ENHR 2021
Conference Proceedings
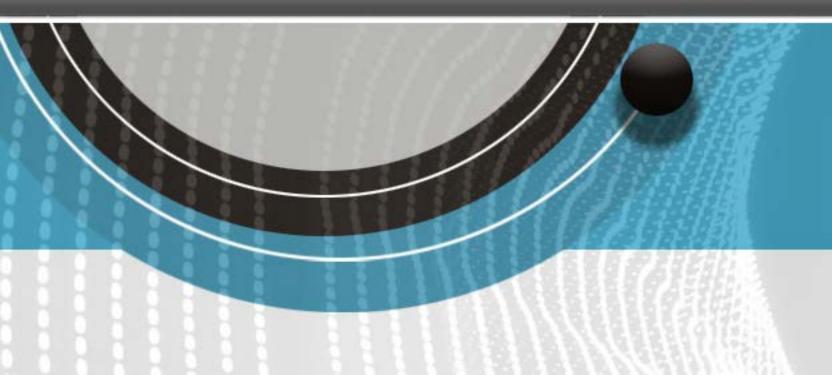
Table of Contents

Sustainability and the smart home: the challenges of an interconnected environment (Francesca Gennari)

Social Housing as a Public Service: A Comparative Analysis of Italian and English Housing Systems (Chiara Prevete)

Housing practices of refugees in the Flemish nebular city (Babette Wyckaert, Hans Leinfelder, Pascal De Decker)

Neighbourhood trajectories in Stockholm: Investigating the role of mobility and in situ change (Louisa Vogiazides, Hernan Mondani)

Beyond (dys)functional: what does success look like in Irish housing policy? (Paul Umfreville)

Ireland's Housing Crisis: How A Tenure Mixing Policy Orthodoxy Is Contributing To The Socio-Spatial Segregation It Seeks to Address. (Eleanor Mc Mahon)

Informal housing through financialization: a Dublin case study (Alexia O'Brien)

Unsettled Settlements: Housing in Unstable Contexts

Preface

The European Network of Housing Researchers ENHR2021 conference, hosted by the University of Cyprus, took place online, in Nicosia, Cyprus, Augyst 30th-September 2nd, 2021. This proceedings volume includes a number of the written contributions presented during the conference.

We had much to discuss during the 4 days of the conference; this year's theme addressed concerns that many of us, involved in housing studies, share. It is exactly these shared research interests of a number of Cypriot researchers emanating from earlier education at schools of housing studies abroad, that were channelled into research, teaching and practice in the local context of the island; such a background, brought an invaluable perspective for analyzing and describing the built environment with rigor and anchored our research from then on, in a long tradition of housing studies in Europe and beyond, aspiring in creating a platform for knowledge exchange and networking among researchers in the field of housing studies who have a specific interest in Cyprus and the wider Eastern Mediterranean region.

The location of Cyprus in the Eastern Mediterranean offers a unique venue at the confluence of three continents and a multitude of cultures that face unique housing challenges. Many of these challenges are the result of not only long-standing local housing issues but also of issues that have emanated from recent conflicts in the surrounding region. In a region of intense conflict, Cyprus offers a common ground for bringing people together in a neutral venue and it has acted thus numerous times in its past.

The island country is dealing with current housing issues derived from the movement of refugees and other transient populations in the region to the island on one hand, to the influx of such populations as Russian and Chinese investors seeking luxury housing in its coastal cities and other groups of varying means seeking secondary housing and EU residency, on the other. In the past it had dealt with issues of its own refugee crisis and settlements that came out of it, to aspects of providing housing as a result of increasing urbanization and abandonment of traditional settlements in the rural areas, to the need for providing social housing to house an increasing number of people facing serious housing challenges as a result of the recent economic crisis. Housing rehabilitation, neighbourhood infrastructure and related services have thus been central in the local and national agendas, providing a unique opportunity for research and scientific knowledge to contribute towards this end.

Nicosia, the last divided capital of Europe, with a prolonged history of conflict, internal refugees' displacements, migration and tourists' flows, economic fluctuations and rapid, often abrupt urban transformations serves as an ideal laboratory to explore, unravel, and question housing development in unstable and contested contexts. It is a city of contrasts in terms of its spatial, social, cultural and economic composition. The city provides a valuable case study for housing researchers and can unveil the complexity of all the factors which condition the various forms of dwelling in contemporary contested, continuously transformed contexts.

Having as a starting point the complexity of the factors that have shaped Nicosia though time, the conference sought to understand conditions of the unsettled and the respective challenges posed to housing. Contemporary everyday life is characterized by diverse manifestations of instability, including urban conflicts and contestations, revolutions in political life, terrorism, migration, displacements and mobility, which continuously challenge and redefine cities' infrastructures. The involuntary removal of individuals or communities from their houses, lands, localities, rights or belongings, experienced in

many parts of our contemporary world, creates new urban instabilities and conflicts. The experience of urban life in such contexts—transient, fragmented, changeable and unpredictable— contrasts to concepts of dwelling based on stability, permanence, locality and a sense of belonging.

Such unsettling practices simultaneously challenge the production of housing environments and dwellings which many times takes place against a backdrop painted by uncertainty and change. The proposed conference topic aimed to explore and understand uncertainties and instabilities which shape contemporary urban living, to unveil critical concerns on the impact of such unsettling practices on the production of housing environments and to foster an inquiry into potential responses in the form of policies, governance, social innovation, community initiatives and planners' investments.

The conference aimed to provide a discussion platform for researchers, policy makers and practitioners concerned with housing issues. Researchers at the University of Cyprus, recognize the importance of strengthening even further the bridge between research, practice and policymaking to create opportunities to inform local, national and international agendas. UCY established in 1989, is a vigorous community of scholars engaged in the generation and diffusion of knowledge, it comprises eight Faculties and 22 Departments offering a wide range of undergraduate, postgraduate and research study programs and is a member of the international network of universities and an active participant in the research community worldwide (http://www.ucy.ac.cy/en/). A significant local critical mass in housing research and allied fields at UCY pursue research themes aligned with the conference's themes, offering the opportunity of deliberation in a multidisciplinary approach.

13 distinguished speakers in six plenary sessions, discussed critical housing issues which included: Housing Challenges And Opportunities In The Cypriot Context, displaceability and the effects of urban renewal on households, housing policy transformations and urban governance, the (changing) role of housing in the production of inequalities, housing as a financial asset and housing as a commodity and the right to housing as the right to health, as well as housing measures, effects and impact due to the Covid epidemic.

61 parallel sessions with inspiring presentations from around 220 delegates who joined us from all over the world, aimed to address the conference's specific themes as set by 19 ENHR Working Groups, addressing a broad spectrum of housing issues which include among others: Collaborative Housing, Disadvantaged Urban Neighborhoods and Communities, Housing and Living Conditions of Ageing Populations, Housing finance, Housing in developing Countries, Housing Law, Minority Ethnic Groups and Housing and many more.

We were very happy to host young researchers in the New Housing Researchers Colloquium chaired by Richard Sendi, with interesting discussions on affordable housing, housing policies, socio-spatial segregation and informal housing.

There are a number of people who have made this event possible and whom we would like to warmly thank. Firstly, we would like to thank the ENHR Council and the president, Peter Boelhouwer, for the continuous support, guidance and advise during the preparation of this conference. Warm thanks to Dirk Dubbeling, Secretary General, whose guidance and advise has been invaluable, who has been next to us from the very beginning, willingly and patiently answering all questions! Easy Conferences and Petros Stratis for the excellent organisation and collaboration and finally all the participants who joined us and who have contributed to the fruitful discussions that took place in Nicosia.

Nadia Charalambous

Conference Chair
Associate Professor,
Head of Department of Architecture,
University of Cyprus

Affordable Housing in Canadian Cities: Policy-Design Nexus

Sasha Tsenkova

University of Calgary, School of Architecture, Planning & Landscape, University of Calgary, Calgary,

Canada

e-mail: tsenkova@ucalgary.ca

Abstract

A growing affordability problem in Canadian cities has prompted a renewed commitment of the federal government, complemented with provincial and municipal programs, to increase the supply of affordable rental housing. Recently large Canadian cities have joined their efforts with non-profit and private organisations to provide affordable rental housing in mixed-income experimental projects. In this context, the research addresses a significant gap in the evaluation of partnerships, focusing on the nature of multi-agency collaborations in the provision process (design, build, finance, operate). Partnerships capitalise on the effective role of the public sector in the mobilization of resources, the efficiencies of private agencies in the development process (design, build) and the hybridity of the non-profit institutions (management, service delivery).

The research develops a conceptual framework, based on the political market model to explain adoption of planning and housing policies by municipalities. It presents a typology of affordable housing partnerships using highlights from case studies in large Canadian cities—Toronto, Vancouver and Montreal.

Keywords: partnerships, affordable housing, institutions, evaluation, cities

Mind the Gap: The Affordable Housing Challenge

A growing affordability problem affecting over 5 million people in Canada (1.7 million households) has prompted a renewed commitment of the federal government, complemented with provincial and municipal programs, to increase the supply of affordable rental housing. Finding solutions to increase the small share of affordable/social housing (home to less than 600,000 households) is important for Canada's big cities, which are at the forefront of the affordable housing crisis (Statistics Canada, 2017). Given the devolution of government involvement in housing, consensus has been building that an effective response requires a multi-sectoral approach, including all levels of government, the private for-profit and non-profit sectors, as well as local communities (Moore and Skaburski, 2004). This is perceived as the most effective way of producing affordable housing to meet growing local needs within limited resources and capacity.

The goal of our research is to present a comparative evaluation of successful affordable housing in the context of neighbourhood rebuilding in Canadian cities. The research provides important directions for the future of affordable housing through identification of design and planning strategies and best practices. The specific objectives are:

- To provide insights on partnerships implemented to deliver affordable housing using a social mix concept of sustainable neighbourhood design;
- To profile affordable housing projects focusing on people-based and place-based characteristics defining a mixed income model;

W**14. Social Housing: Institutions, Organisations and Governance**

The research design is based on mixed methods. Our first stage focused on a review of the literature on affordable housing to develop a conceptual framework for comparative analysis and evaluation. This is complemented with a methodology that uses the nested case study method, combining comparative analysis of case study projects located in select neighbourhoods. We explored recent experiences in three cities—Toronto, Montreal and Vancouver. The neighbourhoods are identified using sustainability performance criteria embedded in the Leadership in Energy and Environment Neighbourhood Development framework (LEED-ND). An additional filter is applied to identify best practices of LEED-ND places with 10-25% affordable housing to create a social mix in the neighbourhood. Given the importance of partnerships to deliver sustainable affordable housing in the *National Housing Strategy*, we focused on partnership models in the implementation process (Government of Canada, 2018). The methodology includes content analysis of planning and policy documents pertinent to our research focus, stakeholder mapping, visualization, field visits to project sites and key informant interviews with leaders of affordable housing projects.

Our best practice review is organised in several thematic sections. First, we develop a conceptual framework that will guide our analysis and evaluation of best practices with a focus on efficiency through partnerships, equity through social mix and environment through design. Second, we provide a comparative overview of affordable housing projects in four neighbourhoods in Toronto, Montreal and Vancouver highlighting economic, social and environmental benefits. Finally, the concluding comments reflect on challenges and opportunities of affordable housing partnerships for inclusive and sustainable neighbourhood rebuilding.

Conceptual Framework

Given the devolution of government involvement in housing, recent experiences in Canadian cities indicate that an effective provision of affordable rental housing to meet the housing supply challenge requires partnerships including all levels of government, the private and non-profit sectors, as well as local communities (Schembri, 2014). This is the most effective way of producing affordable housing to meet growing local needs, particularly in the context of inner-city neighbourhood rebuilding. Our conceptual framework brings a sustainability lens to the exploration of partnership models by emphasizing the need for equity and social inclusion through social mix and environmental sustainability of the built forms through design (Tsenkova, 2016; 2021).

Efficiency through Partnerships for Affordable Housing
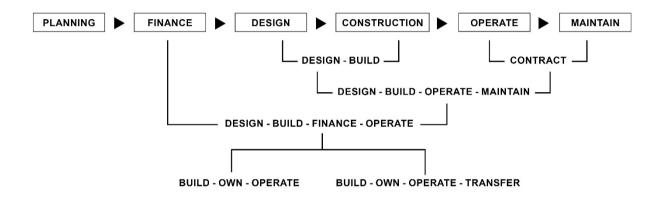
Large Canadian cities join their efforts with non-profit and private organisations to provide affordable rental housing in mixed income, mixed tenure projects. While these projects are experimental, they have demonstrated a viable alternative to address vulnerabilities in the housing market as well as make Canadian cities more inclusive and competitive (Conference Board of Canada, 2010). Our research profiles a model of public, private and non-profit (PPNP) partnership that has evolved to deliver affordable rental housing, capitalizing on the strengths of each sector. The public sector (federal, provincial, municipal) is effective in the mobilization of much-needed resources, while the private sector (designers, developers, construction companies) is efficient in managing the construction process by maximizing economies of scale, tapping into technological innovation and marketing strategies. Not-for-profit housing institutions are more effective in managing and operating affordable rental housing due to the extensive knowledge of the people they service. In large-scale developments such synergies are important in the provision process (design, build, finance, operate) as insights from neighbourhoods in Toronto, Montreal and Vancouver in this report will demonstrate.

PPNP partnerships maximize such synergies through collaborative processes of jointly determined goals, decision-making, non-hierarchical institutional structures of the housing development process, and shared accountability for outcomes and results (Tsenkova, 2019). Public authorities employ various policy instruments to implement partnership projects through a wide range of innovations in public/private funding and planning instruments with varying capacities to address the affordability gap (Black, 2012). Municipalities often take a strategic leadership role, defining the share of affordable rental

housing in mixed income neighbourhoods, leveraging the value of public land and infrastructure investment, increasing densities and incorporating planning and design strategies to facilitate social mix and integration of projects in communities. Figure 1 situates the variety of partnerships on a continuum, depicting the transfer of liability and risk from the public to the private and non-profit sectors in key phases of the development process—plan, finance, design, build, operate, own/lease. The institutional landscape is quite diverse and every stage represents a mix of private, public and non-profit agencies, depending on the scale of the development and specific markets. While there is no set of prescribed guidelines in Canadian cities, some of the small scale partnership projects will typically fall in the category 'deign-build' or 'contracts', where the private sector has a limited responsibility, often referred to public private partnerships.

Figure 1: Partnership Typologies in Housing Provision

Source: Tsenkova, 2020

In the case of larger, block size mixed income developments a more ambitious PPNP model of 'design-build-operate' evolves, where a full range of publicly financed housing agencies (private and not-for profit) deliver affordable rental housing, often over a period of 25-50 years. These models sketched in broad strokes capture a complex reality with very fluid institutional arrangements. The PPNP partnerships profiled in the article fall under 'design-build-finance-operate' type, where construction and development is done by the private sector, while operation and maintenance risks are assumed by the non-profit entity (often city-owned agency). Such partnerships have a strong involvement and leadership of non-profit organisations acting as socially responsible developers, mobilising public sector financial and fiscal support to ensure financial viability. Public sector involvement is typically limited to financing, transfer of land and the definition of key planning outcomes (housing typology, rent levels, access to neighbourhood amenities).

Municipal governments have a critical role in the provision of affordable rental housing. Some of the incentives and planning strategies to stimulate mixed income, mixed tenure housing projects include waiving development charges, selling municipal land at discounted rates, lowering property taxes, inclusionary zoning or start-up grants/loans. In addition, municipalities expedite the planning approval process and encourage private developers to join partnerships with city-owned or non-profit housing providers to build developments with varying degrees of affordable housing.

Equity through Social Mix in Affordable Housing

Social mix refers to the integration of people of different social standing or identity. The term is used in relation to affordable housing and sustainable neighbourhoods to describe an environment where housing offers diverse opportunities in terms of types, tenure, costs and design to respond to a diversity of needs (Galster, 2013). In many European countries social mix through the planning process is a normative requirement specifying targets of 20% affordable rental housing, 30% market rental housing and 50% homeownership as a desirable tenure mix to bring a mix of people together by offering housing

for a range of income-levels in a single development, or neighbourhood (Scanlon, Whitehead & Arrigoitia, 2014). The social mix approach aims at combating economic, social and ethnic segregation. It is justified on grounds of both economic efficiency—making society as a whole better off by enhancing solidarity, labour productivity and community sustainability—and equity—improving the life-chances and social inclusion of disadvantaged groups.

Social mix in North America became prominent in the 1970s as a response to growing social inequalities and stigma attached to large subsidized housing developments (Kearns et al., 2013). This resulted in the demolition of public housing projects (Pruitt-Igoe in St. Louis or Regent Park in Toronto) and their replacement with mixed income developments to promote social mix. Neighbourhood planning initiatives include urban regeneration with an emphasis on housing mix, inclusion of rental housing through zoning and density bonusing policies, provision of public land for affordable rental housing, encouragement of public/private partnerships and rent supplements to allow local residents to stay-in-place (Galster, 2013). The pursuit of social mix is innovative in the Canadian context and cities such as Vancouver and Montreal use the concept to guide the planning and development of inclusive and equitable neighbourhoods.

Due to the dynamic nature of social mix there are multiple ways it can be implemented at various scales. Social mix can take place in a building, on a street, a block or a neighbourhood. Some of the best practices include making the difference between low-income and market housing non-existent, using common spaces to promote interaction between residents, and minimizing the impacts of displacement during changes within existing communities.

Environmental Performance through Design
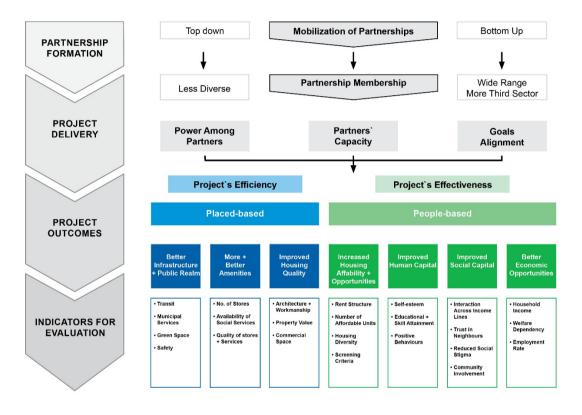
Leadership in Energy and Environmental Design (LEED) is a program that evaluates and certifies green buildings. LEED-ND takes the green certification concept beyond individual buildings and applies it to the neighborhood context. It contains a set of standards that collectively identify whether a development is environmentally sustainable using a set of indicators that measure performance in terms of location and access, street pattern and design, and the use of green technology and building techniques. These standards include baseline requirements for sustainable neighborhood development and credits awarded for best practice standards. The green stamp of approval, while rigorous in terms of smart, green and well-designed neighbourhoods does not really emphasize housing affordability. Other studies have considered this aspect as detrimental to social cohesion and exclusion by design (see Tallen et al, 2013 for a review of the literature). Such neighbourhoods often command higher house prices and become a place of choice for affluent urban households. Often, they do not include purpose built rental housing, so it is important to layer another set of requirements essential for a socially inclusive neighbourhood—the provision of non-market rental housing using a variety of typologies to meet a diverse set of needs. In our selection of conceptually appropriate case studies, we looked at LEED-ND neighbourhoods with a higher share of affordable rental housing to explore how green and affordable projects can be integrated in smart and sustainable neighbourhoods.

The overall goal of mixed income housing is to establish better quality of life and adequate living conditions for all residents. There is ample research conducted on the efforts, rationale and importance of mixed income housing (Bailey et al, 2006; Graves, 2011). We have adopted a conceptual framework that focuses on place-based and people-based outcomes of mixed income affordable housing delivered through partnerships (Tsenkova, 2014). The success of building such strong communities involves synergies of physical, social and environmental measures. The built environment has an important impact on place-based outcomes, defining neighbourhood qualities, types of housing, density of urban form, amenities, access to common spaces and services (parks, schools, transit). While such qualities of the built environment have been a significant focus of housing policies, the evidence of how design impacts mixed income housing to achieve good people-based outcomes is less conclusive (Bond, Soutkina, Kearns, 2011). Within the planning and design profession, place-based outcomes are often easier to influence, but the social impact on residents remains limited. Research recognises that people-

related outcomes are about access to adequate housing, but also about social development, well-being and opportunities for civic participation (Joseph, Chaskin & Webber, 2007).

Figure 2: Affordable Housing Evaluation Framework

Source: Tsenkova, 2020

The profiles of individual affordable housing projects use these two clusters of people-based and place-based outcomes to define the following metrics:

- mix of tenants, rent levels, access
- diversity of housing types, units, services & uses
- partnership arrangements, leading institutions
- finance, land and subsidy nexus
- design performance in social & environmental terms.

We have profiled 15 affordable housing projects in our case study neighbourhoods to illustrate a diversity of economic, social and environmental characteristics accomplished through PPNP partnerships.

Rebuilding Regent Park, Toronto

The partnership is led by Toronto Community Housing Corporation (TCHC), which is a city-owned organization that operates in a non-profit manner. It is the largest social housing provider in Canada, managing 60,000 units. Regent Park Redevelopment is transforming the largest publicly funded housing in Canada (69 acre site) reinventing this community as an integrated, socially inclusive place in inner city Toronto. The five-phase redevelopment capitalises on opportunities for residential intensification, replacement of the existing 2,000 social housing (RGI), provision of neighbourhood amenities and public spaces to integrate the physically segregated neighbourhood back into the city. The budget stands at $1 billion, boasting multilayered federal, provincial, and municipal funds, private sector investments and TCHC equity contributions (land) and loans. In partnership with a private sector developer, The

Daniels Corporation, TCHC has rebuilt 1,350 social housing units at an average cost of $450,000 per unit (excluding the cost of land) and has added 1,769 market units (rental and ownership). Upon completion the neighbourhood is projected to have 2,000 social housing and 7,000 market units, while achieving LEED-ND Gold through sustainable urban design.

Figure 3: Toronto Regent Park Redevelopment

Source: Toronto Community Housing

The City of Toronto waived development and property taxes on all new social housing and absorbed the infrastructure costs with $1.61 million assistance from senior governments. The buoyancy of the housing market helped to mitigate the risks associated with mixed income housing. In an effort to erase the stigma associated with Regent Park, the partnership front-loaded phase one with higher density market units with the expectation that the influx of higher income tenants and homeowners will have a positive impact on the social and economic fabric of the community and cross-subsidise the social housing, which has limited return on investment. Contributions and additions to the plan brought an aquatic center, a community center and an athletic field to the newly designed neighbourhood. The residential architecture has brought a new vibe to the neighbourhood, new businesses, new residents, and new memories. The story of Regent Park continues to evolve as the project moves into the final phases of revitalization.

Figure 4: Toronto Regent Park Redevelopment

W**14. Social Housing: Institutions, Organisations and Governance**

Source: Eagle Ray Perspectives

Les Bassins du Nouveau Havre, Griffintown, Montreal

The affordable housing partnership involves Société d'habitation et de développement de Montréal (SDHM), which is a municipal not-for-profit corporation and a social housing provider that undertakes land acquisition and development on behalf of the municipal government. It owns 2,082 affordable rental units assumes a variety of roles within the design-build-operate matrix. In Les Bassins du Nouveau Havre, a redevelopment site in inner city Montreal, they partnered with private developers, Canada Lands Corporation (CLC) and not-for-profit providers to deliver cohousing (234 units) and affordable homeownership options (78 units) (see Figure 5). The development is an integral part of a new mixed income, mixed use community on an abandoned Canada Post distribution center in Griffintown, Montreal.

Les Bassins du Havre is 9.6 ha brownfield redevelopment reinvented as a new vibrant mixed-use community with Gold LEED-ND status. Canada Lands Company (site owner) partners with a number of private developers and the City of Montreal to develop 2,000 units with an additional 20% social housing with the financial support of Société d`habitation du Québec. The master plan outlines the creation of 2,000 housing units, 30,000 m^2 of commercial space and over 20,000 m^2 of public space and recreational facilities.

Figure 5: Les Bassin du Nouveau Havre

Source: Groupe Cardinal Hardy, L'OEUF

The City of Montreal's *Housing Inclusion Strategy* mandates 30% of all housing to be affordable or social; nearly half of it designed for families (Canada Lands Company / Sociéte immobilière du Canada et al., 2009). SHDM along with the Pointe Saint-Charles Improvement Society, SOCAM, and the Cooperative des Bassin were provided with land at below market value for the affordable housing projects. The residential block H3C integrates mixed income, mixed tenure developments with live-work options, community spaces and diversity of housing types to promote a mix of family compositions (Accès Condo 2018). The three individual projects share architectural and construction costs in the development phase but have separate title and management/operations. SDHM limits the risks of real estate speculation by offering prospective homeowners a 10% purchase credit to lower the down payment to as low as $1,000 and financial incentives to keep the condo for at least five years. It holds a second mortgage for their share of the equity, recovering this through a share of appreciation on future resales.

Figure 6: Mixed Income Affordable Housing in Les Les Bassins du Havre

Source: SHDM, Google Street View

South East False Creek, Olympic Village, Vancouver

The City of Vancouver redeveloped an industrial yard in operation since the early 1800s into a world-class sustainable neighbourhood (Figure 6). Just across the creek from Downtown Vancouver the neighbourhood is an award-winning mixed-use, walkable, transit-oriented community with innovative sustainable qualities and a strong legacy attributed to the 2010 Winter Olympic Games. Developed with a target of 12,000 residents in 5,000 homes, the sustainable neighbourhood set ambitious social and environmental objectives. The vision included new water management tools, green roofs and the Neighbourhood Energy Utility (drawing heat from the sewage system), access to a rapid transit station built for the Olympics. Other neighbourhood amenities include a state-of-the-art community center, boating facility, historic markets and retail, open spaces, an elementary school and daycare facilities. The high-quality eco-design of the public realm uses native grass, public art features, and a waterfront boardwalk and bikeway (Olympic Village seawall) to provide local opportunities for community interaction.

Figure 6: South East False Creek & the Olympic Village

Source: City of Vancouver, Millennium Southeast False Creek Properties Ltd.

The Olympic Village is one of the precincts in the neighbourhood built with the ambition of creating a model sustainable community. The City of Vancouver was the lead partner. Bidding for city owned land, the Millennium Development Group—a Vancouver-based private company—paid $193 million, the highest price per square foot of land in Canadian history and set to achieve LEED Platinum status. The initial plan provided one-third social housing, one-third below market housing and one-third market housing (Taylor & Callihoo, 2011). As the developer was caught up in the global financial crisis and went bankrupt, the City had to assume the costs (over $100 million), so the share of social housing was reduced to 15% and some market-modest rentals were replaced by market condominiums. Following the 2010 Games, the Olympic Village retained 252 units of social housing and 119 units of modest market housing, built at an average cost of $436,500 per unit (not including land value) (McCarthy, 2012). The City used a revenue sharing model, where land is leased to non-profit organizations for 60 years at nominal rent to provide social housing.

80 Hardwick Avenue: Net Zero Seniors Housing

This is Canada's first net-zero multi-unit residential building offering affordable rental housing to low-income seniors and people with disabilities through BC Housing (Charron 2017). The project is an eight-storey residence with 67 one-bedroom units, designed to be fully wheelchair accessible, and six two-bedroom street-level townhouses intended for families. Designed by GBL Architects, built by MetroCan Construction (General Contractor) and in collaboration with LEED consultant Recollective Consulting, the building incorporates a variety of passive and active energy-saving strategies to meet net-zero carbon emissions (City of Vancouver 2010). The design's passive strategies include optimal orientation for natural ventilation and daylighting, maximum insulation thicknesses to resist heat flow and position thermal mass elements to store and release heat over time. Additionally, active design strategies focus on energy efficiency to reduce energy consumption by 68%(Charron, 2017). The building maximized the potential of heat recovery by using the excess heat from a neighbouring grocery store's refrigeration system to provide space heating. An important part of the net-zero design is the use of solar panels (45 square meter system) to pre-heat hot water. Excess energy can be sold back to the Neighbourhood Energy Unit heating adjacent buildings in the Olympic Village development.

Figure 7: Net Zero Seniors Housing

W**14. Social Housing: Institutions, Organisations and Governance**

Source: City of Vancouver

Neighbourhood Rebuilding & Affordable Housing

Affordable housing partnerships through public, private and non-profit collaboration in Canadian cities are used as a social planning strategy to address the shortage of affordable rental housing, foster social mix and regenerate brownfield sites. Notwithstanding the complexities of these collaborations, they provide critical opportunities to improve the built environment through coordinated investment in infrastructure, development of a variety of housing types, ownership opportunities (social and modest market rental housing and affordable homeownership), investment in neighbourhood amenities, transit, and retail (Ramzanpour & Noutaghani, 2019). Such large-scale redevelopment projects bring brownfield city sites back to life, creating new attractive neighbourhoods inspired by sustainability plans. While residential intensification and planning strategies enhance the quality of built form and encourage higher density mixed use developments, the provision of quality affordable housing is essential to maintain diversity of residents and social mix. The creation of mixed income, mixed tenure neighbourhoods depends on the plans, but also on the successful PPNP partnerships for plan implementation.

One of the important lessons is that partnerships capitalise on the effective role of the public sector in the mobilization of resources, the efficiencies of private agencies in the development process (design, build) and the hybridity of the non-profit institutions (management, service delivery). In many European countries the provision of mixed income housing, set at 20-30%, is a normative requirement in neighbourhood plans. In the United States place-based campaigns anchored around affordable housing are consistently led by multi-sectoral partnerships bringing public and private capital into segregated neighbourhoods and turning them into neighbourhoods of choice (Tsenkova, 2019). The case studies in this article provide inspiring examples of partnerships for neighbourhood rebuilding through a mixed income model including 15 to 25% of affordable housing.

A second lesson is that PPNP partnerships need strong leadership, often from a city-based housing agency that has the ability to coordinate finance, manage projects in a dynamic real estate environment and deliver on time and budget (Fraser & Kick, 2007). The public and private sector's capacities and goals alignment are critical in establishing the partnership and leading it through multiple and often challenging phases of planning, development, financing and project management. Current models in Canadian cities indicate that the implementation process relies on senior government funding for capital costs and infrastructure, but more importantly on planning policies that will alter the socio-economic mix of poor neighbourhoods and transform them into communities that appeal to a wide range of households.

Third, an important lesson for planners is that PPNPs are indeed very diverse multi-sectoral collaborations that leverage real estate market pressures to promote affordability goals and social mix. Neighbourhood rebuilding takes decades and shifting the responsibility to private developers might not work, particularly in the context of gentrification and displacement of lower-income residents. PPNPs need robust and sustained financial support, alignment of planning policies and institutional commitment to increase the supply of affordable rental housing. Such complexity by design makes statements on 'what works' and 'what does not' challenging. Each city will need to develop its own successful model to respond to growing affordability pressures emphasizing diversity of housing and social mix.

Fourth, PPNP partnerships in Canadian cities demonstrate success in city building where the transition from 'brown' to 'green' solutions through LEED-ND certification is advancing responses to climate change imperatives. However, an important component of sustainable neighbourhood rebuilding is associated with equity and social inclusion. This is where in most cases the planning, policy and design strategies fall short in addressing the housing affordability gap (Thurber, Bohman & Heflinger, 2018). All orders of government should work together to ensure that urban residents have access to safe, suitable, and affordable housing options. This requires dedication of adequate resources to the full range of options along the housing continuum, including homeless shelters, community housing, supportive housing, and affordable rental housing.

A final and important lesson is that all orders of government should foster 'complete communities' as a neighbourhood model with a diverse range and mix of housing options, densities, and tenures developed through sound planning processes. This needs to be supported through a number of policy instruments and incentives to secure a substantial share of non-market housing in neighbourhoods by design—emphasizing the importance of people-based and place-based outcomes for successful integration. The success of building such strong communities involves synergies of physical, social and environmental measures. The built environment has an important impact on place-based outcomes, defining neighbourhood qualities, types of housing, density of urban form, amenities, access to common spaces and services (parks, schools, transit). Environmental measures minimize the consumption of energy, water, and protect the natural systems and landscapes.

Acknowledgements

W**14. Social Housing: Institutions, Organisations and Governance**

References

August, M. (2016). Revitalization Gone Wrong: Mixed-Income Public Housing Redevelopment in Toronto's Don Mount Court. *Urban Studies, 53*(16), 3405-3422.

Black, J. (2012). The financing & economics of affordable housing development: incentives and disincentives to private-sector participation. Cities Centre, University of Toronto.

Bailey, N., Haworth, A., Manzi, T., Paranagamage, P., & Roberts, M. (2006). *Creating and Sustaining Mixed Income Communities: A Good Practice Guide.* Coventry, UK: Chartered Institute of Housing and Joseph Rowntree Foundation. Retrieved March 6, 2019, from https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/9781905018314.pdf

Bond, L., Sautkina, E., & Kearns, A. (2011). Mixed Messages About Mixed-Tenure: Do Reviews Tell the Real Story? *Housing Studies, 26*(1), 69-94.

Canadian Housing and Mortgage Corporation. (2018). *About Affordable Housing in Canada*. Retrieved November 1, 2018, from https://cmhc-schl.gc.ca/en/developing-and-renovating/develop-new-affordable-housing/programs-and-information/about-affordable-housing-in-canada

Canada Lands Company / Sociéte immobilière du Canada, Groupe Cardinal Hardy, L`OEUF, and Nouveau Havre de Montréal. (2009). "Les Bassins Du Nouveau Havre." Office de Consultation Publique de Montréal.

Chaskin, R., & Joseph, M. (2011). Social Interaction in Mixed-Income Development: Relational Expectations and Emerging Reality. Journal of Urban Affairs, 33(2), 209-237.

Charron, R. (2017). Passive Approaches to Low-Energy Affordable Housing Projects. Canadian Mortgage and Housing Corporation, February.

City of Calgary. (2018) Affordable Housing: Needs Assessment. Calgary: City of Calgary. Retrieved October 21, 2020 from https://www.calgary.ca/content/dam/www/cs/olsh/documents/affordable-housing/affordable-housing-needs-assessment.pdf

City of Calgary. Affordable Housing Division (2018) Affordable Housing in Canada's Big Cities. Calgary: City of Calgary. Retrieved October 21, 2020 from https://www.calgary.ca/content/dam/www/cs/olsh/documents/affordable-housing/housing-in-canadas-big-cities.pdf

City of Vancouver. (2010). CIP 2010 Awards for Planning Excellence Submission: Olympic Village. Canadian Institution of Planners. https://www.cip-icu.ca/Files/Awards/Planning-Excellence/2010-Winner-Neighbourhood-Planning.aspx.

Conference Board of Canada (CBC). (2010) *Building From the Ground Up: Enhancing Affordable Housing in Canada.* Ottawa: Conference Board of Canada

Council on Tall Buildings and Urban Habitat. (2020). Regent Park Sackville Dundas Residences. The Skyscraper Center. 2020. https://www.skyscrapercenter.com/building/regent-park-sackville-dundas-residences/9226.

Fred Victor. (2020). Expertise and Solutions to Homelessness. Fred Victor (blog). 2020. https://www.fredvictor.org/about-us/.

Galster, G. C. (2013). Neighborhood social mix: Theory, evidence, and implications for policy and planning. In *Policy, Planning, and People: Promoting Justice in Urban Development* (pp. 308-336). University of Pennsylvania Press.

Graves, E. (2011). Mixed Outcome Developments: Comparing Policy Goals to Resident Outcomes in Mixed-Income Housing. *Journal of the American Planning Association, 77*(2), 143-153.

Government of Canada. (2016). *Habitat III on Housing and Sustainable Urban Development – Canada National Report.* Retrieved from http://habitat3.org/wp-content/uploads/Final-Report-Sep-29.PDF, November 12, 2017

Government of Canada. (2018). *National Housing Strategy.* Retrieved from Place to Call Home: https://www.placetocallhome.ca/, January 12, 2018

Government of Alberta. Ministry of Housing & Seniors. (2020). Affordable Housing Review Panel Presentation. Edmonton, July 2020

Infrastructure Ontario. (2011). Preferred Bidder Selected for Toronto 2015 Pan/Parapan American Games Athletes' Village Report. Infrastructure Ontario. September 2, 2011. https://www.infrastructureontario.ca/Preferred-Proponent-Selected-Pan-Am-Athletes-Village/.

Joseph, M., Chaskin, R., & Webber, H. (2007). The Theoretical Basis for Addressing Poverty Through Mixed-Income Development. *Urban Affairs Review, 42*(3), 369-409.

W14. Social Housing: Institutions, Organisations and Governance

Kearns, A., McKee, M., Sautkina, E., Weeks, G., & Bond, L. (2013). Mixed-Tenure Orthodoxy: Practitioner Reflections on Policy Effects. *Cityscape, 15*(2), 47-67.

McCarthy, W. P.J. (2012). The failed experiment of Vancouver's 2010 Olympic Village. (Insider's Perspective). *Real Estate Issues*, 37(2-3), 60-76.

Moore, E., and Skaburski, A. (2004) "Canada's increasing housing affordability burdens." *Housing Studies,* 19(3), 395-413.

Ramzanpour, M., & Nourtaghani, A. (2019). Impact of Four Physical Design Factors on Mixed-Income Housing. *Journal of Architectural Engineering, 25*(1), 1-8.

Scanlon, K., Whitehead, C., and Arrigoitia, M. (eds.) (2014). *Social Housing in Europe.* Oxford: Wiley-Blackwell.

Statistics Canada. (2017). *Canadian Housing Statistics Program*. Retrieved November 2, 2018, from https://www150.statcan.gc.ca/n1/daily-quotidien/171219/dq171219b-eng.htm

Schembri, L. L., (2014) "Housing finance in Canada: Looking back to move forward." National Institute Economic Review, 230, R45-R57.

Talen, E.; Bossea, A.; Ahmann. B.; Koshynska, J.; Elizabeth Wentza, E.; Anselina, l. (2013). LEED-ND as an urban metric. *Landscape and Urban Planning*, 119 (Nov): 20-34. https://doi.org/10.1016/j.landurbplan.2013.06.008

Taylor, A. & Callihoo, C. (2011). From "No Place" To Great Places: Reinventing Planning "The Perfect Storm": Lessons from the Vancouver Olympic Village. *PLAN Canada* 51(2).

Thurber, A., Bohmann, C., & Heflinger, C. (2018). Spatially Integrated and Socially Segregated: The Effects of Mixed-Income Neighbourhoods on Social Well-Being. *Urban Studies, 55* (9), 1859-1874.

Toronto Community Housing. (2011). 246-252 Sackville Street - Closure Report. Toronto Community Housing Corporation. https://www.torontohousing.ca/events/Documents/Archives/7048Item%203%20-%20246-252%20Sackville%20street%20-%20Closure%20Report.pdf.

Tsenkova, S. (2016) "Sustainable Housing & Livable Cities: The New Urban Agenda." *Urban Research & Practice, 9(3), 322-326.*

Tsenkova, S. (2018) *Partnerships for Affordable Housing*. Calgary: University of Calgary/Faculty of Environmental Design. www.ucalgary.ca/cities/affordable-housing

Tsenkova, S. (2021) Affordable Housing and the Future of Cities. In Tsenkova, S. (ed) (2021) *Cities and Affordable Housing: Planning, Design and Policy Nexus.* New York: Routledge

Wigwamen. (2017). 75 Cooperage Street. Wigwamen. New Builds (blog). 2017. http://www.wigwamen.com/project-development/75-cooperage-street/.

Local Housing Support Instruments in Poland and the Czech Republic.
A comparative analysis of dwelling allowances in Lodz, Cracow, Brno and Ostrava

Artur Parys

The Faculty of Economics and Sociology University of Lodz, Department of Investment and
Real Estate, 90-255 Lodz, 3/5 POW Street, Poland
email: artur.parys@edu.uni.lodz.pl

Abstract

The aim of this article is to present and evaluate the results of local housing support programs in Poland and Czech Republic on the example of four cities: Lodz, Cracow, Brno, and Ostrava. The main purpose of this article is to estimate the effectiveness of local housing policy instruments. The formulated research problem is as follows: what are the results of used instruments regarding the conditions of local housing stocks and needs expressed by households in chosen cities; are the chosen instruments of housing support adjusted to local conditions? The comparative analysis is made starting with a framework of national housing policies in Poland and Czech Republic and then going to local instruments used in analyzed cities and their outcomes.

The research methods used in the text are the analysis of the subject literature, legal acts, and the analysis of data of the public statistics.

Keywords: housing suports instrument, housing allowance,
local housing policy

Introduction

Increasing housing affordability and stimulating the overall supply of (affordable) housing is identified as a major housing policy goal for many OECD countries. However, governments could do much more to increase the supply of affordable housing, which could bring significant benefits to vulnerable households. Many OECD countries, by contrast, face obstacles to increasing the supply of affordable housing, although the situation in some countries varies widely. This is mainly due to the diversity and dissimilarity of local housing policies implemented and that in many OECD countries, housing policies are dispersed across different ministries and levels of government. Since 2000, overall investment (both public and private) in housing has not been uniform across the OECD. On average across OECD countries, direct investment (gross fixed capital formation) in housing increased strongly before the financial crisis, followed by a sharp decline around 2007. There is a steady increase until about 2013, but housing spending varies considerably across OECD countries

[https://www.oecdilibrary.org/sites/643cfb7fen/index.html?itemId=/content/component/643cfb7f-en]. Meanwhile, public investment (public capital spending) in housing has more than halved on average from 2001 onwards across the OECD. Over the past two decades, government spending on capital transfers and gross capital formation for "housing development " has declined on average about 0.17% of GDP across the OECD to about 0.07% of GDP in 2018. Direct investment in housing has disappeared since the global financial crisis and amounted to less than 0.01% of GDP in 2018. In contrast, the volume of capital transfers, which make up the bulk of public investment in housing, has declined slightly. Nevertheless, at less than 0.1 percent of GDP on average since the global financial crisis, public investment in housing is not significant. By comparison, demand-side housing assistance, measured in terms of public spending on housing allowances, has increased slightly over the same period, from 0.26% of GDP in 2001 to 0.31% of GDP in 2017. At the same time, the share of social housing has declined in most OECD countries since 2010, further reducing the supply of affordable housing for low-income households.

Curiously, public investment in housing has declined, while spending on housing allowances has held steady. The decline in investment has contributed to housing supply not keeping pace with housing demand. However, there are significant differences in local housing policies across countries such as: job-rich urban centers tend to experience housing shortages, while declining areas may face an oversupply of housing (e.g., high vacancy rates). In addition, many countries experience shortages especially of affordable housing and/or rental housing.

Increases in housing supply have been limited by several factors. These include increasing construction costs, labor shortages, significant increases in or shortages of land prices, and overly restrictive land regulations. Development of the affordable and rental housing sector may face further difficulties such as funding shortages and opposition from local residents. Investment in the housing stock may be discouraged by public policies-particularly property taxes-that tend to favor owner-occupied rather than rental housing, or rental regulations that overly protect tenants. Finally, the historical context in some Eastern European countries has led to highly unsustainable ownership arrangements in which homeowners dominate and there is very limited private rental (formal) market.

Governments can invest in social and affordable housing by providing subsidies and other forms of financial support to developers to encourage them to build affordable housing. As summarized by the OECD, 24 countries offer support to developers to finance affordable housing. Such support can be in the form of tax breaks, subsidies, subsidized land prices, or other forms of support.

To reduce high construction costs, governments can also take advantage of new housing technologies, building materials, and processes (such as the 3-D printing of houses that will be carried out in the

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Netherlands. Governments can look for ways to support such innovations and consider whether changes to existing housing policies are needed [https://www.oecdilibrary.org/sites/643cfb7fen/index.html?itemId=/content/component/643cfb7f-en].

The main purpose of the article is to evaluate the effectiveness of the instruments of local housing policy, considering the complexity and diversity of their tools used to solve local housing problems. The formulated research problem is as follows: what are the effects of the applied instruments in relation to the state of the local housing stock and the needs reported by households in the selected cities; are the selected housing support instruments adapted to local conditions? The comparative analysis was conducted starting from the framework of the national housing policy in Poland and the Czech Republic and then moving on to the local instruments applied in the analyzed cities and their results.

Housing support to households in a difficult housing situation

One strategy for assisting vulnerable households with housing is to introduce an assessment of their financial situation throughout their tenancy in social housing, not just at the start of the tenancy, as a basis for adjusting rent levels for better-off tenants or encouraging them to move out of social housing. While low-income households are most likely to live in social housing across the OECD, middle- and upper-income households in some countries remain in social housing. On the one hand, such social mixing within social housing may be an explicit goal of a country's housing policy. On the other hand, where social housing stock is limited, it may be important to consider strategies that encourage tenants who have improved their situation to move to other forms of tenancy to make room for economically more vulnerable households. Various tools can help manage the flow of residents, including periodic eligibility reviews, fixed-term leases and income-based rent increases, and more targeted criteria for determining eligibility for social housing. Short-term financial incentives to encourage higher-income tenants to move out of publicly supported housing may also be considered.

However, more regular means-testing may be difficult to implement from a practical and policy perspective, and important trade-offs must be considered. Depending on the application of such financial assistance measures, they may act as a disincentive for households to improve their economic situation. Furthermore, limiting the number of social housing tenants to only the poorest households will inhibit the mixing of social groups, may undermine community building, and threaten the financial sustainability of the entire social housing system. In addition, if social housing is spatially concentrated, it risks creating enclaves of poverty. Such trade-offs must be carefully weighed against the expected outcomes [https://www.oecdilibrary.org/sites/643cfb7fen/index.html?itemId=/content/component/643cfb7f-en].

History of housing policy in Poland

The situation of the Polish housing policy belongs to exceptionally difficult ones. We may point out the following problems of the Polish housing sector: unsatisfied housing needs of the Polish society, inadequate housing structure caused by the large share of small apartments in the total housing stock and inadequate quality of the existing stock due to its age and neglect of repairs and modernization. This situation is an effect of the housing policy model based on the dependence of housing on the state budget [Kucharska-Stasiak 2006: pp. 21-22].

In the post-war period, the model of housing policy in Poland as well as in other Eastern European countries was based on state domination. This domination was manifested spheres of activity such as: central planning of the number of housing units to be completed, their type and location, the realization of housing stock by state enterprises and the allocation of housing stock based on housing needs rather than households' financial capacity to acquire and maintain housing. This led to a situation where the housing economy remained dependent on state funding as well as future economic development strategies.

In fact, throughout the entire period of the Polish People's Republic (PRL), the state was unable to provide urban residents with sufficient housing, although it had committed itself to do so as part of its ideological program. A shortage of housing and the maintenance of a significant portion of the housing stock in poor technical and infrastructural condition were characteristic features of socialist housing. Nor did socialized housing extend to residents of rural areas and small towns. Private ownership of a significant portion of the housing stock and private agriculture distinguished Poland from other socialist bloc countries [Kucharska-Stasiak 2006: pp. 21-22].

In the period 1976-1985 housing was only seemingly unaffected by the slowdown in investment activity. The dynamics of the increase of housing investment costs was higher than of production investments, and particularly, industrial investments. This tendency, which had already occurred earlier, was only to a small extent caused by changes in the standard of new apartments being built. The reasons for this phenomenon are mainly attributed to the strengthening of the position of construction enterprises, which led to an increasing mismanagement and quality of workmanship [Kucharska-Stasiak 2006: pp. 24].

Between 1986 and 1987, there was stagnation and even regression in housing development. With significant population growth, housing intensity declined from 10.3 housing units completed per 1,000 residents per year for urban use in 1976-1980 to 6.6 in 1981-1985 and declined to 5.4 in 1988.

Although in the 1980s the housing sector was treated as a component of social policy, the housing

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

policy model based on state domination, due to the deficit of financial resources, could not ensure the implementation of the basic principle of housing policy, which is the right to housing. The implementation of the housing policy model, adopted in the post-war period, caused problems in the housing sector, such as: a decrease in the size of construction and a sharp increase in construction costs, a housing deficit, a low standard of newly built housing, low quality of the housing stock due to low attention to its technical condition due to low rents. Rents for a significant part of the housing stock were set at a level below the current costs of maintaining the housing stock.

The transition process of the 1990s in Poland towards the realization of a market model of the housing sector was very difficult. The attempt to transition to a market economy deepened the housing crisis. The principle was adopted that the purchase or construction of an ownership apartment was to be the primary means of obtaining housing. With strong inflation, the cost of credit was very high, the cost of housing construction increased. In 1992, the principles of commercial lending were adopted, which accelerated the further collapse of construction. A new entity appeared on the market - private construction companies building on commercial terms [Kucharska-Stasiak 2006: pp. 24].

The emergence of local government, which became an important element in housing policy, was significant for housing. With the empowerment of municipalities, the responsibility for shaping the housing situation was transferred to them, e.g., through the implementation of social housing and the payment of housing allowances for low-income households. It soon became apparent that with their limited resources, municipalities were not able to meet the objectives assigned to them. The belief that local government units could assume responsibility for meeting housing needs proved to be erroneous. These units have no influence on legal conditions and do not have sufficient financial means to solve the housing problem.

The accumulated scale of deficiencies in respect of maintenance and repair of communal housing stock in Poland is so large that a quick improvement of the situation in practice is not possible, and the undertaken repair activities require great efforts on the part of communal authorities as owners of the resources, as well as on the part of managers and users of buildings and [Muczyński 2009: pp. 69–82].
In Poland, it is currently the municipalities that shape housing policy on their territory. They support social housing with direct investments in new municipal housing and repairs of municipal resources, subsidies for the repair of historic buildings, construction and maintenance of houses and shelters for the homeless, capital support of municipal companies operating in the housing sphere, including Towarzystw Budownictwa Społecznego (TBS)[1]. The municipalities also pay housing allowances to eligible persons and, to a certain extent, can decide to increase such benefits.

---

[1] Social housing association (TBS) - entities whose purpose is to carry out the tasks of building rental housing with moderate rents for people with average incomes.

History of housing policy in the Czech Republic

State regulatory interventions in the housing sector have a relatively long tradition in the Czech Republic. Already after World War I, during the First Republic (1918-1939), housing policy, in addition to supporting the construction of new housing, included measures to protect tenants and regulate rents, due to the postwar housing shortage and soaring construction costs. The construction of small housing units for economically weaker segments of the population was also supported. [Sunega 2005: pp. 271-272].

The housing policy of the Czech state after 1948 was based on the principle that housing is such an important good in a person's life that the increasing costs of its construction, maintenance and management should not be exclusively translated into household expenses. In the countries of the communist bloc, housing policy was associated with the nationalization of private property and an ideological approach to egalitarianism. Its negative consequences were ever-increasing amounts of state subsidies to finance both housing construction and its operation, management and maintenance, insufficient investment in the existing housing stock, and unequal access to housing. Housing finance was provided in the form of targeted state subsidies for housing investment, state contributions for cooperative housing, and state contributions for individual housing [Lérová 1983]. Communal housing included only the construction of rental housing, which was under the administration of the national committees (or the housing companies they managed and financed) and was entirely financed by state subsidies.

As in other areas of the economy, also in the housing sector after 1989, the transformation from a rationed system of housing management to a system based on the respect of market principles began. The role of the state, according to the first concepts of housing policy based on neoliberal principles, was to be limited to the creation of conditions for the emergence of a housing market.
As part of the decentralization of state power and the restoration of local self-government, there was a free transfer of housing stock from state ownership to municipal ownership.

The transfer began in 1991 and according to some sources [Sýkora 2003] concerned 877,000 apartments (23.5% of the housing stock), according to other sources [Slavata 2000: pp.8-9] pp. 1.44 million dwellings (about 39% of the housing stock in the Czech Republic). Author Sýkora [2003] reports that only houses in which more than one third of the floor space was used for non-residential purposes remained under state ownership [Sýkora 2003]. The municipalities were placed in the role of administrators of housing stock, thus the responsibility for shaping the local housing policy was transferred to the municipalities and they were forced to bear the costs of operation, management, and maintenance of the newly acquired properties. However, the transfer of housing stock was not

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

accompanied by the reinforcement of municipal budgets with additional financial resources; municipalities were not prepared for the new role in terms of methodology, no rules or recommendations for housing stock management were developed.

At the beginning of the 1990's, in most municipalities, the funds collected from rent were not sufficient to cover the costs associated with the current operation and maintenance of the housing stock, which constituted an additional burden on municipal budgets. Consequently, a state of long-term underinvestment in the housing stock persisted and municipalities attempted to privatize at least a part of the housing stock and relieve their own budgets. In connection with the transfer of a large part of the state housing stock to municipal ownership, it was assumed that the municipalities would privatize part of these newly acquired housing stock. However, no nationally important recommendations were made as to what proportion of the housing stock should be privatized by the municipalities and what proportion should remain in their possession, no recommendations were made as to the prices at which the municipal housing stock should be sold, no principles were defined for selection of houses/apartments for privatization, no recommendations were made as to the terms of payment, settlements with the new owners or disposal of the funds obtained from sale of a part of the housing stock. All these issues were left to the discretion of the municipalities, which necessarily led to a wide variety of conditions under which privatization took place. The beginning of the privatization process can be dated as early as 1991; despite the lack of precise statistical data on its course, it can be concluded (especially based on data from a survey conducted by the Institute of Territorial Development in Brno) that its greatest momentum occurred in the second half of the 1990s [Sunega 2005: pp. 272].

Municipal housing stock in Poland

Municipal housing is a housing stock owned by the municipality and is part of the public resources [(Sikora-Fernandez, 2011: pp. 18]. In Poland, the management of municipal housing stock is an activity directed towards the municipality's housing assets, involving planning and decision-making in the construction of new housing, as well as the ongoing operation and maintenance of existing resources in an appropriate technical condition. The municipal housing stock are defined in the Law on the Protection of Tenants' Rights, according to which the municipal housing stock consist of apartments owned by the municipality or by municipal legal persons or commercial companies formed with the participation of the municipality, except for social housing societies (TBS).

Thus, it is a housing stock intended for rent, by assumption, for people who are unable to satisfy their housing needs. A municipal apartment fulfills an auxiliary function and at the same time constitutes a part of the commune's assets which may be used by it to multiply its income. Therefore, the municipality may lease or sell council apartments and the income - both from the lease and sale of the

apartments - is the municipality's own income [Parys A. W. 2020: pp.23-45].

Łódź has the largest number of council dwellings per 1000 inhabitants of all the regional capitals. The quantitative changes in the municipal housing stock in Łódź were mainly due to the privatization of the housing stock. The housing stock in Łódź is also characterized by a low proportion of social housing units in the overall municipal housing stock.

The municipal housing stock plays a major role in the functioning of the housing economy and in shaping the living conditions of the inhabitants and the spatial system in Łódź. The city is ranked as the largest owner of tenement houses among the major urban centers in Poland. More than every third apartment (38.0%) in Łódź is part of the council housing stock. Such a situation is mainly a legacy of the social housing management policy pursued in the period of the People's Republic of Poland. Fundamental changes in the management of the council housing stock in Łódź took place during the systemic transformation in the early 1990s. At that time, the previously state-owned housing stock was municipalized. In line with the legal regulations, the municipality became responsible for satisfying the housing needs of its inhabitants. It must be noted that because of the progressive privatization of the municipal housing stock, its significance in the housing management in Łódź has considerably decreased. In the years of socio-economic transition, the importance of municipal housing in the housing economies of Łódź and Kraków clearly decreased, mainly due to the progressive privatization of the municipal housing stock.

Evaluation of the effectiveness of instruments of local housing policy in Poland and the Czech Republic on the examples of Lodz, Kraków, Brno and Ostrava

City of Lodz

Lodz is the third largest city in Poland in terms of population and the fourth in terms of area. The city is in central Poland, in the central part of Lodz Voivodeship. The current area of the city is 293.2 km². The city of Łódź is divided into 37 urban districts. At the end of 2018, Łódź had 685,285 inhabitants, of which 372,957 were women. As of 30 December 2017, Łódź had a population of only 693,79 thousand, which was about 28% of the population of Łódź Voivodeship.

One of the key documents essential for the development of the housing stock in Łódź is the document "Housing Policy of Łódź 2020+(Polityka Mieszkaniowa Łodzi 2020+)". The city of Łódź pursues an integrated housing policy with respect to the entire housing stock, however, it assumes that due to the factors listed in the performed diagnosis, it will focus its efforts primarily on tidying up and reforming its actions with respect to the council housing stock, primarily in the key central area of the city. This is determined by the critical technical condition of the municipal stock, its ownership relations, and its

economically ineffective and socially unjust treatment to date
[https://uml.lodz.pl/files/public/user_upload/Polityka_mieszkaniowa_Lodzi_2020_.pdf].

The main axis of the housing policy of Łódź 2020+, and the primary condition of its success, is the separation of the housing policy with respect to the social stock from the housing policy with respect to the remaining municipal stock. This means a definite separation of the commercial function of the municipal stock from its social function. In view of the above, the actions of Łódź's housing policy serve to functionally divide the city's housing stock into two groups: the shrinking stock of municipal dwellings which do not perform social functions, and the extensive and restructured stock of social dwellings, replacement dwellings and temporary accommodation - which constitute an indispensable instrument for supporting the city's social welfare policy and revitalization programs. Thus, it is the city's duty to provide effective solidarity-based social support to those tenants who, for reasons beyond their control, are unable to independently satisfy their reasonable housing needs.

The diagnosis of the municipal housing stock in Łódź, carried out based on the analysis of statistical material, made it possible to define the selected groups of problems in the field of housing in Łódź, such as:

- despite the relatively large municipal housing stock in Łódź, the city's performance in providing social, replacement and temporary dwellings is insignificant,
- one of the basic problems of Łódź's municipal housing stock is its poor technical condition. This refers both to the housing stock at the municipality's disposal (owned by the municipality, the State Treasury, and housing cooperatives), and the stock owned 100% by the municipality,
- lack of a separate, adequate to the expected needs, stock of social, substitute and temporary dwellings makes it impossible to provide effective housing aid by the City,
- rental rates for dwellings which only partially cover the costs of maintaining the housing stock illustrate the decidedly social character of the Polish rent policy.
-

The main goal of the housing policy in Łódź is to separate the municipal housing stock from the local municipality's social housing stock. First, a system will be developed (for areas outside Łódź's city center) of principles of converting council dwellings into social housing and temporary accommodation. From the municipal social housing stock, temporary accommodation outside the very city center will be created for those unable to afford the running costs of an independent social unit, even with the municipality's financial support

[https://uml.lodz.pl/files/public/user_upload/Polityka_mieszkaniowa_Lodzi_2020_.pdf].

City of Krakow

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Krakow is the second largest city in Poland both in terms of population and area. The city is in southern Poland, in the central-western part of Malopolska voivodeship. The current area of the city is 327 km². Kraków is divided into 18 urban districts. At the end of 2018, Kraków had a population of 771,069, of which 411,204 were women. At the end of December 2017, the population of Kraków was 767,35 thousand, which was 22.6% of the total population of the Malopolska Voivodeship.

One of the main documents of fundamental importance in shaping the housing resources of the City of Krakow is the "Long-term Program for the Management of the Housing Stock of the Municipality of Krakow and the Stock of Temporary Dwellings for 2018- 2023 („Wieloletni program gospodarowania mieszkaniowym zasobem gminy miejskiej Karków oraz zasobem tymczasowych pomieszczeń na lata 2018- 2023)". This is a sectoral program implementing the objective of providing housing assistance to the residents of Krakow within the housing resources of the Municipality of Krakow and the resource of temporary dwellings. The housing policy of Krakow adopts the principle that a dwelling from the resource is not a target dwelling, but only a form of assistance granted for the time of remaining in a situation which makes it impossible to satisfy housing needs on one's own, including during the process of becoming independent connected with establishing a new, separate household.

The City of Krakow also undertook in the document to realize the goal of "Rational management of the housing resources of the Municipality of Krakow". Realization of this goal will allow limiting the number of people waiting for an apartment from the stock and will lead to a final state in which this dwelling will be "waiting" in a state that is free and fit to be inhabited by an applying person interested in housing aid from the Municipality. This goal was dictated by the deficit in housing units and the expected increase in the need for social and substitute dwellings, as well as the related increase in compensation claims for failure to provide social housing (based on court judgments ruling on eviction with the tenant's right to housing).

Rational management of housing stock of Municipality of Krakow is also understood as realization of the following tasks:

- ongoing implementation of tasks assigned to the Municipality in housing support,

In terms of local housing policy, Krakow foresees the following actions:

- increasing the stock and the stock of temporary dwellings,
- maintaining the stock and the stock of temporary dwellings at a good technical level,
- satisfying the necessary housing needs by the municipality,
- stopping the reduction of the stock,

- marketisation of the level of rent rates in the housing stock and application of a system of rent rebates depending on the income achieved,
- participation of the municipality in housing cooperatives with its participation,
- management of the resource and the stock of temporary dwellings.
-

Decreasing number of buildings under management of Municipal Buildings Management Board (ZBK) in Krakow in recent years, including the oldest ones, was mainly a result of returning real estate to private owners, transferring the management of buildings to cooperatives in connection with the purchase of dwellings by tenants and the sale of entire buildings by the Municipality of Krakow [Parys A. W. 2020: pp.23-45].

City of Brno

The city of Brno is the second largest city in the Czech Republic in terms of population and area. In Brno and its immediate surroundings, medium-sized and larger enterprises are concentrated, education and training services at all levels (primary, secondary, and higher education) are developed. The current area of the city is 230.2 km². The statutory city of Brno is divided into 29 urban districts. At the end of 2018, Brno had 380,681 inhabitants, of which 196,633 were women. The number of people residing in the city increases daily by 100,160,000 people who come to Brno for work or education. The Brno metropolitan area has a population of about 600,000. There is a process of urban sprawl - people of working age moving to suburban areas, which reduces the number of people living in the city and increases their average age [*Tematický akční plan pro oblast sociálního bydlení ve městě Brně* 2019–2022 pp.4].

The involvement in the creation of the Social Housing Concept in Brno dates to 2016, when the Statutory City of Brno was selected as one of sixteen cities and municipalities to test the Social Housing Concept of the Czech Republic 2015-2025 (approved by the Czech government on October 12, 2015). Based on the cooperation agreement between the Statutory City of Brno and the Ministry of Labour and Social Affairs of the Czech Republic (hereinafter referred to as the Ministry of Labour and Social Affairs), a three-year pilot project for testing the Social Housing Concept was launched in April 2017 social housing in Brno.

The purpose of social housing is to meet the housing needs of people who, due to adverse financial circumstances, are unable to find housing on market terms[2]. However, housing needs are a much

---

[2] In its conception of social housing, the European Commission (2020/C 429/13), acting as the European competition authority, is very restrictive: it states that social housing should be reserved only for "disadvantaged persons or disadvantaged social groups who, for reasons of solvency, are unable to find housing at market conditions", https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:52020IE1076&from=EN.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

broader concept and affect the overall quality of life. Individuals with unmet housing needs are at increased health risk. Housing poverty takes its toll on the psyche, finances, employment, does not provide sufficient peace and quiet or space for study, etc., and so generally puts people at risk of a continuing existential crisis that prevents other aspects of life from being fulfilled. Since the Act to Housing has not yet been adopted in the Czech Republic, currently municipalities are mainly responsible for this area. In the long run, it is socially beneficial to solve the housing problem comprehensively and responsibly, as recommended by the MPSV (Ministry of Labour and Social Affairs of the Czech Republic): "The provision of housing with clearly defined conditions is one of the basic tools for solving social and economic problems at the local and regional level. If a municipality has this tool at its disposal, it can effectively protect itself from poverty, the formation of socially excluded localities and solve serious crisis situations of its inhabitants *Sociální bydlení – metodická a informační podpora v oblasti sociálních agend* ". http://socialnibydleni.mpsv.cz./cs/.

Based on the need of social housing development and in accordance with governmental concept a concept of social housing at the local level is being created based on the experience of Brno city council from the pilot project Rapid re-housing. This project was aimed at families with children and thanks to the decision of Brno City Council an innovative social method "*Housing first*" was transferred and implemented for the first time in Czech Republic. This approach is based on the simple assumption that housing needs should be solved first of all by what people lack the most, namely housing. This means that housing need cannot be replaced by any social service accommodation service or a stay in a commercial shelter. Only after the housing situation is stabilized can other social or health problems facing the household be effectively addressed. The target group for social housing is people in need of housing who are also low-income. The category of social housing therefore does not include sheltered housing or special purpose housing, as well as other categories of municipal housing, which are separately defined in the Regulations for Renting Housing in Dwelling Owned by the Statutory City of Brno.

City of Ostrava

The city of Ostrava is the capital of the Moravian-Silesian Region, which lies in the northeastern part of the Czech Republic[3]. In terms of area and population, Ostrava is the third largest city in the Czech Republic. Today's Ostrava covers an area of 214.24 km2. Ostrava is currently divided into 23 municipal districts, the most populous of which are Ostrava South, Poruba, Moravian Ostrava and Přívoz.

---

[3] The current administrative division of the Czech Republic includes 13 self-governing countries and the separate city of Prague (*samosprávné kraje*), which are units of local government with their own administration (the equivalent of the Polish voivodeship).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Many people live in conditions that do not meet the minimum housing standards or have no housing at all. The City of Ostrava, which has been dealing with such situations in the sphere of housing policy for a long time, did not have an approved strategic document on this issue. In view of this, based on these identified needs, the Concept of Social Statutory Housing of the City of Ostrava (Koncepce sociálního bydlení statutárního města Ostravy) was prepared in 2017. The overall goal of the concept was to create a comprehensive social housing system to meet the needs of the city's residents who were classified as in need of housing.

As of 2016, the Statute of the City of Ostrava allows the city districts to sell their housing stock (Article 7) and obliges the city districts to allocate at least 50% of the housing rental income exclusively to finance the administration, maintenance, repair and reconstruction of the housing stock entrusted to the city districts (Article 10). The remaining housing rental income may be used by the municipality to finance the administration, maintenance, repair, and reconstruction of the properties entrusted to the municipality.

The condition and size of the housing stock are the basic starting point for the formation of housing policy, which determines decisions on further actions and solutions to housing problems. In Ostrava, between 2009 and 2016, there was an overall reduction in the number of housing units owned by municipal districts by 244. As of December 31, 2016, there were a total of 12,872 housing units under the management of municipal districts, i.e., 1,037 residential buildings. Some of the city-owned housing units entrusted to the districts are located in buildings with other apartment owners and formed associations of apartment owners. The reduction of housing stock in the city's districts over the past 12 years has been influenced by their extensive privatization [Koncepce sociálního bydlení statutárního města Ostravy (2017), pp. 33].

Comparative Analysis of Housing Benefit in Lodz, Krakow, Brno and Ostrava

Principles, procedure for granting and numbers and amounts of housing allowances in Poland.

In Poland, the rules, procedure for granting, determining the amount and payment of housing benefits and the competence of the authorities in these matters are governed by the Act of 21 June 2001 on Housing Benefits [Ustawa z dna 21 czerwca 2001 r. o ochronie praw lokatorów, mieszkaniowym zasobie gminy i zmianach Kodeksu cywilnego (Dz.U. z 2001 r. Nr 71, poz. 733]. The housing allowance is granted by the city president by way of an administrative decision at the request of a person entitled to a housing allowance. The housing allowance is a form of assistance for people who have difficulties in settling their current housing charges. It is addressed to persons meeting the following three conditions:

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

- the person has a legal title to the dwelling,
- the person lives in a flat that meets the metric criteria,
- the person meets income criteria.

The size criterion depends on the number of persons living in the dwelling. A housing allowance is granted if the usable area of the dwelling does not exceed the area specified for a given number of persons (the standard area) by more than 30% (or 50% if the area of the rooms and kitchen does not exceed 60% of the area of the whole dwelling). For each additional person living in the property, the standard floor area is increased by 5 m^2.

Another important element included in the housing allowance is the income criterion. The income criterion is determined with reference to a household. The housing allowance is granted if in the period of 3 months preceding the date of application the average monthly income per one member of the household did not exceed 40% of the average salary in a one-person household or 30% in a multi-person household.

According to the contents of the Act of 21 June 2001 on Housing Benefits, Article 4 amended on 1 July 2021 precisely defines a household. According to the Act, a household is understood as a household run by the person applying for a housing allowance, who independently occupies a dwelling, or a household run by this person together with his/her spouse and other persons permanently residing and farming with him/her, who derive their right to live in the dwelling from the right of this person. Members of the household shall not include persons residing in institutions [OJ 2019.2133 t.j] . The structure of the housing allowance for Łódź and Kraków is presented in Table 1.

TABLE 1. Number and amount of housing allowance paid in Łódź and Kraków between 2008 and 2018

Number of housing allowances paid			Amount of housing allowances paid (in PLN)		
Year	Łódź	Kraków	Łódź	Kraków	
2008	170885	98261	23882648	15961621	
2009	139643	85999	20612150	16177607	
2010	138393	83908	22164700	17174167	
2011	138345	74517	23970940	16341583	
2012	142172	88452	26829028	20963254	
2013	151326	92569	31002842	22286481	
2014	150233	86081	33198881	21246081	
2015	139662	82109	30162075	19960659	
2016	126353	77467	27479205	18605599	
2017	112964	70976	25504975	16778332	
2018	101785	64028	23945559	14642663	

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Table 1 and Figures 1 and 2 show the number and value of the amount of housing benefit paid in Łódź and Kraków between 2008 and 2018. The data was obtained from the Polish statistical office.
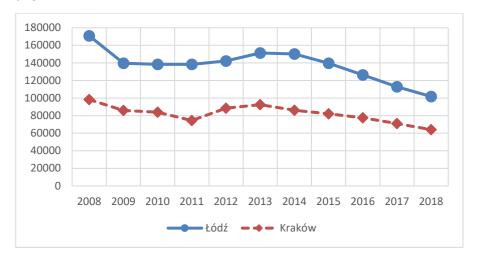
From the analysis of the data in Table 1 and presented in Figures 1 and 2, we may observe a decrease in the number of housing allowance paid out in Łódź in 2008-2011 (by 32 540). An increase in the number of paid housing allowance occurred in 2012-2013 (by 9 154). From 2014 to 2018, a decreasing trend in the number of paid housing allowance is noticeable.

In Łódź, the amount of housing allowance paid increased in 2009-2014 (by PLN 12,586,731 million). In contrast, the decrease in the amount of housing benefit paid in Łódź occurred in 2008-2009 (by PLN 3,270,498 million) and from 2014-2018 (by PLN 9,253,322 million).

In Kraków, there was also a decrease in the number of housing allowance paid out between 2008 and 2011 (by 23,744). In 2012-2013, there was also an increase in the number of paid housing allowance (by 4,117). Like Łódź, in Kraków from 2014 to 2018 there is a noticeable trend of decreasing the number of paid housing allowance.

In Kraków, between 2008 and 2010, we observe an increase in the amount of housing allowance paid (by PLN 1,212,546 million). On the other hand, a decrease in the amount of housing allowance paid in Kraków occurred in the period 2013-2018 (by 7,643,818). Thus, we can say that the rate of change in the number and amount of housing allowance payments in Łódź and Kraków is similar.
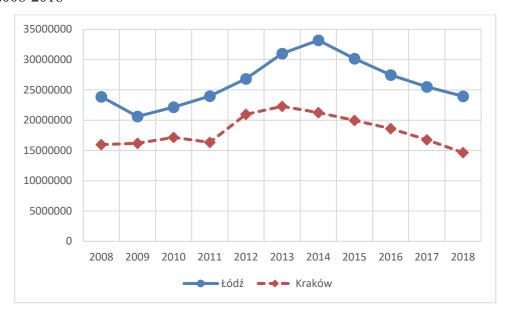
FIGURE 1. Number of housing allowance paid per year in Łódź and Kraków between 2008 and 2018

FIGURE 2. Amount of housing allowance paid/year in PLN in Łódź and Kraków between
2008-2018

Source: own work based on the BDL GUS.

Rules, procedure for granting and numbers and amounts of housing allowance in the Czech Republic

Since 1 January 2012, the decision-making and administration of social benefits not covered by insurance has been handled by a single body, the Employment Office of the Czech Republic (*Úřady práce ČR*). Since then, all services in the area of employment, state social support, assistance with material needs and benefits for the disabled can be handled at individual contact points of the Employment Office of the Czech Republic. These benefits are regulated by [Act No. 117/1995 Coll].

Housing allowance (*Příspěvek na bydleni*) is the most important state social benefit that concerns housing in the Czech Republic. The conditions for obtaining the right to housing benefit are set out in § 24 of the Act on State Social Assistance. The state contributes to the housing costs of low-income families and individuals. The owner or tenant of a dwelling registered for permanent residence in that dwelling is entitled to a housing allowance if 30 % of the family income is not sufficient to cover housing costs and at the same time 30 % of the family income is below the respective normative costs determined by law [Koncepce sociálního bydlení statutárního města Ostravy (2017), pp. 33].

TABLE 2. Number and amount of state social assistance allowances paid: Příspěvek na
bydlení- housing allowance in Brno and Ostrava during 2008-2018

Number of state social benefits paid out (Vyplacené dávky státní sociální podpory): Příspěvek na bydlení- housing allowance	Amount of benefits paid out in thousands CZK (thousand Czech crowns) (Value of benefits paid out in thousands of CZK)

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Year	Brno	Ostrawa	Brno	Ostrawa
2008	59206	79985	115360	134750
2009	62644	79161	154331	167172
2010	76396	95214	222280	244838
2011	87542	118057	276212	334931
2012	99030	137389	338329	418351
2013	115367	164413	430329	534969
2014	132775	191891	523384	659972
2015	140862	201746	567004	705582
2016	143244	201406	593229	724004
2017	138628	196053	572521	706550
2018	125445	182026	520970	662145
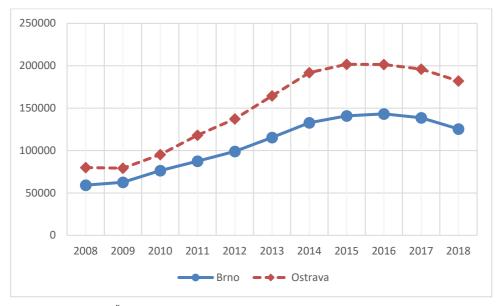
Source: own work based on Český statistický úřad.

The data in Table 2 and shown in Figures 3 and 4 were obtained from the Czech Statistical Office (Český statistický úřad) and refer to benefits from state social assistance (Vyplacené dávky státní sociální podpory). From the analysis of the data in Table 2 and shown in Figures 3 and 4, we can observe a significant increase in the number of paid housing allowance in Brno in 2008-2016 (by 66,239) and the amount paid (by 405,610 thousand CZK). This is an indicator of the increasing number of households and their difficult situation in terms of housing maintenance, i.e., housing costs are such an expense for the household budget that financial support from the state is needed to cover it.

In Ostrava, between 2008 and 2016, there was also a significant increase in the number of housing benefit paid (by 102,041) and the amount paid (by CZK 527,395 thousand). On the other hand, in 2017 and 2018 both the number and the amount of paid housing benefit decreased. Thus, we can say that the rate of change in the number and amount of housing benefit payments in Brno and Ostrava is analogous.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl
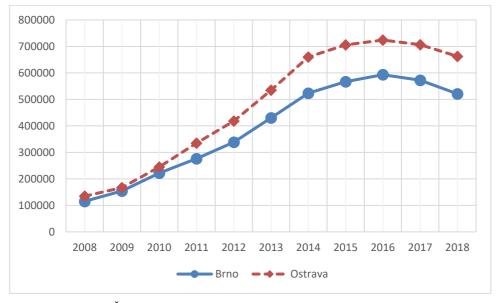
FIGURE 3. Number of state social assistance allowances paid out (Vyplacené dávky státní sociální podpory): Příspěvek na bydleni in Brno and Ostrava in 2008-2018

Source: own work based on Český statistický úřad.

FIGURE 4. Amount of benefits paid out in thousand CZK (tisíc korun českých) (Hodnota vyplacených dávek v tis. Kč): Příspěvek na bydlení -housing allowance in 2008-2018

Source: own work based on Český statistický úřad.

Conclusion

In the paper, a comparative analysis was made of local housing policy programs focusing on the improvement of access to social housing and selected housing support instruments in the cities of Poland: Łódź, Kraków and Czech Republic: Brno and Ostrava such as housing benefit (*Příspěvek na*

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

bydleni) in the Czech Republic and housing allowance in Poland. Answering the research question, we can say that the following effects of the instruments applied in relation to the state of the local housing resources and the needs reported by households in the selected cities result from the analyses:

- due to the large difference in the number of inhabitants (in 2018 there were 379,526 inhabitants in Brno, 289,629 in Ostrava. In comparison, in 2018 there were 685,285 inhabitants in Lodz and 771,069 in Krakow) the size of the social housing stock is highly differentiated which makes direct analysis and inference difficult,

- at the end of 2018, the city of Ostrava had a total of 726 social housing dwellings (i.e., twice the number of social housing dwellings in Brno),

- in 2018 in the city of Brno there were 0.93 social housing dwellings per 1,000 inhabitants, and in the city of Ostrava there were 2.52 social housing dwellings,

- at the end of 2018, the housing stock of the municipality of Łódź included 44,045 municipal dwellings, and 2,431 dwellings comprised the social housing stock,

- in Krakow at the end of 2018, the stock of municipal housing amounted to 14,810, while the number of social housing dwellings was 3,882,

- the reduction of housing stock in individual districts of the city of Brno during the last 12 years has been influenced by their extensive privatization,

- both in Łódź and in Kraków, as a result of progressive privatization of municipal housing stock, their number has visibly decreased,

- the subsidies analyzed: housing allowance (*příspěvek na bydleni*) and housing benefit are income-related,

- the proportion of households eligible for these benefits is clearly highest among the lowest-income households, while households eligible for benefits are almost non-existent among the highest-income households,

- the rate of change in the number and amount of housing allowance payments (*příspěvek na bydleni*) in Brno and Ostrava is the same,

- the rate of change in the number and amount of housing benefit payments in Łódź and Kraków is similar,

- answering the second research question: are the selected housing support instruments adapted to local conditions? We can say that the housing support instruments adapted to the local conditions include housing allowance (*příspěvek na bydleni*) in the Czech Republic and housing allowance in Poland, while housing support instruments such as providing affordable housing to people in a difficult housing situation should be evaluated positively for Brno and Ostrava and negatively for Lodz and Krakow.

References

Zákon č. 117/1995 Sb., o státní sociální podpoře, ve znění pozdějších předpisů,

https://www.zakonyprolidi.cz/cs/1995-117; access: 15.11.2021.

Ustawa z dna 21 czerwca 2001 r. o ochronie praw lokatorów, mieszkaniowym zasobie gminy i zmianach Kodeksu cywilnego (Dz.U. z 2001 r. Nr 71, poz. 733); http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20180001234/U/D20181234Lj.pdf; (access: 15.11.2021).

Kucharska-Stasiak E. (2003), The evolution of the housing policy model in Poland, Studia i materiały towarzystwa naukowego nieruchomości, V o l u m e 16, N u m b e r 1, Olsztyn pp. 21-22, 2003.

Lérová I. (1983) Úloha bydlení v sociálně ekonomickém rozvoji. Praha: SNTL.

Muczyński A. (2009) Metodyka wspomagania gospodarki remontowej w gminnych zasobach lokalowych (Methodology of supporting repair management in the municipal housing stock). Studia i Materiały Towarzystwa Naukowego Nieruchomości 17(3), 69–82, 2009.

Slavata D. (2000) „Vybrané problémy obecní bytové politiky ". Veřejná správa, pp. 8–9, 25.

Parys, A. W. (2020) Ocena lokalnej polityki mieszkaniowej Łodzi i Krakowa w świetle wybranych aspektów. Acta Universitatis Lodziensis. Folia Oeconomica, 4(349), pp. 23-45.

Dorota Sikora-Fernandez D. (2011), Budownictwo socjalne na tle zrównoważonego rozwoju miast, Acta Universitatis Lodziensis Folia Oeconomica (0208-6018), vol. 3, nr 261, pp. 433-443.

Sunega P. (2005) The Effectiveness of Selected Housing Policy Subsidies in the Czech Republic, Sociologický časopis/Czech Sociological Review, Vol. 41, pp. 271-272.

Sýkora L. (2003) „Between the State and the Market: Local Government and Housing in the Czech Republic. " Pp. 48–116 in Lux, M. (ed.): Housing Policy: An End or a New Beginning? Budapest: Open Society Institute, 2003.

Tematický akční plan pro oblast sociálního bydlení ve městě Brně 2019–2022, https://www.socialni-zaclenovani.cz/wp content/uploads/BRNO_TAP_soc_bydleni_ZOR7.pdf, (access: 15.11.2021).

Koncepce sociálního bydlení statutárního města Ostravy (2017), pp. 33

Koncepce sociálního bydlení v Brně Analytická a návrhová část 2020–2030, pp.22-23.

Tematický akční plan pro oblast sociálního bydlení ve městě Brně 2019–2022 pp. 9-10.

https://www.czso.cz ;access: 15.11.2021.

https://www.uradprace.cz/moravskoslezsky-kraj ; access: 15.11.2021.

https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:52020IE1076&from=EN ; access 15.11.2021.

http://socialnibydleni.mpsv.cz./cs/; access: 15.11.2021.

Lost hybridity? Trajectory, path dependence and hybridization pathways of cooperatives in the provision of affordable housing in Milan (Italy)

Marco Peverini
Politecnico di Milano, Department of Architecture and Urban Studies,
Via Bonardi, 3, 20133 Milano, Italy
e-mail: marco.peverini@polimi.it

Housing cooperatives (HCs) represent a "third way" between state and market for providing affordable housing. HCs provide housing according to the *mutualism* principle – based on social need by their members (and not on speculative expectations) – usually at prices or rents corresponding to the mere costs and with good qualitative standards. Considering the importance of providing affordable housing as a societal challenge, the article explores the trajectory of HCs in Milan, linking it to the (national and local) policy and market framework.

Italy, and especially Milan, has a longstanding tradition of HCs. They were born around 1870, upscaled by the first public housing law in 1903 and later supported by planning instruments. Locally founded HCs have been important in providing affordable housing both for rent ("undivided" HCs) and in homeownership ("divided" HCs) in growing Italian cities. However, the trajectory and role of HCs in Italy and Milan have changed significantly by the time, linked to path dependence (political, cultural and material heritage and tradition of HCs) and critical junctures (shifts in national housing policies, local planning/land use instruments and market conditions). This led to certain pathways of "hybridization" – the integration HCs in the housing welfare mix – or, as I argue, to a "lost hybridization" for HCs in Italy: the lost opportunity of integrating HCs in public policies for providing affordable housing.

The article uses a neoinstitutionalist approach to policy analysis – with the connected concepts of path dependence and critical junctures – (Sorensen, 2015) and applies process tracing (Trampusch & Palier, 2016) and the concept of "state-directed hybridity" (Mullins et al., 2017) to the analysis of the trajectories and hybridization pathways of two longstanding Milanese HCs through grey literature and interviews. The article aims to contribute to the literature on HCs by: (i) tracing their trajectory and role in Italy and Milan concerning organization/governance, housing stock, and hybridization; (ii) relating it to the national and local housing policies and culture, highlighting different hybridity mechanisms, causalities, and implications within their trajectory; and (iii) identifying present challenges and opportunities for HCs to provide affordable housing in a mutualist way.

0. Introduction

Housing cooperatives represent a "third way" between state and market for providing affordable housing. HCs operate according to the *mutualism* principle. Mutualism is a broad concept encompassing, among others, reciprocity, intergenerationality and rewarding of the exchange amongst the cooperative members and with externals. For the purpose of this article mutualism is here intended in the sense that housing is provided on the basis of the need shared by HCs' members (and not on speculative expectations as would be in the market) and at prices or rents corresponding to the mere costs, as in the principle of cost renting (Kemeny, 1995). Considering the importance of providing affordable housing as a pressing contemporary societal challenge, especially for attractive and growing cities (like Milan), the article explores the trajectory of some of the most relevant HCs in Milan, linking it to the (national and local) policy and market framework.

Italy, and especially Milan, has a longstanding tradition of HCs. Born around 1870, upscaled by the first public housing law in 1903 and later supported by financial and planning instruments, locally founded HCs have been important in providing affordable housing in growing Italian cities. Today, the housing sector of the Italian Alliance of Cooperatives (*Alleanza Cooperative Italiane*, ACI), which includes the

three Italian HCs associations at the national level (Agci-Abitazione, Confcooperative Habitat and Legacoop Abitanti) and almost all Italian HCs, represents 4.364 HCs with around 438.000 members. The trajectory and role of HCs in Italy and Milan have changed significantly over time, and the sector has faced stagnation in housing production despite a general increase in the demand for affordable housing. The article investigates the reasons for this apparent contradiction, arguing that Italian HCs – especially those providing rental housing – have faced a "lost hybridity", or the lost opportunity of being structurally integrated into housing policies for the provision of affordable housing.

While cooperation in general has been widely investigated from a sociological and economic point of view (see for example, Axelrod, 1984; Zamagni & Zamagni, 2008; Sennett, 2012), HCs have been less directly addressed by the academic literature, especially the Italian ones (with the exception of Legal Studies investigating the legal relationship among cooperative members). This gap in the literature is acknowledged by scholars that have underlined the role of HCs as social landlords with a big rental stock (Gaeta, 2017) or of actors providing an alternative to the traditional market speculation (Bricocoli & Salento, 2019). However, research is still lacking on the role and trajectory of HCs, especially from the perspectives of planning and policy analysis and regarding their contribution to the local housing stock and their relationship with housing policies and planning. Moreover, while recent efforts by various HCs have resulted in a relevant self-produced documentation on their history and heritage, there is little academic literature specifically regarding Italian HCs on a more general scale and from an external point of view.

The article aims at filling these relevant gaps, providing an overview on the trajectory and role on two among the most relevant HCs in Milan and taking advantage of this empirical material to reflect more generally on the role of HCs within local housing policies in Milan and, partly, in Italy.

The article uses a neoinstitutionalist approach to policy analysis – with the connected concepts of path dependence and critical junctures – (Sorensen, 2015) and applies process tracing (Trampusch & Palier, 2016) and the concept of "state-directed hybridity" (Mullins et al., 2017) to the analysis of the trajectories and hybridization pathways of two longstanding Milanese HCs through grey literature and interviews.

The trajectory is reconstructed building on the elaboration of information collected through primary sources (mainly data and interviews) regarding the two HCs object of this study, and of secondary sources, such as grey and academic literature, for the general institutional framework.

The article aims at contributing to the literature on HCs by: (i) tracing their trajectory and role in Italy and Milan concerning organization/governance, stock, and hybridization; (ii) relating it to the national and local housing policies and culture, identifying different hybridity mechanisms, causalities and implications within their trajectory; and (iii) identifying present challenges and opportunities for HCs to provide affordable housing in a mutualist way.

The article is organized as follows: in the first section, it introduces the theoretical framework and methodology; in the second, it describes the context of HCs in Italy and Milan; in the third, the trajectories of two Milanese housing cooperatives are analyzed as case study; finally, in the fourth section the article present conclusions and perspectives.

1. Theoretical framework and methodology

Scholars pay increasing attention to what has been called a new "global urban housing affordability crisis" (Wetzstein, 2017), meaning that cities face issues of housing affordability due to stagnating incomes and increasing housing prices and housing shortage in the face of increased immigration to the core economic areas of attractive and global cities.

Except for some new articulations (e.g. the fact that housing prices are pushed by international financial investment in real estate) this is not a new phenomenon, but is rather a structural character of capitalist

urbanization (Engels,1950 [1872]) resulting in a continuous state of crisis (Madden & Marcuse, 2016) since the industrial revolution.

It was also, and especially, for this reason that HCs were established during the 19th Century. In this sense, this article explicitly investigates HCs focusing on their actorial role in providing affordable housing and not in other important themes, such as democratization of housing production, collaborative housing, etc. Here we focus on HCs "as an affordable, accessible and (partially) decommodified alternative" to the (crisis prone) dominant housing provision (Ferreri, Vidal, 2021: 2). In relation to Italian HCs, it is important to stress that complete decommodification is hardly secured by HCs since there is no explicit legislation that prevents it – as there is, for example, in Austria or Switzerland (see: Lawson, 2010; Barenstein et al., 2021) –, especially for homeownership cooperatives (see further). For this reason, I focus here on the affordable character of the housing stock produced by HCs, and to its accessibility for different populations.

While some authors have stressed how cooperation is well embedded into the market economy, representing a more "civil" alternative to it, there has been an increasing interest in recent scholarship on the role of the state as 'enabler' of HCs (see: Ferreri, Vidal, 2021; Ganapati, 2010). HCs are here conceived as actor within a *governance system* and especially within *housing policies*.

Policy is here intended in the sense of what is decided or done (or not) with problems or needs regarded of collective relevance (Dunn, 1981). More specifically, then, housing policy is what is decided or done (or not) with housing problems or need within a governance system, and actors' role and behavior as well as housing outcomes at least partly depend on housing policy.

This is relevant since HCs are "actors" within local governance and in the design of local policies and can sometimes also be regarded "policy entrepreneurs" (Pirani, 2008). Moreover, they can be regarded as small-scale collective actor operating with the aim of providing affordable housing to their members, and HCs action depends not only on the conditions of the (land and housing) market but also in the framework of housing policy and governance system, or on state-directed hybridity" (Mullins et al., 2017). "The concept of hybridity was developed within the non-profit studies literature to account for how competing drivers of state, market and community interact to shape decision-making within non-profit organizations […] The concept of hybrid organizations reflects the blurring of sector boundaries that has followed the welfare mix" (Mullins et al., 2017: 3). Hybridization in this case means reaching housing objectives through public-private partnerships involving private and collective actors such as housing associations, HCs, and other no- or low-profit third sector actors in an intermediate and partly regulated segment of the housing market (Mullins et al., 2017). Hybridization is "state-directed" because it depends on funding, subsidies, incentives, directives or, in other words, on policies enacted by the state at its various level. For the housing sector, "Some of the concrete themes in the hybridization of non-profit housing include governance, decision-making, resource allocation, asset sales, cross-subsidy and the balancing of commercial and social goals" (*ibidem*: 4).

Finally, hybridization should be conceived as "a contested process, rather than as a static description and to uncover 'institutional logics' which underpin varied organizational responses to common external pressures" (*ibidem*: 3). The article applies process tracing as a methodology aimed at unpacking causal and temporal mechanisms, by qualitatively examining a phenomenon chronologically as a sequential series of events and therefore including time as a variable in the formation of causal mechanisms on the basis of temporal orders of events (Trampusch, Palier, 2016).

Process tracing was fruitfully applied to trace policies for greening (Mocca, Friesenecker, Kazepov, 2020) and to housing policies (Friesenecker, Kazepov, 2021) in Vienna, combining it with the neoinstitutional concept of "critical junctures". These are moments that allow for change and where path-dependent processes are initiated, not only in terms of dramatic change but also in more swift policy

"drifts" – moments where external conditions shift – and "layerings" – moments where new policies are added to existing ones (see also Sorensen, 2015).

Process tracing, path dependence and critical junctures are here applied to investigate the trajectory of HCs in Milan as a consequence of the evolution of planning and housing policies at the different levels of governance in Italy and Milan, with the aim of identifying actual hybridities and test the hypothesis – which constitute the main research question – that HCs in Milan (and Italy) faced a "lost" hybridization: a situation in which HCs were more deeply involved into housing policy objectives but drifts or layerings in policies and evolutions in the market have crowded them out.

The article draws on the reconstruction and periodization of relevant housing and planning policies at the national and local level, combined with that of the trajectory of two specific HCs in Milan. The two cooperatives were chosen because among the most relevant in Milan for dimension and because one, *Delta Ecopolis*, pertains to the tradition of *undivided* rental-oriented and "red" cooperatives – linked to communist and/or socialist organizations – while the other, *Consorzio Cooperative Lavoratori (CCL)*, to *divided* ownership-oriented and "white" cooperatives – linked to catholic-social organizations. Data were collected for both cooperatives especially regarding the construction of their stock and its localization, and interviews were conducted to operators of the two HCs in order to identify main activities and challenges faced by the cooperatives by the time. This part, in section 3, is organized in three sub-themes: 1) History, organization, and governance; 2) housing stock and geography; 3) trajectory and hybridities. Additional interviews to "third" subjects – namely, an acknowledge researcher in the field and a renowned accountant of Milanese HCs – were conducted to control the findings (table 1).

Table 1. List of interviews conducted for the research

Interviewee	Role	Date
1	Cooperator of *CCL*	May 19th 2021
2	Cooperator of *Delta Ecopolis*	May 19th 2021
3	President of *CCL*	May 23rd 2021
4	Researcher of Politecnico di Milano	May 28th 2021
5	President of *Delta Ecopolis*	June 3rd 2021
6	Researcher of Politecnico di Milano and former member and inhabitant of Delta Ecopolis	June 11th 2021
7	HCs Accountant	July 13th 2021

Source: made by the author

2. The context: historical path dependency and critical junctures of HCs in Italy and Milan

This section investigates the context in which HCs operated in Italy and Milan, proposing a periodization and highlighting path dependencies and critical junctures that influenced the activities of HCs (Table 2).

2.1 from the second half of the 19th century to WWII

At the beginning of the 20th century, Italy's large industrializing cities were growing at a fast pace, attracting masses of workers from the countryside and the south in search of employment. Initially there were no real housing policies, and the speculative rental market subjected the working classes to high prices and desperate housing conditions. To solve this problem, workers began to organize themselves into cooperatives. In the second half of the 19th century, soon after the first English experiments, in Italy workers founded the first HCs to provide for their own housing needs and avoid falling victim to

speculators. The first Italian HC, the Società Edificatrice Abitazioni Operaie (SEAO) in Milan, was founded in 1877 at the workers' consulate in Milan (an association of mutual aid societies). According to a historical reconstruction, the founders of SEAO were concerned with the burden that building speculation was placing on rents and therefore on incomes, and the consequences that this had for them on their daily lives, on consumption, on their ability to save. The mechanism that led to the birth and spread of HCs was therefore very simple: instead of relying on a housing market that was expensive and burdened by the weight of speculation, individual resources could be pooled to provide housing directly at cost price. Workers became developers, builders and homeowners themselves (through the co-operative societies of which they were members), making the speculative component of housing production virtually disappear.

Until the beginning of the 20th century, the main collective actions in Italy on housing were private initiatives, in the form of cooperatives or charitable organizations, with the exception of some municipal experiments that were in many ways pioneering. In 1903 the first national policy of public intervention on housing was inaugurated and, with a certain delay compared to other European nations, the Italian State also began to legislate on an the increasingly pressing phenomenon of the urbanization of workers in cities in the process of industrialization, with its urban, social and public health consequences. With the Luzzatti law, for the first time the Italian State set itself the objective of tackling the problem of providing healthy and affordable housing for the less well-off classes, and of organizing and facilitating the urbanization of these new populations with affordable housing. In order to achieve these aims, the Luzzatti law established the *Istituti per le Case Popolari* (Icp) - later renamed *Istituti Autonomi per le Case Popolari* (Iacp) - inspired by the statute of the *Istituto Comunale per le Abitazioni Minime di Trieste* (at that time an Austro-Hungarian city) founded the year before.

These were municipal bodies with the aim of activating, directly or through the financial facilitation of HCs or other insurance or charitable bodies, the construction of a stock of *case popolari* ('popular housing'). The *case popolari* of the Luzzatti law consisted of housing for low-income groups, built by cooperatives or directly by the institutions according to a financing scheme based on subsidized credit and tax breaks which ensured their economic sustainability even at reduced final prices. The law lays down rules for access to and operation of council houses, to ensure that they meet social needs and are not speculative: access is granted according to need and income; the final cost required cannot be higher than that needed to pay back the cost of production and maintenance; etc. They are 'popular' in that they are aimed at the variety of working classes and others, taking into account their different needs and possibilities, and targeted mainly workers, families and also lower middle classes. In Milan, since the foundation of the Icp, many parts of the city have been built with an idea of governing urban development that guarantees accessibility to housing for workers and the less well-off, neighborhoods that are integrated into the urban fabric while remaining clearly recognizable and distinct parts of the city, forming part of what is known as the *città pubblica* ('public city').

The law provided both for the facilitation of intermediate institutions (cooperatives, charities, etc.) and for the direct construction by the municipality of *case popolari* or even 'popular hotels to be rented for daily living and public dormitories for free use' for the less well-off. Along the first half of the 20th century the scheme and, to some extent, the target have changed. Especially during the fascist period, middle classes were favored, and many HCs were placed under receivership and dismissed.

2.2 the postwar period and the 1970s and '80s

After WWI the State, driven by the need for reconstruction and the new housing emergency, but also by the desire to stimulate economic development and employment, began to directly finance large programs for the construction of *case popolari*. It did so by means of ad hoc appropriations from the budget or through levies on salaries - initially through the *Ina casa* plan (liquidated in 1963) and then with the *Gescal* fund (*Gestione Case per i Lavoratori* or management of workers housing). In this way the State intended to ensure a constant flow of funding for the construction of *case popolari*, directing urban

development in all the cities of the country, and in particular in those like Milan where industrialization continued to attract workers from the countryside and the South. The stock continued to increase, reaching a record one million public residential housing units or "Erp" (the new technical term for council houses). For families who migrated in search of work and an improvement in their living conditions, social housing became a fundamental step in the process of urbanization. In this period, public housing was a real infrastructure for urban and economic development, fuelled not only by allocations of public resources, but also by the availability of reserved land plots within municipal development plans. In the postwar period, municipalities were mandated by a national law to design a *Piano di Edilizia Economica e Popolare* (or PEEP, so-called *Piani di Zona* established by the Law 167 of 1962), part of the urban development plan that designated areas to be zoned for public and affordable housing, mandating municipalities to expropriate these areas and grant them to public housing providers and HCs at affordable prices and sometimes for free. In Milan, during the 'thirty glorious' years, working-class neighborhoods were built in the countryside in all directions and particularly in the south and public housing in Milan reaching around 10% of the total housing stock in the municipality. However, in this period of construction boom also HCs saw a huge expansion in their activity, connected to the PEEP plans, financial incentives and the general increase in housing demand. In this period, though (rental) public housing production has reached its peak, housing policies were decisively shifted toward homeownership promotion consistently with international trends. A very important stream of policy for HCs in this sense, also introduced in the Law 167 of 1962, was (and still is) that of *edilizia convenzionata* (subsidized housing), that promotes homeownership of lower-middle classes based on agreements between single municipalities and developers, the former guaranteeing favorable conditions (e.g., access to land with controlled prices from PEEP) and imposing to the latter a cap on prices and rents (usually defined by the municipality) and specific eligibility criteria (often comprising income limits, and no ownership of an adequate dwelling) for a certain amount of time after construction.

2.3 late 20th and beginning of the 21st century

During the last three decades of the 20th century, the policy situation has changed in many ways. Firstly, funding for public and affordable housing, previously coming from a specific tax on wages, decreased and was dried out during the turn of the century. Secondly, the feasibility of new PEEP plans declined due to a mix of legal and political reasons, and the availability of land plots dedicated to affordable housing was exhausted. Thirdly, market conditions have changed all over, with land prices growing consistently especially in urban location.

In this situation, partly characterized by policy drifts and partly by a globally changed market condition of more expensive urban land (Knoll et al., 2017), it became much harder for HCs to operate. Moreover, much of the stock that was built by HCs in the first half of the century was in deep need of renovation. This represented a special problem for rental HCs that had to choose whether to raise rent, highly unpopular decision among the members, or to sell off parts of the stock, a decision contrary to the statute of red cooperatives. In this period, many undivided HCs modified their statute to become "mixed" cooperative, meaning they started developing dwellings to be given in homeownership as in the tradition of divided cooperatives. At the same time, a specific policy was promoted by the association of "white" HCs, nowadays known as Legacoop Abitanti, to incorporate and unify small cooperatives in order create bigger ones with the weight to face those challenges. Very often this meant measures of equalization of rents among members. Moreover, undivided HCs made extensive use of the "social loan" (*prestito sociale*), a specific instrument introduced in the Italian legislation to favor cooperatives in raising money in the form of a loan or deposit directly from their members. The scale and dimension of cooperatives (and their aggregation) shall be intended in the sense of acquiring a better position in the governance system, in complying with the requirements on financial rating introduced by Basilea II, and in reaching the necessary "critical mass" (also financial) for taking part in new and more complex development projects.

Production by HCs in this period appears strongly influenced by their "territorial" organization and they tended to expand in cluster around the nucleus of previous initiatives.

At the end of the 1990s, new policy layerings had a relevant impact on HCs activity. Firstly, the intervention programs on existing public housing neighborhoods – such as the *Programmi di Riqualificazione Urbana* (Programs of urban redevelopment) – offered some spaces to HCs. Secondly, the *Programmi Integrati di Intervento (PII)* (Integrated Intervention Programs) were introduced in order to foster renovation in the existing private urban fabric. The PII could be proposed by privates and entailed changes in the zoning of a limited and localized area, usually involving an increment in buildable volume in exchange of public services and the provision of new affordable housing. HCs were deeply involved in the design and development of these programs, especially in Milan, since they provided favorable conditions for them and often a reserved quota for *edilizia convenzionata*. Everywhere in Italy, and especially in Milan, the "season" of PII was linked to the coincidence of a huge availability of abandoned former industrial plots and of a phase of return of middle classes to the cores of cities after a phase of intense suburbanization (Bricocoli, Savoldi, 2010). At the same time, one of the most intense phases of construction boom in the history of (especially the North of) Italy happened during the 1990s to end only with the financial crisis of 2008, pulled by migration fluxes and speculative housing demand, which triggered high increases in land costs and housing prices (Bellicini, 2011).

2.4 post-2008

The financial crisis has resulted in a sharp decrease in housing prices all over Italy, while in some prime locations, including Milan, housing prices rapidly recovered and raised again due to national and global investment trends. In this situation, while many HCs all around Italy faced bankruptcy or stagnating construction activity due to a setback of the housing demand, in more dynamic cities like Milan with high housing demand HCs were hindered by the competition of speculative actors and high land prices. Additionally, after PII season (many of which were also affected by the financial crisis) no new specific planning policy was introduced to provide land for affordable housing construction. While a drift happened very recently when the municipality of Milan has introduced an inclusionary zoning rule for new developments over 5000 sqm of gross floor area to provide 40% of affordable housing (half for rent and half for ownership), most active land policies (e.g. the Reinventing city contest and the redevelopment of the former railway yards) follow a rather speculative and market-led orientation that crowds HCs out.

The reform of the Italian rental sector with the Law 431 of 1998 – which abolished rent control in the private market and introduced the segment of *canone concordato* (agreed rent)[1] – and the reform of housing policy and subsidies of 2008 – which introduced the very broad definition of *alloggio sociale* (social dwelling) beneficial of subsidies and kickstarted the so-called *housing sociale*[2] – did not really take undivided cooperation into account. Most of the stock remained in the very specific segment of *godimento* (enjoyment), convenient for members due to very low rents and favorable conditions for the tenant – comparable to those existing in Italian public housing[3] – but practically impossible to reproduce in the current market conditions. However, in new contracts of *godimento* rents are often raised to cover maintenance, while in newly produced dwellings undivided and mixed HCs started shifting toward the more flexible and economically feasible conditions offered by *canone concordato* (agreed rent) and

---

[1] It is specific and incentivized segment of the private market, in which rents must be within a range of maximum which is definided by an "agreement" among local stakeholders (tentants' unions, landlords' associtiations, municipality, etc.).

[2] A sort of affordable housing segment conceived to be produced through public-private partnerships, for which dedicated funding and incentives was made available (Belotti, Arbaci, 2020).

[3] In the oldest buildings of SEAO, built at the turn of the 20th century, the average rent of a dwelling is around 50 €/month, while the average rent in Italian public housing is 100 €/month (FEDERCASA, 2013).

fixed-term contracts, determining a condition of "double standard" – similar to the typical situation when rent control is lifted –: while members with old contracts enjoy very protected and favorable conditions, new members not only have to queue longer but face much worse conditions.

While policies for *housing sociale* promoted new public private partnerships that involved the financial sector, housing cooperatives remained largely excluded by this new branch of policies, except for their inclusion as "social managers" of initiatives developer through newly established financial vehicles (Belotti, Arbaci, 2020).

In this context, HCs have started various pathways of evolutions. For example, some have collaborated as social managers in the *housing sociale* and most have changes from traditional divided-undivided formulas to mixed and more flexible ones. However, the traditional distinction between "red" and "white" cooperatives is still very present in organizational pathways.

Table 2. Periodization, path dependencies and list of critical junctures

Period	Context	Path dep. (*) and critical junctures (>)
second half of the 19th century to WWII	-industrialization and urbanization -emergence of the cooperative movement	*great land availability >Luzzatti law for *case popolari*
postwar period, 1970s and '80s	-growth and big construction activity -State welfare -suburbanization -promotion of homeownership	*necessity of maintenance of historical stock of undivided cooperatives >PEEP plans and *edilizia convenzionata* (Law 1627 of 1962)
late 20th and beginning of the 21st century	-welfare retrenchment -end of PEEP plans -reurbanization -increasing land prices	* "territoriality of HCs" >PII programmes >*canone concordato* >public private partnerships
Post-2008	-crisis of the construction sector -emergence of international real estate actors -evolution of HCs and signs of convergence between divided and undivided cooperation	*historical divide between "red" and "white" cooperatives >*housing sociale*

Source: made by the author.

3. Case study. The trajectory of selected housing cooperatives in Italy and Milan

3.1 *Delta-Ecopolis*

3.1.1 History, organization, and governance of Delta Ecopolis

Delta-Ecopolis is the result two main incorporations designed amidst Legacoop Abitanti. The first generated the Cooperativa Ecopolis with the incorporation at the beginning of the 2000s of three red HCs of the northwest of Milan: Cooperativa Edificatrice di Lampugnano (1918), Cooperativa Edificatrice di Rogoredo (1966) and Cooperativa Edificatrice Uguaglianza di Trenno (1977). A subsequent incorporation of Cooperativa Nazionale di Senago in 2017 resulted in the present structure of Delta Ecopolis. The main political reference was the Italian Communist Party, which had even its local seat in the first building of the cooperative, and very often members of the cooperatives were also

political activists in the party (Briata, Gaeta, Liberatore, 2004). From an organizational point of view, the cooperative works as a unique structure, affiliated with the national association Legacoop Abitanti, that is composed of smaller HCs but with a considerable degree of centralization. Delta Ecopolis is deeply rooted in the tradition (so called "red") of undivided cooperation, according to which the property of the housing stock is collective, and the members of the cooperative are those who rent or wish to rent a dwelling. Therefore, the whole housing stock is owned by the cooperative itself, which works as a landlord but is in turn "owned" and managed by its members. In fact, however, even if property is collective rental in undivided cooperation is very close to homeownership: traditional rental contracts in undivided cooperatives are actually life-long enjoyment contracts (*godimento*), that is even inheritable, with rent levels initially calculated on the basis of costs (the principle of cost-renting, see Kemeny, 1995) and only modifiable after the approval of the members' assembly, which means they are usually very low depending on the age of the building and of the contract. Membership has an administrative cost of 25€ una tantum (corresponding to one stock of capital) and until recently new members had to be "presented" by established members. Allocation is usually decided based on a list; at present, the list is very long and the waiting time to get a dwelling can be up to years or a decade. Since the 1970s the cooperatives that are part of Delta Ecopolis, like many other undivided cooperatives (see part 2.2). Recently, Delta Ecopolis founded a department that offers housing services, also collaborating with the financial vehicles of *housing sociale* as social managers.

3.1.2 Housing stock and geography of Delta Ecopolis

The housing stock of the cooperative was built by the three separate cooperatives and then joined. It is therefore described separately in the subsequent paragraphs, then resumed historically (fig. 1) and spatially (fig. 2).
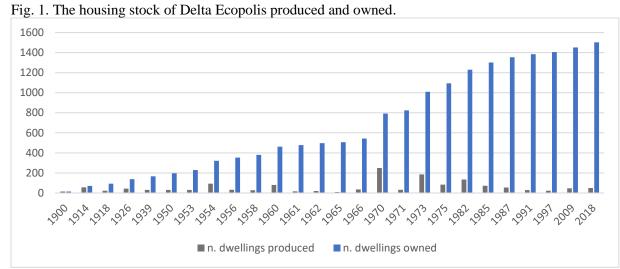
Cooperativa Edificatrice di Lampugnano. The cooperative was founded in 1914 in the at that time rural village of Lampugnano, in the northwest of Milan. The first buildings of the cooperatives correspond to a nucleus of three small sized buildings, overall around 100 dwellings, realized between WWI and WWII on agricultural plots bought on the market. In the postwar, in a context of growth and densification of the area (now a periphery of Milan), the cooperative realizes two other small buildings and a medium sized one, for a total of around 150 new dwellings on plots bought on the market in the same area. In the 1970s and '80s, the cooperative is able to access public land by PEEP plans and in this phase the cooperative realizes two medium and two large sized building for a total of over 400 new dwellings. Meanwhile, the oldest buildings were restored. After that, reflecting the increased difficulty in finding affordable plots of land in the city, the only new initiative happened in the neighboring municipality of Settimo Milanese.

Cooperativa Edificatrice di Rogoredo. The cooperative was founded in 1922 in the at that time rural area of Rogoredo, in the southeast of Milan. The first small building with 15 dwellings was realized before WWII. Important construction happened in the postwar era, consisting in five small sized building for a total of 126 dwellings. In the 1970s and '80s, the cooperative realized four new medium sized dwellings for 217 dwellings in the same area of Rogoredo. After that, the only new initiative with 46 dwellings was realized in the big new development of Santa Giulia in 2009.

Cooperativa Edificatrice Uguaglianza di Trenno. The cooperative was founded in 1914 an area close to Lampugnano. The first building had 56 dwellings was realized before WWII. Four small sized buildings were realized in the postwar era for a total of 94 dwellings. In the 1970s and '80s, the cooperative built a single large sized building with 186 dwellings. In 1997, only one initiative with 22 dwellings was built in Rho, a neighboring municipality to Milan.
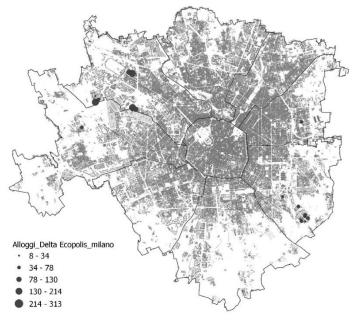
Adding the around 100 dwellings of the cooperative Senago, at present the cooperative owns and manages around 1.500 dwellings. While part of the stock was built before WWII, the biggest part of the stock was produced in the 1970s and '80s, and production stagnated since the 1990s. The most recent initiative was developed on land provided via inclusionary zoning in collaboration with CCL (see part 3.2) and consists of around 50 dwellings for rent. Moreover, since the 1970s and '80s the cooperative also modified its statute to become a "mixed" cooperative and started developing dwellings to be given in homeownership as in the tradition of divided cooperatives.

Fig. 1. The housing stock of Delta Ecopolis produced and owned.

Source: data provided from the cooperative and from Pogliani, Innocenti, Magnani (2011) and do not include those by the Cooperativa Senago.

Fig. 2. Initiatives by Delta Ecopolis in the municipality of Milan (left) and table of the initiatives (right, in order by number of dwellings)

Source: data provided from the cooperative and from Pogliani, Innocenti, Magnani (2011) and are without the Cooperativa Senago and do not include two initiatives outside of Milan municipality.

Spatially, the housing stock of the cooperative mirrors the initial subdivision into different cooperatives, and it is possible to identify three main clusters in Lampugnano and Trenno (in the northwest) and in Rogoredo (in the southeast) (fig. 2). Only the most recent initiative of Cohabitat Lambrate and two initiatives developed in surrounding municipalities, as well as those acquired with the Cooperativa Edificatrice Senago (not in figure 2) escape this very rigid and path-dependent spatial pattern.

3.1.3 Trajectory and hybridities of Delta Ecopolis

The present configuration of Delta Ecopolis depends on a highly path-dependent trajectory. The system of undivided cooperation means that in principle the stock is continuously enlarged. However, according to an interviewed cooperator of Delta-Ecopolis (interviewee 2): "undivided cooperation was feasible in Milan until the 1980s. After that moment, land became too expensive. For this reason, the cooperative was turned into a mixed one". Two aspects are highlighted by the interviewee. One is the decline of planning instruments that would assure land at affordable prices, like the end of the so-called *Piani di Zona* established by the Law 167 of 1962 – land expropriated by municipalities and provided at fixed price to public housing providers and HCs at affordable prices (sometimes for free). The other is the rise in land prices that followed the period of housing boom that preceded the 2008 crisis.

Interviewee 4 and 6 stressed how the cooperatives were very prominent presences in the neighborhoods, representing a center of welfare services, social capital, politics and sociality. In their words, the cooperative was a sort of "big mother" in the neighborhood.

Spatially, the Delta Ecopolis has an apparently clustered pattern depending on path dependence on the history of three cooperatives that compose it, which clearly also depends on available plots in the surrounding of existing clusters, first in the market and then provided by PEEP plans and PII programs. More recently, land prices "pushed" Delta Ecopolis to look for plots in surrounding municipalities, but overall activity was very low. The newest initiative of Cohabitat Lambrate escapes this pattern because it was obtained through a new planning instrument, inclusionary zoning. Without this new instrument, Delta Ecopolis would not have had the possibility to produce any new dwelling.

3.2 *Consorzio Cooperative Lavoratori*

3.2.1 History, organization, and governance of Consorzio Cooperative Lavoratori

Consorzio Cooperative Lavoratori (hereafter, CCL), was founded in 1974 within the context of the Christian Associations of Italian Workers (*Associazioni Cristiane Lavoratori Italiani*, ACLI) and the Milanese section of the Italian Confederation of Workers' Unions (*Confederazione Italiana Sindacati Lavoratori*, CISL). CCL activity has long followed the typical scheme of divided cooperation of Catholic (so called "white") tradition, meaning that housing is provided to the members in homeownership, according to principles centered around the family and private property. Divided cooperation can be part of *edilizia libera* (free-market housing), when acting in the free land market, or of *edilizia convenzionata* (subsidized housing), when accessing specific land dedicated through zoning and subsidies (see part 2.2). Final housing costs are the mere costs of production (including the operative and administrative costs of the cooperative) and are paid by members individually. The typical divided cooperative is a pure expression of homeownership demand: it is formed by member who wish to become homeowners (or, more in general, to buy a new dwelling), individuated locally through the parish and local Catholic-related associations when the possibility for a new initiative is foreseen. Members pool financial and organizational resources until the end of construction, when the cooperative is generally dissolved. In fact, CCL is a "consortium", a fixed organizational structure that groups and coordinates HCs that are created and dissolved any time a new initiative is developed. In this sense, divided cooperatives are not collective landlords, as it is the case for undivided cooperatives, and does not accumulate a housing stock

to rent. However, at the end of the 1990s CCL embarked on rental housing triggered by the opportunities of an inedited partnership with the Milanese housing provided that leased part of its stock to cooperatives, aiming at enhancing renovation and social mixing in the public housing neighborhood of Stadera (Bricocoli et al., 2021). A specific cooperative was created to manage the rental stock (called *Solidarnosc*) and some new initiatives, sometimes to comply with planning and zoning rules, also included some rental dwellings (fig. 3). Moreover, in 2009, CCL founded a cooperative for housing services (Società Servizi per l'Abitare, SSA).

3.2.2 Housing stock and geography of Consorzio Cooperative Lavoratori

The HCs that are part of CCL produced in total around 14.325 dwelling, of which 6.623 in the municipality of Milan (46% of the total production CCL took part to the process of suburbanization in the metropolitan area of Milan during the 1970s and '80s (see fig. 4) and then to the season of reurbanization and construction boom in the core during the 1990s and early 2000s, also extensively taking part to PII plans (fig. 5). Housing production was very relevant, and almost constant, until the 2008 crisis, when it dropped considerably. In some years, no initiatives were kickstarted and dwellings produced, representing a critical moment for the consortium. More recently, following the general positive trends in housing construction in Milan, the consortium has again improved its production activity, now also involving a growing rental stock.

Spatially, CCL has an important presence in some specific areas of the Milan metropolis, especially in cluster of municipalities in the southwest, the east and northeast (fig. 4).

In the core municipality, initiatives are clustered in the areas of most relevant expansion and densification of the last decades (fig. 5), namely: Porta Romana and Rogoredo in the southeast, Giambellino-Lorenteggio in the southwest and Quartiere Adriano in the northeast.

3.2.3 Trajectory and hybridity of Consorzio Cooperative Lavoratori

Even if relatively recent, CCL has had a very important role, producing slightly less than 1% of the total housing stock in the Milan municipality and also playing an important role in the suburbanization of the city in the 1970s and '80s and its reurbanization wave in the late 1990s and early 2000s.
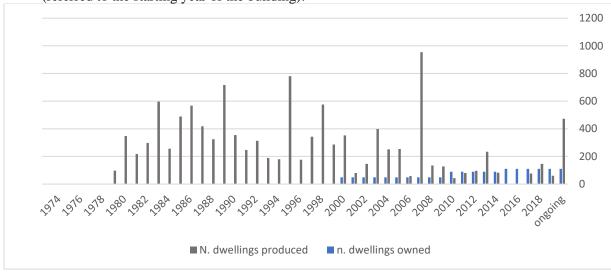
From the map in fig. 4 and its comment by some relevant administrator of CCL (interviewees 1 and 3), it emerges how the "territorial" principle is shaped by some relevant factors which are external to the aims and principles of the cooperative. One main factor regards the "human factor", that is to say the capacity of certain cooperators to create strong relations with other territorial actors and institutions. In the case of CCL, the former president had a decisive role in the development of the consortium in the south-western area of the Milanese hinterland (the municipality of Abbiategrasso and surrounding). In the core municipality, the spatial principle is rather driven by the presence of large new construction opportunities, earlier conveyed through PEEP plans and later, to a larger extent, through PII plans. Additional pepper-potted initiatives throughout the peripheries were primarily driven by the availability of convenient plots in the land market.

More recently, CCL faced important challenges in redefining its role. First, it was hit by the post-2008 crisis stagnation. More recently, heated real estate market conditions, especially regarding skyrocketing land prices and the emergence of international actors, have partially crowded out undivided cooperation from the free market space. However, through reputation and an established knowledge and network of contacts, CCL was able to kickstart new free market initiatives also in relatively expensive locations.

Additional space is provided by public policies and public private partnerships. The partnership experimented with the Stadera case, which remained a unique though remarkable case (Bricocoli et al., 2021), demonstrated the role of "policy entrepreneur" in establishing spaces of action in the public housing sector.
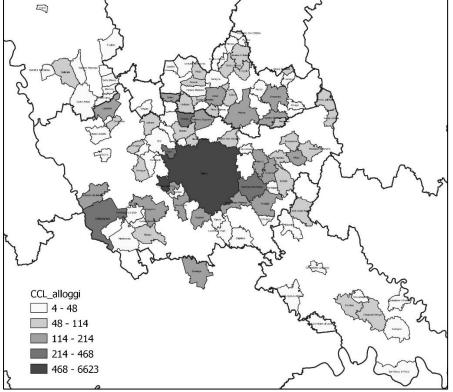
More recently, the newest *Piani di Governo del Territorio* (urban plans) of the municipality of Milan, in which cooperatives had some influence as stakeholders, introduced inclusionary zoning rules that could provide new "reserved" space for HCs in an increasingly heated real estate market.

Fig. 3. Number of dwellings produced (in homeownership) and owned (for rent) by CCL per year (referred to the starting year of the building).

Source: own elaboration on data by CCL. Date of production for approximately 2.000 dwellings is missing.

Fig. 4. Number of dwellings by CCL per municipality in map (left) and table (right, only municipalities counting over 100 dwellings).
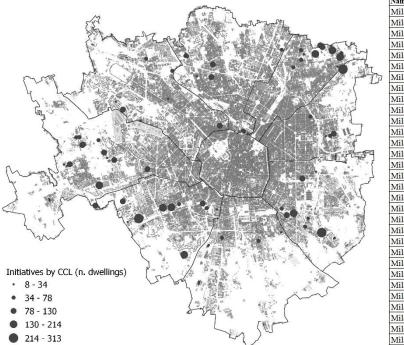
Municipality	N.in	N.dw.
Milano	89	6623
Abbiategrasso	12	468
Senago	12	367
Peschiera Borromeo	7	258
Pero	5	246
Paderno Dugnano	5	214
Giussago	5	206
Robecco sul Naviglio	12	205
Gaggiano	10	191
Rozzano	4	189
Melzo	8	172
Solaro	6	172
Cesano Boscone	4	168
Rodano	5	163
Desio	4	158
Pioltello	4	158
Mediglia	5	149
Agrate Brianza	4	141
Buccinasco	2	137
Legnano	4	130
Vimercate	5	130
San Donato Milanese	4	123
Monza	5	120
Bollate	5	114
Novate Milanese	5	112
Bovisio-Masciago	4	107
Rosate	7	106
Nova Milanese	4	105
Sesto San Giovanni	3	102

Source: own elaboration on data provided by CCL.

Fig. 5. Initiatives by CCL in the municipality of Milan (left) and table of the 32 largest initiatives (right)

Name of the initiative	N. dw.	Year
Milano - Rogoredo Montecity	313	2007
Milano - via Rizzoli	271	1989
Milano- via Gonin	251	1989
Milano - via Cividale 15	214	1986
Milano - via Savona	209	2003
Milano - p.le Bologna 7	206	2000
Milano - via Giambellino	203	1995
Milano -area ex Marelli - VIA Gassm	198	2007
Milano - via Saragat 5 - 6	197	1998
Milano - via S. Mamete 91	164	1986
Milano - Conca Fallata - via Jan Palac	162	2007
Milano - via C.na Bianca 9/5	157	1987
Milano - Via Taggia 15	130	in corso
Milano - cascina S. Giuseppe - via Ug	129	2007
Milano - via Nervesa	127	1995
Milano - Caldera edificio M (via zoia	124	2013
Milano - via Gulli	119	2005
Milano - via Candiani	107	1999
Milano-Via Kuliscioff/Bisceglie - P.	106	in corso
Milano-Via Kuliscioff/Bisceglie - P.	106	
Milano - via Riccardo Pitteri 86/5 (e	102	2000
Milano Scarsellini	99	2009
Milano - via B. Gozzoli	98	1987
Milano - via Budrio	98	1997
Milano - C.na S. Giuseppe (Libera-ed	90	2008
Milano - via Omodeo 29 (ex Trenno	88	
Milano - Ripa Porta Ticinese	86	2018
Milano - via Piranesi	86	in corso
Milano - via Procaccini	83	2014
Milano - via Caldera	81	1998
Milano - via Caldera	80	1998
Milano - via S. Mamete 105	78	1986

Source: own elaboration on data by CCL.

4. Discussion.

The analysis of the context in section 2, exposing path dependency and critical junctures for HCs in Italy and Milan, and the original empirical material provided in section 3, examining the trajectory of two relevant HCs (respectively of the undivided and divided type) are here used for a discussion on the role of HCs in housing policies and in the production of affordable housing. In particular, the material of section 2 and 3 is used to discuss the hypothesis that in Italy there has been a lost hybridization of HCs in housing policies (in subsection 4.1) and that, nevertheless, there have been innovative experiments that could be upscaled and sketch potential hybridization pathways (in subsection 4.2).

4.1 Lost (or missing) hybridity? Path dependency, critical junctures and hybridization pathways

The analysis highlights different patterns of path dependency for divided and undivided HCs in Milan. Delta Ecopolis, as many other undivided HCs, proliferated at the end of the 19th century, at the beginning of the 20th century and again with the establishment of active land policies with the PEEP plans, but declined afterwards, when land prices increased and active land policies were dismissed, though not being hardly hit by the 2008 crisis. An important cultural (collectivist) and territorial heritage and housing stock involved some critical issues, for example around the agreement on rent levels and the necessity of maintenance, but is also a path-dependent opportunity in the Milanese heated housing market, where affordable rental dwellings are desperately needed, and also an important economic asset. CCL, instead, like many other divided HCs proliferated from the postwar era, thanks to a general construction boom and to favorable policies such as the PII plans, until the 2008 crisis when the general construction sector declined. In the case of CCL, the path dependent homeownership-oriented catholic

tradition allowed a good flexibility (also territorial) to adapt to demand and market (and policy) conditions which resulted in great housing production but turned into a critical factor in the post-2008 period, with the stagnation of the construction sector and the increased demand of rental housing.

However, they both face a critical moment in the today's heated Milanese real estate market, challenged by skyrocketing land prices and the emergence of international real estate actors but also by the new stream of housing policies known as *housing sociale*, which brought financial actors in the social market. These circumstances reduce the space of action of the traditional model of housing cooperation, especially that of undivided cooperation, and produce a tendency to crowd out HCs from housing production, relegating them to a residual role of social managers or pushing them to an increasingly similar way to that of market players.

The main critical junctures that reshaped HCs action and redirected their pathways from path dependence are represented by planning instruments (e.g., PEEP plans, PII programs) and housing policies (e.g., Luzzatti Law, *edilizia convenzionata*), that also shaped potential hybridization pathways for HCs. However, the most recent developments in policies and planning, especially the introduction of *housing sociale* in national housing policies and the market orientation of land policies, crossed with increasingly heated real estate market conditions in Milan, are producing a crowding out of HCs and ultimately reverting the processes of hybridization activated in the previous periods.

From the cases studied it emerges how the "territorial" principle is shaped by some relevant factors which are also external to the aims and principles of the cooperative. One main factor regards the "human factor", that is to say the capacity of certain cooperators to create strong relations with other territorial actors and institutions. In the case of CCL, the former president had a decisive role in the development of the consortium in the south-western area of the Milanese hinterland (the municipality of Abbiategrasso and surrounding). A similar history was reported for the cooperative CONSEDI of Brescia, where priest Ottorino Marcolini made possible to develop over 20.000 dwellings

4.2 Rediscovering hybridization pathways for HCs? Innovative experiments in Milan and possible pathways of evolution

In the framework described in subsection 4.1, some HCs have undertaken innovative experiments and adaptation strategies that sketch possible pathways of evolution of the sector in a very critical moment. They are mainly: the introduction of housing services; mixed developments (divided+undivided); and the development of partnerships around the management of public assets.

4.2.1 housing services

Increasingly, HCs turn from primarily housing production, that became harder in the present conditions, to offering housing services, such as block management (as in the case of CCL) and "social management" for real estate firms in the framework of *housing sociale* (as in the case of Delta Ecopolis).

4.2.2 mixed developments (divided+undivided): the case of "Cohabitat Lambrate"

HCs, even of different cultural backgrounds, traditionally cooperated in arranging urban development. More recently, cooperation among different HCs was brought to an unprecedented level by CCL and Delta Ecopolis, that joined for the development of the initiative "Cohabitat Lambrate".

It is the first concrete realization of the inclusionary zoning policy recently introduced in Milan, which provided a plot of land at favorable price to produce *edilizia convenzionata* in homeownership for two thirds of the gross surface and *affitto agevolato* (reduced rent), which is regulated by national laws and

local regulations[4] for one third of the gross surface and for which land was inexpensive. The economic model included the pooling of 1,5 million € from *edilizia convenzionata* to finance the dwellings in *affitto agevolato*, a principle called "external mutuality" because members who can afford homeownership virtually support (on the basis of reciprocity) members who need a rental accommodation. In this way, the final rent was reduced from the level of *affitto agevolato* (which would have been of 116 €/sqm per month) to 75 €/sqm per month, in line with the limits of *canone concordato*. After this experiment, CCL and Delta Ecopolis created a new HC, Cooperativa Unitaria, that explicitly aims at reproducing this model and make affordable rental housing feasible..

4.2.3 HCs and public assets: the case of Quattro Corti di Stadera

The public housing complex of the Quattro Corti, in the Stadera neighborhood of Milan had been abandoned for long time due to chronic obsolescence and non-compliance with the standards. Rather than divesting the buildings, in 1999 an unprecedented form of public-private partnership was set to renovate the buildings: while the property remained public, two housing cooperatives, CCL and another "red" cooperative of recent formation called Dar=casa, were entrusted to restore them with private resources and rent out the dwellings at the *canone concordato* for 25 years.

In a context of general disinvestment on public housing and public asset, the Quattro Corti case represents a remarkable practice of regeneration that could unburden the public provider from the restoration costs while offering a supply of affordable rental housing to a variety of housing needs and demands and allowing HCs to develop a rental stock. This policy, however, was never replicated.

5. Conclusion and outlook

The present article has presented an overview of trajectory, path dependence and hybridization pathways of HCs in the provision of affordable housing in Milan and Italy. In the light of the global urban housing affordability crisis, it is crucial to analyze the hybrid role of the various actors that play within the framework of policies and governance and HCs are among the most important ones. Though much literature exists on third sector actors, contributions that focus specifically on HCs and on their role in the production of affordable housing and the hybrid relation with policies are lacking. This is especially true for Italy and also for Milan, despite the long history and the important role of HCs in housing production.

By presenting an analysis of the national context and of the specificities of the city of Milan in section 2, and conducting a case study of two relevant HCs from the two main cooperative traditions (undivided and "red" and divided and "white") in section 3, the article has shed some light over the evolution of the sector in Italy and contributed to fill this gap in the literature.

Building on this material, in section 4 the article has argued that the trajectory of HCs in Milan is that of a "missed hybridization": while up to a certain point planning and policies had directed toward an integration of HCs withing the objectives and instruments of housing policies, in the last period this tendency was abruptly reversed.

Today, Milanese HCs face the challenge of renewing their role in a very different national and local market condition and policy framework. The two HCs analyzed have undertaken a process of evolution that has uncertain pathways, but it is certainly important to acknowledge in the design of policies that tackle the contemporary housing affordability issue.

References

---

[4] According to the rules, rent in this category is capped at 5% of the total costs, which are also capped at the level of *edilizia convenzionata* (subsidized home-ownership).

Axelrod R. (1984) *The evolution of cooperation*, Basic books, New York (read in the italian translation, 1985), *Giochi di reciprocità. L'insorgenza della cooperazione*, Feltrinelli, Milano.

Barenstein J.D., Koch P., Sanjines D., Assandri C., Matonte C., Osorio D. Sarachu G. (2021), "Struggles for the decommodification of housing: the politics of housing cooperatives in Uruguay and Switzerland", Housing Studies, DOI: 10.1080/02673037.2021.1966392

Bellicini L. (2011), "Immobiliare, debito, città: considerazioni sui primi 10 anni del secolo XXI", in G. Dematteis (ed.) *Le grandi città italiane. Società e territori da ricomporre*, Venezia: Marsilio Editori.

Belotti E., Arbaci S. (2020), "From right to good, and to asset: The state-led financialisation of the social rented housing in Italy", Environment and Planning C: Politics and Space, 39(2): 414–433.

Bruni L., Zamagni S. (2004) *Economia civile. Efficienza, equità, felicità pubblica*, Il Mulino, Bologna.

Briata P., Gaeta L., Liberatore L. (2004), *Sotto un unico tetto. Fatti e storie della Cooperativa edificatrice di Lampugnano 1914-2004*, M & B Publishing, Milano.

Bricocoli M., Savoldi P. (2010), *Milano downtown. Azione pubblica e luoghi dell'abitare*, et at., Milano.

Bricocoli M., Salento A. (2019), "Housing and the grounded city: rent extraction and social innovations". In Barbera F., Rees Jones I. (Eds.), *The Foundational Economy and Citizenship: Comparative perspectives on civil repair*, Policy Press.

Bricocoli M., Peverini M., Tagliaferri A. (2021), *Cooperative e case popolari. Il caso delle Quattro Corti a Milano*, Il Poligrafo, Padova.

Capoccia, G., Kelemen, R.D. (2007), "The study of critical junctures: Theory, narrative, and counterfactuals in historical institutionalism". World Politics, *59*, 341–369.

Cucca, R., Gaeta, L. (2015), "Ritornare all'affitto: evidenze analitiche e politiche pubbliche", *Atti della XVIII Conferenza Nazionale SIU. Italia '45-'45. Radici, Condizioni, Prospettive, Venezia, 11-13 giugno 2015*, Planum Publisher, pp. 1248-1253.

Engels F. (1950) [1872], *The housing question.*. available at: https://www.hlrn.org/img/documents/Engels%20The%20Housing%20Question.pdf

FEDERCASA (2013), *Abitazioni sociali. Motore di sviluppo – Fattore di coesione*, report.

Ferreri M., Vidal L. (2021), "Public-cooperative policy mechanisms for housing commons", International Journal of Housing Policy, DOI: 10.1080/19491247.2021.1877888

Friesenecker M., Kazepov Y. (2021), "Housing Vienna: the socio-spatial effects of inclusionary and exclusionary mechanisms of housing provision", Cogitatio, 9(2), pp. 77-90.

Gaeta L. (2017), "I grandi proprietari milanesi di edilizia residenziale: questi sconosciuti", in F. Cognetti, A. Delera (a cura di), *For rent, Politiche e progetti per la casa accessibile a Milano*, Mimesis, pp.123-133.

Ganapati S. (2010), "Enabling Housing Cooperatives: Policy Lessons from Sweden, India and the United States", International Journal of Urban and Regional Research, Volume 34, Issue 2, pp. 365-380.

Kazepov Y. (ed) (2005), *Cities of Europe: Changing Contexts, Local Arrangement and the Challenge to Urban Cohesion*, The Wiley Blackwell, John Wiley & Sons Ltd.

Kazepov Y. (ed) (2010), *Rescaling social policies: towards multilevel governance in Europe*, Farnham: Ashgate Publishing Limited.

Kemeny J. (1995), *From public housing to the social market. Rental policy strategies in comparative perspective*, London: Routledge.

Kingdon J.W. (2013, first edition 1984), *Agendas, Alternatives, and Public Policies*, Harlow, Pearson.

Knoll K., Schularick M., Steger T. (2017), "No price like home: Global house prices, 1870-2012", American Economic Review, 107(2): 331-353.

Lawson J. (2010), "Path Dependency and Emergent Relations: Explaining the Different Role of Limited Profit Housing in the Dynamic Urban Regimes of Vienna and Zurich", Housing, Theory and Society, 27(3): 204-220.

Le Gales P., Lequesne C. (eds.) (1998) *Regions in Europe. The Paradox of Power*, Routledge, London.

Le Gales P. (2002), *European Cities. Social conflicts and Governance*, Oxford University Press, Oxford.

Madden D., Marcuse P. (2016), *In defense of housing. The politics of crisis*, London, Verso.

Mocca E., Friesenecker M., Kazepov Y. (2020), "Greening Vienna. The Multi-Level Interplay of Urban Environmental Policy–Making", Sustainability, 12, 1577.

Mullins D., V. Milligan, N. Nieboer (2017), "State directed hybridity? The relationship between non-profit housing organizations and the state in three national contexts", Housing Studies.

Peverini M. (2019), "More than affordable Housing. Potentials and challenges of new emerging actors in the development of affordable housing supply", paper presented at the European Network of Housing Research 2019 conference.

Pasqui G. (2005) *Territori: progettare lo sviluppo*, Carocci, Roma.

Pirani A. (2008), "Pratiche locali, modi di fare città. Un repertorio", in Pirani A., Zanoni F. (eds.), *Cooperative e città. Pratiche di innovazione della cooperazione di abitazione nei processi di sviluppo urbano*, FrancoAngeli, Bologna, p. 63-98.

Pogliani L., Innocenti M., Magnani M. (2011), *CA.SO., Progetto Casa Sociale Sostenibile*, unedited.

Sennett R. (2012), *Together: The rituals, pleasures and politics of cooperation*, Yale University Press.

Sorensen, A. (2015), "Taking path dependence seriously: An historical institutionalist research agenda in planning history", Planning Perspectives, *30*(1), 17-38.

Trampusch C., Palier B. (2016), "Between X and Y: how process tracing contributes to opening the black box of causality", New Political Economy, 21(5):1-18.

Viviani M. (2010), *Abitante, socio, cittadino : un sopralluogo sulla cooperazione di abitanti*, CLUEB, Bologna.

Zamagni S., Zamagni V. (2008), *La cooperazione. Tra mercato e democrazia economica*, Il Mulino, Bologna.

Wetzstein S. (2017), "The global urban housing affordability crisis", *Urban Studies* 54(14): 3159–3177.

Governance in here intended the sense of an "art of government", as in the view of Le Galès and Lequesne (1998) is the capacity to put together diverse interests, actors and organizations, and to express them in a place, giving form to the various local interests, organizations, social groups, developing strategies which are more or less unified in relation to the state, the market, other cities and levels of government. On the other hand, as in the view of Pasqui (2005), the effect of

government generated by the action, more or less intentional, of a plurality of actors with different interests and resources and in a context of policy, therefore considered as a product of local collective action, a government *de facto* which has different borders that the institutional government. Traditionally, government and governance has been analyzed at the national level, but recent scholarships also situate governance at the urban scale, identifying cities as prominent and relevant collective actors within European governance and global dynamics (Le Galès, 2002; Kazepov, 2005; 2010).

Challenging Issues of Social Housing Transformation: UK Case

Shilan Gharanfoli

Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34 437 Istanbul, Turkey
e-mail: shilan.gh@gmail.com

Yurdanur Dülgeroğlu Yüksel

Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34 437 Istanbul, Turkey
mail: d.yurdanur@gmail.com

Abstract

Social housing has transformed into a problematic issue in recent decades due to uncertainty and increasingly complex challenges such as the lack of affordable housing, overcrowding, resident dislocation, gentrification, and socio-spatial problems. During the historical development of social housing, these transformations lead to different architectural, urban planning, and policy challenges. The research aims to compare the architectural transformations of social housing that began in the twenty century and continues to these days. The evolution of European social housing is not static. It continues to evolve and is changing to adapt to changing circumstances. The aim is a descriptive and analytical study of the trajectory of design principles transformations during different periods within which the main ideas about social housing developed. To this end, this research has examined the transformation of social housing through case studies. large-scale social housings projects from the UK are examined in four different historical periods. Besides the analysis of social housing as a whole, analysis of case studies in different periods shows how social housing responds to different challenges and constant changes. Analysing projects, in different historical periods, allowed us to identify the transformation of design quality, Concepts, and practices during the historical development of social housing. The purpose is to investigate the changing nature of social housing under the influence of architectural design principles and its impact on housing quality. Reviewing past design principles can provide ideas for creating future successful social housing. Increasing demand for housing and new forms of cohabitation requires new strategies to implement affordable housing in a high-quality structure. Creative architectural strategies that have adapted to the variety of urban circumstances lead to initiating a new era in social housing. These strategies should lead to long-term sustainable developments.

Keywords: social housing, transformation, design principles, design quality, complex challenges.

Introduction

With rapid urbanization and population growth, housing people in decent conditions has become a challenge all over the world. Housing problems in both developed and emerging economies are growing, while current levels of housing are insufficient to address this shortage. "Social housing" is a solution to provide housing for those who have not been able to afford a house in the private market and need some help to live in a decent environment.

The primary focus of this paper is to examine the transformation of social housing in UK as a country with a long history of social housing. The research aims to compares the transformation of social housing that began in twenty century and continues to these days. Reviewing past policies can provide ideas for creating future successful social housing. for this end, social housing is examined through their lifetimes in different. Besides the analysis of social housing as a whole, analysis of it in different periods reflects how social housing is developed.

The evolution of social housing is not static. It continues to evolve and is changing to adapt to

changing circumstances. The aim is a descriptive and analytical study of the trajectory of transformations during different periods within which the main ideas about social housing developed.

The research is based on the relevant scientific literature through electronic and library resources to set up theoretical propositions as background. The first purpose of the literature review is to obtain a critical review related to the concept of social housing transformation. Social housing is examined to understand how academics and policymakers conceptualize these changes. The aim is to have an integral definition that encompasses the fundamental aspects related to architectural design, urban planning policies and social housing policies.

To this end, a timeline is developed as part of my research. The aim is to indicate the preferred policies in five different periods of social housing development. The timeline represents the challenges raised by these changes for the social sector through consideration of five key facets of the social housing system: Providers, housing policy, target groups, housing type and architectural design style. This research explores shifting attitudes, recent experiences, housing traditions, and challenges to create a timeline.

The Historical Developments of Social Housing

Social housing is set in a historical period with the primary aim to create new cities and societies with better living conditions. In the United Kingdom, social housing has become an essential aspect since the twentieth century. Many of social housing projects were constructed as an earlier urban renewal, slum clearance program (Watt and Smets, 2017). These projects aimed to provide high quality and affordable modern housing estates for working class and low-income people.

In most of the northern European countries, social housing was not only for poor and vulnerable people but considered a wider target-group, particularly for the working class. According to Harloe (1995), immediately after 1918, 'mass model' rather than 'residual form' of social housing was the dominant model during the post-war recovery. In this period people in the UK "considered council houses better than private accommodation, both in quality and in the security, they offered" (Todd, 2014, pp. 179– 180).

The historical development of social housing is more complicated than the housing of the poor. Historically, Social housing has a significant role in the urban development of European cities. Accordingly, it encompasses an array of social, economic, political, and ecological challenges. There is a need to step back and think about the power of the housing policy in achieving broader social goals.

The history of social housing goes back to more than a century ago. Despite a similar history of industrialization and urbanization of some European countries, they reflect a diverse system of social housing provision. Social housing has developed in each Europe country differently, per its local historical circumstance. Despite these differences, the main lines of the history of social housing are relatively similar across Europe. It is the details of development which is different in each country.

The evolution of European social housing is not static. It continues to evolve and is changing to adapt to changing circumstances. The aim is a descriptive and analytical study of the trajectory of transformations during different periods within which the main ideas about social housing developed.

The historical developments of social housing can be comprised in five different periods as follows.:

1.   New forms of urban housing: the first decades of the twentieth century- the emergence of the apartments as a new building type; the Transition from 19th The into 20th Century

2.   Modernism social housing; The Period After World War I: The State Intervenes

3.   Post-war modernism: an urgent need for housing after Destruction of war; The Period After World War Il: 1945 To 1970s; The Golden Age of Social Housing

4.   Postmodernism: losing popularity of high-rise social housing developments and looking for alternatives; the 1970s- 1980s; Domination of a Neo-Liberalism

5.   Contemporary interpretations, which can adopt different occupants and changes over time; since the 1990s; Sustainable design

1.   New forms of urban housing: the first decades of the twentieth century- the emergence of the apartments as a new building type; the Transition from 19th The into 20th Century

The original form of social housing created after industrial revolution (Harloe, 1995); industrialization, the massive urbanization process and increased demand for housing in cities in the mid-nineteenth century was a starting point in the creation of social housing. Social housing was shaped by utopian ideals, philanthropy, and industry. In this period social housing was often provided by charities or employers. It was based on philanthropic activity and was built as a form of voluntary.

The first legal regulation of social housing began to emerge in England in 1980s. London county council (LCC) established in 1989. It became one of the first and most prolific social housing builders. The aim was to improve its housing stock and the living standards of its inhabitants. London county council (LCC) start to build the first council estate, Boundary Street, conceived at neighbourhood scale and replacing former slum. Its architectural standards and details inspired by crafts movements.

Boundary estate in 1907   Boundary estate in 2015(tom corbett, @rook_tx)
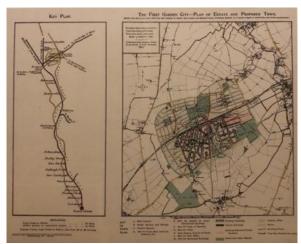
Social housing architecture as a concept emerged in England in the late 19th century. England's architecture experiences a significant change in target group and style which had an impact on the architecture of Europe and North America (Change in target group from wealthy people toward common people and change of design toward a more egalitarian architecture (Maschaykh, 2015)). Social housing design was inspired by the Arts-And-Crafts Movement of the 1880s, which would later develop into the Garden City Movement.

Garden City Movement, pioneered by Ebenezer Howard, derived from the idea that neighborhoods, should promote a social mix between rich and poor. This aim of this movement which provided an 'anti-urban' model was to create a more livable city which would be more affordable and self-sustaining, in which homes, workplace, and gardens were in harmony together (Henderson, Lock and Ellis, 2017). The idea is based on the integration of green into the city and the idea of functional separation.

plan of first garden city; Letchworth 1904 (Henderson, Lock and Ellis, 2017)

In this period new housing legislation began to develop a residential architecture for all. These construction regulations were applied to improve the living quality of residents. The basic principle of the design was the consideration to ventilation, plumbing, and sanitary arrangements. Also, attention to privacy and creation of external and social spaces (balconies, private and shared gardens, and roof gardens) were beginning to be used in urban housing. Housing type was usually terraced house and high-density type.
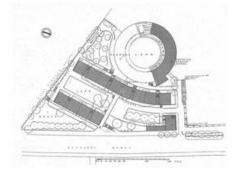
2. Modernism social housing; The Period After World War I: The State Intervenes

War produced severe infrastructure damage, and urgent necessity for mass residential housing after the war led to the creation of adequate and affordable large-scale housing for poor and working class

Economic crises and housing shortages after World War I led to new cost-effective mass housing solutions. The rationalization of production methods and a principally economic view of floor plan organization, building types, and their ensembles with the aim of standardization governed the debate on housing for many years to come.

This period was start of state-supported social housing Construction. After 1920s Social housing was constructed as an essential pillar of welfare policies (Scanlon et al., 2014) and an essential tool in the political local power balance (Houard, 2011)

In terms of architectural design social housing began to use modernism design principles. Functional, practical and cost-effective housing was designed to provide adequate and affordable housing. Kensal House, designed by Maxwell Fry was one of the first modernist social housing scheme in UK. It was funded by the Gas Light and Coke Company for working-class tenants

Master plan of kensal house (Jackson and Holland, 2014)

3.   Post-war modernism: an urgent need for housing after Destruction of war; The Period After World War Il: 1945 To 1970s; The Golden Age of Social Housing

1945 to mid-1970s, is, the golden age for social housing; it is the period of post-war reconstruction and growth.   Large-Scale provision of social housing was achieved to address housing shortage alongside an effort to deal with slum housing. In terms of target group social housing considered a wider target group. It was available not only for low-income households but also for middle-class people.

In this period architects employed the early modernism ideas-often at larger scales than before due to the housing shortage and at times built to inferior standards. "Social housing was tied to functionalist notions of what constituted a modern society: accessibility, functionality, and uniformity were the key principles in the provision of affordable housing for workers and their families." (Lévy-Vroelant et al., 2014, p. 284). In this period state supported reconstruction projects across UK cities to build more housing. Social housing adopts modernist design principles and government subsidies encourage taller and denser developments. Also, Provision of facilities and amenities goes beyond the dwellings and include local infrastructures like schools, playgrounds, and public spaces.

many of these large housing estates built in this period have been associated with diverse problems. The most common problems are, physical decays of building and open spaces, monotonous living space, separation of functions leading to multiple problematic effects, such as unsafe spots, conflicts over maintenance of public spaces opportunities, safety problems, stigmatization and socio-spatial isolations (Rowlands, Musterd, and van Kempen, 2009)

4.   Postmodernism: losing popularity of high-rise social housing developments and looking for alternatives; the 1970s- 1980s; Domination of a Neo-Liberalism

With the increasing influence of postmodernism, a new type of social housing emerged based on a return to the streets. Rethinking the design of large-scale suburban estates led to the creation of low-rise, high-density social housing projects. Also, there was A return to focus on internal layout. instead of tower and slab blocks, the architects try to design new urban housing that creates high density without raising the height and integrated housing with or without separation from its surrounding context.

After mid-1970s social housing experienced a period of rapid change in the organization, (the demographics of its residents and the scale of provision has changed). Bin this period universalist social housing idea was criticized and the role of social housing in accommodating lower-income and vulnerable households has increased. In the 1980s UK government introduces Right to Buy, offering council tenants the opportunity to buy their council house at a substantial discount. Right-to-buy accelerated decline of council housing in Britain and removing them from local authority control.

5.   Contemporary interpretations, which can adopt different occupants and changes over time; since the 1990s; Sustainable design

Financial crisis (2007-2010) reduces housebuilding and leads to reduce subsidies for housing associations in countries across Europe. In UK during the past decades, there has been decline in social housing numbers. In terms of housing policies, social housing becomes more often part of urban regeneration than reconstruction and expansion programs of post-war decades since the 1990s. The question of demolishing and rebuilding large housing estates has emerged as a central theme of urban policies linked with social housing (Malpass, 2014).   In this respect, mixed-use and mixed-tenure developments are promoted to combat residualisation and exclusion problems of social housing projects.

In social housing design, there is an approach to using flexible spaces, interacting with the surrounding areas, creating good neighbourhood social interactions, and emphasizing energy and efficiency techniques. Also, in recent years, social housing projects provides a full range of dwelling types

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

instead of repeated one-type housing.

Table 1. Development of social housing timeline (1984-2020)

Abcde	the Transition from 19th The into 20th Century	The period After World War I;	The period after World War Il; 1945-70	Post-modernism: 1970s-1980s	Contemporary Interpretations. Since 1990s
Provider	Philanthropy, charities, and industry employers	State-support housing construction	State-support housing construction	Reduction in direct state-support Increased in Statues of non-profit organization and private actors	transfer of social housing stock from local authorities to housing associations
Housing policy	The first legal regulation of social housing- The aim was improving living condition of working-class	Social housing as an important pillar of welfare policies Housing for mass was based on the concept of "equality residual model of social housing[1]was more common	Maximizing housing production through large housing projects to address housing shortage alongside effort to deal with slum housing	Reduction in subsidies for new social supply numerical housing shortage was greatly solved so it was not at the forefront of policy.	mixed use and mix tenure developments social housing as part of urban regeneration process
Target group	well-off, and working-class group		mass model of social housing	greater targeting resulting in higher proportions of neediest people	Greater targeting; higher proportions of poor and vulnerable households– including ethnic minority and immigrant households
Housing type	terraced house, high-density type garden cities	low-rise type	Medium-large scale and high-rise estates with large green public spaces	low-rise, high-density type	low-rise, high-density social housing projects
Design style	new stylistic concepts on residential architecture for all	functional, practical, and cost-effective housing design	standardized production, functionality, and uniform design	a new type of urban housing, based on a return to streets with front doors focus on internal layout	utilize flexible spaces and community areas, variety of different types and sizes

Discussion

The origin of social housing starts with England's 19th- century Garden City movement. The Period after World War I is the beginning of the era of modernism in housing. The post war years (1954-1980) were a period with the highest level of large-scale social housing construction. Some of the social housing designed in this period is an important part of modern architecture. It did not take much time that these estates were far away from their utopian roots. Social housing turned into the cause rather than a solution to urban poverty. Large-Scale "tower and slab" estate (Urban, 2012) was faced with social and physical problems. The result was a spatial concentration of low-income, ethnic

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

minority groups, and crime in these stigmatized "sink estates" (Campkin, 2013).

From 1970s decline and poor reputation of social housing has been expanded. To construct a greater number of social housing design quality was undermined by poor construction. Besides physical problems, many social issues cause this decline. The reason for this deterioration was manifold, but included, management and maintenance problems, layout, and urban design issues, decreasing building quality, low quality of public space and an accumulation of social problems like poverty, unemployment, social exclusion, segregation (Karakusevic and Batchelor, 2017).

Social housing is a rapidly evolving sector which has experienced a considerable period of change. Today social housing should change; this monotonous typology should break up to respond to rapidly changing needs and contexts. A new school of thought in social housing architecture should be created against challenging issues of social housing. It is necessary to learn from history and explore how social housing has been designed and provided throughout its evolution to develop more effective concepts.

Conclusion

During the historical development that have taken place in different periods the different strategies and policies are developed to tackle challenging problems of social housing like social isolation, physical decays of building and open spaces (sub-standard housing), overcrowding, simplicity, the mismatch between the demand and supply of social housing, and stigmatization. In terms of architectural design, the transformation should consider both the social and physical aspects to enhance the quality of housing units, flexibility, individuality, personalization, and social interaction.

A new generation of practices is transforming social housing. Rapid change in social housing represents fundamental transformations in the essence of housing problems, structures of housing provision and patterns of housing consumption is rooted in fundamental shifts in the political, economic, and social landscape. Responding to continued high demand, changing clients and new funding methods, architects' roles become once again prominent. They address how homes are delivered at scale with a new focus on city making. In recent years architectural strategies should embrace new methods and innovative strategies to achieve a high-quality housing design against complex   challenges.

References

Campkin, B. (2013). *Remaking London: Decline and Regeneration in Urban Culture*. London: I.B. Tauris.

Harloe, M. (1995) *The people's home? Social rented housing in Europe and America.* Oxford: Blackwell Publishers.

Henderson, K., Lock, K. and Ellis, H. (2017). *The art of building a garden city; Designing new communities for 21st century*. newcastle upon tyne: RIBA publishing.

Houard, N. (2011) *Social housing across Europe.* Paris: la Documentation française.

Jackson, I. and Holland, J. (2014) *The architecture of Edwin Maxwell fry and Jane Drew: Twentieth century architecture, pioneer modernism and the tropics*. London, United Kingdom: Ashgate Publishing.

Karakusevic, Paul, and Abigail Batchelor. (2017). *Social Housing: Definitions and Design Exemplars*. RIBA Publishing.

Lévy-Vroelant, C., Reinprecht, C., Robertson, D. and Wassenberg, F. (2014) '*Learning from history: Path dependency and change in the social housing sectors of Austria, France, the Netherlands and Scotland, 1889-2013*', Scanlon/Social Housing in Europe, , pp. 277–294. doi: 10.1002/9781118412367.ch16.

Malpass, P. (2014) '*Histories of social housing: A comparative approach'*, Scanlon/Social Housing in Europe, , pp. 255–274.

Maschaykh, U. (2015) *The changing image of affordable housing: Design, Gentrification and community in Canada and Europe.* London, United Kingdom: Ashgate Publishing.

Rowlands, R., Musterd, S. and van Kempen, R. (eds.) (2009) *Mass housing in Europe: Multiple faces of development, change and response*. New York: Palgrave Macmillan.

Scanlon, K., Whitehead, C. and Arrigoitia, M.F. (eds.) (2014*) Social housing in Europe. United States*: John Wiley & Sons, Oxford.

Todd, S. (2014). *The people: The rise and fall of the working class, 1910– 2010*. London: John Murray.

Urban, F. (2012). *Tower and slab: Histories of global mass housing. Abingdon*, Oxon [England]: Routledge.

Watt P.and Smets P(2017) *"Social Housing and Urban Renewal: A Cross-National Perspective*", Emerald Publishing Limited. Kindle Edition.

The Investigation of Intra-Urban Residential Mobility Towards Gated Communities and Housing Choices: Case of Ataköy

Gözde Bodamyalı Nizam

Istanbul Technical University, FBE Urban Design Graduate Programme, Taskisla, Taksim, 34 437 Istanbul, Turkey
e-mail: gozdebodamyali@gmail.com

Ahsen Özsoy

Isık University, Faculty of Architecture and Design, Sile, 34 980 Istanbul, Turkey
e-mail: ahsenozsoy@gmail.com

Abstract

Currently "home" has started to gain different meanings beyond a shelter. It has gained a social symbolic character with the influence of globalization and neo-liberal policies in metropolitan cities. Due to the increase in their incomes, the new social class began to live in residential areas where they could display their social status and they began to abandon their dwellings to settle in gated communities. Recently the impact of this shift can be seen in İstanbul as it is in almost every metropolitan city. This study examines the residential mobility and household preferences towards gated communities through a case study in Istanbul, Ataköy neighbourhood. It seeks to understand the intra-urban residential mobility, housing preferences in Ataköy starting with the sales of the flats in Ataköy Konakları in terms of residential and neighbourhood satisfaction revealing housing experiences together with the demographic structure of households.

Keywords: Housing Preferences, Residential Satisfaction, Residential Mobility, Gated Communities.

Introduction

Housing has become one of the fundamental aspects of human life, especially in the modern world. However, this situation naturally does not make it easier but even harder to define the concept of housing where it is seen that many definition attempts are made on housing by various researchers. Indeed, housing can be conceived as a physical space (shelter) arising from human needs in the most general sense and it protects individuals from the outside world. Moreover, it provides a private space for its inhabitants where it separates individuals from society (Tekeli, 2008). In addition to this, housing apart from its spatial meaning expresses a sociality in terms of maintaining cultural and moral continuity. Therefore, in today's world, housing can be expressed as a necessary part of human life, which has social, cultural, psychological and even behavioral dimensions in addition to its physical and spatial meanings. With the impact of neoliberal policies and globalization, which became widespread in the 1980s, housing has developed a social symbolic character, altering human life, way of behaviors, and socio-economic balances starting from interior space reaching to the urban scale. As housing has become more modernized, it has become a feature of consumer culture and gained a meaning more than a shelter. In recent years, the most typical situation in the housing market has been newly developed residential settlements as a result of population expansion in fast-growing cities that have targeted certain socioeconomic groups. Cities, which are developing and transforming as a result of neoliberal policies and consumer ideals, are undergoing a worldwide transformation and are increasingly turning to gated communities. Neoliberal urbanism seeks to increase market forces in the real estate and housing sectors in order to privatize urban and social services for the wealthy groups. The increase in high-income groups, influenced by global consumerism, has resulted with a "new lifestyle" concept, due to the formation of

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

new social classes (Erkip, 2005; Tanulku, 2012). Through a case study in Istanbul's Ataköy neighbourhood, this study investigates residential mobility and household preferences towards gated communities. It focuses on intra-urban residential mobility and housing preferences in Ataköy neighbourhood in terms of residential and neighbourhood satisfaction, as well as housing experiences and household demographic structures.

1. Intra-Urban Residential Mobility & Residential Satisfaction

In the literature "residential mobility" or "household mobility" refers to housing change in a short distance or a location selection activity in an urban area. Especially when considering the structural change of urban space, it is one of the important factors to be considered. This concept, which is gaining importance, is frequently mentioned in the studies conducted in related fields in the literature and provides significant data when examining the structural transformation of urban space (Özgür and Yasak, 2009). It is also necessary to emphasize the distinction between the concepts of mobility and migration. In the literature, researchers handle migration and residential mobility in two different ways. While some publications argue that these two subjects are the same, there are also studies shaped in line with the belief that mobility is a part of the concept of migration (Brown, and Moore, 1970; Dündar, 2002; Clark and Withers, 2007, Rossi, 1955; Sabagh vd., 1969; Speare, 1974; Clark and Onaka, 1983; Clark vd., 1986).

Housing and neighbourhood selection behaviours of households in different socio-economic levels gain importance with the rapid growth in cities. Since the 1950s, several fields have investigated and attempted to explain residential mobility from an interdisciplinary perspective (Rossi, 1955; Wolpert, 1965; Brown & Moore, 1970; Speare, 1974; Porell, 1982). Architecture, geographic sciences, history, sociology and economics are among these disciplines. Each field approaches this subject using its own methodology and intra-urban residential mobility has generally been dealt with in two main approaches. The first one is the "Dissatisfaction Approach", and the second is the "Balance Approach" (Clark et al., 2006). "Balance Approach" in residential mobility has a theoretical framework that explains the comparison of the house and its surrounding/neighbourhood with other potential housing and neighbourhood features. The economic conditions of the household along with the decision making of a new housing or mobility activity is important as an input (Clark et al., 2006). According to the economists explaining this concept, the change in housing location arises from the effort of individuals to establish a consumption balance with its affordability (Huang and Deng, 2006). The second approach of residential mobility is the "Dissatisfaction Approach" which argues that the mobility stems from the dissatisfaction level of the households with the house they live in or the neighbourhood. It is crucial to understand Rossi's (1955), "life cycle" theory which is one of the most important studies puts an impact on mobility theories. He was the first scholar to discuss the relationship between "life cycle" and residential mobility together. He stresses the mobility behaviour of people as they go through different stages in their lives and have different needs at each stage. He divides housing preferences and the selection process into three stages; "decision-making process", "searching process" and the last one is "selection of a new house". Rossi states that housing choice is highly affected by the life- cycle as well as the individual's tenant or homeownership status. Moreover, dissatisfaction level with the current home has a significant impact on a family's housing decision therefore it is possible to say that the conflict between the current home and the ideal or desired home decreases the satisfaction level in this sense. According to Grigsby (1963) mobility patterns reflect disparities in families' socio-economic levels with demographic characteristics and varies accordingly where expectations, needs and wishes comes to the fore while choosing a new residential environment. It is important to note that, the most significant indicators of a person's quality of life are their contentment with their living quarters. The housing phenomenon is the place where an individual can most easily reflect himself and form a relationship with his environment. Depending on the place, social, and cultural framework, this phenomenon has various values and meanings for each user (Özsoy, 1994). Despite having the power to modify the environment through his actions, individuals have an inner world affected by environmental and external factors. This reciprocal relationship with human nature is also important in terms of urban design and intra-urban residential mobility. In this context, the necessity to determine if the house and its surroundings are suitable for the user's needs and profile, as well as to assess satisfaction level, has always been a task encountered in the field of research. The extent to which individuals feel a sense of belonging to the environment they live in or to what extent the individual's home is closely related to its immediate environment directly affects housing satisfaction.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Therefore, the state of "satisfaction" or "dissatisfaction" reflects individuals' perspectives on their environment.

Residential satisfaction and neighbourhood satisfaction related to household mobility has been handled with an interdisciplinary perspective through intra-urban mobility approaches in this literature review. Residential satisfaction should be considered in three dimensions as follows: the "residential environment", "individual qualities" and lastly the "social environment" (Kellekci & Berköz, 2006). It will be acceptable to dispute individual "residential satisfaction" when these three aspects are all in harmony. As Braubach explains the combination of physical and psycho-social environment factors, he states that one's perception and experience of the neighbourhood environment determines well-being and happiness where objective and subjective factors come both into account (Braubach, 2007). According to Speare's "Satisfaction Approach Model" this concept should be examined in five different variables which can be listed as follows; "household characteristics - neighbourhood characteristics - social connections - desire to move and current mobility" (Speare, 1974). At this point, the relationship between the concepts of "residential satisfaction" and "residence bundle" gain importance in terms of "intra-urban residential mobility". "Residential satisfaction is the state of being satisfied with the house and its surroundings as a whole by the individual or household" (Özgür & Yasak, 2009). As can be understood from this definition, residential satisfaction is a concept determined in the inner world of the person. Positively or negatively, it is very much in relation to the time spent in that environment where personal attachment, psychological comfort, sense of belonging, physical comfort and social ties are important in maintaining a healthy environment and living a healthy life.

2. Methodology and Data Analysis

This study is a qualitative research that includes literature review and fieldwork approach while dealing with housing studies. The fieldwork approach comprises a survey held with 88 participants where 58 participants reside in Ataköy settlement which is a mass housing district and 30 participants reside in a gated community which is Ataköy Konakları. Within the framework of typologies, the survey has a structure that includes diverse questions for each settlement. Moreover, in-depth interviews held with real estate, conservation associations/organizations, headman's office and important members who reside in Ataköy neighbourhood. The majority of the questionnaire held with participants mostly constructed on open-ended questions which seek to examine the housing choices, mobility tendencies and residential satisfaction of upper-middle and upper-income groups who reside in this neighbourhood. It also seeks to understand the previous residence of the household used to live in and the district of workplaces. Data gained from the questionnaire and interviews analyzed with Statistical Package for the Social Sciences (SPSS) program. The data assessed and coded conceptually, grouped and analyzed substantially to obtain meaningful results which provides a qualitative presentation with, ranking, numberings and percentages.

3. Case Study - Ataköy Neighbourhood (Past and Present)

Ataköy is a coastal district located in Bakırköy (Makriköy) on the European side of İstanbul-Turkey which is established 15 km away from the city center. 50 hectares on the coast include nearly 15.000 residences and was developed gradually in phases as a satellite city with 70.000 population by "Turkey Real Estate Credit Bank" (ECB) in the 1950s. It is one of the first planned mass housing settlement and the first satellite city developed in Istanbul. 1st phase started in 1957 and completed in 1962 with 662 housing. However, the development planned as 10 neighbourhoods in total, due to the need for one more neighbourhood developed after 1988. Ataköy settlement completed chronologically, as follows; 2nd neighbourhood 1959-1964 with 852 housing, 3rd and 4th neighbourhood 1963-1974 with 2630 housing, 5th neighbourhood 1976-1983 with 2993 housing, 9-10th neighbourhood 1985-1988 with 3100 housing, 7-8-11th neighbourhood 1989-1991 with 4348 housing, 6th neighbourhood 2003-2007 with 950 housing unit. In response to changing needs and demands throughout time (Figure 1). Due to its central position, the satellite city, which has been merged with the city over time, become very important. The determining variables of the neighbourhood can be listed as, residential comfort, outdoor arrangements, pedestrian

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

and vehicle relationships (Tapan, 1996). Each neighbourhood has developed with its bazaar, social facilities, sports complex, schools, mosques, green areas, children's playgrounds, walking and cycling areas. With its space quality, pedestrian-centred planning, regular open spaces, planned parking lots, green areas, low and high-density solutions, and various housing typologies that can meet the needs of various user groups, the district of Ataköy sets an example of an ideal settlement within Istanbul.

Figure 1: Aerial photo of Ataköy 9-10. neighbourhood was taken from an airplane (Bodamyalı, 2018 photo archive).

Despite the continuous high-rise developments, Ataköy has managed to preserve the majority of its green areas, attracting attention with the high rate of green spaces. Furthermore, thanks to the benefit of Ataköy's coastal location, the beach has been used in the filming of Turkish movies and is well-known for its natural beauty and beach in the 1970s. In the 1980s Ataköy coast was planned as a tourism zone with the change in zoning plan (Figure 2).

Figure 2: 1970s Ataköy coastal area and camping zone (Ataköy 1st Neighbourhood Conservation and Beautification Association Blog). Ataköy neighbourhood site analysis on the left (Bodamyalı, 2018).

The historical Ottoman Gunpowder House (Baruthane), Ispirtohane building, water tower, underground tunnels, and many registered structures can be found in the Ataköy neighbourhood, which has four million square meters of land and was designed with a modern urbanism understanding. It is now surrounded by gated communities, luxury residences, hotel blocks, and has been influenced by neoliberal consumption culture. It is possible to argue that the transformation of the Ataköy coast into a tourism area has paved the way for construction on the Ataköy coast in some ways. Starting with the construction of the 6th neighbourhood (Ataköy Konakları), which began in the late 2000s and was completed in 2007, marked the beginning of this development with the gated community concept. While Ataköy is an exemplary mass housing development in terms of planning, housing typologies, social facilities, historical heritage, beach and green areas, today it is surrounded by closed, protected, luxurious high-density - high-rise residences and hotels which is still under construction. Some examples of these structures include Nef 22, Selenium Ataköy, Sea Pearl Ataköy, Yalı Ataköy, Hyatt Regency, and the Jumeirah Hotel.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

3.1. Research Findings: Questionnaire
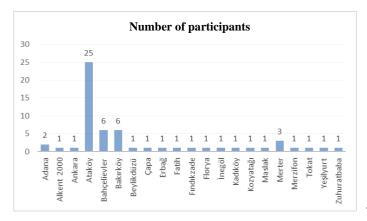
3.1.1. Ataköy Settlement - Household Profile

Within the scope of this research 58 people has been surveyed who reside in Ataköy settlement. There were 30 female and 28 male participants who responded to the questionnaire. When the participants' age group distribution is reviewed, it is understood that individuals aged 60 and over are in the majority. Considering Ataköy is an old residential settlement, particularly the 1st and 2nd neighbourhoods have a higher rate of old age group. At the same time, it would be accurate to say that this area's inhabitants are former Ataköy residents when the residence time and homeownership status are reviewed. Acknowledging the education level of the participants, it is comprehended that they are essentially university graduates. 31 participants have university degrees, and 11 participants have a doctorate's degree. Based on these findings, the number of households living in Ataköy settlement to have a university degree is 84.5%. When the occupational distribution is reviewed, it is comprehended that there are professions such as doctors, pharmacists, dentists working in the health sector, lawyers, architects, engineers, advertisers, designers, business people, pilots, musicians, and traders, hairdressers, teachers, and academics. It is learned that 20.6% of the households interviewed are retired. Based on this, compared with Ataköy Konakları with a high level of education, there is a similar socio-demographic structure. When the individuals' marital status is considered, it is noted that 38 participants are married, 14 participants are single, and 6 participants are widows. Families of two children are in the high ratio in this settlement. When the monthly income of the participants is reviewed, it is realized that 34.5% of the families earning between 20 to 29.000 TL in the majority. When the level of 'proximity to the workplace' considered it is recognized that the participants mostly work in the European side of Istanbul mostly in Ataköy (11 people) and Bakırköy (12 people). When spouses' employment rate is observed, the number of women working in Ataköy settlement was higher than Konaklar. 23 participants travelled abroad at least once a year and nine people at least twice a year. It is noted that a total of 25 participants go abroad at least three times a year. Consequently, out of the 58 participants who participated in the survey; 17 people are tenants at a rate of 29.3% and 41 people are owners at a rate of 70.7%. Hence, while the 29 participants in the survey have another residence in Istanbul, the other 50% do not have another housing. In this context, it should be assumed that the socio-economic status of the households residing in the Ataköy settlement varies by half. While one group is close to the household group living in a gated community, it is recognized that the other half is in the upper-middle-income group.

3.1.2. Current and Old Residential Features

This section examines the old and the new housing features of the participants such as; location of the house, the number of bedrooms, total area of the house, duration of residence. According to the survey data it is understood that 43.1% (25 people) of the participants residing in Ataköy settlement used to live in Ataköy. It is remarkable that the majority of the households who lived in Ataköy moved to a new house due to the increase in their income, life-cycle, and that the majority of them preferred to live in Ataköy again. As it can be observed in the graph, it is also observed that there are families who moved from the close neighbourhoods of Ataköy from other districts such as Yeşilyurt, Florya, Bakırköy, Zuhuratbaba and Bahçelievler (Figure 3). During the life cycle, families economic income level has increased and whose households are growing needed to move to larger houses. It has been observed that 25 households have taken advantage of the various housing typologies of Ataköy to move to other neighbourhoods of this neighbourhood. This is directly related to the satisfaction level of the neighbourhood. When the users' old residences' characteristics are analyzed, it is understood that 53 participants used to live in a mass housing area, two people in a gated community, and two people in detached housing. Moreover, 46.1% of the participants have been living in Ataköy for more than 20 years and 22.8% for more than ten years. The fact that 69% of the user's prefer to live in the same neighbourhood for more than ten years explains the satisfaction level with the residence and its

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

surrounding (Table 1). According to the data obtained, most of the participants who lived in Ataköy in the past have moved to Ataköy at a rate of 43.1%, depending on the family life cycle. When the data are considered in detail, it was understood that the group living in the 3rd and 4th neighbourhood in the past moved to the 9th and 10th neighbourhood while the 9th and 10th neighbourhood moved to the 7th and 8th neighbourhood. This circulation seems significant when the housing typologies are considered.

Number of participants

Adana 2, Alkent 2000 1, Ankara 1, Ataköy 25, Bahçelievler 6, Bakırköy 6, Beylikdüzü 1, Çapa 1, Erbağ 1, Fatih 1, Fındıkzade 1, Florya 1, İnegöl 1, Kadıköy 1, Kozyatağı 1, Maslak 1, Merter 3, Merzifon 1, Tokat 1, Yeşilyurt 1, Zuhuratbaba 1

Figure 3: Distribution of former residential districts.

Time Spent in the Residential	Ataköy Settlement	
	N	%
1-5 Year	18	31,1
6-10 Year	9	15,4
11-15 Year	2	3,7
16-20 Year	2	3,7
21-25 Year	6	10,2
25+ Year	21	35,9
Total	**58**	**100,0**

Table 1: Time spent in the residence.

According to the data obtained from the analysis, the lowest total area is 70m² and the highest total area is 380m². As can be seen in Table 2, there is a wide variety of housing types ranging from 1+1, 4+1, 5+1 and 6+1. When the current housing typology investigated, mainly 2+1 and 3+1 housing types come to fore with 110 m2 as total area (Table 3).

Old housing typology	Old housing number of bedrooms						Total
	1+1	2+1	3+1	4+1	5+1	6+1	
Mass Housing/Apartment	1	23	27	2	0	0	23
Detached House	0	0	1	0	1	0	2
Gated Community	0	0	0	0	1	1	2
Lodging	0	1	0	0	0	0	1
Total	1	24	28	2	2	1	58

Table 2: Old hosing typology and the number of bedrooms.

Curret Residence Number of bedrooms	Total area m²										Total
	75	90	110	120	130	150	180	200	280	300	
1+1	4	0	0	0	0	0	0	0	0	0	4
2+1	6	3	12	2	0	0	0	0	0	0	23
3+1	0	2	13	2	1	4	2	0	0	0	24
4+1	0	0	0	0	0	0	0	1	3	1	5
5+1	0	0	0	0	0	0	0	0	0	2	2
Total	10	5	25	4	1	4	2	1	3	3	58

Table 3: Current hosing typology and the number of bedrooms.

3.1.3. Housing Choices

This section examines the housing preferences of the households residing in Ataköy settlement. In order to examine the residential choices, mobility and the factors that cause this movement. Participants were asked whether they had another residence other than the residence they currently live in Istanbul, and the reasons for choosing to live in the current residence. Due to the results obtained from the survey, it is

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

understood that 50% of the participants owning another house in Istanbul. Consequently, 29 households have another residence in addition to the one in Ataköy. When the reasons why the participants prefer to live in their existing residences are assessed, it is comprehended that the frequently repeated answers reveal similarities with the households living in Konaklar, but at some points, it differs due to the concept of gated settlement. Frequent answers can be classified according to their repetition rate as follows; "need of a bigger house", "infrastructure", "quiet-calm and planned environment", "central location", "proximity to the workplace", "being a socially homogeneous neighbourhood", "easy transportation"(availability of metro, bus, sea bus, and renewed train line), "easy access", "green areas" compared to other residential areas, "coastal district", "scenery, and the presence of a bazaar nearby". Households were asked to rate the reasons for moving to Ataköy from 1 to 5 in order to its importance. Consequently, it was observed that the main reason comes out as follows; "a planned environment" continues with the "proximity to the workplace", "central", "proximity to the schools", "ease of transportation", "social status similarity", "safe neighbourhood". Especially for the pilot participants, it has been understood that the proximity of Ataköy settlement to Atatürk Airport in terms of location is one of the reasons that greatly affects the housing preferences when moving to a new residence. Due to the closing of Atatürk airport to passenger flights on 7 April 2019, airport staff can be projected to move close to the new Istanbul airport.

3.1.4. Meaning of the Housing

Considering the meaning and expression attributed to the house by the households interviewed in Ataköy settlement is essential in understanding housing preferences. It is comprehended that the meaning of the housing refers to "a safe and peaceful place to live in" (55 people), "home where you feel most comfortable" (52 people) are among the first-degree answers given. It is noted that the status of describing the home as a "safe place" (48 people) is the second degree, followed by the third-degree answer "prestige/image" (30 people) and "the place proud to own" (28 people). Nevertheless, 6 people describe their dwelling as "a shell to be sheltered". 70.7% of households think that having a house in Ataköy settlement is a privilege. It is explained that 15.5% of the users think this situation is "ordinary". Most of the households living in Ataköy settlement provided similar answers with the households living in a gated community (Konaklar). It can be said that they are proud and confident and they feel privileged with their residences (Table 4, Table 5).

Being Household in Ataköy Settlement	Ataköy Settlement	
	N	%
Privileged situation	41	70,7
Ordinary situation	9	15,5
Does not matter	8	13,8
Total	58	100,0

The Effect of Economic Value of Housing	Ataköy Settlement	
	N	%
Gives sense of security safety	6	10,3
Provides Prestige	14	24,1
No opinion	7	12,1
Total	31	53,4

Table 4: Owning a Residence in Ataköy.   **Table 5:** The effect of the economic value of the residence on its user.

3.1.5. Household Mobility – Residential and Neighbourhood Satisfaction

Likes and dislikes of the residential examined with its positive and negative aspects. Furthermore, residential satisfaction and neighbourhood satisfaction considered in this section. When the household's residential satisfaction is reviewed, it is noted that there is a high level of satisfaction at the rate of 91.4% (53 people). According to the analysis it is showed that households find their houses "roomy" (55 people),

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

"quiet and calm" (52 people), "safe" (47 people), "efficiency of sound and heat insulation" (40 people). Moreover, household's stated following topics about the neighbourhood satisfaction; "richness of green areas", "beautiful coastal district", "well-planned settlement", "building heights at a human scale", "earthquake resistance", "infrastructure", "proximity to the bazaar and shopping center", "walking and biking opportunities", "being in a socially homogeneous neighbourhood", "strong neighbourhood relations", "having private open or indoor car parking areas", "the existence of parks", "availability of social areas and sports facilities in the neighbourhood".

A participant stated his level of satisfaction while living in Ataköy settlement;

> *"It is a quiet neighbourhood where bird sounds are heard, the fruit can be picked from the trees, and all animals are given a chance to live. No matter what time it is, I can safely go out. I spent some of my education life here. Since this time, it has been one of my favourite places where I find peace. That's why when I decided to buy a house, I didn't think of another district".*

According to the data analysis, it is understood that households mention no dislikes about their housings in general. However, some of the dissatisfactions can be listed as follows; "ageing of the buildings", "inadequacy of the parking areas", "lack of elevators " (particularly in the apartments with a limited number of floors). In addition, participants were asked about their thoughts on the new constructions continuing in their neighbourhood. It is seen that there is a common dissatisfaction due to the new gated mix-use constructions on the coastal area. Also, there is a great negative impact on the good view of the residences especially on the 1st 2nd and 6th neighbourhood. The construction noise, air pollution caused by these sites and aircraft noise caused by the proximity to the airport was mentioned. The good sea view has blocked due to the Sea Pearl and Yalı Ataköy projects, the noise and air pollution caused by the construction, and the struggle of Ataköy residents on the beach are expressed as follows from the words of Ataköy residents;

> *"...We worked so hard to stop the construction on the beach. We did meetings, marches, signed petitions of appeals, but we were not successful. They invaded our public spaces. Risky structures are being built on the beach area. It disrupts the urban fabric of the Satellite City and lowers its environmental quality."*

> *"...We used to go to the beach. We used to get on boats and swim to Florya beach. It was very famous; it was the most beautiful beach. Today the sea is no longer visible and accessible."*

In one-on-one interviews, it is understood that Ataköy Konakları has a negative impact on Ataköy settlement. On the contrary, there are participants who argue that gated settlements are beneficial and have a positive impact for the neighbourhood. Participants state that the construction of more luxurious and modern residences increases the appearance, and prestige of Ataköy neighbourhood. A group agrees with this view and believes that the economic value of their residences has increased due to the new constructions as well. It is understood that households' opinions about the gated communities generally differentiate. Nevertheless, it is noted that there is serious mobility from Ataköy settlement towards Ataköy Konakları which has a gated concept. The data obtained from the survey on Ataköy Konakları confirms this statement when it is cross-checked. Moreover, including Konaklar households, each of the participants has resistance to the rapid change in their neighbourhood where high-rise, mix-use and high-dense gated communities being built on the coastal area (SeaPearl and Yalı Ataköy projects). Furthermore, it is noted that this resistance is higher and intense in 1, 2, 5, and 6th neighbourhoods which are mostly affected by these constructions. It is important to investigate the social relations and frequency of meetings in the neighbourhood to understand a complete level of satisfaction from the neighbourhood. According to the results of the survey, 60.4% of the households believe that they live in a homogeneous community, even if partially, 18.9% express that they do not find Ataköy socially homogeneous anymore. 12 households, representing 20.7% of the participants, stated that they were indecisive about homogeneity

and emphasized demographic changes in the neighbourhood (Table 5). When examining the frequency of meeting in neighbourhood relations, there are 35 participants who meet with their neighbours every day. This group constitutes 60% of the participants. A great majority of the participants, especially retired families, state that they are in contact with their neighbours as a family. In the remaining 40%, it is among the notes taken from the interviews with the participants that neighbourly relations are not common, especially for the young couples and families with children cannot socialize much due to the working load. The new constructions of gated communities both on the E-5 axis in the north and on the coast in the south since 2007 has raised questions about whether a serious crime has occurred in Ataköy neighbourhood. Due to this reason survey includes closed and open-ended questions if participants feel safe in their residences and if there had been a theft in their neighbourhood. Accordingly, 41 participants (70.7%) stated that theft incidents took place in the neighbourhood. This value is quite high and remarkable. Although it is believed that crime has increased in Ataköy since the 2000s, a different result is indicated when the general perspective is examined. According to the responses of the households interviewed, there is a serious crime in Ataköy.

I Feel a Homogeneous Community in Ataköy

	N	%
I strongly agree	19	32,8
I agree	16	27,6
I am indecisive	12	20,7
I disagree	5	8,6
I strongly disagree	6	10,3
Total	58	100,0

Table 5: Social homogeneity

Thinking of Moving	N	%
Yes	10	17,3
No	48	82,7
Total	58	100,0

Table 6: Thinking to move from the existing residence they live in

While 51 of the participants feel safe in their homes, 6 people do not feel safe. It is perceived that 5 people seem to be undecided about this issue. To assume the mobility tendencies of the households of Ataköy neighbourhood, they were asked whether they thought of moving from their residences. It is noted that 82.7% of the participants (48 people) do not intend to move from their residence where they live, and 17.3% (10 people) stated that they think of moving (Table 6). "Have you thought about moving to a gated community around Ataköy? " According to the answers given to the question, it is seen that mobility is not considered by 76%. This situation shows that the mobility tendency in Ataköy settlement is much higher than in Konaklar settlement. Although Konaklar is one of the areas most affected by the physical change in the neighbourhood. Control questions asked comprehending the mobility tendencies. "Would you move if you had the opportunity? If yes, why would you move? and what kind of residence you wish to live in? " According to the data obtained from the survey, it is perceived that thinking about moving to another neighbourhood in Ataköy is 24%. 11 out of 48 participants who did not intend to move from their residences replied that they would have moved if they had the opportunity. It is noted that 37 participants do not intend to move even if they have the opportunity. Among 21 participants who stated that they were thinking of moving based on the opportunities were dreaming of a detached house with a garden (10 people), 6 people stated that they would prefer to live in a residence, 1 person wanted to live in a gated community, 1 person had a dream of a loft flat, and 4 people wanted to live in a mass housing district again. When the reasons for moving are reviewed, it is comprehended that the dream of different types of housing and the status of being a tenant stands out. From this perspective, it is assumed that ownership status is directly related to mobility, and it would be appropriate to state that individuals tend to move to their own homes.

3.2. Research Findings: Indepth Interview and Data Analysis

This part of the research includes in-depth interviews. In-depth interviews were held with Master of Architect D. Kayabay, member of Ataköy Conservation and Beautification Association, the headman of the 2.5.6th neighbourhood H. Çelik, and a member of the real estate agents' union who has been residing in Ataköy since childhood and has been doing real estate business for 25 years, as Ataköy representative, Z. Kaya. Interviews provided important input to the data analysis of the research. Questions were asked about the new constructions in the neighbourhood and the effects of these constructions on the housing values and the neighbourhood. Moreover, the tendency of the households to move towards these new constructions were asked. In addition, the security perception of the households, their lifestyle expectations were criticized.

Kayabay and Çelik stated the following regarding to the completion of Ataköy Konakları in 2007, the housing values, changes in the social environment and the mobility behaviours of the inhabitants reside in Ataköy:

"...With the completion of 'Konaklar' 3rd 4-5th and 11th neighbourhood households started to move to the gated community. Housing values increased in other neighbourhoods of Ataköy after the completion of the 6th neighbourhood. If we think of Konaklar in a social sense, it has a very mixed and heterogeneous structure. My opinion is that the socio-cultural level of the old Ataköy households is much higher than Konaklar settlement. The old Ataköy residents consisted of a more elite stratum. ...As Ataköy Konaklar is a gated community, it has separated Ataköy in social and physical terms. An autonomous, closed settlement on its own, contrary to Ataköy's way of urbanism..." Headman

"...These H blocks we are in are 54 flats, gross 100 m², net 80 m², 2+1 residences. 90% of those who settled here were civil servants, small tradesmen, teachers, faculty members and doctors, who covers the middle group of the society. The demographic structure that settled in Ataköy in 1964 became middle-income families between the ages of 30-40. As the households here got older and migrated, these apartments started to empty. In other words, one of the reasons for the demographic change here was the change of hands of these apartments. For example, 16 flats have changed hands in the last 3 years out of 54 flats in the H block we live in. One of the apartments that changed hands was our upstairs neighbour. A Syrian engineer family of 4 moved here. ...Almost one-third of the apartment has changed hands in 3 years, this is a very serious rate. I attribute the change in demographic structure to this. " Kayabay

"...The first reason why households' prefer to move in new gated settlement was the fear of earthquake. Therefore, the most important aspect for inhabitants was to settle in a newer durable building. The second reason of housing preference was due to the large spaces of the flats in Konaklar, they wanted to move to a newer, more luxurious and larger apartment flats. I attribute the high demand for Konaklar from Ataköy to these reasons. Especially families living in single houses in Florya wanted to move to a safer neighbourhood. In other words, the earthquake, the need for a bigger house and the fact that it is a secure neighbourhood have caused this district to be in great demand. In Ataköy, especially 3rd and 4th neighbourhood there are incidents of theft. There was also a theft in our apartment this year. However, we know that vehicles were stolen and flats were robbed in Konaklar, which looks like a castle from the outside, where entrances and exits are controlled and equipped with security cameras and officers. Theft cannot be prevented. " Kayabay

"...The fact that it is the newest and most beautiful living space among Ataköy neighbourhoods has been one of the reasons for choosing Ataköy Mansions. A site consisting of 950 flats and 58 blocks. It consists of 6-storey buildings with low density, green areas... Having a shopping center right next to it, ease of transportation, no parking problem, controlled entrances and exits, security, social facilities, sauna, sports fields, walking areas, children's playgrounds. indoor and outdoor pools, sports facilities increase

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

the demand here. However, the Sea Pearl project, which was built on the coast, closed the entire sea view of the site. Accordingly, the demand for Konaklar has decreased considerably compared to the past. "
Kaya

The changing social environment in Ataköy, especially in the first 3 stages, are changing hands as a result of the aging of the households. Due to financial difficulties people had to sell or rent the flats inherited from their families. Years passed and Ataköy started to lose its domestic inhabitants. Therefore, it was observed that the sense of belonging in the neighbourhood decreased. The high demand for Konaklar in 2005, from the immediate surroundings of Ataköy such as Florya and Yeşilköy, has diversified the social fabric in this settlement and turned it into a heterogeneous structure. With the completion of Ataköy Konakları, an increase was observed in the housing values in Ataköy settlement, but this increase did not accelerate as fast as the gated settlement. As Kayabay stated, although it was observed that the housing values in Ataköy decreased after the big earthquake happened in 1999, it is understood that it regained its value. When the prices of flats compared with Konaklar and the 7-8th neighbourhoods in 2005, Konaklar were sold more or less the same prices. Therefore, moving to a new, luxurious, brand new flat at approximate prices has become more attractive for the households. Thus, the movement from Ataköy neighbourhoods to Konaklar was triggered and observed. Moreover, it can be understood from the in-depth interviews, Yalı Ataköy and Sea Pearl, which built on the coast of Ataköy, are foreign investor oriented. Although it is understood that a few families living in Konaklar have moved to Yalı Ataköy, the occupancy rate in these projects, where life has just begun, is quite low these days. Considering the situation in the country, Kaya mentions that the real estate market has stalled and people are delaying buying a new house. Ataköy headman, Çelik, thinks that the vertical gated communities built on the E-5 axis and on the coast will not be demanded by Ataköy households. Çelik also mentions a remarkable concern about the 1st and 2nd neighbourhood where she thinks, these areas will undergo a transformation process because of the new constructions.

4. Conclusion

Residential mobility and intra-urban residential mobility have become a research field that numerous disciplines have addressed in years, particularly in terms of residential satisfaction. Intra-urban residential mobility, in its simplest definition, is an act of mobility towards better housing and neighbourhood, due to the dissatisfaction with the housing and its surroundings, which cannot fulfill the expectations and needs of individuals. This mobility is the movement of an individual who cannot benefit from his/her house based on the priorities. The residential and neighbourhood characteristics constitute the most impressive household fact that affects the residential mobility process. It is understood that 'home' mentioned here has gained a meaning beyond a shelter and has become a tool that represents the socio-economic and demographic structures, lifestyles, and social status of individuals. Based on the data obtained from the survey and one-on-one interviews, it is understood that Ataköy households moved to Ataköy again at a rate of 43%. Since 2007, the households moved from Ataköy 4th-5th neighbourhood to 9th-10th neighbourhood, from 7th-8th neighbourhood to Ataköy Konakları, in other words, to 6th neighbourhood and from there to Yalı Ataköy (Figure 4). Similar results seen in the survey conducted in 1988 by A. Özsoy and N. Esin with 893 households in the neighbourhoods of Ataköy. Although 6-7-8th and 11th neighbourhoods were not completed back then, it is understood that Ataköy households did not intend to move from their houses in the 1980s, but they would move to another neighbourhood in Ataköy if they needed to. This situation has presented similar characteristics in this study conducted 30 years later. It is recognized that the vast majority of the households who moved to other neighbourhoods lived as tenants in previous house. They moved to the house they currently live in as an owner. It was comprehended that the mobility tendency of the household increased as the income level increases. Consequently, a significant relationship has been detected between ownership status and mobility. It is understood that many Ataköy inhabitants who evaluated the advantage of having a brand-new flat at that time moved from different neighbourhoods of Ataköy to Konaklar. The gated community typology,

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

which involves multiple services and facilities, has played an important role in the user's residential preferences. Based on the findings, it is understood that there is a collective dissatisfaction about the new the residential environment. Considering this situation, despite all the negativities experienced on the coastal area, there is a great residential satisfaction with the neighbourhood. It is understood that Ataköy has lost its social homogeneity compared to the past. The fact that the new constructions in Ataköy appeal to foreign investors. This group is very distinct from the demographic structure of Ataköy neighbourhood. As the occupancy rate increases in these buildings, it will directly reflect on the social environment. Moreover, it is assumed that the level of satisfaction of the households in the neighbourhood will be negatively affected. The rapid change in the built environment poses a threat to the old neighbourhoods of Ataköy and it increases the risk of urban transformation in these areas.

Figure 4: Mobility patterns of Ataköy settlement through gated communities.

References

Baker, E. (2003). Public Housing Tenant Relocation: Residential Mobility, Satisfaction and The Development of a Tenant's Spatial Decision Support System. *The Adelaide University Department of Geographical and Environmental Studies*, Australia.

Bodamyali,G. (2018). The Examination of Household Satisfaction and Residential Mobility Towards Gated Communities Case Study: Ataköy Settlement. Istanbul Technical University Graduate School of Science Engineering and Technology, Istanbul.

Braubach, M. (2007). Residential Conditions and Their Impact on Residential Environment Satisfaction and Health: Results of The Large Analysis and Review of European Housing and Health Status Study. *International Journal of Environmental and Pollution.*

Brown, L. A., Moore, E.G. (1970). The Intra-Urban Migration Process: A Perspective, Geografiska Annaler Series, *Human Geography*, 52(1), 1-13.

Bruin, M. J., Cook, C. C. (1997). Understanding Constraints and Residential Satisfaction Among Low-Income Single-Parent Families. *Environment and Behaviour*, 29(4), 532-553.

Canter, D., Rees, K. (1982). A Multivariate Model of Housing Satisfaction. *International Review of Applied Psychology*, 31, 185-207.

Clark, W.A.V., Deurloo, M.C., Dieleman, F.M. (2006). Residential Mobility and Neighbourhood Outcomes, *Housing Studies*, 21(3), 323-342.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Clark, W.A.V., Onaka, J.L. (1983). Life Cycle and Housing Adjustment as Explanations of Residential Mobility, *Urban Studies*, 20, 47-57.

Clark, W.A.V., Van Lierop, W.F.J. (1986). Residential Mobility and Household Location Modeling, P. (Ed.), *Handbook of Regional and Urban Economics*, Free University, Amsterdam.

Clark, W.A.V., Withers, S.D. (2007). Family Migration and Mobility Sequences in The United States: Spatial Mobility in the Context of the Life Course, *Demographic Research*, 17, 591-622.

Dündar, Ö. (2002). ''Patterns of Inner-City Migration in Ankara'', *The Sustainable City II, The Regeneration and Sustainability,* (C.A. Brebbia, J.F. Martin-Duque, L.C. Wadhwa, Ed.), WIT Press, Boston, 207-216.

Erkip, F. (2005). The Rise of The Shopping Mall in Turkey: The Use and Appeal of a Mall in Ankara. *Cities*, 22(2), 89-108.

Francescato, G. (1998). Residential Satisfaction, in Van Vliet-W.(ed.) *Encyclopedia of Housing*, Sage, Monterey, CA.

Grigsby, W. G. (1963). ''Housing Markets and Public Policy'', PA: University of Pennsylvania Press, Philadelphia.

Huang, Y., Deng, F. (2006). Residential Mobility in Chinese Cities: A Longitudinal Analysis. *Housing Studies*, 21(5), 625-652.

Kellekçi, Ö. L., Berköz, L. (2006). Konut ve Çevresel Kalite Memnuniyetini Yükselten Faktörler. İTÜ Fen Bilimleri Dergisi, 32, 41-49.

Lawrence, R. J. (1987), Housing, Dwellings and Homes: Design Theory, Research and Practice. Wiley, Chichester West Sussex.

Özgür, E. M., Yasak, Ü. (2009). Şehir İçi İkametgâh Hareketliliğine Kuramsal Bir Bakış. *Coğrafî Bilimler Dergisi,* 7(1), 39-50.

Özsoy, A. (1994). Konutu Anlamak. *Kuram Dergisi*, 6, 5-9.

Özsoy, A., Esin, N. (1988). Toplu Konutlarda Tasarım-Yapım Sistemi-Mekân Kullanımı Etkileşiminin Araştırılması. *İTÜ Çevre ve Şehircilik Uyg-Ar Merkezi,* Türkiye Emlak Bankası ve MESA Mesken Sanayii Aş. Tarafından Desteklenen Araştırma Projesi, İstanbul.

Porell, F. W. (1982). Models of Intra-Urban Residential Relocation, Kluwer-Nijhoff Publishing, Boston.

Rossi, P. H. (1955). Why Families Move: A Study in The Social Psychology of Urban Residential Mobility. New York: Free Press.

Sabagh, G., Van Arsdol, M. D., Butler, E. W. (1969). Some Determinants of Intra Metropolitan Residential Mobility: Conceptual Considerations. *Social Forces*, 48(1), 88-98.

Schwirian, K. P., Schwirian, P. M. (1993). Neighboring, Residential Satisfaction and Psychological Well-Being in Urban Elders. Journal Of Community Psychology, 21, 285-299.

Sirgy, M. J., Cornwell, T. (2002). How Neighborhood Features Affect Quality of Life. *Social Indicators Research*, 59, 79-114.

Speare, A. (1974). Residential Satisfaction as an Intervening Variable in Residential Mobility. *Demography*, 173-188.

Tanulku, B. (2012). Gated Communities: From ''Self-Sufficient Towns'' To ''Active Urban Agents''. *Geoforum*, 43(3), 518-52.

Tapan, A. M. (1996). ''Toplu Konut ve Türkiye'deki Gelişimi. Tarihten Günümüze Anadolu'da Konut ve Yerleşme''. Tarih Vakfı Yayınları, İstanbul.

Tekeli, İ. (2008). ''Göç ve Ötesi. İlhan Tekeli Toplu Eserleri-3'', Tarih Vakfı Yurt Yayınları, İstanbul.

Wolpert, J. (1965). Behavioral Aspects of The Decision to Migrate. *Regional Science*, 159-169.

Complexity and Contradiction in Affordable Housing.
Diffuse Dwelling in times of uncertainty

David Hernández Falagán

Universitat Politècnica de Catalunya, ETSAB, Av. Diagonal 649, Barcelona, Spain
e-mail: david.hernandez.falagan@upc.edu

Abstract

Conditions of uncertainty in contemporary world, clearly reflected in economic instability, political and ideological polarization, technological acceleration, environmental unrest, or social virtualization, have an immediate effect on housing affordability, habitat models and characteristics of domesticity. This paper aims to demonstrate the complexity, contradictions and paradoxes involved in the production of affordable collective housing under these conditions. The Spanish city of Barcelona is analyzed below as a case study. Here it is proposed a methical analysis of the housing policies activated in recent years and the observation of new (diffuse, complex and contradictory) architectural models resulting from their application.

Keywords: Uncertainty; Affordable Housing; Diffuse Dwelling; Housing Design; Time

Introduction

Design of residential architecture and affordable housing policies currently contemplate the need to incorporate conditions of scarcity and instability to produce contingent and flexible spaces, capable of reacting to the variable needs of inhabitants. The time factor becomes the determining condition when defining a new diffuse collective habitat. The observation of Barcelona (Spain) as a case study demonstrates the scope of the paradoxes that the incorporation of this factor entails. First, faced with the urgent need to increase the affordable housing offer, the importance of considering the renovation of existing housing stock is demonstrated. Second, faced with the need to stabilize vulnerable communities and population groups in consolidated neighborhoods, the capacity of emergency strategies to preserve the stability of a context is observed. Finally, faced with the appearance of permanence granted by public ownership of a property, the need to incorporate private and collective stakeholders in the production and management of affordable housing is demonstrated.

The construction sector in Spain was hardest hit by the 2007 economic crisis, particularly the housing sector, in the form of the "property bubble". This was the expression used for the speculative pressure that affected the housing market in Spain from the 1990s. The main manifestation of this bubble was the disproportionate rise in house prices, which grew at an annual rate of 30% – and even higher in some years – between 1997 and 2007 (Romero et al., 2012). The bubble was the result of a series of interrelated factors. Some of the reasons stemmed from commercial liberalism, such as land speculation and reclassification, and easy and deregulated access to property loans (Marcuse & Keating, 2006). Other reasons included the imbalance between property supply and demand – such as the scarcity of building land available at a time when the so-called "baby boom generation" was looking to buy a home – and the growing number of foreign nationals residing in Spain during this period, which reached 5 million. Finally, we also need to acknowledge other reasons linked to poor management of the housing policies applied in previous periods, such as the tax relief offered to home buyers and the establishment of mechanisms for building social housing mainly for homeowners, without planning the construction of a significant stock of social rental housing.

Given this situation, we can identify a twin effect over the last few years. Firstly, a rise in house prices that led to the property bubble (López García, 2004). Having become a market value, housing, whether for renting or owning, is almost out of the reach of large sections of the population. In the second place, the financial crisis, which has made it hard for people to pay back a large part of the mortgages they have received in previous years, has led to them losing their homes and problems in gaining access to affordable housing. In such a context, it is hardly surprising that access to housing has become one of the main concerns of today's society, and one of the problems regularly listed in the Sociological Research Centre's barometers (www.cis.es).

This situation forces us to focus our attention to the mechanisms for achieving affordable housing (Crook & Whitehead, 2002; Stone, 2006; Goetz, 2012; Marom & Carmon, 2015; Friedman & Rosen, 2019), particularly in the context of Barcelona. Therefore, the goal of these pages is to identify and briefly analyse, from an innovative perspective, the management strategies, mechanisms, tools and agents that Barcelona City Council has had at its disposal over the last few years to deal with the problems spotted regarding access to housing. It focuses on the management years of the government team run by the Mayor Ada Colau, a right-to housing activist before she took office (Adrià & Colau, 2013). The special sensitivity of her government team for resolving this problem can be seen not just in the sheer volume of initiatives designed to achieve this goal, but also in the professional capacity of the people in the posts with most responsibility in the area, such as the Councillor for Housing and Renovation, Josep Maria Montaner (a professor at the Barcelona Higher School of Architecture, a recipient of the National Prize for Urban Planning and an expert on collective housing) (Montaner, 2015), and the Housing Manager, Javier Burón (deputy regional minister for housing in the Basque Country from 2007 to 2009, and a lecturer and researcher on housing policies at numerous institutions) (Burón Cuadrado, 2008).

Barcelona's case study constitutes an experience of innovation in housing policies well worth

analysing and disseminating, building a know-how narrative that can be highlighted. In turn, the example shows the paradoxes and complexities involved in finding affordable housing. Contradictions that deserve to be studied also from the perspective of design, due to the change in conditions that a diffuse and unstable context implies. Therefore, the main hypothesis of this contribution is the need for creativity, both in policies and in architectural design, to face the problem of housing. It is a complex moment in which design mechanisms for diffuse dwelling (attentive to time as a design condition) become necessary.

The Case of Barcelona. Diagnosis

The housing question in Barcelona has specific traits which reveals here in a unique way (Carreras-i-Solanas & Yegorov, 2003; Carreras-i-Solanas et al., 2004; Musterd & Fullaondo, 2008). We will attempt to review the particular features that enable a diagnosis of this problem in the Catalan capital below.

In the first place, it should be noted that Barcelona is subject to the Catalan Right to Housing Act (Act 18/2007), which stipulates that "for the purposes of enforcing the right to housing throughout the territory of Catalonia, all municipalities with over 5,000 residents (...) must have, within twenty years, a minimum stock of dwellings allocated to social policies of 15% of the total number of existing main dwellings". That would mean some 100,000 protected dwellings in Barcelona, although the reality of the current situation is some way from achieving this goal. According to City Council data (https://habitatge.barcelona/es), the approximate figures for dwellings available at below-market prices in 2015 were as follows:

- 7,000 dwellings forming a rental housing stock managed with municipal intervention.
- 19,000 dwellings forming a stock of officially protected (subsidised) housing for sale still covered by this protection.
- 9,100 dwellings receiving financial help for rent payments
- 60,000 dwellings with old leases (close to termination).
- 500 social insertions dwellings managed by associations.

So the 15% target was still at the halfway point to being achieved. If we examine the local property market we can approach the situation in greater detail (www.ohb.cat/). Around 38% of the city's dwellings are rental (making it one of the cities with the highest percentage of such dwellings on the free market in Spain). At the same time it also has one of the highest rental prices per square metre and where tenants dedicate one of the largest percentages of their own resources to rent payments (García-Lamarca, 2020). The economic crisis has given the housing market in Barcelona several notably unique features. In the first place, both rental and purchase prices fell significantly between 2008 and 2013. However, construction of new housing froze during that period and the percentage of rental housing rose. Because of that, renting began to appear as the main mechanism for accessing housing and prices started shooting up again from 2014 on. Here, a few circumstances allow an analytical interpretation of this situation.

Risc of residential exclusion

It is worth highlighting first of all the risk of residential exclusion faced by a large part of Barcelona's population (Martínez, 2019). The economic crisis since 2007 proved to be especially virulent in the case of Barcelona, where unemployment, job insecurity and scarcity of economic resources had made housing access considerably more difficult. This can be seen in the tremendous effort being made to pay for it in the city's neighbourhoods with the lowest-income residents (García & Raya, 2011). Paradoxically, the difficulty factor is not for the most part determined by housing prices but by household incomes. In some neighbourhoods it has been determined that the cost of renting based on income is in excess of 30%, a deeply worrying situation. It is precisely on the basis of this figure (30% of family incomes or 40% including utilities) that the cost of renting is considered a worrying overload. The diagnostic observations that have been made in the Barcelona metropolitan area show that 16.9% of families are burdened by high housing payments (more than 40% of their income). In

the specific case of renting, the burden in Barcelona is 42.7% on average (one of the highest in Europe). And among the families with income below €11,000 a year, the rate rises to 56%.

The most painful manifestation of this situation is the increasing number of evictions that have occurred in the city since 2008 (Gutiérrez & Domènech, 2018). While they have an uneven effect on the city as a whole – over 50% took place in the Sants-Montjuïc, Nou Barris and Ciutat Vella districts – the concern is everywhere. Many of the city's resources have had to be allocated to protecting these cohabitation units while a significant level of effective residential exclusion has been reached: overcrowded housing, substandard housing, improper subletting, squatting, makeshift settlements and people living rough are just a few of the consequences of this situation (De Weerdt & García, 2016). Several groups may be considered genuinely harmed by this. One of them has been the youngest section of the population, a sector in clear decline, whose age of emancipation continues to rise and whose percentage of resources allocated to housing is becoming increasingly large. Elderly people face difficulties too. In their case, the population bracket in this situation is on the rise – close to 50% of Barcelona's population is at least 50 years old – and future problems are expected over housing accessibility and mobility as well the ageing of buildings themselves. Part of this group are people living alone, where the problem becomes more acute in situations of dependency. Another group specially suffering the housing problem is the immigrant population, making up over 20% of the total census. Their places of residence are concentrated at several points in the city – practically half are located in Ciutat Vella (Arbaci & Tapada-Berteli, 2012). Insecure financial (and often legal) circumstances, job instability and communication difficulties can put them in complex situations where they are obliged to invest a good part of their resources in totally substandard dwellings. Other complicated situations are those experienced by single-parent families, women victims of gender violence and people with different capacities (especially those with limited mobility), all of which represent vulnerable situations which are often reflected in residential difficulties.

Tourist pressure

A second important feature typifying the state of the housing question in Barcelona is tourist pressure. Tourism is one of the causes of gentrification in some of the city's neighbourhoods (Cocola-Gant & López-Gay, 2020). The reason here is the high return that can be obtained in Barcelona from tourist properties (which can be up to 4 times higher than on standard lets). Luxury dwellings and tourist apartments (García-López et al., 2020; Manzano- González, 2018; Lambea Llop, 2017; Sans & Quaglieri, 2016) intended as accommodation for the city's visitors have become lucrative uses for small and medium-sized property owners and investment funds in search of profitability.

Despite the existence of a Special Tourist Accommodation Urban Development Plan (PEUAT), which has banned primary-residence dwellings from being replaced with tourist-use accommodation, the percentage of flats whose owners fail to declare their activity is extremely high. It has been estimated that up to 40% of the tourist flats on offer in the city are illegal. The competition for profitability is too high and the measures taken since 2015 for stopping the phenomenon had no effect.

Vacant dwellings

A third feature to consider when tracing an itinerary through Barcelona's specific difficulties over housing is its considerably large stock of vacant dwellings. However, as the diagnostic work carried out by Barcelona City Council shows, the reality regarding the city's vacant dwellings census may not be as bad as our collective imagination would have it. Even though it is true that in the property boom, before the bubble burst, more dwellings were produced than were ultimately occupied. There was also an exodus of residents to dwellings in outlying areas, at much more affordable prices than in Barcelona, during the years before the crisis (Blanco-Romero et al., 2018).

According to studies conducted by Barcelona City Council enabling a systematic census to be drawn up, around 1.3% of the city's total number of dwellings are vacant. For the purposes of keeping such estimates up to date, a specific diagnosis is needed for this problem, which limits the social use of housing, and a new strategy get this built and underused housing stock on the market.

Ageing of the residential stock

A final factor that needs to be addressed is the state of conservation of Barcelona's housing stock. While the situation has improved over the last few decades (78% of dwellings were in good conditions in 1991, whereas two decades later the figure has risen to 90%), we must not lose sight of the threat that comes with technological obsolescence (March et al., 2012). We can focus on three basic factors:

- Ageing buildings. In some of the city's districts – such as the explicit case of Ciutat Vella – the average age of the building stock is considerable, entailing maintenance problems for the building envelopes (façades and roofs), installations and supplies, and occasionally structural problems, which cannot always be dealt with by residents. In addition, ageing has been frequently used as a factor for property mobbing by those intent on expelling tenants with old leases. Ageing can therefore be a factor triggered by other factors and that needs to be taken into account.
- Accessibility problems. It is believed that practically half of the housing stock would fail to comply with current legislation on accessibility (a quarter of Barcelona's dwellings have no lift, for example). Bearing in mind the progressive ageing of the population, accessibility difficulties can become a basic factor in loss of residential quality in the future.
- Energy inefficiency. It can likewise be pointed out that only 5% of Barcelona's dwellings were built after the approval of the Technical Building Code in 2006. That means that the heating insulation and energy performance requirements for the overwhelming majority of Barcelona's properties were not exacting enough when they were built. The problem that arises is not just the consumption of energy resources on household heating and air conditioning but also the energy poverty in particular that results from an incapacity to assume such costs.

New designs, new economic effort

It is within this context, and for the purposes of reversing the situation, that the change of municipal government at Barcelona City Council in 2015 represented a watershed in housing policies (Eizaguirre et al., 2017). Based on the premise of enforcing people's fundamental right to housing, the new team has been working on a battery of strategic measures and tools that have begun to be applied in Barcelona. Its approach here is particularly noteworthy, as is the fact of having tackled it by prioritising municipal investment in housing policies, when, as we have seen, the basic powers in this area fall to the regional government. Despite that, numerous measures have been launched thanks to the funding support provided by European public banking. Among other achievements, all the municipal investment and strategic action will enable the stock of public rental housing to double over the coming years. In fact, the current map of affordable housing developments shows 72 are under way and at various stages. So, the impetus achieved is very significant, and in addition to this strategy there are other initiatives, such as a notable policy for purchasing land and buildings, a greater insistence on the social use of housing and the issuing of fines for improper uses reflecting a new housing discipline, as well as more efficient management of rent subsidies for those sectors with greater difficulties – 10,000 families are estimated to benefit from this.

Carrying out the entire process requires an economic effort on the part of Barcelona City Council without precedence. Indeed, we could almost say without precedence in all the experiences of municipal policies throughout Spain. Some of the data that enable us to quantify this effort are as follows (Housing Management, Barcelona City Council, 2019):

> *The City Council's direct budget for housing policies between 2016 and 2019 is more than €180 million. This represents a budget increase of over 50% compared to the previous period.But the total amount of resources made available for housing in this period is nearly €990 million. This has been made possible, among other initiatives, thanks to the external funding mechanisms in operation. Finally, we should also mention the efforts made in the area of human resources. The reorganisation of the management infrastructure that flows from creating new institutional agents enables a near doubling of the staff working on housing.*

In short, tackling such ambitious goals necessarily implies innovation in defining the action required, as can be seen in the stages we shall see below.

Stages for innovation in affordable housing

To address the outlined situation by a local government like Barcelona means tackling the problem of housing from a position where it is needed to learn from the mistakes of the past, accepting the conditions implied by the limited powers for dealing with the problem locally and positioning itself to tackle the crisis of public action in its capitalist context, with the support of the collaborative resources offered by emerging forms of association (Hernández Falagán & Montaner, 2019).

Innovating means changing or altering something, by introducing new features. Innovating in housing policies could be interpreted from the perspective of introducing new strategies, agents, and useful tools for changing the existing models and creating new opportunities for the habitat. That needs to be creative and can only be tackled through a holistic approach capable of contemplating all the layers of action, and all the situations, periods and windows of opportunity (Hernández Falagán, 2019).

Given this need for innovation, all the initiatives carried out in Barcelona between 2015 and 2018 (and the subsequent legislature) identified the various times when public intervention was necessary. So, it is possible to observe the measures considered from the various stages and scales of application, which provide an overall picture of the needs and problems detected.

The first strategic initiative here was to carry out a full diagnosis of Barcelona's housing situation. To that end a snapshot of the current situation was taken through exhaustive quantitative and qualitative exploration work on the problem, accompanied by studies on housing policy models and typological analyses of public housing. As regards the results of this diagnosis, work has been done in two basic areas.

- First, the housing policy management tools, covering areas such as regulations, defining agents and participants, and defining new intervention resources and methodologies.
- Second, the tools for action and directly defining a new public housing stock, attentive to new typological, technological, ecological and territorial needs.

Diagnostic mechanisms

The first approach to the housing problem was an exploration of the current state of the art. The existing statistical information (only quantitative) or results of initiatives carried out by those previously in charge (occasionally suspected of having possible propaganda aims) were considered insufficient tools for obtaining full, objective, and useful information to identify the most important problems (Blanco-Romero et al., 2018). Hence the need to determine which agents will update the situation, observe the critical aspects and identify the ideal workspaces for solving them. It was also important to commission diagnostic tools from external bodies that enable objective and qualitative audits of the situation facing the city to be carried out. Adopting these criteria, Barcelona considered the diagnostic action of the following agents and tools:

Table 1. Diagnostic agents and tools

Diagnostic agents	
Barcelona Metropolitan Housing Observatory (O-HB)	The Barcelona Metropolitan Housing Observatory (O-HB) is a metropolitan entity with a holistic approach to housing. Its function is to contribute useful information, data, studies and analytical tools for designing and promoting public housing policies.
Barcelona Observatory for Architectural Renovation (OBRA)	The Barcelona Observatory for Architectural Renovation is an entity whose goal is to promote architectural housing renovation as a tool for expanding the city's affordable housing stock.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Diagnostic tools	
Vacant dwellings census	The Vacant Dwellings Census is a municipal tool whose goal is to diagnose the city's housing situation by analysing the real occupation of buildings. Its results allow policies to be designed which are adapted to the reality of this occupation by attempting to generate an increase in the affordable rental housing stock.
Study on residential vulnerability areas	Residential vulnerability is a situation closely linked to poverty, exclusion and social inequality. It is a concept with repercussions on numerous aspects of social and urban dynamics. This study is being carried out through socio-spatial phenomena.
Rental price index	The benchmark rental-housing price index is a tool aimed at finding out the average price per square metre rented according to the areas and features of the dwellings. It is a tool that is meant to enable public consultations on this information and establish estimates and guidelines on the minimum and maximum prices that a dwelling must have.
Private housing acquisitions	The acquisition of private housing is a mechanism that helps to increase the pace of the affordable housing stock's expansion. Given the complexity and length of time involved in building new housing, purchases of existing dwellings and buildings constitute flexible mechanisms for the generation of available housing.
Study on housing policies in the international context	This is a study of municipal housing policy models implemented in cities in the Europe and America. It is an investigation based on a series of case studies selected according to the relevance of the housing policies involved.
Study on gender flexibility and equality in housing typologies	The Report on Gender Flexibility and Hierarchies in residential typologies produced by the Barcelona Municipal Housing Trust (PMHB) has been developed as a tool for diagnosing the typological model and establishing recommendations for improving the quality of public housing.

Managing the housing stock

Having identified the problems and opportunities that can become housing policy goals, a management structure was created to be capable of operating efficiently with the available housing stock, using the most appropriate management tools. An optimal infrastructure makes it possible to exploit the available resources to the full, order the priorities and plan legislation, regulations and programmes promoting the goals set out under the housing policies. Nor should affordable housing management ignore the possibility of reconverting part of the existing stock (Bana e Costa & Carvalho Oliveira, 2002). By attending to these priorities, Barcelona launched a series of tools managed by new agents defined for that purpose:

Table 2. Management agents and tools

Management agents	
Municipal Institute of Housing and Renovation (IMHAB)	The Municipal Institute of Housing and Renovation is a body that concentrates all the services relating to housing policies, managing public housing and the private rental pool. The main goal behind this unification is to provide the public with direct access to all housing-related services.
Barcelona Housing Consortium	The Barcelona Housing Consortium is an entity made up of Barcelona City Council and the Catalan Government (Generalitat of Catalonia). Article 85 of the Municipal Charter grants it the powers to carry out the functions, activities and services relating to affordable housing, a role that it performs within the city area.
Barcelona Social Housing Council (CHSB)	The Barcelona Social Housing Council is a consultative body whose goal is to provide a space for public participation in housing matters, where they can express their opinions, put forward proposals and promote the results of their analysis.
Habitatge Metròpolis	Habitatge Metròpolis Barcelona is a body created by Barcelona City Council and the

Barcelona	Barcelona Metropolitan Area (AMB) for the purposes of promoting a significant affordable rental housing stock. It is a public-private operator which private limited companies will have shares in.

Management tools:

Barcelona Right to Housing Plan	The Barcelona Right to Housing Plan (PDVB) is the strategic tool developed by Barcelona City Council to ensure housing maintains its social function between 2016 and 2025. The main goals and lines of action for improving the quality of public service in the area of housing can be identified in it.
Amendment to the General Metropolitan Plan	The General Metropolitan Plan (PGM) has been the current urban-planning arrangement in the Barcelona Metropolitan Area since 1976. The Amendment to the General Metropolitan Plan (MPGM) now being proposed will have an impact on several aspects that directly affect the area of housing: increasing the public housing stock, defining protection strategies for existing housing and transforming Poblenou's industrial sites.
Amendment to the ORPIMO regulation	The Amendment to the Regulatory Byelaw on Municipal Intervention Procedures in Public Works (ORPIMO) – a municipal tool designed to regulate administrative intervention in public works – seeks to implement measures for safeguarding the rights of local residents during the renovation processes of residential buildings.
European public banking loans	Barcelona City Council has received €184 million in two lines of credit for housing initiatives from European institution banks. In May 2017, the European Investment Bank (EIB) granted €125 million for building social rental housing In September 2017, the Council of Europe Development Bank (CEB) agreed to provide €59 million for the same purpose.
"The key is in your hands" programme	"The Key is in your hands" is a publicity campaign for attracting the flats of small property-owners to the Municipal Housing Pool. Launched in December 2016 it is enshrined in the Right to Housing Act.

Initiatives for bringing about affordable housing

When the available affordable housing stock is clearly insufficient for covering the needs of the population, it is necessary to devote a large part of our efforts to building affordable housing. This was faced in Barcelona with two main difficulties. First, tackling the prevailing model for access to owned dwellings. This decadeslong system has led to the privatisation of dwellings built with public resources. The new model needs to ensure permanent affordable housing (Brysch, 2019). Second, producing a new housing stock should provide for the participation of private entities that guarantee longer-term management of the model, for example, through mechanisms for assigning land uses (Parés, 2019). Based on these goals, Barcelona has established new agents for producing a new affordable housing stock, putting tools at their disposal which are capable of optimising the possibilities:

Table 3. Implementation agents and tools

Implementation agents

Residential Exclusion Unit (UCER)	The Residential Exclusion Unit is designed to deal immediately with residential exclusion, by responding to the cohabitation units affected by evictions and dealing with vulnerable situations.
Promotion foundations and cooperatives	These foundations are non-profit organisations established for the purpose of providing vulnerable cohabitation units with access to housing. They work against residential exclusion and promote social integration plans to develop people's sense of independence and autonomy. Housing cooperatives are entities aimed principally at the self promotion of

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

	residential buildings to provide communities of people with access to housing.
Assigned-for-use cooperatives	Assigned-for-use housing cooperatives are entities which, like traditional cooperatives, attempt to promote residential solutions for the people that belong to them. What sets them apart is that, instead of buying a plot of land for building on, they gain access to land they do not own but whose use they have been assigned for an extended period, which may range between 50 and 100 years.
Implementation tools	
Housing interior renovations	Housing interior renovations are a tool designed to ensure the habitability, security, accessibility, hygiene and minimum energy efficiency conditions that vulnerable co-habitation units without financial resources live in. This strategy can apply to both owned and rented dwellings.
Tactical groupings for inclusive repopulation (ATRI)	The tactical groupings for inclusive repopulation (ATRI) is a strategic mechanism for exploring alternative ways of increasing the public housing stock. Housing-creation mechanisms are being put forward which complement and offer alternatives to the possibilities that urban planning regulations provide for.
Temporary local accommodation (APROP)	The procedure for achieving provisional local accommodation (APROP) is a tool designed for installing groups of modules and prefabricated mobile cabins that can be used as temporary accommodation. The aim is locate them in spaces offering an opportunity in areas inhabited by people at risk of residential exclusion.
Cohousing	Cohousing is an alternative model for housing production and access that enables the affordable public housing stock to be expanded. It is a tool available to social housing cooperatives and promoters which allows housing projects to be implemented under a type of occupancy that ensures the stability of the community.
Architectural competitions	International architectural competitions are a tool for expanding the affordable housing stock by applying innovative models with the possibility of choosing between several solutions. In this case, innovation arises not so much from the tool, which is common in many contexts, as from the creativity of the people taking part.

Strategies for innovation in affordable housing

The goal that has been a priority in Barcelona's housing policies over the last few years would be addressing the housing emergency that hit the city's populace following the economic crisis and the collapse of the property bubble. The situation in 2015 depicted a city where the right to housing had remained in the hands of financial assets. The social function had disappeared and housing construction as a public service was a minority, non-priority activity. That is why ensuring the social function and strengthening of the right to housing have become the pillars on which all the management and construction infrastructures set up rest. Strengthening the right to housing involves making regulatory changes and defining the management and production entities already operating in the city (Barcelona City Council, 2019).

The prevalence of the house-buying model has been a problem historically when it comes to offering affordable housing. Offering a supply of decent public housing for rent at below-market prices has therefore been another of the main goals set. Maintaining a significant stock over time not only allows a good number of cohabitation and family units to be housed, it also has a significant effect on the entire private rental market (Pendall, 2008). Achieving this housing stock not only means considering new architectural production but also all the resources for enabling the transformation, renovation, recovery and adaptation of part of the existing stock. In that regard, guaranteeing a suitable use for already existing housing includes the necessary steps for locating dwellings that are vacant or used for illegal tourist activities, as well as locating infrastructures or dwellings with serious habitability flaws.

Bearing in mind the existing housing emergency, strategies are being considered for generating an affordable housing stock which facilitate an urgent and efficient management of needs (Hernández

Falagán, 2019). Involving non-public community agents, innovating in temporary accommodation management, renovation as the cross-cutting line of work, strengthening processes for generating and locating available land and actively promoting architectural competitions are just a few of the tools enabling an effective and innovative public service for providing affordable housing. A collateral effect of these functions is the qualitative repercussion in urban terms: gentrification is avoided, the stability of neighbourhood communities is guaranteed and, in short, the city-housing link is strengthened.

As an interpretation of these goals, we can summarise the strategies, agents and tools involved considered as follows:

Table 4. Strategies for innovation in affordable housing

Strategy 1: Social rights		
Main goals	Involved agents	Involved tools
Strengthening the right to housing	Barcelona Housing Consortium Barcelona Social Housing Council (CHSB) Promotion foundations and cooperatives	Barcelona Right to Housing Plan European public banking loans Tactical groupings for inclusive repopulation (ATRI)
Social function of housing guarantee	Barcelona Metropolitan Housing Observatory (O-HB) Promotion foundations and cooperatives	Study on residential vulnerability areas Barcelona Right to Housing Plan Amendment to the ORPIMO regulation European public banking loans Tactical groupings for inclusive repopulation (ATRI)
Housing stability guarantee	Residential Exclusion Unit (UCER) Promotion foundations and cooperatives Assigned-for-use cooperatives	Vacant dwellings census Amendment to the ORPIMO regulation Housing interior renovations Temporary local accommodation (APROP)
Easy access to housing	Barcelona Housing Consortium Habitatge Metròpolis Barcelona Promotion foundations and cooperatives Assigned-for-use cooperatives	Rental price index Study on housing policies in the international context European public banking loans Cohousing Architectural competitions
Strategy 2: Habitat production		
Expanding the affordable housing stock	Barcelona Metropolitan Housing Observatory (O-HB) Municipal Institute of Housing and Renovation (IMHAB) Habitatge Metròpolis Barcelona Barcelona Housing Consortium	Vacant dwellings census Study on residential vulnerability areas Barcelona Right to Housing Plan Amendment to the General Metropolitan Plan European public banking loans "The key is in your hands" programme Tactical groupings for inclusive repopulation (ATRI) Architectural competitions
Mobilising the private housing stock	Municipal Institute of Housing and Renovation (IMHAB)	Barcelona Right to Housing Plan "The key is in your hands" programme Housing interior renovations
Promoting renovations	Barcelona Observatory for Architectural Renovation (OBRA)	Barcelona Right to Housing Plan Amendment to the ORPIMO regulation

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

	Municipal Institute of Housing and Renovation (IMHAB) Barcelona Housing Consortium Barcelona Social Housing Council (CHSB)	"The key is in your hands" programme
Promoting land for protected housing	Barcelona Observatory for Architectural Renovation (OBRA) Municipal Institute of Housing and Renovation (IMHAB) Barcelona Housing Consortium Barcelona Social Housing Council (CHSB) Assigned-for-use cooperatives	Amendment to the General Metropolitan Plan Cohousing
Strategy 3: Urban qualification		
Action against gentrification	Residential Exclusion Unit (UCER)	Study on residential vulnerability areas Amendment to the ORPIMO regulation Tactical groupings for inclusive repopulation (ATRI) Temporary local accommodation (APROP)
Action against property speculation	Barcelona Metropolitan Housing Observatory (O-HB) Habitatge Metròpolis Barcelona Residential Exclusion Unit (UCER)	Vacant dwellings census Rental price index Study on housing policies in the international context Barcelona Right to Housing Plan Amendment to the ORPIMO regulation "The key is in your hands" programme
Integration between housing and city	Municipal Institute of Housing and Renovation (IMHAB)	Study on residential vulnerability areas Amendment to the General Metropolitan Plan Tactical groupings for inclusive repopulation (ATRI) Temporary local accommodation (APROP) Architectural competitions
Improving the quality of housing	Barcelona Observatory for Architectural Renovation (OBRA) Barcelona Social Housing Council (CHSB)	Study on gender flexibility and equality in housing typologies Amendment to the ORPIMO regulation Housing interior renovations Architectural competitions

Architectural result. Diffuse Dwelling

The holistic strategy carried out allows us to distinguish a new paradigm of housing production linked to the variable of time and motivated by the conditions of uncertainty, scarcity and contingency of the architectural object. This approach to contemporary housing has been defined as "diffuse".

The concept of diffuse dwelling has been defined as the conjunction of three factors: non-permanent coexistence models, residential adaptation of the built environment, and non-hierarchical typological patterns (Hernández Falagán, 2021). At least two of these characteristics (non-permanent coexistence models and adaptations of the built environment) are clearly visible in some of the most emblematic collective housing materializations carried out through the implementation of the related strategies. Below we will show three examples, selected because of the objective quality of their architectural design, which have made them deserving multiple awards in this field.

1. APROP Ciutat Vella (Straddle3 + Eulia Arkitektura + Yaiza Terré), 2019.

It is a paradigmatic example of tactical housing, built with recycled shipping containers on a temporarily available lot. The fast and affordable assembly and disassembly strategy allows optimizing the occupancy of the site to meet the need for emergency accommodation for people in the district in a situation of residential need. The result can be read as diffuse housing. An alternative to the traditional housing market has been used as a reaction to the difficulty of access to housing.

Fig. 1: APROP Ciutat Vella (Straddle3 + Eulia Arkitektura + Yaiza Terré), 2019. Source: Straddle3 (https://straddle3.net/)

2. Laborda Housing Cooperative (LaCol Architects), 2018.

It is a housing cooperative, built thanks to a free land use concession agreement for a period of several decades. The community of inhabitants, existing before architecture, has actively participated in the promotion, design, construction and occupation of the site. The result is an architectural model that allows a much more flexible use than traditional property structures, favoring the evolution of the home based on the evolution of the coexistence group.

Fig. 2: Laborda Housing Cooperative (LaCol Architects), 2018. Source: LaCol Architectes
(http://www.lacol.coop/)

3. Fabra & Coats Social Housing (Roldan & Berengué Architects), 2019.

This example is the transformation of an old obsolete industrial building converted into an area where houses and new creative workshops coexist. The proposal considers the use of an existing architecture as a resource to face the scarcity of land and the need to propose a sustainable use of the built environment.

Fig. 3: Fabra & Coats Social Housing (Roldan & Berengué Architects), 2019. Source: Roldan & Berengué
(http://roldanberengue.com/)

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

None of the three cases mentioned responds to the traditional models of housing production in Barcelona. The location of temporary opportunities, the hybridization of public and private non-profit initiatives, and the concern to extend the usefulness of the built environment as much as possible, become premises for a paradigm shift that brings us closer to a diffuse housing model: examples that take into account the variable of time, that face new models of coexistence without prejudice, and that innovate in relation to the design and technology used to optimize the architectural result.

It would be appropriate to speak of a new concept of collectivity. The trend towards tactical housing requires in many aspects a new social construction of residential coexistence, based on solidarity, participation, and temporality. A new community is reflected not only in cohabitation management models, but also in access to housing opportunities and in the types of housing that are generated. Also, there is an attitude of resilience of the built environment as a habitat that faces the complexity of the socio-economic context surrounding it. Resilience can be especially detected in the idea of evolving architecture to adapt to new needs- but is also visible in the distributed condition of typologies and in the collective and tactical management of cohabiting. All these qualities can be considered characteristics of the diffuse dwelling paradigm.

Conclusion. Three paradoxes

The housing policies applied in Barcelona allow us to discover certain innovative features that are not always immediately noticeable. The map of agents and tools displayed covers almost entirely the various scales and situations of action. Such a holistic approach to the problem represents an attitude that helps to prevent a possible worsening of the situation, which could be caused by future economic crises, new property-sector bubbles and other unforeseen events that could affect the housing sphere. The reaction to the COVID-19 pandemic, whose effects on housing policies the city is currently facing, is a proof of the strength of the infrastructure created.

Planning an entire structure of action – and identifying the goals and priorities of intervention through the agents' tools – optimises the efficiency of the work strategies, which need to function as an interrelated system. In that regard, it is worth concluding this contribution by outlining three paradoxes of housing policy that need to be taken into account if the efforts made in Barcelona are to continue in the future.

The three paradoxes relate to some of the main goals of their strategies and show the capacity of innovation to tackle problems from unexpected – somehow, diffuse – perspectives.

1. Importance of the housing stock already built and its renovation for obtaining a public housing stock.

In contrast to the notion that achieving an affordable housing stock means producing new buildings, Barcelona has opted to restore the existing stock. They are doing this by promoting the renovation of dwellings with poor living conditions, by exercising its pre-emption rights in purchasing properties, reaching agreements with banks to mobilise their stock of properties, encouraging the use of vacant flats, promoting the renting out of under-used second homes and so on. The impact that these initiatives generate may exceed what is achieved from building new housing, at clearly lower cost and within shorter time frames.

2. Importance of emergency action to maintain stability and balance of the systems.

Action in the gaps, locating temporary (but immediate) opportunities, and a capacity for mobilising resources to attend to emergency situations are typical of a way of doing things that ensures two types of stability. On the one hand, people's housing stability, ensuring they maintain contact with their close, neighbour and family networks that housing entails. On the other hand, maintaining the stability

and balance urban communities helps to protect against gentrification and property speculation processes.

3. Importance of private agents for guaranteeing the permanence of a public housing stock.

The role of public entities in ensuring access to housing can prove short-lived without long-term continuity of the measures applied. There is no point building public housing that might be privatised in the future. Faced with this difficulty, public intervention can be supported through non-profit entities, such as foundations and cooperatives, capable of producing affordable housing under an assigned-for-use system (Cabré & Andrés, 2018). In this housing, typologically innovative because it involves community cohabitation and shared-resource management, maintenance is guaranteed as is its use as the occupants main dwelling throughout the assigned-for use period, thereby meeting the goals of public action. This therefore gives rise to the third paradox, where public intervention needs the responsible action of community initiative.

Housing policy efforts help to obtain short-term results that may be insufficient if mechanisms are not put in place for maintaining strategies over time, for assessing the results and replanning where necessary. This difficulty is important, given the need for administrative and legislative consensus going beyond geography, jurisdictions and political terms of office. So it is important to pinpoint challenges that can facilitate the continuation of efforts towards these goals. In Barcelona's case, we could mention two significant issues: the metropolitan scale and the convergence of good European practices in housing matters. The work carried out in Barcelona from 2015 to 2018 demonstrates that knowledge of good practices that are carried out in local contexts encourages innovation in the face of global problems.

Acknowledgements

References

Adrià, A., & Colau, A. (2013). *Vidas hipotecadas: de la burbuja immobiliaria al derecho a la vivienda*. Cuadrilátero de libros.

Arbaci, S., & Tapada-Berteli, T. (2012). Social inequality and urban regeneration in Barcelona city centre: reconsidering success. *European Urban and Regional Studies*, *19*(3), 287-311.

Bana e Costa, C. A., & Carvalho Oliveira, R. (2002). Assigning priorities for maintenance, repair and refurbishment in managing a municipal housing stock. *European Journal of Operational Research*, *138*(2), 380-391.

Blanco-Romero, A., Blázquez-Salom, M., & Cànoves, G. (2018). Barcelona, housing rent bubble in a tourist city. Social responses and local policies. *Sustainability*, *10*(6), 2043.

Brysch, S. (2019). Reinterpreting Existenzminimum in contemporary affordable housing solutions. *Urban Planning*, *4*(3), 326.

Burón Cuadrado, J. (2008). Una política de vivienda alternativa. *Revista Ciudad y Territorio: Estudios Territoriales*, *40*(155), 9-40.

Cabré, E., & Andrés, A. (2018). La Borda: a case study on the implementation of cooperative housing in Catalonia. *International Journal of Housing Policy*, *18*(3), 412-432.

Carreras-i-Solanas, M., Mascarilla-i-Miró, Ó., & Yegorov, Y. (2004). The evolution and the relationship of house prices and rents in Barcelona, 1970–2002. *European Journal of Housing Policy*, *4*(1), 19-56.

Carreras-i-Solanas, M., & Yegorov, Y. (2003). Rental and Housing Markets in Barcelona. *European Real Estate Society (ERES)*, (131).

Cocola-Gant, A., & López-Gay, A. (2020). Transnational gentrification, tourism and the formation of 'foreign only'enclaves in Barcelona. *Urban Studies*, *57*(15), 3025-3043.

Crook, A. D., & Whitehead, C. M. (2002). Social housing and planning gain: is this an appropriate way of providing affordable housing? *Environment and Planning A*, *34*(7), 1259-1279.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

De Weerdt, J., & García, M. (2016). Housing crisis: the Platform of Mortgage Victims (PAH) movement in Barcelona and innovations in governance. *Journal of Housing and the Built Environment*, *31*(3), 471-493.

Eizaguirre, S., Pradel-Miquel, M., & García, M. (2017). Citizenship practices and democratic governance:'Barcelona en Comú'as an urban citizenship confluence promoting a new policy agenda. *Citizenship studies*, *21*(4), 425-439.

Friedman, R., & Rosen, G. (2019). The challenge of conceptualizing affordable housing: definitions and their underlying agendas in Israel. *Housing Studies*, *34*(4), 565-587. https://doi.org/10.1080/02673037.2018.1458289

Friedman, R., & Rosen, G. (2019). The face of affordable housing in a neoliberal paradigm. *Urban Studies*, *57*(5), 959-975. https://doi.org/10.1177/0042098018818967

García, J., & Raya, J. M. (2011). Price and income elasticities of demand for housing characteristics in the city of Barcelona. *Regional Studies*, *45*(5), 597-608.

García-Lamarca, M. (2020). Real estate crisis resolution regimes and residential REITs: emerging socio-spatial impacts in Barcelona. *Housing Studies*, 1-20. https://doi.org/10.1080/02673037.2020.1769034

García-López, M., Jofre-Monseny, J., Martínez-Mazza, R., & Segú, M. (2020). Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona. *Journal of Urban Economics*, *119*, 103278.

Goetz, E. G. (2012). The transformation of public housing policy, 1985–2011. *Journal of the American Planning Association*, *78*(4), 452-463.

Gutiérrez, A., & Domènech, A. (2018). The mortgage crisis and evictions in Barcelona: identifying the determinants of the spatial clustering of foreclosures. *European planning studies*, *26*(10), 1939-1960.

Hernández Falagán, D. (2019). *Innovación en vivienda asequible. Barcelona 2015-2018*. Ayuntamiento de Barcelona.

Hernández Falagán, D., & Montaner, J. M. (2019). Housing in Barcelona: New Agents for New Policies. *Footprint*, *13*(1), 153-160. https://doi.org/10.7480/footprint.13.1.3365

Hernández Falagán, D. (2021). Review of design of collective housing in the 21st century. *Buildings*, 11(4): 157. https://doi.org/10.3390/buildings11040157

Housing Management, Barcelona City Council. (2019). *Balance 2018: Plan por el Derecho a la Vivienda de Barcelona 2016-2025*.

Lambea Llop, N. (2017). A policy approach to the impact of tourist dwellings in condominiums and neighbourhoods in Barcelona. *Urban Research & Practice*, *10*(1), 120-129.

López García, M. Á. (2004). Housing, prices and tax policy in Spain. *Spanish Economic Review*, *6*(1), 29-52.

Manzano-González, L. I. (2018). *On the Sharing Economy. How Airbnb alters Barcelona Housing Market*. PhD Dissertation. University of Gothenburg.

March, H., Perarnau, J., & Saurí, D. (2012). Exploring the links between immigration, ageing and domestic water consumption: The case of the Metropolitan Area of Barcelona. *Regional Studies*, *46*(2), 229-244.

Marcuse, P., & Keating, W. D. (2006). The permanent housing crisis: The failures of conservatism and the limitations of liberalism. In *A right to housing: Foundation for a new social agenda*. Temple University Press.

Marom, N., & Carmon, N. (2015). Affordable housing plans in London and New York: Between marketplace and social mix. *Housing Studies*, *30*(7), 993-1015. https://doi.org/10.1080/02673037.2014.1000832

Martínez, M. Á. (2019). Bitter wins or a long-distance race? Social and political outcomes of the Spanish housing movement. *Housing Studies*, *34*(10), 1588-1611. https://doi.org/10.1080/02673037.2018.1447094

Montaner, J. M. (2015). *La arquitectura de la vivienda colectiva: políticas y proyectos en la ciudad contemporánea*. Editorial Reverté.

Musterd, S., & Fullaondo, A. (2008). Ethnic segregation and the housing market in two cities in northern and southern Europe: The cases of Amsterdam and Barcelona. *ACE: Architecture, City and Environment*, *3*(8), 93-115.

Parés, M. (2019). Socially innovative housing activism: local context and collective leadership practices in Barcelona and New York City. *Housing Studies*, *34*(10), 1654-1672.

Pendall, R. (2008). From hurdles to bridges: Local land-use regulations and the pursuit of affordable rental housing. In *Revisiting rental housing* (pp. 224-273). Brookings Institution Press.

Romero, J., Jiménez, F., & Villoria, M. (2012). (Un) sustainable territories: causes of the speculative bubble in Spain (1996–2010) and its territorial, environmental, and sociopolitical consequences. *Environment and planning C: Government and policy*, *30*(3), 467-486.

Sans, A. A., & Quaglieri, A. (2016). Unravelling airbnb: Urban perspectives from Barcelona. *Reinventing the local in tourism: Producing, consuming and negotiating place*, *73*, 209.

Stone, M. E. (2006). What is housing affordability? The case for the residual income approach. *Housing policy debate*, *17*(1), 151-184.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Flexibility in Use:
Theoretical and Practical Approaches to Flexibility in Austrian Social Housing (1968-present)

Maja Lorbek

University of Applied Arts Vienna, Design History and Theory
Oskar-Kokoschka-Platz 2
1010 Wien / Austria
e-mail: maja.lorbek@uni-ak.ac.at

Abstract

Drawing on the document and qualitative content analysis, this paper explores theoretical concepts and practical applications of flexibility in Austrian social housing from the late 1960s to the present. In 1968, the federal Housing Subsidy Promotion Act was adopted. In addition to state loans for housing production, a research programme was launched, dedicated to optimising construction, urban regeneration, democratising housing, and initiating pilot projects (Demonstrativbauten). From the late 1960s, Austrian architects and sociologists started to examine the potential of flexibility and participant design in mass housing. When pilot housing projects were built, researchers evaluated their approach before and after the planning and construction process. Unlike the well-known concept of flexibility, such as Habraken's open building concept, which uses construction and installation nodes to enable adaptability and more intangible philosophies of flexibility inscribed in the notion of polyvalence and loose-fit, the Austrians approach to adaptable housing is hands-on and pragmatic. In the early 1970s, technologies for flexible design and construction were already available. However, tenure and ownership rights cannot be extended beyond the dwelling unit and thus inhibit future modification. The realistic Austrian approach positioned the dwelling unit as the core element for flexibility. Despite the hands-on approach, participant design and flexible construction were not introduced on a large scale in social housing. However, these pilot projects were widely published and discussed and have contributed to the recent revival of user participation and adaptable modes of construction.

.

Keywords: flexibility, adaptability, participant design,
Austrian social housing, dwelling unit

Introduction

One of the challenges in the residential sector is a steadily increasing demand for affordable apartments in central urban locations. There is a renaissance of research and pilot projects based on modular and serial construction modes to meet the demand. Prefabricated buildings are being researched and built again both internationally and in Europe. In contrast to serial and typified prefabricated mass housing from the 1970s, which fell into disrepute due to monotony and lack of urban amenities, today's innovative residential projects rely on digital planning tools and sustainable wood technologies. As a characteristic feature of modular construction methods, a high degree of prefabrication can increase the quality of execution, shorten construction times, and significantly reduce costs, mainly through economies of scale. In Austria, too, there are already specialised providers of prefabricated wood construction methods and some multi-storey residential properties based on serial and modular construction modes. However, the potential of digital technologies has hardly been used, both in the planning and in the realised modular multi-storey residential buildings. The use of digital tools in modular multi-storey residential buildings can optimise planning and construction processes and enable the individualisation and adaptability of modules and buildings for different construction methods. Novel digital instruments and the use of prefabricated, serial and modular construction modes can facilitate the adoption of flexible and adaptable design and assist with participatory approaches during the planning and use phases. Austria has a long tradition of participant design and innovative construction modes. This tradition was initiated through the '*Bundeswohnbauforschung*' program in 1968. Recently, the practice of participant design and innovation in construction was revived. Both cohousing projects in Vienna and research and development of sustainable prefabricated wood construction technologies by timber construction companies in Vorarlberg, Carinthia and Styria, contributed to this revival.

This paper explores the specific notion of flexibility in Austria from 1968 to the present. The main research objective is to explore the flexibility within the design process and how it influences decision-making and choices concerning the design and structural concepts, construction modes and materialities of multi-storey residential buildings. The design process in this study is defined as a process of co-production. It includes several actors such as property developers and housing corporations, architects and construction companies, and, in some cases, cohousing collectives.

Methods

Research in this study is based on document analysis and semi-structured interviews. I have used historical and contemporary documents and visual representations in studies and buildings authored by architects such as Ottokar Uhl, Franz Kuzmich, Franz Fehringer, Christof Riccabona and Michael Wachberger. My aim was to identify and classify the specifics of the Austrian

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

approach to flexibility from 1968 to 1988 when the *Bundeswohnbauforschung* program ended. I compared the specific Austrian discourse on flexibility to the international architectural theories of the era, most notably the open-plan building approach (Habraken, 1972). For current notions of flexibility, I analysed the spatial organisation and construction modes in contemporary residential buildings that offer flexibility or were developed as cohousing projects.

The study follows a multi-method approach to generate knowledge from different disciplines, as suggested by authors conducting similar research on housing (Lawrence, 1992; Perkins et al., 2009; Mackay and Perkins, 2017). The research orientation of this proposal is based on an interpretive approach (Schwartz-Shea and Yanow, 2012; Yanow, 2000; Yanow and Schwartz-Shea, 2009).

Users and flexibility: international theories

Since the 1950s, both bureaucratic regimes that governed large-scale housing projects and bottom-up activism enabled the rise of the user and the shift to participation in mass housing (Cupers, 2011: 30, 2013: 7).

Involving the user also requires a new form of designing during the planning phase so that spatial organisation can be adapted to users' preferences and the structural framework of the building allows such variability. Flexibility is also linked to prefabricated constructions, for instance, reinforced concrete panels introduced into housing construction on a mass scale during the boom years of economic and demographic expansion. Standardised and typified building components should ideally allow for variable spatial arrangement when assembled and enable choice during the planning stage and later replacement during the use phase. How do theoretical notions of flexibility and adaptability fit into this equation? Groák uses these two terms to define different concepts of the malleability of space:

The spatial organisation and internal environment may be suitable for only a limited array of uses. Here we should distinguish between 'adaptability', taken to mean 'capable of different social uses', and 'flexibility', taken to mean 'capable of different physical arrangements'. The building's capacity for accommodating changed uses will depend on the extent to which it is adaptable and flexible (1992: 15–16).

Adaptability, as defined by Groák, is related to the German notion of *nutzungneutral (denoting neutrality of use)*, which describes spaces that enable different uses without material intervention or shifting of movable elements. According to Groák's definition, flexibility means rearranging the physical organisation of space and hence requires some effort to transform the existing form. For clarity, and unlike Groák's definition, I propose to use 'flexibility' as a generic term describing both open-plan spaces that enable different usage and transformability of building systems through interchangeable building components. I use the word 'adaptability' to describe actively induced changes to the movable elements and the structural and infrastructural framework of the building. Adaptability, in our definition, thus entails deliberate action to change the arrangement either as an in-build capacity or as a transformative measure of alteration.

However, despite the potential of the building technology for variability and choice, most of the post-war housing estates were monotonous and uniform both on the level of the urban fabric and

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

concerning individual dwelling units. Housing research of the era took on this challenge. John N. Habraken, who worked for the S.A.R. (Foundation for Architectural Research in the Netherlands), proposed a novel approach for the design and construction of buildings, later titled 'Open Building' to reconcile the industrialised building process with users' needs. In 1961, Habraken published '*De Dragers en de Mensen: het einde van de massawoningbouw*'. In 1972 the English edition of the book '*Supports: An Alternative to Mass Housing*' was published. In German-speaking countries, Habraken published shorter articles in architecture magazines. The Open Building is based on the idea of the distribution of agency between different actors on the one hand and the separation between durable and interchangeable building parts called 'supports' and 'infills', respectively. 'Levels', which were defined at a later stage, are used to describe different roles in the building process and 'who controls what, and when' (Kendall and Teicher, 2000: 31). However, the Open Building approach predominantly addresses the technology enabling flexible use of space rather than offering practical solutions for planning processes based on participant design.

Users and flexibility: the implicit agenda of *Bundeswohnbauforschung*

For the decades to come, other concepts of flexibility and adaptability for the built environment emerged. Gosling et al. provide a comprehensive classification of different approaches and definitions of flexibility for building systems, distinguishing between the design for flexibility and process flexibility (Gosling et al., 2013). Even though the Open Building approach was not adopted on a large scale when designing, constructing and maintaining blocks of flats, Habraken's concepts of supports, infills and levels remained nevertheless the principal concept for housing flexibility in architectural theory. However, the analysis of studies and residential buildings in Austria associated with housing research program *Bundeswohnbauforschung* between 1968 and 1988 shows that housing theory and practice in Austria developed an own, specific approach to flexibility.

Flexibility per se did not belong to the research foci of the *Bundeswohnbauforschung*. However, the topic of 'democratisation of housing' required novel forms for organising the design process and application of construction modes that had the capacity for flexibility during the design process and during the use phase. How did the architects solve these two challenges: firstly, the design process that integrates the user as decision-makers and secondly, which construction modes enable participatory design and flexible use of space during different stages of the buildings' life span?

I evaluated the projects in the handbook of model housing projects based on participant design curated by Freisitzer, Koch and Uhl (1987a) and research reports on pilot housing projects. The compendium was targeted laymen but also professionals involved with housing construction. Residential buildings included in this book are presented through photographs, descriptions and information on construction costs. My analysis has shown that many architects used skeletal structures and cross-wall construction to create open-plan floor plans that allow flexible division between the differently-sized units in the building and flexible room designation within the

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

dwelling units. The authors, who provided descriptions for the housing projects presented in this compendium, often refer to the primary structure of these buildings. It remains unclear if the expression 'primary structure' is used in the traditional sense meaning main load-bearing elements of the building, or to describing 'supports' as defined by Habraken. Analysis of model projects developed, investigated and built with the funding from the housing research programme shows that only Ottokar Uhl took up the Open Building / S.A.R method. This approach was implemented in the project 'Wohnen morgen' in Hollabrunn, where he collaborated with Jos P. Weber and Franz Kuzmich. The S.A.R concept proposed by Uhl, Weber and Kuzmich is based on a modular grid and internal zoning and the separation of primary structure and secondary finishings (Uhl and Weber, n.d.). Other elements included a catalogue for façade elements, doors, windows and sanitary pods.

One of the earliest Austrian projects based on an open-plan concept and variable building elements to be selected by future users was the housing project for Wien Lichtenthal, designed by the Austrian Prader Fehringer architects and presented at the C.I.A.M. meeting in La Sarraz in 1955 (Platzer, 2019: 262–264). This team of architects later became one of the protagonists in *Bundeswohnbauforschung* and planned an owner-occupied model block of flats in Purkersdorf, which was based on user participation and accompanied by a research project funded by Federal Housing Research. In the research report, the planners describe a very different approach for achieving flexibility for floor plans (Prader, 1977: 80). In the building based on cross-wall construction, floor plan variability is achieved through buffer spaces on each floor, different floor space on each floor as the building is terraced, but also through the use of typified dwelling units and swapping of rooms. The model housing project in Purkersdorf reveals a different solution to flexibility in Austria during the 1970s and 1980s, which significantly differs from international approaches. Riccabona and Wachberger, who developed assessment tools for housing projects, distinguish between internal and external flexibility. Interior flexibility enables changes to spatial in a singular dwelling unit, including changes in room designation and modification of room sizes (Riccabona and Wachberger, 1975: 5–9). The concept of internal flexibility is similar to our definition of adaptability. However, it also includes a system boundary: that of the dwelling unit. According to Riccabona and Wachberger, external flexibility includes merging or separating dwelling units either by attaching one or more rooms (called 'addition') or by merging flats, which the authors define as 'combination'. Another possibility is incorporating the initially separate third unit into two individual flats described as 'addition-combination'. In the latter cases, the system boundary is the floor of the building.

In 1975, another research report on flexible housing design was published. This study, conducted by th*e Institute for Empirical Social Research (I.F.E.S.), explored the users' interest in '*Saalwohnungen', which can be described as loft-like flats where flexible elements (such as wardrobes) are used as partition walls to enable maximum interior flexibility within the dwelling unit.

In this study, dwelling unit variability can be achieved through the following strategies: (1) mobility, when the dwellers move elsewhere; (2) external flexibility, which can be achieved by

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

merging auxiliary units, additional flats or annexes; (3) planning flexibility, when users participate in designing the dwelling and (4) internal flexibility which can be attained by a) 'usage flexibility' based on the internal variable structure within the unit that can be modified and b) designation flexibility: a conventional floor plan design where room designation can be changed and a bedroom turned into a living room (I.F.E.S., 1975: 6–7). According to this categorisation of flexibility options, the *Saalwohnung* belongs to category (4).

Both Riccabona, Wachberger and I.F.E.S. studies use almost identical definitions for internal and external flexibility. Unlike the S.A.R. / Open Building approach, which is geared towards the structural and infrastructural framework of buildings and different levels of intervention for different actors, the flexibility notions in Austria are linked to dwelling units and the corresponding system boundaries.

Bundeswohnbauforschung and the associated administrators, architects and sociologists failed to introduce participant design and flexible modes of construction on a large scale in mass housing produced by housing cooperatives. However, the research program and pilot case studies nevertheless profoundly impacted the discourse on housing typologies, changed the role of users in the planning process and, in the long run, transformed building practices in mass housing, as can be currently observed in the revival of cohousing and regained interest in flexible construction technologies.

In 1987, the Ministry for Buildings and Technology (*Das Bundesministerium für Bauten und Technik*) managed social housing subsidies program and acted as the funding agency for the housing research program. In 1988, the competence for housing subsidies was decentralised and became the responsibility of the Austrian federal states, and in 2008, the funds for housing subsidies were no longer required to be allocated to housing (Bußjäger, 2014; Lang and Stoeger, 2018). Since 2008 only a few federal states have continued to provide housing subsidy schemes for housing. Vienna is the only federal state and city municipality that carries on with the funding for housing research.

Pragmatic Flexibility and the Revival of Cohousing

During the golden age of housing research, experimental and innovative apartment blocks and settlements were built all over Austria, as demonstrated in the publication' Mitbestimmung in Wohnbau' (Freisitzer et al., 1987). However, the end of *Bundeswohnbauforschungs* deeply affected pioneering developments in Austrian housing architecture, and since the late 1980s, only a few cohousing projects were built. These buildings are located in Vienna: the projects include B.R.O.T. Geblergasse, designed by Ottokar Uhl and completed in 1990, Sargfabrik at two different sites built in 1996 and 2000, and two women's housing projects that were built in 2009 (Temel, 2021).

Even though not based on participatory design, some architects in Vienna continued to explore flexibility multi-storey residential buildings by designing flexible dwelling units and developing novel building technologies. Since 1996, this route was pursued by the architect Helmut Wimmer (later renamed 'wup wimmer und partner architekten'), when he designed three apartment

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

buildings: Grieshofgasse and Wulzendorfstraße in 1996 and Kanalstraße in 1998). The layouts of dwelling units in Grieshofgasse are based on loft-like open-plan concepts. Load bearing elements are walls between the dwellings and beams inside the units. Bathrooms, storage and the central corridor, are positioned in the middle of the unit and are equally accessible from the living space, consisting of two pairs of same-sized rooms, separated through sliding doors. Larger rooms of the same size allowing different uses follow the international principle of polyvalence but also conform to the concept of inner flexibility as defined by Riccabona and Wachberger in the 1970s. This layout scheme was used also used in residential buildings in Wulzendorf and Kanalstraße. Another novel construction mode, aiming to optimise adaptability within dwelling units, is a system patented by Robert Kallinger, a Vienna-based project developer. The SlimBuilding © system, based on a steel frame construction and in-situ concrete slabs, allows open-plan design. Lightweight structures are used for partition walls to ensure flexibility during the use phase of the buildings. This system was used in home 21, a housing estate designed by trans-city architects and built-in 2016. The Vienna municipality funded this multi-storey residential building within a program for rapid construction of temporary dwellings.

This continued quest for flexible layouts and modes of construction that enable the adaptable spatial organisation and participatory practices that can be observed in parts of Viennese housing architecture is to some degree linked to the legacy of *Bundeswohnbauforschung.* Cohousing, despite the revival, still constitutes only a small percentage of newly built dwelling units in Vienna. The majority of residential buildings in Vienna are developed by not-for-profit housing cooperatives, which are de facto not-for-profit project developers and commercial project developers who use housing subsidies and participate in competitions for plots of land. In 1995, the municipality introduced the '*Bauträgerwettbewerb*' (project developer competition), which is used as a tender instrument to allocate city-owned plots of land and is implemented for all residential developments with more than 200 – 300 dwelling units. Wohnfonds Wien, the city agency that manages these competitions, defines these competitions as follows: "*Property developers and architects work with experts to develop residential projects for the advertised building sites. An interdisciplinary jury determines the winning projects. The winners acquire the building sites with the obligation to realise the judged projects."* Similarly, Wohnfonds Wien also organises a small number of property development competitions for cohousing groups (*Bauträgerwettbewerbe für Baugruppen*). Cohousing initiatives can participate in order to obtain a plot of land and built their project. In order to will the competition, the cohousing groups and their architects need to provide a coherent concept for their residential project, including social infrastructural facilities that cater to the broader neighbourhood.

Cohousing: Modes of Construction and Building Types

During the design phase, when the future cohousing collective, the architects and process moderators need to define the building brief for non-housing uses and communal facilities and allocate space to individual dwelling units, modes of construction that allow open-plan layouts are crucial.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Since the 1970s, cohousing initiatives perceived themselves as a progressive way of living, embracing non-traditional forms of households, emphasising the collective and providing joint facilities, sometimes also accessible for external users. On the symbolic level, the choice of state-of-the-art construction materials such as prefabrication and standardised components and more recently recyclable and sustainable materials such as modular prefabricated timber constructions and high levels of energy efficiency. To enable flexibility during the design phase, the majority of cohousing residential buildings are based on load-bearing shear walls and open-plan space in-between or skeletal frame constructions and non-load bearing walls

Already, a specific building type for residential cohousing has emerged. This building type has been co-produced by the building regulations, architectural traditions in Viennese social housing, the cohousing groups' inclination towards sustainable, recyclable modes of construction, and the requirements of the concept developed for the competition. The typical design brief includes cultural amenities and facilities for local supply on the ground floor accessible for all, shared facilities such communal kitchens, saunas, and gardens on the top floor (accessible for the member of the cohousing group) and individual dwelling units on different floors. The design brief sometimes also includes co-working spaces and children's playrooms. The circulation scheme in cohousing projects is optimised to lower the construction costs. Circulation in buildings on longer, narrower sites is based on one staircase and elevator and on access balconies. Square sites require compact cores with staircases and elevators and usually three to four apartments per floor. Balconies, both access and individual, are also conceived as a space for neighbourly encounters, with many developments also providing balconies, loggias and terraces for individual use. When it comes to dwelling unit typologies, there is not much innovation in Viennese cohousing. There are no unique new typologies such as the Swiss 'cluster' type or 'Hallenwohnen' (Hall living) developed by the Swiss Kalkbreite housing cooperative. As cohousing projects rely on social housing subsidies, the dwelling unit typologies are most likely informed by the regulations for the subsidies and predefined maximum space and number of rooms per household. Despite construction cost restraints, the cohousing groups and their architects strive for sustainable construction and high levels of energy efficiency.

Conclusion

Research grants and pilot projects financed by the *Bundeswohnbauforschung* program enabled architects to change the traditional design process. Instead of typified plans developed in cooperation with the housing cooperatives, they were able to work with users on individual dwelling units and involved the housing collective in decision-making on financial issues and even decisions on heating systems or construction materials.

In cooperation with sociologists, the architects evaluated their design processes and buildings and obtained feedback from users. *Bundeswohnbauforschung* and associated administrators, architects and sociologists failed to introduce participant design and flexible modes of construction on a large scale in mass housing produced by housing cooperatives. However, the model buildings were widely discussed and are since continuously explored in architectural historiography and

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

housing research (Steger, 2007; Jany, 2019; Schneider and Till, 2007). Hence, *Bundeswohnbauforschung* profoundly impacted the discourse on housing typologies, helped to change the role of users in the planning process and, in the long run, to some degree transformed the building practices, as can be currently observed in the revival of cohousing and regained interest in flexible construction technologies.

Similarly, the ongoing revival of cohousing projects is influencing the design and the production of residential architecture in Vienna beyond traditional social housing. The cohousing competition program instigates experimental design and sustainable residential architecture, which houses more than just individual dwelling units. Compared to the previous housing research program, the cohousing promotion in Vienna nevertheless lacks evaluation through independent research and evaluation.

References

Bußjäger P (2014) Wohnbauförderung im Kontext des österreichischen Föderalismus. In: Amann W, Lugger K, Pernsteiner H, et al. (eds) *Wohnbau in Österreich in europäischer Perspektive: Festschrift für Klaus Lugger für sein Lebenswerk*. Wien: Manz, pp. 241–245.

Cupers K (2011) The expertise of participation: mass housing and urban planning in post-war France. *Planning Perspectives* 26(1): 29–53. DOI: 10.1080/02665433.2011.527546.

Cupers K (2013) Introduction. In: Cupers K (ed.) *Use Matters: An Alternative History of Architecture*. London ; New York: Routledge, pp. 1–12.

Freisitzer K, Koch R and Uhl O (1987a) *Mitbestimmung Im Wohnbau. Ein Handbuch*. Wien: Picus-Verl.

Freisitzer K, Koch R and Uhl O (1987b) *Mitbestimmung Im Wohnbau. Ein Handbuch*. Wien: Picus-Verl.

Gosling J, Sassi P, Naim M, et al. (2013) Adaptable buildings: A systems approach. *Sustainable Cities and Society* 7: 44–51. DOI: 10.1016/j.scs.2012.11.002.

Groák S (1992) *The Idea of Building: Thought and Action in the Design and Production of Buildings*. 1. ed. London: Spon.

Habraken J (1972) *Supports: An Alternative to Mass Housing*. Bedford: Architectural Press.

IFES (1975) *Mobilisierbares Interesse an Saalwohnungen*. IFES. Institut f. Empirische Sozialforschung, Wien : 1974, 39. Wien : Inst. f. Empirische Sozialforschung, 1975. Available at: https://permalink.obvsg.at/AC11561954.

Jany A (2019) *Experiment Wohnbau: Die Partizipative Architektur Des Modell Steiermark*. Architektur + Analyse Band 7. Berlin: Jovis.

Kendall S and Teicher J (2000) *Residential Open Building*. New York: E&FNSpon.

Lang R and Stoeger H (2018) The role of the local institutional context in understanding collaborative housing models: empirical evidence from Austria. *International Journal of Housing Policy* 18(1): 35–54. DOI: 10.1080/19491247.2016.1265265.

Lawrence RJ (1992) Integrating architectural, social and housing history. *Urban History* 19(01): 39–63. DOI: 10.1017/S0963926800009627.

Mackay M and Perkins HC (2017) The globalising world of D.I.Y. house improvement: interpreting a cultural and commercial phenomenon. *Housing Studies* 32(6): 758–777. DOI: 10.1080/02673037.2016.1234031.

Perkins HC, Thorns DC and Winstanley A (2009) House and home: methodology and methods for exploring meaning and structure. In: Tonts M, Thompson SM, and Maginn PJ (eds) *Qualitative Housing Analysis ; An International Perspective*. Bingley: Emerald Group Publishing Limited.

Platzer M (2019) *Kalter Krieg Und Architektur: Beiträge Zur Demokratisierung Österreichs Nach 1945*. Zürich: Park Books.

Prader H (1977) *Partizipation Im Sozialen Wohnhausbau : Modell Purkersdorf*. Wien : Atelier P + F, 1977. Available at: https://permalink.obvsg.at/AC01054367.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Riccabona Christof and Wachberger Michael (1975) *Wohnwertvergleiche Und Bewertung Der Verschiedenen Wohnungstypen, Untersucht Am Demonstrativbauvorhaben Graz-St. Peter*. Schriftenreihe der Forschungsgesellschaft für Wohnen, Bauen und Planen : 60. Wien : FGW, 1975. Available at: https://permalink.obvsg.at/AC04089798.

Schneider T and Till J (2007) *Flexible Housing*. 1st ed. Amsterdam ; Boston: Architectural Press, an imprint of Elsevier.

Schwartz-Shea P and Yanow D (2012) *Interpretive Research Design: Concepts and Processes*. Routledge series on interpretive methods. New York, NY: Routledge.

Steger B (2007) *Vom Bauen: zu Leben und Werk von Ottokar Uhl*. Wien: Löcker.

Temel R (2021) Baugruppenprojekte - Möglichkeiten und Potenziale. Co-Housing Projects - Opportunities and Potentials. In: Marboe I (ed.) *Bauen Für Die Gemeinschaft in Wien: = Building for the Community in Vienna*. Erste Auflage. München: Edition Detail, pp. 17–25.

Uhl O and Weber JP (n.d.) Dwellings in a realised S.A.R. -Support.

Yanow D (2000) *Conducting Interpretive Policy Analysis*. Qualitative research methods v. 47. Thousand Oaks, Calif: Sage Publications.

Yanow D and Schwartz-Shea P (2009) Reading and writing as method: In search of trustworthy texts. In: Ybema S, Yanow D, Harry Wels, et al. (eds) *Organisational Ethnography: Studying the Complexities of Everyday Life*. Los Angeles ; London: SAGE.

.

Please write the number of your workshop and title in the header area on the second page

Name(s) of the author(s) should be typed below the title in 12pt in bold, only initials are in capital. The affiliation of the author(s), including e-mail address(es) in 11 pt, should be centered and written under each name.

Paragraphs and Headings

Body text should be typed in 11 pt. Text should be both left and right justified. Paragraphs should not be indented. There should be one blank line between paragraphs. First-order headings should be typed in 12 pt, in bold with only the first letters capital. One blank line should be left above and below first-order headings.

Second-Order Headings

Second-order headings should be typed in 12pt and italic with only the first letters capital. One blank line should be left above and below second-order headings.

Figures

All graphic elements (graphics, line drawings, photos) should be referred as "figures" and should be numbered consecutively. Please position figures within the text as close as possible to where they are first referenced. All graphs, figures, photographs, diagrams etc, must be included within the single file.

It is recommended that when preparing electronic versions of photographs and figures the following formats be used:

Type	Recommended format	Resolution	Image size
Black and white drawings	bitmap format	300 dpi	No more than 10 cm on the larger side
Greyscale photos	greyscale format	200 dpi	No more than 7 cm in the larger dimension
Colour pictures and drawings	jpg colour format	200 dpi	No more than 7 cm in the larger dimension

Tables

Please place all tables as close as possible to where they are first referenced. Number tables consecutively with Arabic numerals (Table 1, Table 2).

The preferred style is as shown below. Please leave two blank lines after tables.

Table 1. An example of table layout is below. All the information necessary for the reading of the table will be in the caption text. Please leave a blank line after the caption.

Abcde	Erty [%]	Nmoc [%]	Asdfg
A	15.3	101.38	Aaaaa
B	24.5	92.25	Bbb
C	29.8	82.62	Ccccc

Source: should be typed in 10 pt.

Equations

Equations should be aligned left and referenced with a number shown in parenthesis flush right of each equation.

Units of Measurements

International System of Units (S.I. units) must be used. If necessary, alternative units may be given in parenthesis.

Acknowledgements

If included, acknowledgments should appear before the list of references.

References

Ladányi J. (2001) "Residential segregation among social and ethnic groups in Budapest during the post-communist transition", in P Marcuse, R van Kempen (eds) *Of States and Cities: The Partitioning of Urban Space* .Oxford University Press, Oxford, pp 170-182

Marcuse P. and Van Kempen R. (eds) (2000) *Globalising Cities: A New Spatial Order?* Oxford: Blackwell

Özüekren A.S. and Karahan-Ergöz E. (2010) ''Housing Experiences of Turkish (Im)migrants in Berlin and Istanbul: Internal Differentiation and Segregation'', *Journal of Ethnic and Migration Studies*, 36 (2), pp: 355 - 372

Phillips, D. (2006a) Moving towards integration: the housing of asylum seekers and refugees in Britain, *Housing Studies,* 21 (4): 539-553.

Phillips, D. (2006b) Parallel lives? Challenging discourses of British Muslim self-segregation, *Environment and Planning D: Society and Space,* 24 (1): 25-40.

Residential Satisfaction in a Social-Mix Disadvantaged Neighbourhood: The Case of Arabayatağı, Bursa/Turkey

Ebru KAMACI KARAHAN

Bursa Technical University, Department of City and Regional Planning, Bursa, Turkey
e-mail: ebru.karahan@btu.edu.tr

Ömer BİLEN

Bursa Technical University, Department of City and Regional Planning, Bursa, Turkey
e-mail: omer.bilen@btu.edu.tr

Ersan KOÇ

Bursa Technical University, Department of City and Regional Planning, Bursa, Turkey
e-mail: ersan.koc@btu.edu.tr

Serkan KEMEÇ

Yüzüncü Yıl University, Department of City and Regional Planning, Van, Turkey
e-mail: serkan.kemec@yyu.edu.tr

Abstract

This study aims to examine the determinants as well as selectiveness of residential satisfaction in the context of a disadvantaged urban setting with a specific emphasis on being local or Syrian refugee. The case is a neighbourhood of Bursa, namely Arabayatağı, where is characterized by a large share of low-status locals with different cultural identities and Syrian refugees. To achieve the goal of the research, we conducted a questionnaire survey (N=301) using snowball technique. Chi-squared Automatic Interaction Detection analysis (CHAID) is used to analyse the selectiveness of overall residential satisfaction. The preliminary finding of this study states that Locals and Syrian refugees differ regarding their satisfaction levels with their living environments. Besides, homeownership and higher education-degree of respondents are significant on overall residential satisfaction of the locals and Syrians, respectively. We believe the results will help review current integration strategies in Turkey regarding the issues relating to Syrian refugees' re-settlement.

Keywords: Residential Satisfaction, Disadvantaged neighbourhood, Locals, Syrian Refugees

Introduction

The is about a study on residential satisfaction. We examine the underlying forces of residential satisfaction in a disadvantaged neighbourhood that is also one of the favourable locations of Syrian Refugees[1] in Bursa. So forth, we formulate the main question of the research as a comparative manner: what are the main dimensions of overall residential satisfaction regarding the locals[2] and Syrian refugees? The timeframe of the survey is also critical, since 2020 marks end of the first decade of

---

[1] In Turkey, according to the Foreigners and International Protection Law (No: 6458), the forced relocated individuals' formal status is defined as "Persons Under Temporary Protection". But, in this study we prefer to use "refugee" regarding the motivations, scope and duration of Syrians, till late 2010s.

[2] Refer to the residents who born in Turkey and have a Republic of Turkey Identity Card in this study.

Syrian refugees living in Turkey. However, little is known about how Syrian refugees and locals interact with the cities' socio-spatial spheres in Turkey. This study aims to fill the existing gap in the literature by investigating both locals and refugees' residential satisfaction patterns, tendencies and selectiveness in a social-mix[3] disadvantaged neighbourhood.

Housing (residential) satisfaction decreases when families detect a mismatch between dwelling circumstances and cultural standards, which Winter and Morris (1975) refer to as "housing deficiency." In this approach, assessment of residential environment is described as a complicated process impacted by social context, dwelling unit features, and neighbourhood facilities. In accordance with the theory of Family Housing Adjustment, Amerigo and Aragones (1997) state that a resident's standard of dwelling and its surroundings is determined by his or her individual, social and cultural values. Above and beyond, demographical, societal and cultural values affect a person's style of living environment as well as the level of satisfaction with them. Besides, contentment has a subjectivity due to its inherent operational mechanisms.

Residential satisfaction, here, refers to the multidimensional process which operates through the complex interactions among the reflections of the residents' backgrounds, perceptions of dwelling as well as neighbourhood, with reference to the aspiration of the residents' life-satisfaction and adequacy of socio-spatial settings to reach their life-course target. So, even if they reside in the same area, individuals' satisfaction levels vary significantly. Such an interpretation of residential satisfaction gives us the chance to investigate the diversity of perceptions of inhabitants with different root of origins towards the socio-spatial environment they share. To the best of our knowledge, through adopting quantitative technique this is one of the first papers to use such a point of view on studying residential satisfaction as regards refugees in Turkey.

Literature on satisfaction confirmed that the subjective evaluation of neighbourhood features has a greater impact on neighbourhood satisfaction than objective measures (Francescato, Weidemann, & Anderson, 1989; Lu, 1999). In other words, the objective valuations of residential characteristics, according to Francescato et al. (1989), are weaker predictors than subjective assessments. Attributable to this, this study relies on subjective assessment of the residents. To conduct our research, we classify the components that contribute to residential satisfaction in a disadvantaged neighbourhood into two major sets of indicators: physical and social living environment components. While social indicators refer to the social environment and cover the relationships between neighbours as well as security, the social profile of the neighbourhood; physical indicators refer to the physical environment and include residents' subjective evaluations of dwelling and neighbourhood attributes and facilities (see Figure 1, for the conceptual framework of the study).

As mentioned, the paper is concerned with examining the residential satisfaction process in a social-mix disadvantaged neighbourhood which is among the most preferable living places of Syrian refugees in Bursa, Turkey. We also aim to highlight the determinants of residential satisfaction as well as to picture the diversification of those among Locals and Syrian refugees. Data in this study derived from a face-to-face questionnaire survey (N=301), conducted on September 15th, 2020, and May 15th, 2021, with three intervals because of the COVID-19 lockdowns (full and/or partial) in Turkey, like other countries of the world.

The structure of the paper is as follows: after the chapter of introduction, in section two, related literature is reviewed. Chapter three pictures the study area's socio-spatial settings from a comparative point of view. The following section, data and method explains the nature of data, variables of analysis, analysis methods and the limitations of the research. In chapter five, the findings are listed and interpreted with reference to the current literature. And the last chapter, concluding remarks summarized the study and give suggestions for the further research areas.

---

[3] In this study, taking a divergence from its literary connotations, the so-called social-mix neighbourhood is meant to represent a socio-spatial living environment that serves affordable housings for both locals with diverse socio-economic position and ethnic origin, as well as to immigrants.

Review of the literature

Satisfaction with residential areas is one of the well-researched fields among the scholars from divergent disciplines such as environmental psychology (see Chen, Hall, Yu, & Qian, 2019; Lewicka, 2011). Although it is in fact a complicated sequences of processes, residential satisfaction can be described –in a simplicity manner- as a state in which an inhabitant's housing needs are fulfilled and he or she is pleased with the amenities and physical attributes (Dekker, de Vos, Musterd, & van Kempen, 2011; Lu, 1999; Mohit, Ibrahim, & Rashid, 2010), neighbours (Van Assche, Haesevoets, & Roets, 2019), and surroundings, of his/her living environment (Buys & Miller, 2012; Hipp, 2009).

Studying residents' satisfaction encompasses a wide range of research areas: residential mobility (Wang & Wang, 2020); place attachment (Harten, 2021; Kale, 2019; Zenker & Rütter, 2014); housing tenure (Li, Zhu, & Li, 2012); forced relocation (Huang, He, Tang, & Li, 2020; Li, van Ham, & Kleinhans, 2018; Posthumus, Bolt, & van Kempen, 2014, Kale, 2019); vulnerable and/or disadvantaged groups (Chen, Zhang, Yang, & Yu, 2013). The seminar work of Lu (1999) indicates that (a) housing satisfaction has a strong positive effect on neighbourhood satisfaction; and (b) housing satisfaction and neighbourhood satisfaction are inextricably linked bodies. However, they mostly are considered as separate concerns and researchers choose to study one of these two notions due of its intricacy. Aside from this propensity, we used both housing satisfaction and neighbourhood satisfaction through computing a composite variable, overall residential satisfaction, in this study.

As shown in Amerigo & Aragones' (1997) most-cited model of residential satisfaction, the objective attributes of residential settings are converted into subjective judgements by the individuals who live in them. This method places a high value on residents since the individual's subjective appraisal of the physical or social surroundings, as well as compositional elements such as family characteristics such as life stage and socioeconomic level, all have an impact on residential satisfaction. In addition, it is crucial to note that the individual's perception of his or her physical or social environment is influenced by compositional elements such as family variables, lifestyle, previous living experiences, etc. This study uses this point of view as a starting point for its research. The socioeconomic and demographic characteristics of inhabitants, objective and subjective assessments of both dwelling and neighbourhood components are included in the analysis as independent variables (see Section 4).

Compositional elements -refers to the works of Galster and Hesser (1981) like as age and household (family) size have a significant impact on residential satisfaction. In general, older age is associated with higher levels of satisfaction with one's residential areas (Temelová & Dvořáková, 2012; Zanuzdana, Khan & Kraemer, 2013). As Huang, Du, & Yu (2015) point out, the culture and background of the household has the greatest influence on family size. Hence, empirical studies cannot provide a broad interpretation of household size. The findings of Diaz-Serrano and Stoyanova's (2010) research which is examined 12 European countries show that the number of children in a home appears to have a negative association with residential satisfaction. On the other hand, Zhan et al. (2018) state that family size is positively correlated with satisfaction in the context of China. Another context dependant variable is marital status. The effect of being married or not varies (Hipp, 2009; Lovejoy, Handy, & Mokhtarian, 2010). Homeownership (Elsinga & Hoekstra, 2005; Tao et. al., 2014) and length of residence (Mohit, Ibrahim & Rashid, 2010) have also positive effects on residential satisfaction. The findings of the study conducted by Ren and Folmer (2017) show that as education level increase the level of satisfaction also increase in the case of urban China; while an another comprehensive study of Dekker et al. (2011) stated that contentment with living surroundings was negatively impacted by education levels of households. This tendency is also approved by the study of Gan et al. (2016) that examine the migrants' residential satisfaction dimensions in China. However, residential satisfaction and educational attainment is strongly associated in positive manner (Zanuzdana et al., 2013). In the case of residential satisfaction of relocates, household income –which is also another context specific dimension- is preferred to determine with reference to the individuals' level of education, much as we do in this study.

When it comes to residential satisfaction, the physical aspects of the dwellings are crucial. Number of

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

rooms and floor area are the most essential factors in determining satisfaction with a dwelling (Buys & Miller, 2012). The number of rooms per person in the family, according to (Wijegunarathna, Wedawatta, Prasanna, & Ingirige, 2018) is a major driver of housing satisfaction. Another element that influences home satisfaction is the age of the residence or the building's year of construction. Because of the maintenance cost, age and satisfaction is negatively correlated. Besides, satisfaction with dwelling is influenced by the building quality (Ibem & Amole, 2013). As the quality of dwellings improves, so does residential satisfaction. The social as well as physical environments of a neighbourhood has an impact on residential satisfaction. Relationships with neighbours' increase satisfaction with living environments (Huang & Du, 2015; Ibem & Amole, 2013). The evaluation of physical attributes such as quality and maintenance level of building environments, accessibility to neighbourhood facilities such as retail, medical, and educational institutions are also important variables for residential satisfaction (Temelová & Dvořáková, 2012). At last, but not least, residential satisfaction is also influenced by perceived safety (Buys & Miller, 2012; Lovejoy et al., 2010).

Figure 1. Conceptual Framework of the Study

Source: Developed by Authors

With the aim of analysing residential satisfaction of Syrian refugees, Haliloğlu Kahraman (2021) conducted a qualitative survey with 38 Syrian refugees live in Önder neighbourhood, Ankara, Turkey.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Haliloğlu Kahraman (2021) claims to be the first to conduct qualitative analysis the contentment of Syrian refugees in Turkey with their living conditions. The findings of this study show that Syrian refugees' needs and expectations in terms of housing and neighbourhood features have been met in the neighbourhood under study. Dissatisfaction among Syrian refugees is partially caused by security issues resulting from the dispersal of locals from their neighbourhoods (Haliloğlu Kahraman, 2021). Şafak-Ayvazoğlu et al. (2021) examine the socio-cultural adaptation of Syrian refugees using semi-structured in-depth interviews with 15 participants in three industrial cities (Istanbul, Sakarya, Kocaeli) in Turkey. While they focused life satisfaction of Syrian refugees, research gives us valuable information on socio-cultural surroundings of those. The findings of the research show that socio-cultural adaptation of Syrian refugees is negatively affected by economic concerns. Another recent study that also aims to analyse the life-satisfaction of Syrian refugees (N=285) found that the level of intervention with locals' increases life-satisfaction of refugees (Özkan, Ergün & Çakal, 2021). Number of studies on the satisfaction of forced-relocates is limited due to the specificity of the inquiry, however, research in the fields of sociology and environment psychology can be used as a reference point.

Case Study

The case of our research Arabayatağı is a neighbourhood of Yıldırım District of Bursa with a total population of 27347 according to 2019 census. Housing typology of the area is dominantly post-squatter housing units with less than 3 storeys. As can be seen in Figuıre 1, buildings portray a low-quality housing often showing below ground level floors exposing to flooding risks. The living environment and the village was founded by those who migrated after the 93 Russian-Ottoman War. After Yıldırım was designated as a provincial district in 1987, Arabayatağı was also granted a neighbourhood status. The area is defined by three neighbourhoods: "Yavuzselim" in the west, "Çınarönü" in the east, and "Ulus" in the North. "Ankara Street" in the south defines the border of the neighbourhood with "BursaRay" Metropolitan Railway.

Figure 1: Location of case in Bursa and information on the neighbourhood

Bursa located in southern Marmara and northern Aegean region, Arabayatağı neighbourhood is located on eastern development corridor of Bursa

The area is defined by three neighbourhoods: "Yavuzselim" in the west, "Çınarönü" in the east, and "Ulus" in the North

Street layout with low quality infrastructure; inappropriate building height-street width ratio; low level of housing unit privacy and under-attended urban setting.

Below ground level floor units portraying flooding risks

Mid- and high-rise business and office units behind the usual low-quality housing, not only define southern border of the neighbourhood with Ankara Street Strip, but also prove a vivid image of urban development disparities.

Source: Google Earth Professional, 2021. Arabayatağı Neighbourhood, Accessed 09 August 2021.

Data and Method

In this section, we give information on data, data source, questionnaire of the survey, variables, methods and limitations of the study.

Table 1: Structure and scope of the questionnaire survey

Tag	Scope	# of questions
1st part Location	Provides geographic information regarding the residence of surveyed households.	1
2nd part Demographic profile	Provides information about demographic composition of respondents such as age, number of children, family size, education attainment level, etc.	2
3rd part Socio-economic profile	Provides information about economic and social profile of respondents such as job, occupation, homeownership, social security, etc.	5
4th part Residential mobility	Provides information about respondent previous residential experiences and intentions to moves, etc.	5
5th part Residential satisfaction	Provides information about residential satisfaction levels, subjective evaluation of dwelling and neighbourhood attributes, etc.	13
6th part Perceptions and Relationships with Syrians (ask Locals only)	Provides information about Locals' perception on Syrian migration, integration process and refugees, etc.	14
7th part Perceptions and Relationships with Locals (ask Syrians only)	Provides information about how Syrians perceived themselves, future intention and sense of place, etc.	14

Source: Developed by Authors

Data

While quantitative research dominates residential satisfaction literature, many studies on refugees and immigrants' satisfaction with their living conditions rely on qualitative data. Including this research, relatively few studies have used quantitative research to analyse residential satisfaction in the context of forced relocation. Apart from these studies, our study acknowledged a comparative approach on residential satisfaction -locals versus Syrian refugees-, which is rare in the literature, even if it is the first in Turkey.

The study's data was collected through questionnaires as a part of the larger project (October 2019-July 2021) funding by Bursa Technical University with grant number 191N012. The face-to-face questionnaire survey consists of 7 parts and 54 questions, and raw data with 294 variables). The study acknowledged stratified random sampling technique. According to the Address-Based Population Registration System conducted by Turkish Statistical Institute, the number of households in Arabayatağı neighborhood is 6301, by the year 2019. In final, the number of samples which is appropriate to analysis is 301 (and 40 of the samples is Syrian refugees, the remainder of which are

Locals. The structure and scope of the survey are shown in Table 1, besides the referenced sections of this study are highlighted.

Variables and methods

Our survey does not assess overall residential satisfaction in a single question. This implies that no question is asked that assesses both house and living environment satisfaction. The two Likert 5-scale (5=very dissatisfied, 1=very satisfied) questions "How satisfied are you with your current home?" and "How satisfied are you with living in Arabayatağı neighbourhood?" are combined and the dependent variable of the analysis namely overall residential satisfaction is created. The characteristics of inhabitants and dwellings were considered exogenous factors in this study. The model incorporates respondents' subjective satisfaction ratings (5-point Likert scale; 5=very dissatisfied, 1=very satisfied) on physical and social environment attributes, as well as housing features, by computing new components: physical environment, social environment, safety, dwelling features, and accessibility to services (Table 2). A reliability test between the relevant variables was used when designing the component. The Cronbach alpha of overall residential satisfaction coefficient was 0.745. The Alpha Cronbach coefficients were 0.865 for the physical environment, 0.886 for the accessibility of services, 0.828 for the safety, 0.883 for the dwelling features and 0.844 for the social environment. Table 2 lists the variables that were used to build these composite variables.

Table 2: Descriptive statistics of independent variables of the study

Variable	SD	Mean	Percentage
Residents' Background (objective data)			
Age	10.40	35.50	
Marital status			
Married			60.5
Non-married			39.5
Sex			
Male			65.8
Female			34.2
Education			
Graduated from Primary school and/or lower degree			38.2
Graduated from High school and/or higher degree			61.8
Homeownership			
Owner			49.9
Non-owner			59.1
Social security			
Having social security			83.4
Non-having social security			16.6
Household size	1.60	3.82	
# of people work	.707	1.34	
Working status			
Working			90.4
Not-working			9.6
Refugee status (Nationality)			
Locals			13.3
Syrian refugees			86.7
Dwelling features (objective data)			
# of rooms	.650	2.89	

Age of dwelling	13.75	29.85
Median floor area (m²)	23.4625	34.0679
Perceptions of residents (subjective data)		
Physical Environment*	.81538	2.6254
Accessibility to Services**	.98975	2.8189
Safety***	1.0676	2.9169
Dwelling Features****	.99351	2.8726
Social Environment *****	.93793	2.8372

*Physical environment: parking lot, location of the neighbourhood, Recreational area, Physical infrastructure, Municipality services

**Accessibility to services: accessibility to schools, accessibility to healthcare, accessibility to commercial areas, accessibility to socio-cultural facilities

****Safety: safety and quality of built environment

*****Dwelling features: dwelling size (m²), quality of construction materials, number of rooms

******Social environment: neighbouring, social composition of neighbourhood, quality of life

Source: Developed by Authors

In empirical studies, the technique of assessing residential satisfaction is essential since it has an immediate influence on the results (Lu, 1999). To define whether selected sensitivities (see Table 2) affect overall residential satisfaction and determine which dimensions and the extent to which they influence, we use one of the multivariate statistical techniques Chi-squared Automatic Interaction Detection (CHAID) analysis (refer to the works of Barreira et al. (2017) and Gür, Murat & Sezer (2020). As Gür, Murat and Sezer (2020) indicated, the application of this technique on analysing satisfaction is uncommon. Hence, this paper is one of the first studies chosen CHIAD (Exhaustive) analysis method to examine the selectiveness of residential satisfaction as well.

Limitations of the research

Despite its strengths, the study has some limitations. The process of obtaining the data presented the first obstacle. We had trouble finding respondents because of Covid-19, and we had to revise the initial confidence interval. As we use stratified random sampling technique, we layered overall sampling size (N=368 with 95% confidence level and 5% margin of error) by nationality status' proportions in the neighbourhood. Thus, the minimum number of surveys for each stratum is calculated as: 28 for Syrian refugees and 340 for Locals. However, mostly because of pandemic precautions, we cannot reach this number among Locals. We surveyed 40 Syrian refugees and 261 Locals. In the bottom line, the margin of error is calculated as ±5.52%. Second, participants' willingness to participate in the survey is a constraint. Women in the neighbourhood is reluctant to take part in the survey, as can be seen from the number of participants. Covid-19 precautions also forced the conversion of some open-ended survey questions into multiple-choice questions. As a result of converting qualitative to quantitative data, it's possible that some information was lost.

Findings and Discussion

CHAID analysis's result, the tree-diagram of the model, is illustrated in Figure 2. While, 18 variables are included the analysis, there were only 8 variables are involved in final model (see Figure 2). The primary results confirm that the composite variables based on the subjective evaluation of residents: Physical environment, accessibility to services, safety, dwelling features and social environment had no significant effect on the dependent variable. However, the model covers the compositional
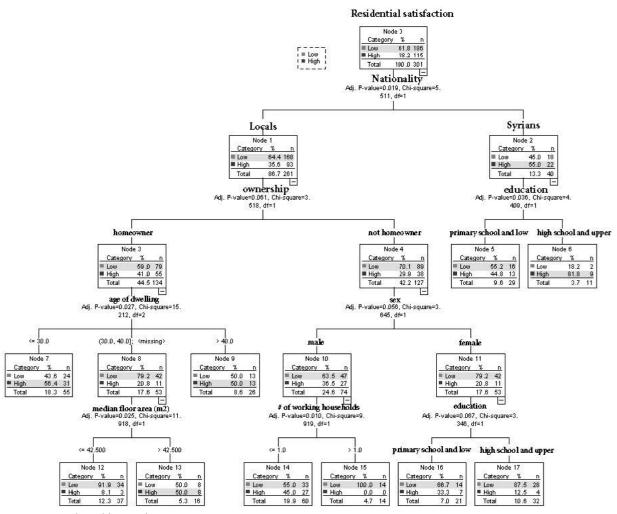
variables based on objective data: nationality, property rights, education, sex, age of dwelling and square meters per person. Besides, this model is consistent with Galster's (1987) imprint of residential satisfaction, in which objective factors of the neighbourhood and personal assets can influence perceptions and judgments and should thus be identified in the analysis.

People living in Arabayatağı is not satisfied with residential settings: only 38.2 percent of all respondents have a high satisfaction rate. The satisfaction varies across the nationalities or being Syrian refugees or not. As being positioned in the first timber branch, the nationality (or refugee status) component has a direct influence on overall contentment with homes (Chi-square = 5.511; df = 1; p=0.019). The high satisfaction rating for Syrians was 55% and local levels 36.6%, a statistically significant differential in several models assessed. This result confirms the findings of the research carried out by Haliloğlu Kahraman (2021) in a disadvantaged neighbourhood as well. As Haliloğlu Kahraman (2021) states that the socio-spatial settings of neighbourhood and housing features in the survey neighbourhood meet the requirements and aspirations of Syrians even in the sense that the level of satisfaction is higher than anticipated. In a similar vein, akin to the research of Şafak-Ayvazoğlu et al. (2021) in which points out that almost half of Syrian refugees surveyed said they were fairly satisfied with their life in Turkey. Moreover, this finding is also compatible with the earlier research such as Gan et al. (2016) and Chen, Dang & Dong (2020) on migrants' residential satisfaction dimensions.

Figure 2: CHAID analysis of data

Source: Developed by Authors

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

As previously stated, of households, the degree of education and the level of income are acknowledged as positively correlated and interchangeable manner. This means as education level of households increase so does income of those. While, especially on working with vulnerable groups, research tend to ask education level instead of income, as they are more likely to get a response. The current study confirms that education is the most important factor driving differences in residential satisfaction among Syrians (Chi-square=4.409, df=1, p=0.036). While 44.8 percent of Syrian refugees who completed primary school or lower are highly satisfied, 81.8 percent of those who completed high school or higher are highly satisfied. This finding is in line with the study of Ren and Folmer (2017) and Zanuzdana et al. (2013) in which assumed a positively association between residential satisfaction and higher education attainment level. Furthermore, the findings should be carefully interpreted when examining the dynamics of refugee residential satisfaction. This is because refugees are unique communities who are forced to leave their homeland. This displacement entails not only a geographical movement between the home and host countries, but also an entry into a novel socio-spatial system and a break with its roots. Besides, immigrants' -or as in our case Syrian refugees-qualifications have a significant impact on how they interact with urban networks in the country of their new arrival. High level of education will make it easier for them to get a position in the employment network, which is one of the social networks mentioned above. The recent study on examining the living conditions of Syrian refugees in Jordan states that educated Syrian refugee women are more likely to be economically engaged than uneducated women, one in every five employed women is a professional, an associate professional (Tiltnes, Zhang & Pedersen, 2019). The earlier research on residential satisfaction, such as Amerigo and Aragones (1997), supposed that high income is strongly correlated with high degree of education, thus high-level of satisfaction (Biswas et al., 2021). Aside from these studies, the findings of Hur and Morrow-Jones (2008) research highlight the degree of education is not significant on residential satisfaction.

As a cultural and social standard, homeownership directly and indirectly affects households' incomes. Lu (1999), Tao et al. (2014), and Mohit et al. (2010) claim the homeownership is positively affect residential satisfaction. Our study also confirms that argument. As illustrated in the second branch, homeownership (Chi-square=3.518; df=1; p=0.061), is the essential element that determines residential satisfaction of the Locals. The high satisfaction rate for local-homeowners is 41.0 percent, this rate decreases to 29.9 percent among local-non-homeowners. This result reflects the earlier residential satisfaction studies.

Previous residential satisfaction studies have assumed that few dwelling characteristics significantly influence residential satisfaction (Biswas, Ahsan & Mallick, 2021). While the unit size positively affects the residential satisfaction (refer to the works of Lu, 1999; Mohit et al. 2010 and Amerigo & Aragones, 1997), housing quality and median floor area (crowding ratio, refers to the work of Amerigo & Aragones, 1997) negatively affect the overall residential satisfaction. The age of residents is one of the sub-components of housing quality. As age of the residence increases, the maintenance costs increases and as a reflection residential satisfaction decrease. This study finding is in line with the findings of earlier research mentioned above. The tree-diagram's third branch shows that the age of residence is the most important factor producing differentiation in overall residential satisfaction among Locals' homeowners (Chi-square=15.212, df=2, p=0.027). While those age of residence 30 and under have a high satisfaction score of 56.4 percent, those age of residence over 40 have a high level of satisfaction (50.0 percent).

While homeownership has affirmative effects on residential satisfaction, as illustrated by the finding of this study, either being male or female also has significant effects on non-homeowners' residential satisfaction level. The earlier studies mostly claim male are more satisfied with their residential settings compare to female. This tendency can be seen in the finding of our research. As can be seen in Figure 2, the most important factor causing differentiation in overall residential satisfaction among Local-non-homeowner is gender (Chi-square=3.645, df=1, p=0.056). While the high satisfaction rate for men is 36.5 percent, this rate is 20.8 percent for women (see the 3rd branch). This finding contradicts the findings of Zanuzdana et al. (2013) in which the claim of women in the case of Dakata, Bangladesh, is more residentially satisfied than men. Besides, the role of gender is highly cultural-

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

based issue, the current study's finding can be partly explained by the inconsistency between the number of female and male respondents in our survey, which is mentioned in the limitation of the study sub-section of this paper. Therefore, these findings should be carefully evaluated. Besides, among female Local-non-homeowners, education is the most important factor driving differences in satisfaction (Chi-square=3.346, df=1, p=0.067). Biswass et al. (2021) examine the residential satisfaction determinants of people who resides near to the refugee camps in Cox's Bazar, Bangladesh. The preliminary finding of Biswass et al., 2021 research is that as education level of residents' increases do thus residential satisfaction. Higher education level positively affects residential satisfaction (Ren & Folmer, 2017 and Biswass et al., 2021) in contrast to the findings of and Dekker et al. (2011) and Hur & Morrow-Jones (2008). In a similar vein, the current study indicates that whereas for primary and/or lower-grads, the proportion of low satisfaction is 66.7%, the proportion for high school and/or upper-grader graduates is up to 87.5%.

The fourth branch of the tree diagram demonstrates that the most important factor describing overall residential satisfaction among Local-Homeowner living in a 30–40-year-old building is median floor area (Chi-square=11.918, df=1, p=0.025). United Nation (2000) states that median floor area is mostly the result of market factors, which are modified in turn by a range of housing regulations. In this respect, median floor area can be interpreted as a dimension of housing quality as well. While the connotations associated with being crowded are closely linked with the cultural values of the society, with a high median floor area value, it is often believed that more satisfaction will result. The earlier research on residential satisfaction, such as Tao et al. (2014) and Mohit et al. (2010), supports overcrowding negatively affects the residential satisfaction of migrants in Shenzhen, China. In a similar vein, CHAID analysis illustrated that among the local homeowners living in a 30–40-year-old building with median floor area of 42.25 or less the proportion of being low satisfied is 90 percent; while this ratio almost halves (50 %), for those with median floor area of 42.45 or more.

The economic conditions of the household after all have a positive effect on residential contentment. In families with only one employee, the rate of dissatisfaction is 55.0 percent; in households with more than one employee, the rate is 100.0 percent. Briefly, the number of individuals working in the household is the most important factor causing differences in life satisfaction among Turkish non-homeowners (Chi-square=9.919, df= 1, p=0.010). This finding is in line with the findings of the empirical studies of other countries including Mohit et al. (2010) and Dekker et al. (2011) those found affirmative effect on residential satisfaction and economic conditions.

Table 3: Correlations among variables of on subjective data

			1	2	3	4	5	6
1	Physical environment	Pearson Correlation	1	.537**	.416**	.316**	.367**	.708**
		Sig. (2-tailed)		.000	.000	.000	.000	.000
2	Accessibility to services	Pearson Correlation		1	.458**	.374**	.409**	.757**
		Sig. (2-tailed)			.000	.000	.000	.000
3	Safety	Pearson Correlation			1	.611**	.180**	.631**
		Sig. (2-tailed)				.000	.002	.000
4	Dwelling features	Pearson Correlation				1	.256**	.625**
		Sig. (2-tailed)					.000	.000
5	Social environment	Pearson Correlation					1	.659**
		Sig. (2-tailed)						.000
6	Overall residential satisfaction	Pearson Correlation						1
		Sig. (2-tailed)						

**. Correlation is significant at the 0.01 level (2-tailed). Source: Developed by Authors

In the light of the discussion above, it is correct to note that while residents' evaluations of social and physical surroundings in both the neighbourhood and the residence were considered to affect overall resident satisfaction, they had no noticeable impact on it. At this point, we examine the internal correlation among these composite variables (see Table 3). The Pearson Correlation Analysis confirms that all composite scores computed from the variables based on resident perceptions of their living areas using the Likert scale are significantly correlated. There is strong correlation (positive) among overall residential satisfaction and accessibility to services ($r>0.7$); the other are moderately correlated (positive) each other ($0.3<r<0.7$). This means that as overall residential satisfaction decreases so thus physical environment, safety, social environment, dwelling features and accessibility to services scores also decrease, vice versa. The current research findings are also consistent with the studies of Mohit et al. (2010) and Tao et al. (2014) which presented that the residential satisfaction is substantially and positively linked to the dwelling features, social environment and public services. Consequently, while these components are not among the determinants of overall residential satisfaction, they are absolutely among the dimensions of residential satisfaction in the setting of a disadvantaged neighbourhood with a diverse fabric social.

Concluding remarks

This study aims to contribute to the residential satisfaction research in two aspects. The first one is the scope of the research. As said previously, Syrians have been living for more than 10 years among us in the cities of our country. Since there is no control over Turkey's living spaces for Syrian refugees, it is also unknown the internal dynamics of the residential preferences, place-making and the relocation strategies of those. By examining residential satisfaction, this study aims to highlight the perceptions of both Syrians and Locals to the same living area; as well as takes to picture of diversifications between these groups. The other uniqueness of this research is a chosen analysis technique, CHAID. In the analysis of satisfaction, this technique is relatively unusual. The main reason we chose this technique is because we want to know if Syrians and locals are different in terms of housing satisfaction. In a similar vein, to the best of our knowledge, this study is one of the first studies conducted comparative perspective and used CHAID analysis method on studying residential satisfaction regarding forced-relocation context.

CHAID analysis reveals that Locals and Syrian refugees are diverse in overall residential satisfaction. Although the degree of satisfaction with living environment is low in general, the rates of Syrian refugees with high levels of satisfaction are greater than for locals. This figure is consistent with the earlier studies on immigrant as well as international-migrant satisfaction assessments in the case of European cities. Besides, it is uncommon that subjective data based on respondents' assessment of their satisfaction with the neighbourhood's social and physical environment and housing have no effect on overall residents' satisfaction. But objective, actual data regarding the dwelling and the neighbourhood are effective in terms of satisfaction levels. Detailed analyses should be done for the sub-qualitative groups of Locals and Syrian refugees.

We think that the findings of the study will help to re-examine present integration strategies in Turkey, pertaining to the re-settlement concerns. In the bottom line, the nationality, being Local and/or Syrian refugee, directly related to the socio-cultural identities of residents, made difference on overall residential satisfaction in the current study. Amongst the key topics of the future research will be issues such as the way in which practices of living together in the same area work in both communities, their views on each other and how the changes in these perceptions are reflected in living space dynamics. As a result, future research must take it into account.

Acknowledgement

References

Amerigo, M., & Aragones, J. I. (1997) A Theoretical and Methodological Approach to the Study of Residential Satisfaction. Journal of Environmental Psychology, 17, 47–57. https://doi.org/10.1006/jevp.1996.0038

Barreira, A. B., Agapito, D., Panagopoulos, T. & Guimarães, M.H. (2017) Exploring residential satisfaction in shrinking cities: A decision-tree approach, Urban Research & Practice, 10 (2), 156-177. https://doi.org/10.1080/17535069.2016.1179784

Biswas B, Ahsan MN, Mallick B (2021) Analysis of residential satisfaction: An empirical evidence from neighbouring communities of Rohingya camps in Cox's Bazar, Bangladesh. PLoS ONE 16(4): e0250838. https://doi.org/10.1371/journal.pone.0250838

Buys, L., & Miller, E. (2012) Residential satisfaction in inner urban higher-density Brisbane, Australia: Role of dwelling design, neighbourhood and neighbours (Vol. 55, pp. 319–338). https://doi.org/10.1080/09640568.2011.597592

Chen, L., Zhang, W., Yang, Y., & Yu, J. (2013) Disparities in residential environment and satisfaction among urban residents in Dalian, China (Vol. 40, pp. 100–108). https://doi.org/10.1016/j.habitatint.2013.03.002

Chen, Y., Dang, Y. and Dong, G. (2020) An investigation of migrants' residential satisfaction in Beijing. Urban Studies, 57 (3). pp. 563-582.

Dekker, K., de Vos, S., Musterd, S., & van Kempen, R. (2011) Residential satisfaction in housing estates in European cities: A multi-level research approach (Vol. 26, pp. 479–499). https://doi.org/10.1080/02673037.2011.559751

Diaz-Serrano, L., & Stoyanova, A. P. (2010) Mobility and housing satisfaction: An empirical analysis for 12 EU countries. Journal of Economic Geography. https://doi.org/10.1093/jeg/lbp045

Elsinga, M., Hoekstra, J. (2005) Homeownership and housing satisfaction. Journal of Housing Building Environment. 20, 401–424. https://doi.org/10.1007/s10901-005-9023-4

Francescato, G., Weidemann, S., & Anderson, J. R. (1989) Evaluating the Built Environment from the Users' Point of View: An Attitudinal Model of Residential Satisfaction (pp. 181–198). https://doi.org/10.1007/978-1-4899-3722-3_14

Galster, G. (1987) Identifying the correlates of dwelling satisfaction: an empirical critique. Environment and Behavior, 19(5), 539–568. https://doi.org/10.1177/0013916587195001

Galster, G., & Hesser, G. (1981) Residential satisfaction. Environment and Behavior, 13(6), 735–758.

Gan, X., Zuo, J., Ye, K., Li, D., Chang, R., Zillante, G. (2016) Are migrant workers satisfied with public rental housing? A study in Chongqing, China, Habitat International, 56, 96-102. https://doi.org/10.1016/j.habitatint.2016.05.003.

Gür, M., Murat, D. & Sezer, F. (2020) The effect of housing and neighbourhood satisfaction on perception of happiness in Bursa, Turkey. Journal of Housing and the Built Environment. 35. 10.1007/s10901-019-09708-5.

Haliloğlu Kahraman, E., (2021) Subjective evaluations of Syrian refugees on residential satisfaction: An exploratory study in an ethnic enclave in Turkey, Journal of Housing and the Built Environment. 14. https://doi.org/10.1007/s10901-021-09867-4

Hipp, J. R. (2009) Specifying the determinants of neighbourhood satisfaction: A robust assessment in 24 metropolitan areas. Social Forces, 88(1), 395–424. https://doi.org/10.1353/sof.0.0239

Hur, M. &, Morrow-Jones, H. (2008) Factors that influence residents' satisfaction with neighborhoods. Environment and behavior. 40(5):619–35.

Huang, X., He, D., Tang, S., & Li, X. (2020) Compensation, housing situation and residents' satisfaction

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

with the outcome of forced relocation: Evidence from urban China (Vol. 96, p. 102436). https://doi.org/10.1016/j.cities.2019.102436

Huang, Z., Du, X., & Yu, X. (2015) Home ownership and residential satisfaction: Evidence from Hangzhou, China (Vol. 49, pp. 74–83). https://doi.org/10.1016/j.habitatint.2015.05.008

Ibem, Eziyi Offia, & Aduwo, E. B. (2013) Assessment of residential satisfaction in public housing in Ogun State, Nigeria. Habitat International, 40, 163–175. https://doi.org/10.1016/j.habitatint.2013.04.001

Kale, A. (2019) Building attachments to places of settlement: A holistic approach to refugee wellbeing in Nelson, Aotearoa New Zealand. Journal of Environmental Psychology, 65(November 2018), 101315. https://doi.org/10.1016/j.jenvp.2019.101315

Lewicka, M. (2011) Place attachment: How far have we come in the last 40 years? Journal of Environmental Psychology, 31(3), 207–230. https://doi.org/10.1016/j.jenvp.2010.10.001

Li, S. M., Zhu, Y., & Li, L. (2012) Neighborhood type, gatedness, and residential experiences in Chinese cities: A study of Guangzhou (Vol. 33, pp. 237–255). https://doi.org/10.2747/0272-3638.33.2.237

Li, X., van Ham, M., & Kleinhans, R. (2018) Understanding the Experiences of Relocates during Forced Relocation in Chinese Urban Restructuring. Housing, Theory and Society, (10140). https://doi.org/10.1080/14036096.2018.1510432

Lovejoy, K., Handy, S., & Mokhtarian, P. (2010) Neighborhood satisfaction in suburban versus traditional environments: An evaluation of contributing characteristics in eight California neighborhoods (Vol. 97, pp. 37–48). https://doi.org/10.1016/j.landurbplan.2010.04.010

Lu, M. (1999) Determinants of Residential Satisfaction: Ordered Logit vs. Regression Models. Growth and Change, 30(2), 264–287. https://doi.org/10.1111/0017-4815.00113

Mohit, M. A., Ibrahim, M., & Rashid, Y. R. (2010) Assessment of residential satisfaction in newly designed public low-cost housing in Kuala Lumpur, Malaysia. Habitat International, 34(1), 18–27. https://doi.org/10.1016/j.habitatint.2009.04.002

Özkan, Z., Ergün, N., & Çakal, H. (2021) Positive versus negative contact and refugees' intentions to migrate: The mediating role of perceived discrimination, life satisfaction and identification with the host society among Syrians refugees in Turkey. Journal of Community and Applied Social Psychology. 31:438-451. https://doi.org/10.1002/casp.2508

Posthumus, H., Bolt, G., & Van Kempen, R. (2014) Victims or victors? The effects of forced relocations on housing satisfaction in Dutch cities. Journal of Urban Affairs, 36(1), 13–32. https://doi.org/10.1111/juaf.12011

Ren, H., & Folmer, H. (2017) Determinants of residential satisfaction in urban China: A multi-group structural equation analysis (Vol. 54, pp. 1407–1425). https://doi.org/10.1177/0042098015627112

Şafak-Ayvazoğlu, A., Kunuroğlu, F., Yağmur, K. (2021) Psychological and socio-cultural adaptation of Syrian refugees in Turkey. International journal of Intercultural Relations. 80, 99-111. https://doi.org/10.1016/j.ijintrel.2020.11.003

Tao, L., Wong, F. K W., & Hui, E. C. (2014). Residential satisfaction of migrant workers in China: A case study of Shenzhen. Habitat International. 42:193–202.

Temelová, J., & Dvořáková, N. (2012) Residential satisfaction of elderly in the city centre: The case of revitalizing neighbourhoods in Prague. Cities, 29(5), 310–317. https://doi.org/10.1016/j.cities.2011.11.015

Tiltnes, Å. A., Zhang, H., & Pedersen, J. (2019) The living conditions of Syrian refugees in Jordan. Fafo.

TURKSTAT. (2019) Address Based Population Registered System Population Statistics. Ankara, Turkey.

United Nations. Department of Economic and Social Affairs. Population Division. (2000) Charting the progress of populations. New York: United Nations

van Assche, J., Haesevoets, T., & Roets, A. (2019) Local norms and moving intentions: The mediating role of neighborhood satisfaction. Journal of Environmental Psychology, 63(March), 19–25. https://doi.org/10.1016/j.jenvp.2019.03.003

Wang, F., & Wang, D. (2020) Changes in residential satisfaction after home relocation: A longitudinal study in Beijing, China. Urban Studies, 57(3), 583–601. https://doi.org/10.1177/0042098019866378

Wijegunarathna, E. E., Wedawatta, G., Prasanna, L. J., & Ingirige, B. (2018) Long-term satisfaction of resettled communities: An assessment of physical performance of post-disaster housing. Procedia Engineering, 212(2017), 1147–1154. https://doi.org/10.1016/j.proeng.2018.01.148

Winter, E. W.& Morris, M. (1975) A Theory of Family Housing Adjustment. Journal of Marriage and Family, Vol. 37(1), 79-88.

Zanuzdana, A., Khan, M., & Kraemer, A. (2013) Housing Satisfaction Related to Health and Importance of Services in Urban Slums: Evidence from Dhaka, Bangladesh. Social Indicators Research, 112(1), 163–185. https://doi.org/10.1007/s11205-012-0045-5

Zenker, S., & Rütter, N. (2014) Is satisfaction the keyα the role of citizen satisfaction, place attachment and place brand attitude on positive citizenship behavior. Cities, 38, 11–17. https://doi.org/10.1016/j.cities.2013.12.009

Zhan, D., Kwan, M. P., Zhang, W., Fan, J., Yu, J., & Dang, Y. (2018) Assessment and determinants of satisfaction with urban livability in China (Vol. 79, pp. 92–101). https://doi.org/10.1016/j.cities.2018.02.025

European Network for Housing Research

Between Constraints Management and Daily Comfort: Domestic Daily Life Changes and New Uses in Times of Confinement in France and Quebec

Nadine Roudil
École Nationale Supérieure d'Architecture de Paris Val de Seine, Paris, France
Centre de Recherche sur l'Habitat-UMR CNRS 7218 LAVUE
e-mail: nadine.roudil@paris-valdeseine.archi.fr

Hélène Bélanger
Département d'études urbaines et touristiques, Université du Québec à Montréal, Montréal, Canada
e-mail: belanger.helene@uqam.ca

Abstract

The actual pandemic situation has highlighted (new) uncertainties and instabilities in residential environments. The confinement measures adopted in France and in the province of Québec (Canada), in response to the sanitary situation, was an exceptional moment of constraints' adaptation for households, where the dwelling was brought back at the center of the way of living. While taking into account the diversity of living environments and household composition, this paper examines how confinement measures in France and in the province of Québec (Canada), have been both an unprecedented moment of constraint management (institutional; domestic with sometimes conflicting relations between spouses, parents/children, or other members of the household; transformation in the uses and of domestic spaces; imposition of teleworking and homeschooling; etc.), but also an opportunity to develop forms of domestic comfort (unhindered consumption; transformation of inhabited space; new forms of sociability; reduction of professional and travel constraints; redistribution of domestic time between spouses; time for oneself, etc.).

This paper presents the results of the "Living in Confinement" exploratory research, based on a mixed methods approach including a quantitative study (web-based questionnaire) and a qualitative study (30 semi-structured interviews per geography) carried out between March and May 2020 in France and in Quebec. Both cases used the same protocol in order to identify the effects of confinement measures on households' domestic practices, from an individual perspective, in France and in Quebec.

Keywords: Living arrangements, households, domestic practices, comfort, constraints management

FIRST DRAFT – DO NOT QUOTE WITHOUT AUTHORS' AUTHORIZATION

March 2020. French and Quebec (Canada) populations are suddenly in confinement, as of 43% or the world population. In only a few hours, the dwelling became the space where one has to entertain, feed, study, work of face unemployment while taking care of children and teenagers whose schooling in now done from home. This unprecedented situation, to dwell inside one's housing, became the norm under the threat of Covid-19 which appeared a few months earlier in the province of Hubei in China. Thus, it was 8,5 million Quebecers and 67 million French who withdraw themselves into their domestic space to protect themselves and stem the spread of the virus. This paper aims to characterize daily domestic life in France and in the province of Quebec during the first confinement.

In France and in Quebec, the confinement was taken in charge by public authorities whose actions were to reduce and frame people's access to public spaces. In both cases, frontiers were closed, nonessential traveling outside the country was forbidden and going outside one's dwelling and traveling between regions were strictly regulated. Only essential services were authorized (i.e. grocery stores, drugstores, food processing industries, transport industries, emergency healthcare, …). People could leave their house only to work in essential services, shop for basic needs, go to a medical appointment, practice a physical activity individually or for imperative family reasons. Exceptional schemes were put in place on both sides of the Atlantic Ocean. In France, individuals needed to obtain (by autodeclaration) an authorization for any movement or travel. In Quebec, people faced the risk of roadblocks at the administrative boundaries between regions with patrollers having the power to verify the legitimacy of movements between regions. In both France and Quebec, confined population agreed to withdraw into the domestic space and to accept this protection regime for fear of the disease of this major health crisis, which was marked, in a few months, by more than 411,000 deaths and 7 million infected individuals worldwide.[1]

For reasons of collective utility, social relations were and still are transformed, managed, and supervised by public authorities/police control, from the place of residence, by restrictive instructions. Living in the city meant (and still means) being governed by injunctions to respect the distance imposed by "barrier gestures". Populations were invited to execute these barrier gestures, and to accept that the so-called state of sanitary emergency laws (or decree in the case of Quebec) pushes through freedom of movements – and sociability modes generated by these movements – under the control of state agents. By inaugurating, both in France and in Quebec, a strict regime hindering the expression of sociability, the pandemic management established a supervision framework of the populations by public authorities.

During the first confinement, "forms of government of people" developed (Rumpala, 1999, p. 602 – free translation), legitimizing a process of behaviors' standardization (Reigner, 2015; Roudil, 2015; Valégéas, 2016). In result, "good" behaviors were valued while bad

---

[1] The last figures are impressive with 4,461,431 deaths and 213,795,270 infected individuals worldwide according to AFP, based on official numbers on August 26th.

ones, marked as deviants, were disqualified (Becker, 1985). The modus operandi consists in asserting individual responsibility in the existence of the pandemic which has become a public problem (Rumpala, 2009).

To legitimize and "intervention on behaviors" (Dubuisson-Quellier, 2016, p. 15 – free translation) and to limit the right to the city, understood as more than the simple right of access (Harvey, 2008), thus, as a right to meet and to gather (Lefebvre, 1968), the pandemic brought to reconsider the ways to dwell. If dwelling is reduced to the question of housing (Ségaud, 2010), then it transforms the dialectic of the inside and the outside considered as a "means of deploying one's world" (Paquot, 2005 – free translation).

Nonetheless, by living in a crisis, the confined population took up the issue of locking themselves on their own, from their own "orders of justifications (Morel-Brochet and Ortar, 2014). The Covid-19 crisis thus necessarily slips into the uniqueness that binds individuals to what makes a home (Serfati-Gazon, 2003).

The purpose of this paper is to present the relationship of people who experienced the pandemic in France and in Quebec to the institutional confinement instructions between March and June 2020. This relationship is complex and refers on both sides of the Atlantic to similarities and differences. It requires questioning the effects of the health crisis on housing conditions from the point of view of the confined populations and revealing their modes of sociability during that time. Our hypothesis is that the management of the Covid-19 crisis, in France and in Quebec, lead to a policing of social relations. This policing transforms populations' relationship to institutions as much as it called for adaptation, not as a simple invitation to adjustment, but rather as an incentive to be part of a "transformative" dynamic (Simonet, 2015, p. 53). This moment of adaptation experienced on a global scale would be based on "an acceptance of constraints and would call for voluntary modifications of individual and collective behavior" (Moulin, 2010, p. 313 – free translation). The capacity of the populations in France and in Quebec to adapt to the pandemic situation could constitute an overturn of the way of considering the fight against future contemporary crisis, pandemic, and climatic crises, by providing a fertile ground for the standardization of behaviors (Roudil, 2018).

This context raises four sets of questions.

First, how "barrier gestures" and the various restrictions specific to the pandemic in France and Quebec were welcome? How did the populations surveyed adapt to the constraints? What effects the instructions had on lifestyles and interpersonal relationships?

Second, what were the main characteristics of the experience of forced confinement in the two countries? How different was the experience of forced confinement depending on social class and place of residence? Has it given rise to specific modes of appropriation of housing and reorganization of space? Has the confinement lead to temporary occupations mode, affinity occupation mode, returns to the parental home revealing the unprecedented constraint experienced? What has been the effect of work interruption and children's schooling interruption in the space where domestic activities usually take place?

Third, has the constraint to stay at home and to limit daily relationships to members of the family unit (or recomposed group for the occasion) trigger new forms of relationships

between people confined together? How were friendly sociability and romantic relationships characterized by the limitation of their expression? Have existing solidarities been put to the test and have new ones come to light?

Finally, what in this unprecedented moment is likely to be replicated in a new crisis and sustained once this crisis will be over?

These sets of questions were explored in the mixed-method investigation carried out between March and June 2020 in France and in Quebec. Both cases used the same protocol based on an online questionnaire and semi-structured interviews in order to identify the effects of confinement's constraints on the domestic practices of households in France and in Quebec. The next sections of this paper will detail the methodology followed by the first results of the quantitative survey.

METHODOLOGY

This research project is based on a mixed-method approach. The first method was an online questionnaire survey launched from March 23 to May 11, 2020, in France and from mid-April to mid-June 2020 in Quebec[2].

The sample was formed from a variety of techniques: posting in social media, posting in the university media, and snowball method from personal and professional contacts of members of the research team. The questionnaire was intended to adults only (and only one per household) occupying a dwelling targeted by the confinement instructions. The questionnaire, of more than 70 questions, took about 20 minutes to complete, and was divided into four sections: the household's situation at the time of confinement; the spatial description of the containment housing; domestic practices in a confinement situation (distribution of daily and household tasks; use of rooms and exteriors, movement outside), daily activities in a confinement situation (leisure relaxation, teleworking, home schooling). In France, 4,500 respondents answered the questionnaire, from all sectors of housing, and all city size and departments of metropolitan France are represented. In Quebec, 476 respondents answered the questionnaire[3], mostly from metropolitan regions of Montreal, but also from different regions of the province.

At the end of the questionnaire, respondents were asked if they would agree to participate in the second phase of the investigation, semi-directive interviews. Thirty interviews were done in France, 27 in Quebec. The interviews, lasting between 60 and 90 minutes, were audio-recorded and transcribed. The interview, divided in five parts, was used to explore more deeply some topic of the questionnaire survey. The topic discussed were: 1) the accommodation where the respondent was confined; 2) the daily life during confinement; 3) the organization of and in the space of the dwelling where the respondent was confined; 4) the relation inside-outside during confinement; and 5) the management of the crisis by

---

[2] The time lag is due to a later inclusion of Quebec cases and delays associated with the ethical certification request.

[3] Respondents could choose not to answer certain questions. This was the case for 100 of them in Quebec.

public authorities. At the end of the interview, respondents were also asked to take digital photos of the dwelling where they were confined.

FIRST RESULTS

Sample description

The population surveyed in France and in Quebec is overwhelmingly made up of women (70.8% and 75.6% respectively). With a questionnaire linked mostly to the assessment of the confinement situation in the domestic sphere, the gender perspective will be taken into account in the analysis of the results.

Most of the respondents are confined with a spouse, with or without children (58.3% or respondents in France, 55% in Quebec) which reduces the situation of isolation during the confinement. At the opposite, 33% of the respondents in France and 37,3% in Quebec declared themselves to be single, widowed or separated without children, thus are living *a priori* alone. This characteristic will be taken into account when it comes to identifying the households' level of concern regarding the health crisis.

One other bias related to the sampling techniques used is that the sample is rather young in comparison of the entire population in France and in Quebec. In France, 63.4% of respondents are under 45 years old, 42.3% under 35 years old. At the other end of the age pyramid, only 6,7% of the respondents in France are over 65 years when about a quarter of the French population is 60 years and over. In the case of Quebec, although the age groups were not divided the same way, the same observation applies (55,5% of the sample has less than 40 years of age; 73,9% less than 50 years and only 15.1% has 60 years or more). With such a young sample for both cases, the reality of the loss of sociability linked to withdrawal into the domestic sphere may have been perceived as more difficult for the young respondents presumed to be more active in extra-domestic relationships. In other words, the population surveyed could appear to have a more difficult time of deprivation that the general population.

A sample composed mostly of young women… with a high level of education which detains for most of them a superior education diploma in France (80,9%) and in Quebec (82.1%)[4]. This level of education also reflects on their work as professionals and on their employment situation. In France, most of the respondents are full-time employees (53.3%). If we exclude students, respondents whose status may be more precarious (part-time employees, self-employed, intermittent, or temporary workers) represent 19.1% of the respondents who nonetheless bring together 862 French households. In the case of Quebec, full-time employees represent the largest share of respondents, but to a lesser extent than in France. There is a greater proportion of part-time workers which could indicate precariousness.

---

[4] Education systems are different between France and Quebec, this figure should not be considered as a clear comparison.

Residential Situation

No questions were asked about the main residence for those who did not confine in their main residence. This is a moderate bias as only 16.8% of households of the French survey confined somewhere else (11.2% in Quebec). For the overwhelming higher proportion of respondents, they confined in their main residence. If we add to this, for France, that 17.5% of households that have moved to confine themselves are students, where the return to the parents' house is seasonal, it underscores the particularity of their status, questions about the confinement residence will enable the main residence to be characterized. In this context, it will be possible to consider the extraordinary nature of the confinement compared to the ordinary nature of everyday life in the same accommodation.

Table 1: Confinement dwellings

	France	Quebec
Main residence	84.3%	89,8%
Secondary residence	2.3%	1,3%
Spouse residence	0.1%	1,3%
Friends residence	2.1%	
Parents residence	10.7%	5,7%
Other or NA	0.5%	2,0%
TT	**100.0%**	**100.0%**

Thus, 84.3% of French respondents confined themselves to their main residence (89.8% in Qc), 16.8% mostly went to the residence of relatives or friends (10.2% in Quebec, mainly in parents). One interesting observation for France, secondary residence didn't appear to have been favored by the respondents (2.3%). In 2017, according to INSEE, 9.5% of French people have a second home, 10% in 2020. It is likely that other parameters have initiated the displacement including the sociability provided by the place of confinement and the available space.

Most respondents were confined into collective housing (52.6% for France; 52.4% for Quebec) and tend to own their dwelling (46.3% for France; 43.9% for Quebec) which is not representative of France's profile. According to INSEE, individual housing in France represents most of the housing stock (55%) and 58% of households own their main residence. Data confirmed also that confinement occurred in rather spacious dwelling for many respondents: dwellings were of 100m2 or more for more than a third of French respondents, and for more than half of them in the case of Quebec.

Crossing data from dwelling types and their size, showed spatial conditions are rather good for confinement which further attests the high socioeconomic status of households surveyed, which is also supported when comparing the reality of household size and dwelling size that doesn't indicate overcrowding issues. This observation applies to both cases, although their housing market is different and differences in results.

Table 2: Dwelling and household size

		1 person	2 persons	3 persons	4 persons	5 persons	6 pers +	TT
More than 200 m2	France	1.5%	2.4%	2.3%	1.8%	3.0%	61.3%	3.5%
	Qc	5.4%	5.9%	13.3%	20.0%	15.2%	14.3%	10.8%
100 – 200 m2	France	97.0%	29.2%	18.5%	18.9%	28.3%	36.6%	28.3%
	Qc	21.6%	35.3%	48.0%	60.0%	45.5%	28.6%	41.1%
70 – 100 m2	France	0.0%	4.2%	77.9%	79.3%	3.7%	0.0%	25.9%
	Qc	18.9%	21.0%	17.3%	11.1%	18.2%	0.0%	17.7%
50 – 70 m2	France	0.0%	36.3%	0.0%	0.0%	0.0%	0.0%	21.4%
	Qc	24.3%	20.2%	9.3%	2.2%	3.0%	0.0%	13.3%
40 – 50 m2	France	0.0%	12.0%	0.0%	0.0%	0.0%	0.0%	7.1%
	Qc	0.0%	2.5%	1.3%	0.0%	0.0%	0.0%	1.3%
20 – 40 m2	France	0.0%	14.5%	0.0%	0.0%	0.0%	0.0%	8.6%
	Qc	16.2%	4.2%	1.3%	2.2%	3.0%	0.0%	4.4%
Less than 20 m2	France	1.5%	1.4%	1.3%	0.0%	1.1%	0.0%	1.1%
	Qc	2.7%	2.5%	1.3%	0.0%	0.0%	0.0%	1.6%
Unknown	France	0.0%	0.0%	0.0%	0.0%	63.9%	2.2%	4.0%
	Qc	10.8%	8.4%	8.0%	4.4%	15.2%	57.1%	9.8%
	TT	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Finally, the population surveyed in France and in Quebec is overwhelmingly urban. In France, the majority (55%) live in the three most populated and most urbanized regions of France. First of all, Île-de-France, 37%, (including Paris and its region), the Auvergne Rhône Alpes region, 11% of respondents, (AURA) with Lyon and its metropolis, the second largest city in France then also including Saint-Etienne, Grenoble and Clermont Ferrand which are among the largest French cities. Without forgetting the Provence Alpes Cote-d'Azur region, also very urbanized (7%) from Marseille to Menton, all along the coast. In the case of Quebec, the vast majority (71.3%) live in the Metropolitan region of Montreal, and another 9.1% in the metropolitan region of Quebec. Nevertheless, in France, the number of respondents living in medium-sized towns (26.9%) and in small towns (16.8%) is appreciable. It makes it possible to introduce the variable of rurality in the assessment of confinement conditions.

Confinement situation

The reality of moving

In the case of France, 16.8% (which represents 758 out of 4,513 respondents) had moved. In the case of Quebec, it is 10.3%, which represents only 40 respondents. And who are the households that moved in both cases? They are mostly full-time employees and students; a tiny fraction is part-time workers and retirees.

Table 3: Employment status for respondents who moved

	France	QC*
Full-time employee	51.5%	23.1% [9]
Part-time employee	7.9%	28.2% [11]
Students	17.5%	30.8% [12]
Retiree	8.2%	7.7% [3]
Self-employed	6.2%	0.0% [0]
Unemployed	3.7%	0.0% [0]
PhD candidate	0.7%	NA
At home	1.1%	0.0% [0]
Contractual	1.7%	2.6% [1]
Other or NA	1.6%	7.7% [3]
TT	**100.0%**	**100.0%**

*with only 40 respondents in the case of Quebec, data are also presented in numbers in brackets

Age distribution is very similar between the two samples distributions. Thus, the majority of respondents are young (62.2% are less than 45 years for France; 72.5% [29 of 40 respondents] for Quebec. In the case of France, all age groups of working people are affected almost equally. Moreover, with the bias identified previously, professionals are overrepresented with more than half of respondents.

If the Metropolitan region of Montreal in Quebec generated most displacements, mobility was not done exclusively for the most populous region of Paris in the case of France. Households from all regions moved, but only 10% of displacements went to the Parisian suburbs, and a few households came to Paris itself. And clearly, French households moved to confine themselves in large dwellings of more than 200m2 and between 100 and 200 m2. Although the limits of Quebec datasets, the same observation can be made with more than half the respondents who moved to large housing.

Table 4: Size of dwellings where respondents moved

	France	Qc
More than 200 m2	12.8%	15.2% [5]
100 – 200 m2	64.0%	36.4% [12]
70 – 100 m2	7.7%	15.2% [5]
50 – 70 m2	6.2%	9.1% [3]
40 – 50 m2	1.2%	3.0% [1]
20 – 40 m2	1.8%	3.0% [1]
Less than 20 m2	5.0%	0.0% [0]
Unknown	1.3%	18.2% [6]
TT	**100.0%**	**100.0% [33]**

This search for large available spaces is a characteristic for all moves. The goal is to move into a larger dwelling. This includes intramural moving, other towards the city of Paris and even from the provinces and abroad to Paris.

Table 5: Dwelling size by geography for respondents who moved

	Paris to province	Province to province	Suburb to suburb	Inside city	Paris suburb to province	Paris to suburb	Paris to Paris	Province to suburb	PRovince to abroad	Province to Paris	Abroad to Paris	Abroad to Province	Abroad to suburb	TT
More than 200	19.7%	10.4%	7.1%	0.0%	13.5%	6.5%	4.9%	0.0%	0.0%	12.5%	0.0%	20.0%	0.0%	13.2%
100 - 200m2	65.5%	67.4%	57.1%	100.0%	73.0%	51.6%	43.9%	0.0%	0.0%	41.7%	33.3%	45.0%	0.0%	62.2%
70 - 100m2	5.0%	9.6%	14.3%	0.0%	5.4%	14.5%	7.3%	0.0%	0.0%	12.5%	33.3%	10.0%	100.0%	8.5%
50 - 70m2	4.2%	5.9%	7.1%	0.0%	5.4%	9.7%	4.9%	0.0%	0.0%	12.5%	33.3%	10.0%	0.0%	6.0%
40 - 50m2	0.0%	0.4%	0.0%	0.0%	0.0%	11.3%	2.4%	0.0%	0.0%	8.3%	0.0%	0.0%	0.0%	1.5%
20 - 40m2	1.3%	1.5%	0.0%	0.0%	0.0%	1.6%	9.8%	0.0%	0.0%	8.3%	0.0%	15.0%	0.0%	2.4%
Less than 20m2	3.4%	2.6%	14.3%	0.0%	2.7%	1.6%	24.4%	100.0%	100.0%	4.2%	0.0%	0.0%	0.0%	4.6%
NR	0.8%	2.2%	0.0%	0.0%	0.0%	3.2%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
TT %	100	100	100	100	100	100	100	100	100	100	100	100	100	100

One representation, very present in the different media in both side of the Atlantic Ocean, which needs to be deconstructed is the appeal of the rural environment and the countryside. The vast majority of the moves were done so for large towns between 500,000 and 100,000 inhabitants, not to mention the attractiveness of metropolises for 16.4% of respondents. Thus, it is possible to posit the hypothesis that more than the urban or rural environment, it is the quality of housing in general and its size that frame the mobility decision. The same can be said for Quebec, where only a minority (15 respondents over 40) moved to a small town or a rural area.

Thus, to confine oneself, the massive choice of single-family homes was made in France, which often has a yard. In this context, given the urban composition of cities, it is very likely that the choice to confine oneself to a house at the urban outskirts of large cities was the main choice.

In general, regarding the confinement, with whom have French households confined themselves and what was their conditions?

The size of the confinement units

In France, dwellings are classified according following Carez Law since 1997. Thus, the letter "T" refers to "type of dwelling". The number associated with the letter indicates the number of main rooms excluding the kitchen, the bathroom and toilet. Thus, a T1 dwelling comprises one main room which acts as both as a living room and a bedroom. The same logic applies to T2, T3, … Normally, except in the case of specific renovation, all T2 dwellings have a separate kitchen, a bathroom, a washroom and a separate toilet or not. Thus, the population surveyed, and confinement was mostly in large dwellings (57%)

which correspond the sample bias since CSP+ are overrepresented, knowing that 80% are confined in its main residence, in sum, confined people are rather well housed with a good level of comfort as previously mentioned.

Comfort in Confinement

The data previously presented indicate that confinement was comfortable for respondents. They indeed confirmed it with 67.1% of French respondents considering the confinement situation as comfortable as usual (78% for Quebecers) and even 19.7% considered it more comfortable than usual (13.2% for Quebecers).

One interesting dimension of this comfort is that the majority of respondent (whom are women), indicated that daily housework didn't change (61.8% for French; 69.7% for Quebecers). In our point of view, this doesn't mean it is a comfortable situation, even more because these same individuals indicate that household chores increased, probably because all meals were taken home during confinement. Despite the increasing workload, it appears that one in five spouses (a bit less for Quebec) was more proactive in daily housework. One characteristic that may be part of the explanation is that most respondents (79.7% for France; 84.8% for Quebec) did have access to a space of their own. The question of interest is to better understand the experience of the remaining respondents. It will be interesting to profile the remaining 15 to 19% who do not have access of a space of their own.

One dimension explaining the comfort lies in households' electronic equipment for work, leisure and communication, such as computers, smart phones of pads. Thus, parameters are brought together to indicate that comfort in confinement is associated with consumption of electronic devices, which makes confinement acceptable for many who can compensate for the constraints of the confinement.

Table 6: Availability of electronic devices

	Computers		Smart phones		Pads	
	France	**Qc**	**France**	**Qc**	**France**	**Qc**
0	1.2%	2,00%	2.2%	5.6%	45.4%	36,00%
1	20.8%	15.9%	20.4%	14.9%	37.6%	34.5%
2	33.5%	43.2%	39.7%	45.3%	11.2%	22.1%
3	22.1%	20.5%	17.8%	18.7%	2.2%	5.8%
4	12.6%	11.1%	12.1%	8.1%	0.6%	1,00%
more than 4	8.9%	7.3%	6.8%	7.3%	-	0.5%
Unknown	1.00%	-	1.00%	-	2.9%	-
TT	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Confinement as a constraint situation

In France as in Quebec, the situation of constraint has three dimensions. First, the major constraint is embodied by public action which regulates or even prohibits mobility outside the house by imposing a curfew.

Instruction Reception and Constrain Acceptance

In France in general, the health situation gave rise to concern among the population surveyed. Only about 20% of the respondents declared having little worry, which is about the same proportion in the Quebec survey.

Likewise, respondents declared to be generally satisfied with the way in which the French government was handling the crisis with 56.9% of them founding appropriate or adapted to the situation (73.3% in Quebec). But for 21.1% of the respondents, public actions were not restrictive enough and therefore inconsistent (only 4.05% in Quebec). In this sense, it is possible to hypothesize that people concern helped the acceptance for the confinement situation, 78% founded it even necessary. Only a tiny minority find it too restrictive (5.2% in France; 6.5% in Quebec).

With this level of satisfaction, it is not surprising to find that people respect instruction and the call to stay at home. In terms of authorized outside of home movements, households regulate themselves. Two questions show that 16.6% of respondents indicate that they did not leave their house since the beginning of the confinement, a figure that is reduced to 8% when it comes to the frequency of exits. Moreover, the one-hour rule in France seems to have been respected for all types of outside movements by half the respondents who also indicate that they go alone despite not living alone for the majority of them.

At the housing scale, the respect of the sanitary instruction, undoubtedly favored by the fear of being sick, shows that 40.6% of respondents in France did not have any relationship with their neighbors (33.8% in Quebec). But for most of the respondents, they declare to have relationships with their neighbors on a regular basis. In France and in Quebec, therefore, sociability specific to confinement has developed despite the instructions at the level of buildings and neighborhoods.

Bringing all activities in the domestic sphere involved the reorganization of daily lives. In both France and Quebec, most of the work and schooling was done from home which, we hypothesize, was generating unprecedented daily stress. Households were required to home school their children based on instructions given by teachers. In France, this represents 37.3% of the respondents (less than 20% in Quebec). This unprecedented situation affected the respondent who were, for the vast majority working from home. In France, 1,363 respondents (30.2%) had to manage to work from home while homeschooling their children. The constraint in this context is twofold: to reconcile the expectations of an employer and that of teachers, the learning objectives in school subjects having remained the same.

However, the population concerned, both in France and in Quebec, by homeschooling was divided regarding it as a constraint. If 45.5% of French respondents considered that this was not a constraint (43.4% in Quebec), another 40% in France consider it as a constraint that was, for some important (9%) or even very important (3%). In this context, it should be noted that a large number of households refuse to comment on whether or not this is a constraint.

The constraint of taking care of children in general must be put into perspective by the level of autonomy of some groups, teenagers in particular. The French survey shows that for

30.9% of the respondents, children were autonomous enough (23.9% in Quebec), only engaging adults in an audit of school activities which may be similar to what was occurring on a daily basis prior the pandemic. But focusing on households with children who are dependent, i.e. 1,085 households (24% of the French survey population), the constraint seems at first glance rather well distributed between spouses. Nevertheless, most French respondents being women, and 21.8% of the responses insisting that it was the latter who oversaw taking care of the children in general, it is possible to think that there is an important gender dimension to these answers. Data is showing that respondents do take care more of children than their spouse. However, it should be highlight, as shown by the next table, that the confinement situation has undoubtedly forced male spouses to take care of their children. The situation documented by the survey in Quebec is similar.

Table 7: Responsibility of taking care of children

	France	Quebec
Respondent and spouse	57.90%	51.8% [43]
Respondent	21.80%	37.3% [31]
Spouse	4.00%	7.2% [6]
Other person confined	2.90%	2.4% [2]
Nobody	3.00%	1.2% [1]
NR	10.40%	--
TT	**100.0%**	**100.0% [83]**

Looking more specifically at "homeschooling", things are quite different. In France, women are generally more involved in this task. For the same reasons as above, the respondents to the questionnaire being 70% women, the first two lines of the table below undoubtedly concern them in a privileged way.

Table 8: Responsibility of homeschooling

FR	France	Quebec
Respondent and spouse	30.3%	20.5% [18]
Respondent	34.8%	40.9% [36]
Spouse	5.3%	5.7% [5]
Other person confined	3.2%	5.7% [5]
Nobody	18.9%	27.3% [24]
NR	7.5%	--
TT	**100.0%**	100.0% [88]

This gender division is clear when we cross the gender variable with "homeschooling", man being a clear minority in taking care of homeschooling as shown by the next table of the French survey. Data for Quebec are similar.

Table 9: Responsibility of homeschooling by gender of respondent

	Respondent	Respondant and spouse	Spouse	Other person	NR	TT
Women	88.6%	71.3%	88.4%	74.2%	69.0%	75.7%
Men	11.4%	28.7%	11.6%	25.8%	31.0%	24.3%
Total général	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Despite these clear figures, when the equity question is asked, most respondents considered it positively in France, but when the answers are crossed with gender, most respondents who do not find the situation equitable are women. In the case of Quebec, we cannot conclude with only 9 men in the sample who answer these questions.

Working From Home

As indicated earlier, the majority of respondents, both in France and in Quebec is concerned by full-time or part-time teleworking, depending on their professional status. In France, 86% of the respondents work from home, in Quebec, it is 68.3%. Despite the sanitary crisis, the workload remains the same or even increase for the majority of workers.

As indicated previously, most of the population surveyed in France is concerned by full-time or part-time teleworking, depending on the professional status of each. 86% of the population surveyed in France is therefore teleworking, 71.2% in Quebec.

Table 11: Workload for respondents

Workload	France	Quebec
As before the crisis	38%	43.3% [87]
Less than before the crisis	34%	28.9% [58]
More than before the crisis	28%	27.9% [56]
TT	**100.0%**	**100.0% [201]**

The increasing workload affects all types of employment situation. In the case of France, although all employees are affected by an increase of their workload, part-time employees are particularly vulnerable with compensation that does not correspond to the workload, with a confinement situation erasing the separation between the private sphere and employment. Besides, more than half of French respondents (75% in Quebec) attest the need of developing a specific time and/or space organization.

By crossing the assessment of the workload and the need for a specific organization to deal with it, it appears in the table below that 59% of French respondents (in greater proportion in Quebec) with a higher workload than usual had had to adopt a specific organization, either by isolating themselves or by having new working hours. The same situation applies for respondents who have kept the same workload as usual.

Whether in Quebec or France, it is nevertheless difficult to speak of an identical workload since the work environment is supposed to facilitate concentration to perform work tasks.

Calm, teamwork, but above all having as the only concern the tasks to be carried out is the core principle. It is clear that, at home, in a confinement situation, with the whole family having repatriated all of their activities in the house, the work situation is difficult. Thus, schedules are shifted in the evening for some of the respondents with children, the French employees also confide in working in dotted lines over a very large hourly amplitude.

BY WAY OF CONCLUSION

REFERENCES

Becker (1985), *Outsiders. Étude de sociologie de la déviance*, Paris, Métailié.

Dubuisson-Quellier (2016), « Introduction. Le gouvernement des conduites comme modalité d'intervention de l'État sur les marchés », in Dubuisson-Quellier S. (dir.), *Gouverner les conduites*, Paris, Presses de Sciences Po, p. 15-48.

Harvey, D. (2008). The Right to the City. *New Left Review*, 53:23-40.

Lefebvre, H. (1968). *Le droit a la ville*. Paris : Anthropos Paris.

Morel-Brochet and Ortar (2014), « Les modes d'habiter à l'épreuve de la durabilité », *Norois*, 231, p. 7-12.

Moulin (2010), « L'adaptation, un concept opportuniste ? Changements climatiques et santé publique », *Natures Sciences Sociétés*, 18 (3), p. 309-316.

Paquot, T. (2005). Habitat, habitation, habiter Ce que parler veut dire. *Informations sociales*, *123*(3), 48. doi: 10.3917/inso.123.0048

Reigner (2015), « Une gouvernementalisation néohygiéniste et néolibérale des conduites », in Boissonade J. (dir.), *La ville durable controversée. Les dynamiques urbaines dans le mouvement critique*, Paris, Petra, p. 171-195.

Roudil (2015), « La ville durable à l'épreuve de la sobriété. Le citadin entre injonction à "bien habiter" et normalisation des conduites en milieu urbain », in Hamman P., Christen G., Jehling M., Wintz M. (dir.), *Systèmes énergétiques renouvelables en France et en Allemagne, synergies et divergences*, Paris, Orizons, p. 95-115.

Roudil (2018), *De la ville sûre à la ville sobre : normalisation des conduites habitantes et fabriques de la ville,* Habilitation à Diriger des Recherches, Université de Strasbourg, Discipline CNU n°19, soutenue le 22 mai 2018.

Rumpala (1999), « Le réajustement du rôle des populations dans la gestion des déchets ménagers. Du développement des politiques de collecte sélective à l'hétérorégulation de la sphère domestique », *Revue française de science politique*, 49 (4-5), p. 601-630.

Ségaud (2010), *Anthropologie de l'espace. Habiter, fonder, distribuer, transformer*, Paris, Armand Colin.

Serfati-Garzon, P. (2003). Le Chez-soi : habitat et intimité. Dans M. Segaud, J. Brun et J.-C. Driant (dir.), *Dictionnaire critique de l'habitat et du logement* (p. 65-69). Paris : Armand Colin.

Simonet G. (2015), « Une brève histoire de l'adaptation : l'évolution conceptuelle au fil des rapports du GIEC (1990-2014) », *Natures Sciences Sociétés*, 3, p. 52-64.

Valégéas f. (2016), L'habitat durable contre la mixité sociale ? Production et réception des normes d'habiter dans les écoquartiers. Sciences de la Société, Presses universitaires du Midi, 98, pp.44-62

THE NEW LIFESTYLE AND PRIVACY DEMANDS IN
POST-CAPITALIST FAMILIES HOUSES

First Author

Janin Husaini - Eastern Mediterranean University, Faculty of Architecture, Famagusta, North Cyprus, e-mail: jeninhusseiny@hotmail.com

Second Author

Assoc. Prof. Dr. Afet Coşkun - Eastern Mediterranean University, Faculty of Architecture, Famagusta, North Cyprus, e-mail: afetceliker@gmail.com

Abstract

Throughout history, transformations in social, political, economic, and health situations have influenced the reformations in family structures that follow the changes in work positions of women and men, and have also determined each era's expected gender roles. In this regard, this qualitative exploratory study has examined the issue of gendered privacy within the plans of family houses starting from the 1930s and continuing until 2020, in order to trace the marks of social changes in family structures and the embedded gender roles that were reflected upon domestic spaces' spatial arrangement. The prime motive of the study was to provoke a discussion about home by speculating on the "Post-Capitalist Family House," as well as to define the new "life-from-home" lifestyle, which is assumed to demand different types of privacy between adults as a new productive way of living that can help people adapt to the ongoing uncertainties.

Keywords: privacy, post-capitalism, family house, spatial arrangement, gender roles.

Introduction

The world had a common traditional belief that there was no relationship between space and time. Time has always been used as symbolic evidence of "change" due to its dynamicity, while space was seen as static and "powerless". However, this belief did not last long, as, in physical science, a new concept of "space-time" has emerged by Hermann Minkowski (1908); that is a single notion which acknowledges the unity of space and time. (Augustyn, 2018) On this subject, Massey (2005) has suggested that space and time take parallel trajectories by arguing that time unfolds as "change" and space unfolds as "social interaction". These arguments and many others assure that the world humans inhabit is man-made and that every event occurs within the territories of "social reality"; this is to refer closely to the relativity theory where everything is not absolutely determined and thus supposing that the physical environment with its rules and regulations is vulnerable to errors, and its conditions and characteristics may not be applicable to all times. Accordingly, this study has based its argument on similar understanding which suggests that in times when life changes are evident worldwide –such as in the case of the current Coronavirus COVID-19 pandemic—space and time have to go hand in hand to represent the new life

transformations on the lived reality, by unfolding space (social interactions) through observing and evaluating changes of people's lifestyles that adapt to the global crisis and reflect those changes on the present environments, instead of only letting "time" to impose its modifications on the future.

Space was referred to in this study as an instrument for consciousness, action, and interaction. Domestic spaces, for instance, mirror the power dynamics between partners in a single household. Nonetheless, it is important to note that physical spaces do not initiate encounters or conflicts, thus, they are not powerful in and of themselves; they are the politics of space use that activate their ability to control and regulate social communications. (Lico, 2001) The architectural framing of spaces has been strongly based on patriarchy, where its accepted concepts work in seclusion inside a system that regulates power relations to authenticate or transmit societal values, and these imparted notions are also utilized within family residences to support the capitalist dominant powers. In a matter of fact, the family house might be considered as the primary basis for the capitalist societies' hierarchical structures. (Lico, 2001)

According to Loyd (1975), a house is a space that is commonly referred to as "feminine", this gendered notion emphasizes the complexity of a single-family home in satisfying and meeting the variations in identities, and the different needs and preferences of sexes. The structure of the nuclear family, for instance, is not only impacted by an individual's or group's intuitive thinking, but also—and foremost— by the global system that involves the economic and political forces. As a result, family structures have changed drastically throughout history as they have been affected by the common beliefs of each century; such as who should stay at home and who should depart for work, which again indicates that the sex roles are part of the social construction of reality, and these roles subsequently become part of one's identity-formation process. Furthermore, the home design, size, plan type, spatial organization of functions, interior features, privacy, and so on, have been converted to reflect the predicted familial structures that suit each era.

However, taking life today as a case, the current global crisis of (COVID-19) has forced a new global "work-from-home" lifestyle, and by that it has started to render new meanings and uses of home space. In this regard, this research's case study has focused on the effects of such large shift on the design of houses and the question of privacy, namely the gendered determinants of its degrees, meanings, and arrangement for men and women inside the domestic interiors since the twentieth-century and until today. Furthermore, this examination, along with the literature review have supported the main motivation of this study which was to provoke a discussion and to expand existing lines of thought concerning home, by speculating on and envisioning the "Post-Capitalist Family House".

The Social Interpretations of Space and Home

This section has established the theoretical framework for the study's broader meanings by identifying, unfolding, and gathering the possible social meanings of everyday experienced reality at various scales via the viewpoint of gender, which is to demonstrate its influence on many life meanings that were commonly agreed on and taken for granted without questioning what for.

Space, as defined by the Oxford English Dictionary, can be "an amount of an area or of a place that is empty or that is available for use". Based on the arguments of Henri Lefebvre (1974), space can be defined as a notion that has been socially produced by those who occupy it. He views space as something that can be produced and reproduced under the higher control or influence of the capitalist system. Space according to him has three main types; the absolute, the abstract, and the differential type. The latter type was defined as the space of freedom and resistance for the inhabitants away from the public judgments, this type of space initially relates to the public and urban spaces, however, its concept matches the study's essence of the interior environment where a similar capitalist order of power relations and resistance methods are being practiced within. (Winton, 2013)

The typical illusion of social space[1] is that its actuality is taken beyond our materialistic perception of the world, and so its true nature fades into a philosophical level of abstraction. Further, the issue of liberating space from unwanted attachments is addressed as space is unfolded. On this subject, Massey (2005) emphasizes that individuals should be completely conscious of how they think about space since it rules–to some extent– their attitudes, knowledge of life, and politics. According to her, space has two main invalid attachments; one is to tie it to time; if the unfolding of space's fundamental identity happens through the exploration of the codes of change in the present conditions, the future, then, will lose its freedom. It is a free and continuous production. Injecting time into space can activate its capacity for detached multiplicity. Despite the fact that space represents the social dimension of active simultaneous plurality, it is not restricted to human existence, it is part of the multiplicity correlation; while the other attachment is with it being conceived, still, in reference to several stereotypical associations. Grosz, E. (1995) connects to this issue by noting that there is an old link between the way space, time, and subjectivity are being portrayed. Similarly, Irigaray (1993) proposes a relationship between exteriority and interiority, claiming that space is seen as the presence of exteriority and time as interiority. This division of space-time relation has been explained as one among many other roots for the gendered understanding of the world, in which time represents the masculine introspective and conceptual interiority, whereas space is the feminine exterior; "woman is/ provides space for man, but occupies none herself". (Grosz, 1995; Massey, 2005) (See figure.1)
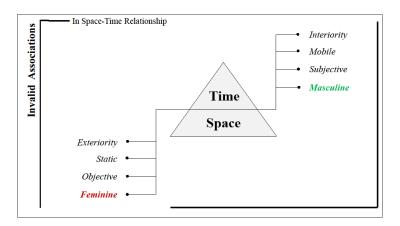

Figure 1: Space and time invalid associations.

---

[1] It refers to the collective use and perception of space by many social groupings. 'Social space is created by societies based on the spatial activities that exist inside them. (Carter, 2004, Oxford Reference)

These associations, however, not only affect the essential comprehension of space but are also embedded in the social concepts and use of the domestic space/home. Firstly, it is important to note that in this study, the term "home" refers to the conceptions, and views of the domestic space, whilst the term "house" represents its architecture. Home according to the Oxford English Dictionary can be defined as "The family or social unit occupying a permanent residence". Home has many definitions and significations that are attached to it. It was earlier reviewed by Gaston Bachelard who identifies the importance of the house in the details as well as the overall picture. The home, according to him, frames a sequence of pictures in the mind that give individuals an illusion or sensation of settlement. In another philosophical discussion, Bachelard was interested in connecting self to housing; he goes beyond the simple picture of a home to the actual tangible space, that he described as a zone for creativity, and people prefer it because of the association they establish with it which ties it to their core beliefs. (Bachelard, 1958; Winton, 2013) While Walter Benjamin has addressed the house as a "shell" in its most exaggerated sense. Back in time, the residential space was seen as a container for one's own self, enclosing the individual with his things to the greatest extent possible, much like a "compass case". These arguments and many others relate the importance of home mainly to its interiors. In this regard, Victoria Rosner (2008) has highlighted the importance of the interior and everyday activities; for her, the house's layout and walls –as borders—define, arrange, and draw on the social interactions between groups and their activities in capitalist ways within the home, and more significantly, she notes that there is a distinction to be made between the plan layouts and the actual experience of family life.

One can mark the home's complexity which lies in the fact that it can expand on to reflect many selves under its shared borders. Interestingly, the terms house and family are often used interchangeably. (Oakley, 1976) The word "family", as Rapp (1979) explains, is analogous to "gender" in that it is a socially created notion based on expectations of what should be rather than what it actually is. The word "family" refers to individuals who should live together – but are not required to do so because of biological ties. While the word "household" refers to individuals who live together in one dwelling, whether or not related by blood. (Franck, 1985) This study, however, was concerned with family households which combine the two meanings, in order to explore women's and men's roles and privacy demands within the shared familial domestic spaces.

Detached Houses of the Twentieth Century

This section presents arguments that took the discussion into a deeper level of investigations about the "House" with its physical characteristics and changes from the early 20th century and onwards. What made the 20th century specifically special is that no century in recorded history has experienced as many political, social, and dramatic transformations as it did. (Drucker, 1994)

First and foremost, the socio-economic conditions have been completely altered in many countries, as prior to the First World War, farmers were the most united group in nearly all industrialized nations and in the majority of undeveloped countries, as well. Meanwhile, in 1900, the population's second-biggest category was the live-in servants working for "lower middle class" homes; these households are defined as employing fewer than three workers. However, eighty years later, live-in domestic servants were uncommon in industrialized countries. Nonetheless, these massive societal shifts occurred quietly and

without civil conflict because of an emergence of a new class; the "blue-collar workers" who became socially dominant. They constituted a sixth or eighth of the population by 1914. In the United States, industrial worker unions and employees themselves were retreating in 1990, while the retreatment procedure in the other industrialized nations was initially slower. Their position was overtaken by the "technologist": a person who combines theoretical knowledge with practical abilities. This gradually gave rise to the new dominant group's knowledge workers. (See figure.2) These modifications, however, go much beyond a societal shift; it is a change in the human situation. (Drucker, 1994 coined it in "Landmarks of Tomorrow", a 1959 book)

Using the image from the preceding discussion, it is possible to see that the primary two changes in home life are the withdrawal of live-in servants, which left the stage empty for the new housewife, who had been silently present. From this moment on what became crucial to women was not their position, cultural differences, or income, but their gender similarities with men. All women began to play multiple roles. (Oakley, 1976) The modifications in gender roles and expectations across time suggest a link between economic systems and familial ideologies adopted in each age. For a long time, men were committed to wage-earning while women were assigned to homemaking by constructing distinct spatial domains for each activity and therefore for each gender. This split first appeared as a result of the effects of industrialization in the nineteenth century. (Cowan, 1983) Thus, the grounds for the "separate spheres" lifestyle were in such changes of working nature that moved into the outside labor, and the creation of a gap between home and work, as well as the removal of homework for both men and children. (Franck, 1985)
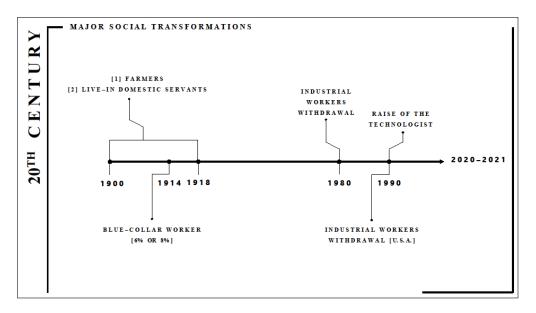

Figure 2: The major social transformations in 20th century working conditions.

Furthermore, the separate spheres lifestyle was reflected upon the design of houses. According to Chapman, T., and Hockey, J. L. (1999) home design in the twentieth century began to vary in style, such as England's semi-detached house (Oliver, et al., 1981), as well as Scotland's bungalow house (McKean,

1987), which was the most popular form at the time. In many ways, inter-war private houses may be seen as smaller-scale reproductions of what came before them, particularly in the preservation of the socially conventional arrangement of defined 'front' and 'back' sides, following the fundamental design of the parlor home, which was the most popular design in the first half of the 20th century. From the second part of the twentieth century, the 1950s onward, a new housing type of "built estate" dwellings became popular in the UK, (1966, Hole and Attenburrow; 1986, Burnett) the front parlor room was removed and replaced with a bigger space for lounge and dining that stretched from the front to the rear side, with windows at either end. (Matrix, 1948) (See figure.3)

According to Watson (1986), the family residence being built with only one public area raised numerous worries about the following issues: the ways for each member to make his or her own private time, the determination of primary member/s to dominate their activities in common areas, and the appropriate space for social contacts. Matrix (1984) analyzed the British home and its symbolic concepts, arguing that the late 19th century Victorian "Gentleman's Town House" reflected the internal capital order of the bourgeois family that continued to be used in the following century's earlier years with masculine supremacy at the front and private femininity buried at the back. But with the changes discussed by Burnett, McKean (1987), and Oliver et al. (1981) including the withdrawal of live-in house servants, the rise of developed domestic technologies, the impact of the "garden city movement", smaller families, the increase in occupation opportunities, as well as the emergence of "modernism" have all pushed architects to revise the design of houses mainly between the years 1920's and 1930s, (Madigan, and Munro, 1991) and the revisions have mainly introduced open-plan and multi-use spaces in most of the developed countries.
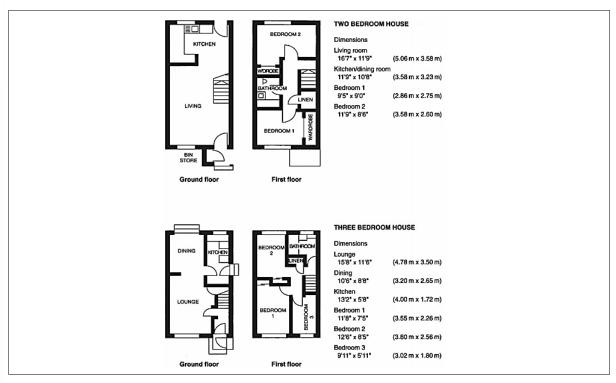

Figure 3: Design of a combined living/dining room (1980). Source: (Chapman and Hockey, 1999, p. 64)

Houses' Privacy and Gender

The section here explains several intangible meanings of privacy at homes; its levels, its link to spatial layout, the conventional back and front divisions in house planning, and lastly privacy will be portrayed via the lens of gender, as gender is an overlooked factor which strongly affects the spatial arrangement of domestic spaces.

According to the Oxford English Dictionary, privacy is "the state of being alone and not watched or interrupted by other people". Allen and Mack (1990) have been examining the essential meaning of privacy by arguing that it can be in form of anonymity, seclusion, reserve, and/or solitude. Abu-Gazzeh (1996) states that; privacy has three important roles: regulating social contact, establishing methods and plans to manage social encounters, and lastly, preserving and strengthening self-identity. The concepts and practices of personal privacy in the home might be intangible. Robinson (2001) considers privacy to be an inherent and static quality governed by distinct sorts of spaces. In her research of typical Midwestern single-family house plans, she claims that their differentiated arrangements appear to reflect three territorial types; public-relating to community activities, private-linking to social activities within the residence, and intimate-relating to the individual him/herself. She further raises the number of territorial levels to seven and calls them the "zones of a territorial gradient", which are as follows; civic –public domain, neighborhood –public domain, collective or partially–public domain, semi-private domain, private domain, partially intimate domain, and finally, an intimate domain. (cited in Mustafa, 2010) This model, though, was utilized for the analysis of privacy in the case study analysis of this research study, which will be covered extensively in the following section. (See figure.4)
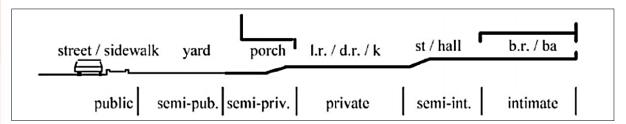
Figure 4: Julia W. Robinson's territorial assessment of privacy levels. Source: (Mustafa, Hassan, and Baper, 2010, p. 164)

Apparently, privacy and gender have a strong relation and influence on the arrangement of houses, nevertheless, there were a few studies that have explored the links between them. As stated previously, because modern house designs of open spaces provide no back space for the family to be untidy, households started to have higher standards for tidiness in the public area, and women were primarily placed in a problematic condition; on the one hand, they must maintain high standards for public areas while simultaneously providing a comfortable, homely, and soothing environment for the family. Pahl (1984) argues that individuals are unaware that these norms are imposed from without, and thus confuse the public and private lives; they believe that their conventional conceptions of appropriateness are entirely self-created, while may be socially imposed. Further, Marcus, C., and Sarkissian (1986) speculated about changes in home design and family ideologies, arguing that the general removal of the

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

front parlor through connecting an area of lounge and dining may have –to a certain extent– depicted the new "democratic" familial ideology, nonetheless, this change had an impact on the privacy of family members.

Despite the fact that privacy is a phenomenon in all societies, its availability and value varies according to culture, economy, gender, status, and age. Gender, in particular, is an important social factor in defining the sort of personal and societal privacy. According to Barrington Moore (1984), the cost of privacy for men in many societies is by not providing any for women, particularly women whose domestic labor keeps patriarchal shelters for them. (cited in Allen and Mack, 1990) In most architectural literature and practice, privacy in home is thought of in terms of separating adults from children, while ignoring that adults (parents) may require a private space/time apart from one another. (Madigan, Munro, 1991) This idea, once again, brings up the issue of privacy in family homes. In their study on domestic private space for adults, Chapman and Hockey (1999) suggested that; whereas children's bedrooms are typically built for multipurpose usage, most adults' bedrooms are not; the master bedroom is nonetheless traditional in style, with few options for alternate purposes.

Bernstein (1975) proposes that spatial organization and object placement deal with language norms and laws regarding the correct use of space. Regardless of whether such regulations are legitimate or incorrect, they have an influence on the behavior of occupants and their communications with others. The definition of space facilitates the formulation of possible interrelationships inside it, whereas space demarcation (on where and how items are put together) regulates the relationships through time. (Hasell, Peatross, and Bono, 1993) The earlier exploratory research by Peatross and Hasell (1992) revealed that couples with interchangeable gender roles in terms of work pattern and cooking activities favored a large open style of kitchen or "the farmhouse kitchen". Couples who adhere to conventional home duties, on the other hand, preferred a semi-open kitchen. Based on their findings, they claim that the egalitarian couples, both of whom are working, desire housing that reflects their egalitarian life pattern and style. Such findings imply that the issue may not be one of "enclosure" or "openness" in the architectural design of spaces (Rapoport, 1990), but rather one of multi-use and functional overlapping areas that are open to other areas or –at least—to include semi-fixed furniture, for all the family members to be able to share the housework equally and to break the stereotypical femininity of housework.

Case Study of Detached Houses from the 20th Century and Beyond

This qualitative research study focused on the gendered privacy/spatial organization of functions in family residences, which has been reflecting the family structure and differentiating the sense of home between females and males. The research was centered on two key questions; whether or not the gendered privacy/spatial arrangements of houses have represented a significant change in family structure and its inherent gender roles throughout the previous century and beyond, and, what modifications could be made to build the "Post-capitalist Family House" in response to the family's increased privacy requirements, while also encouraging a democratic family life free of stereotypical gender roles.

The research took two primary qualitative approaches; the first method was to conduct relative data from the literature, which assisted in developing common ground between the two themes of this study; privacy and gender. While the other method was by collecting plans of detached houses built in the years of 1930s until 2010s in different states in U.S.A, in order to evaluate and analyze their privacy levels, and their spatial distribution of gendered functions. Finally, the results of the case study have all contributed to the opening of a speculative debate about the new post-capitalist family dwelling.

The case study included three major delimitations; one was with the specific selection of years, which was due to the tremendous changes that happened in the social, economic, and political elements throughout that time period, another reason was that marriages began to be established on democracy between spouses in the twentieth century especially with the development of home technology. In addition, the U.S.A region was chosen because it was and still is one of the biggest industrialized countries with a major effect on the entire globe on many levels. Furthermore, the study used the detached types of houses that consisted of two floors, nonetheless, houses size was one of the study's limitations that could possibly have affected the results and their interpretation.

Case Study: Characterization and Justification

This section will provide an in-depth introduction to the case study analysis by providing the major tools used for data collection, as well as discussing the rationale for the various choices, classifications, and motivations behind different components of the research.

The original study has collected and analyzed 45 houses plans in total, for each decade, a number of plans were analyzed, starting from the year 1930 until 2020. However, this paper will limit the number to present one plan from each decade. The data analysis bases were developed by establishing a link between two distinct subjects: the privacy leveling of domestic functions, and their stereotypical gendered classification. The primary subject of the investigation was influenced by the territorial privacy levels model of Julia W. Robinson (2001) which divided privacy into seven levels that go between the level of community public and the intimate level. (figure.4, under "Privacy and Gender in Houses" section). The study, however, included only six levels of privacy of which the plans' functions were vertically reflected upon them. Furthermore, the privacy levels in this study were categorized as shown in (figure.5).

While the second topic, gender, was inspired by the many arguments revolving around family dwellings and the gendered definitions of certain functions. Many scholars in their earlier researches about home and gender have clearly stated some of the taken for granted classifications of house functions as being used primarily by the woman or the man of the house, among these scholars are; Tognoli (1980), Ruth Madigan and Moira Munro (1991), Roberts, M. (1990), and Rock, Torre, and Wright, (1980), who have been referred to in this study to justify the gendered classification in the case study analysis of house functions. (See figure.6 for further details) Depending on such academic references; kitchen, bedroom, bathroom, living, servant, laundry, sewing, and dining room were classified as feminine, whereas;

library, study room, workshop, basement, entrance hall, and parlor room were classified as masculine. Additionally, open plan houses which included living, dining, and kitchen in one unit were claimed to encourage democratic lifestyles between partners, hence, the study has considered such spaces as gender-neutral, lastly, the uncommon or extra functions were also categorized as neutral.
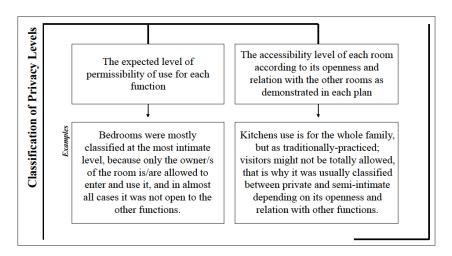
Figure 5: The main determinants for the study's classification of privacy levels.
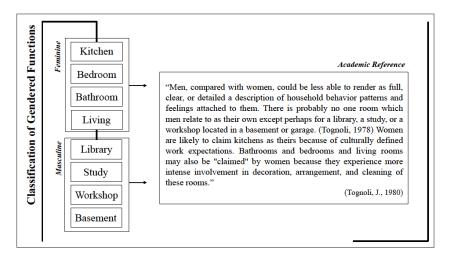
Figure 6: An illustration of how the case study's gendered categorization of domestic functions was justified.

Further, to proceed with the analysis the research used a general table to present houses' plans of both floors, some general information, plan type, and a list of each floor's functions. The dashed line was used to separate the primary functions including kitchen, dining, bedroom, and bathroom, from those extra ones found, such as activity room, gaming rooms, etc. On the right-hand side, analytical sectional schemes were used to analyze the functions of each house's two levels, colors were assigned based on

the preceding reasons for gender classification (Grey: neutral, Red: feminine, and Green: masculine). Outside the boundaries of the house included two privacy levels which are the Public, and Semi-Public levels, while all the other levels were within the physical territories of it. (See Table.1, for visional description) However, the paper has shrunk the number of detached houses plans analysis by presenting only one sample from each decade, nonetheless, the results and interpretation will discuss the case as of total 45 plans. (See Table.2,3,4)

Table 1: Description of the case study's analytical table components

Source: (Husaini, 2021, p.90)

Case Study Analysis: Detached Houses of The (U.S.A.)

Table 2: Case Study Analysis [1930s – 1950s]

1930's

Year	Location	Architect/s
1935	Chicago, IL	National Plan Services
P. Type	Open / Closed	Second/Lower Floor Functions
First/Upper Floor Functions		

First/Upper Floor Functions:
-Entrance hall
-Living room
-Dining room
-Kitchen
-Toilet

-Garage
-Nook

Second/Lower Floor Functions:
-Two bedrooms
-Bathroom

-Terrace

Sectional Diagram: Privacy level + User Type

https://vintagehomeplans.tumblr.com/

1940's

Year	Location	Architect/s
1940	Washington	Structural Clay Prod. Inst.
P. Type	Open / Closed	Second/Lower Floor Functions
First/Upper Floor Functions		

First/Upper Floor Functions:
-Living room
-Dining room
-Kitchen
-Bedroom

-Utility

Second/Lower Floor Functions:
-Two bedrooms
-Bathroom

Sectional Diagram: Privacy level + User Type

https://vintagehomeplans.tumblr.com/

1950's

Year	Location	Architect/s
1954	---U.S.	---
P. Type	Open / Closed	Second/Lower Floor Functions
First/Upper Floor Functions		

First/Upper Floor Functions:
-Living area
-Dining area
-Kitchen
-Two bedrooms
-Bathroom

-Garden room
-Storage

Second/Lower Floor Functions:
-Two playing areas
-Cl. room

Sectional Diagram: Privacy level + User Type

http://www.jstor.org/stable/j.ctt83jhq9

Source: (Husaini, p. 101, 104, 107)

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Table 3: Case Study Analysis [1960s – 1980s]

	Year	Location	Architect/s	Sectional Diagram: Privacy level + User Type

1960's

Year	Location	Architect/s
1969	Washington	American Plywood Assoc.

P. Type		
	Open	Closed

First/Upper Floor Functions	Second/Lower Floor Functions
-Living room -Dining room -Kitchen -Bathroom -Bedroom	-Three bedrooms -Bathroom
-Carport -Laundry	-Deck

Sectional Diagram: Privacy level + User Type

CAR PORT	PORCH	ENTRANCE HALL	DINING ROOM	HALL / DECK	BEDROOMS / BATH ROOM
				LIVING ROOM / KITCHEN / LAUNDRY	BEDROOM / BATH ROOM
PUBLIC	SEMI-PUB.	SEMI-PRIV.	PRIVATE	SEMI-INTL.	INTIMATE

MASCULINE / FEMININE / NEUTRAL

First Floor Plan / Second Floor Plan

https://vintagehomeplans.tumblr.com/

1970's

Year	Location	Architect/s
1971	---U.S.	---

P. Type		
	Open	Closed

First/Upper Floor Functions	Second/Lower Floor Functions
-Foyer -Living room -Dining room -Kitchen -Lavatory	-Four bedrooms -Two bathrooms
-Family room -Casual dining	

Sectional Diagram: Privacy level + User Type

GARAGE	PORCH	FOYER	LIVING ROOM / DINING ROOM	HALL	BEDROOMS / BATH ROOM
				KITCHEN / CASUAL DINING / FAMILY ROOM	BATH ROOM
PUBLIC	SEMI-PUB.	SEMI-PRIV.	PRIVATE	SEMI-INTL.	INTIMATE

MASCULINE / FEMININE / NEUTRAL

Second / First

http://www.jstor.org/stable/j.ctt166gr82

1980's

Year	Location	Architect/s
1985	Minnesota	Planning Services

P. Type		
	Open	Closed

First/Upper Floor Functions	Second/Lower Floor Functions
-Living room -Two bedrooms -Bathroom -Kitchen & Dining area	-Two Future Bedrooms
-Garage	-Future Family Room

Sectional Diagram: Privacy level + User Type

CAR PORT	PORCH	ENTRANCE HALL	LIVING ROOM / DINING & KITCHEN AREA	HALL	BEDROOMS / BATH ROOMS
				FUTURE FAMILY ROOM / UTILITY	FUTURE BEDROOMS
PUBLIC	SEMI-PUB.	SEMI-PRIV.	PRIVATE	SEMI-INTL.	INTIMATE

MASCULINE / FEMININE / NEUTRAL

Upper / Lower

https://vintagehomeplans.tumblr.com/

Source: (Husaini, 2021, p. 112, 113, 117)

Table 4: Case Study Analysis [1990s – 2010s]

1990's	Year	Location	Architect/s	Sectional Diagram: Privacy level + User Type
	1990s	--U.S.	---	
	P. Type			
	Open	Closed		
	First/Upper Floor Functions	Second/Lower Floor Functions		
First Floor Plan / Second Floor Plan	-Foyer / -Dining room / -Kitchen / -Front room	-Three bedrooms / -Two bathrooms		
https://www.dfdhouseplans.com/plan/1990/	-Garage / -Mud room	-Laundry		

Sectional Diagram: Privacy level + User Type
GARAGE (PUBLIC) — PORCH (SEMI-PUB.) — FOYER / ENTRANCE HALL (SEMI-PRIV.) — FRONT ROOM & KITCHEN & DINING ROOM (PRIVATE) / FAMILY ROOM — HALL / LAUNDRY / MUD ROOM (SEMI-INTL.) — BEDROOMS / BATH ROOM (INTIMATE)
S.F. / F.F. / MASCULINE / FEMININE / NEUTRAL

2000's	Year	Location	Architect/s	Sectional Diagram: Privacy level + User Type
	2009	New York	Bates Masi Architects	
	P. Type			
	Open	Closed		
	First/Upper Floor Functions	Second/Lower Floor Functions		
First / Second	-Living & Dining & Kitchen areas / -Bedroom / -Two bathrooms	-Three bedrooms / -Three bathrooms		
https://www.archdaily.com/36345/qual-hill-bates-masi-architects?ad_medium=office_landing&ad_name=article	-Den. / -Pantry			

Sectional Diagram: Privacy level + User Type
PORCH (SEMI-PUB.) — ENTRY (SEMI-PRIV.) — LIVING & DINING AREA (PRIVATE) — HALL / KITCHEN / LAUNDRY (SEMI-INTL.) — BEDROOMS / BATH ROOM / OFFICE (INTIMATE)
PUBLIC / S.F. / F.F. / MASCULINE / FEMININE / NEUTRAL

2010's	Year	Location	Architect/s	Sectional Diagram: Privacy level + User Type
	2017	New York	Robert Young Architects	
	P. Type			
	Open	Closed		
	First/Upper Floor Functions	Second/Lower Floor Functions		
First / Second	-Living, Dining area / -Kitchen / -Three bedrooms / -Three bathrooms	-Bedroom / -Bathroom		
https://www.archdaily.com/935368/mitchell-lane-house-robert-young-architects?ad_medium=widget&ad_name=more-from-office-article-show	-Rec room / -Mud room			

Sectional Diagram: Privacy level + User Type
PORCH (SEMI-PUB.) — ENTRY (SEMI-PRIV.) — LIVING DINING & KITCHEN AREA (PRIVATE) — MUD ROOM / HALL (SEMI-INTL.) — BEDROOMS / BATH ROOMS / REC ROOM (INTIMATE) / BEDROOM / BATH ROOM / DRESS ROOM
PUBLIC / S.F. / F.F. / MASCULINE / FEMININE / NEUTRAL

Source: (Husaini, 2021, p. 119, 124, 126)

Data Evaluation Approach

The case study general analysis tables were the primary analytical approach employed. Following each decade, the extra functions and dominant gender at each privacy level were recorded. The data from the general analysis tables was moved to the data evaluation table. The analytical approach was simple; the dominancy was determined when a certain gender (color) was repeated in 3 or more plans among the total five of them at each privacy level (column). (See Table.5)

Table 5: Visual Representation of the Data Evolution Technique

NO.	PUBLIC		SEMI-PUB		SEMI-PRIV		PRIVATE		SEMI-INTI		INTIMATE	
	First/Upper floor	Second/Lower floor	First/Upper floor	Second/Lower floor	First/Upper floor	Second/Lower floor	First/Upper floor	Second/Lower floor	First/Upper floor	Second/Lower floor	First/Upper floor	Second/Lower floor
House[1]												
House[2]												
House[3]												
House[4]												
House[5]												
Dominating Gender "3 or more out of 5"												

NO.	PUBLIC		SEMI-PUB		SEMI-PRIV		PRIVATE		SEMI-INTI		INTIMATE	
	F	S/L	F	S/L	F	S/L	F	S/L	F	S/L	F	S/L
1	GARAGE		STOOP		VEST. ENTRANCE HALL ENTRY		LIVING DINING		KITCHEN NOOK	HALL TERRACE	TOILET	BED BATH
2	GARAGE		PORCH		VEST ENTRANCE HALL ENTRY		LIVING		KITCHEN BREAKFAST NOOK	HALL		BED BATH
3			TERRACE		ENTRY HALL		LIVING DINING		LIVING KITCHEN	HALL UPPER LIVING	BED BATH	BED BATH
4			TERRACE		ENTRY HALL		LIVING DINING STUDY		KITCHEN BR. ROOM SERVICE HALL	PLAY ROOM HALL SITTING ROOM	MAID ROOM	BED DRESS BATH
5	GARAGE		TERRACE		ENTRY HALL		LIVING DINING		KITCHEN HALL	HALL	LIBRARY BATH	BED DRESS BATH
D.G	GARAGE		STOOP PORCH TERRACE		VEST. ENTRANCE HALL		LIVING DINING STUDY		KITCHEN NOOK LIVING BR. ROOM	HALL TERRACE LIVING PLAY SITTING	LIBRARY BATH MAID ROOM BED	BED BATH DRESS

(D.G.) represents the dominating gender at each privacy level, that were all collected under the table of results.

Source: (Husaini, 2021, p. 129)

Results Interpretation

The general findings of the case study suggested dominant masculinity at the public levels and concentrated femininity at the most intimate levels inside the house even in the case of houses built in the last few decades, which further indicates a slow and rigid change in the traditional rhythm of front/masculine and back/feminine design of domestic spaces. (See Table.6)

However, each privacy level had its unique pattern of change; the public level, for instance, was not attached to the house in the early decades of the twentieth century, but the introduction of "garage" or "carport" had a strong influence on linking the street with the home's activities since the 1930s and beyond. While the public space may seem "masculine", the results showed that some neutral and feminine functions were located at the semi-public level including heating chambers, storage, laundry, etc., yet this was for the minority cases. In regard to breaking the gendered spatial stereotypes, some houses got rid of the traditional masculine entrance hall located at the semi-private level, by having the main functions directly opened towards the main entrance. In addition, in the 1990s onwards another break of stereotypical design has emerged by the design of open plan layouts that have almost removed the means of "semi-private" and "private" levels found in the earlier traditional layouts, which got the family life and their activities closer to the semi-public level. The introduction of open plan domestic spaces has imposed a new meaning for the semi-intimate level; as in the first half of the 20th century, kitchens were located at the back rear and were used exclusively by women and servants, however, in the second half of the century the open plan use has changed this stereotypical division by being used a social space for the whole family instead, and relatively, the semi-intimate level was used instead for the halls that separate the common kitchen-dining-living areas from the bedrooms, and by that this level has changed from being entirely feminine to become neutral. Lastly, the intimate level, as the name may stereotypically indicates, was dominated by femininity because it consisted mostly of bedrooms. Nevertheless, from the 1970s and beyond, masculine functions such as an office, library, and study room were frequently found at the intimate level, since these functions dominated the front side of the home in the early decades. This could point to new usage of the same functions, in which men and women of the democratic marriages share work and study activities.

Table 6: General Results Table

PRIVACY/ DECADES	OUTSIDE				INSIDE THE HOUSE							
	PUBLIC		SEMI-PUB.		SEMI-PRIV.		PRIVATE		SEMI-INTI.		INTIMATE	
	F/U.F.	S/L.F.	F/U.F.	S/L.F.	F/U.F.	S/L.F.	F/U.F.	S/L.F.	F/U.F.	S/L.F.	F/U.F.	S/L.F.
1930's	green	white	green	white	green	white	pink	white	pink	gray	pink	pink
1940's	green	white	green	white	pink	white	pink	white	pink	gray	pink	pink
1950's	green	green	green	gray	green	gray	pink	white	pink	white	pink	pink
1960's	green	white	green	green	green	green	pink	white	gray	gray/green	green	pink

1970's													
1980's													
1990's													
2000's													
2010's													

Source: (Husaini, 2021, p. 134)

It has also been noticed that various functions began to appear or vanish in different decades. The parlor, for example, was utilized more in the first decades of the twentieth century, but it was eventually phased out and replaced with other functions including a family room that has begun to appear in the 1950s, or earlier in the 1930s as a sitting room. Furthermore, around the turn of the 20th century, there were some feminine functions, such as the sewing room, that were phased out over time. Apparently, since the topic here is concerned with privacy, then this exclusion may be discriminatory for women, as such function was practically the only room that appeared to be owned by the lady and/or her servants. While parallel to this, additional male functions were introduced in the 1930s, such as the garage that was later merged with the workshop for the entire area to be owned and utilized by the man. (See Table.7)

Table 7: The Chronology of the Appearance of the Extra/Uncommon Functions

DECADES	EXTRA/UNCOMMON FUNCTIONS	
	FIRST/UPPER FLOORS	SECOND/LOWER FLOORS
1930's	-BREAKFAST NOOK -BR. ROOM -STUDY ROOM -GARAGE	-PLAY ROOM -SITTING ROOM
1940's	-CAR PORT -DURANCE ROOM -POWER ROOM -HEATER -CHILD ROOM	-LOUNGE & SLEEPING AREA
1950's	-LIVING & DINING AREA -LIVING, DINING & KITCHEN AREA -GARDEN ROOM -FAMILY ROOM	-UTILITY -RECREATION -CELLAR
1960's	-LAUNDRY	-

1970's	-CASUAL DINING	-
1980's	-MUD ROOM -OFFICE	-LOUNGE -ACTIVITY ROOM
1990's	-FRONT ROOM -RETREAT ROOM	-MECHANICAL CLOSET
2000's	-MEDIA ROOM	-REC ROOM -EXERCISE ROOM
2010's	-	-GAME ROOM

Source: (Husaini, 2021, p. 136)

The Post-Capitalist Family House: Propositions and Speculations

This section works as the primary keystone of this research, which is the section that include possible answers to the main subject of the ongoing global situation and its consequences on the design and usage of future family dwellings. It is also worth noting that the discussion of this part may involve a global look into the many elements of homes and the world, and thus it will not be confined to the case study analysis alone, since the case study plans were all precisely "capitalist", hence, the analysis will be utilized as an evident tool.

It is clear that everyday reality is the result of an infinite number of elements that come together, affect, link, and determine each other in order to control people, societies, and the globe in a highly structured manner. The discussion in this study has been established on the basis of an "influential relationship" between some elements that do typically affect living conditions, to be able to open a speculative discussion regarding "post-capitalism".

There are two types of variables that influence living circumstances: external and internal influences. External variables are classified into two types: bigger external factors that cannot be controlled by ordinary people in a society; and smaller external elements that come unexpectedly and may take the shape of political issues or health crises. While the smaller exterior variables arise as a result of the larger ones, they require "time" to mature and progressively affect the internal components, which include the physically created and socially practiced life dimensions; the physical dimension is represented by the family dwelling, while the social dimension is represented by family structures and the ingrained gender norms. (See figure.7)

Moreover, the influential relationship factors were used to evaluate and speculate upon the current ongoing life situation (COVID-19) pandemic. To begin with the external factors, the health condition was the turning point, and time as a tool for "transformation" has yet to unveil any major changes in life. During the global lock-down people were compelled to stay at home, while the educational, work,

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

religious, entertainment, and nearly every other area of life were closed, except for hospitals and food markets. Instead, institutions were obliged to transfer their tasks to various online platforms, and by this, people have started to adapt to the new "work-from-home" lifestyle. It is possible that this is a call for a reform in the existing economic capitalist system, in order for it to evolve into a post-capitalist one. As a consequence, the new economic system may be gradually establishing itself.
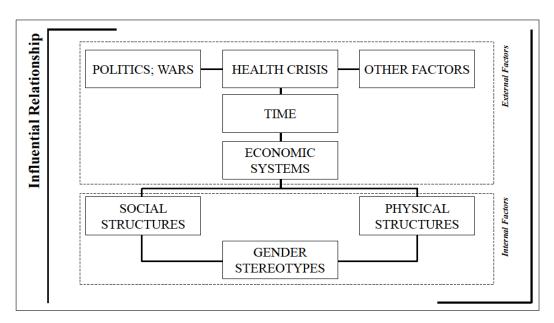
Figure 7: The study's inventory influential relationship of life situations. Source: (Husaini, 2021, p. 138)

This way of living, in which the entire family spends the entire day together and produces things from home, was uncommon for many families. Such shifts in men's and women's employment positions may be linked to past historical events. As Franck (1985) expresses it; in pre-industrialization eras, the husband and wife worked next to each other in the same house or nearby it, but with the industrial revolution, males were required to leave the house for wage-earning leaving women at home, and by this change, the new gender roles of "breadwinner" and "housewife" have emerged. These world events are influenced by the same network of forces through which the economic system evolves and therefore impacts both employment positions and homework for men and women, as well as the way family dwellings are structured. When this shift is compared with the current situation, one can notice some similarities between the two.

Now that the physical design of houses has not yet changed to adapt to the new lifestyle, nonetheless, the spaces' social dimension and the lived experience have already begun to be practiced differently due to the pressures of external causes. Further, this way of living and the collapse of many work institutes have pushed people to launch small businesses via online platforms, as if people are pushing the economic system –perhaps the opposite case—to reshape itself into individualized capitals. In any case, each changed economy in history has taken about a century or more to reform itself. Regardless of this

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

speculation's validity, a revolution is already going on and hence life has to be changed physically as well, which means that homes (as being the basic unit of life, now as never before) have to be redefined accordingly.

The post-capitalist family residence can be defined as a house that can ease the coming challenges following the current uncertainties of life. It may be characterized as the "new production space" which merges production and leisure in one unit; work, study, and other activities are all part of the production process. With the current situation, it became clear that there is a high need for additional privacy as a part of the recent houses' combined functionalities. For children's privacy, Madigan and Munro (1991) previously noted that this problem is not as significant as it is for adults, because their status has altered in recent years, and they have begun to have rooms of their own. Although the need for adult-to-adult privacy within the house is not a new expectation, it has become much more essential in the current ongoing scenario.

To address this issue, it is suggested that the master bedroom be designed as a multi-use space, with an extra zone for alternative individual activities, or with partial segregation of the room in which space can still be defined as one, but couples can do their individual activities in a much more personal manner. In the situation of tiny bedrooms, multi-purpose and flexible furniture may be an alternative. Perhaps the new scenario necessitates larger-sized rooms at home, larger bedrooms, partially separated neutral functions for work and study, and a reduction in total open space to conserve the extra square meters for private zoning (if such modifications are required). These assumptions, however, must be empirically verified. (See figure.8)
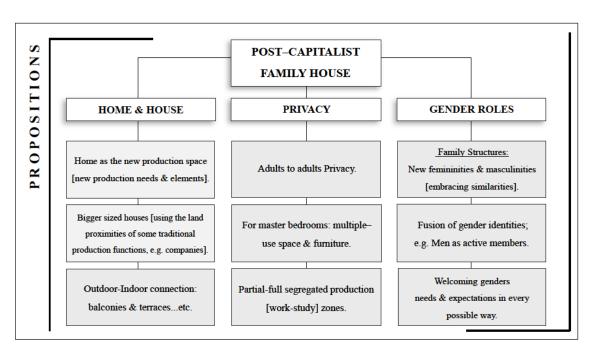
Figure 8: Propositions regarding the Post-Capitalist Family House's main features. Source: (Husaini, 2021, p. 147)

The post-capitalist family house might witness a complete reformation of the traditional capitalist/ patriarchal gender roles. The structure of families is expected to alter based on the ongoing wave of democratic marriages, by the development of new domestic masculinities and femininities. If males stay at home for extended periods of time, they are expected to become active partners by being involved in domestic chores. (Kan, 2011) Thus, the home will shift from being entirely feminine to become gender-neutral where the demands and preferences of men are going to be welcomed as well. According to Osnowitz (2008), home-based work can break down the spatial and temporal limits between private and public life and may promise greater harmony and flexibility between work and family life including a decline in the performance of traditional gender roles. As a result, the ability for men and women to work and live in close proximity may provide a possibility to reconsider gender differences and try to capitalize on commonalities instead. Domestic space could be used as a foundation for gender identity fusion. (Cătălina-Ionela, 2015) In short, the post-capitalist family house is the new production space that provides enough personal space for adults as much as for their children and is the foundation for the fusion of gender identities especially for the case of heterosexual couples. (See figure.8, above for further details)

Conclusion

This study took a multidisciplinary journey that integrated architectural housing and privacy studies with gender and family concerns from sociology, and it investigated the impact of global system transformations on the design of the house, as well as the expected gender roles of men and women within nuclear family structure.

Space was the basic foundation of this journey with its abstract layers of meaning to unravel it from the traditional superfluous attachments. The journey next established its boundaries in the twentieth century and beyond, focusing on family detached dwellings and the issue of gendered privacy as a factor affecting the physical layout of domestic spaces. The major purpose of this study was to note if housing arrangement has changed to reflect the 20th century promises of democratic livings as well as to discuss the current life conditions on determining the future of houses and family life. Relatively, the analysis of the home plans revealed a shift in the traditional division of public and private zoning within the dwellings throughout the last century and until today. Nonetheless, the results revealed that the change in houses design was slower than the social changes of family structures and working conditions.

Following the case study analysis, the journey arrived at its final destination; the discussion was opened and different parts were linked together to draw the image of the "Post-capitalist Family House". The speculation, however, was used to remind architects to explore the present social and other conditions in order to reflect them sensitively on spaces, mainly, on the domestic spaces. Especially because the world today is going through very exceptional circumstances, hence, instead of waiting for time to impose its evidence on the future, people have the right to sense their realities and live in spaces that represent their current selves upon the surroundings, or further to push spaces to transcend time by creating environments that fit for a better future of humanity.

References

Allen, A. L., Mack, E. (1990). "How Privacy got its Gender", Northern Illionis oooUniversity Law Review, 10 (3), pp 441-478.

Andra, J. L. (2016). "The House as Support of Gender Relations", AGATHOS, 7, pp 142-156.

Augustyn, A. (2018). "Space-time: Additional Information", Britannica.com, from: https://www.britannica.com/science/space-time/additional-info#history

Bachelard, G., (1969). "The Poetics of Space", Beacon Press, Boston, pp 25-26.

Benjamin, D. N., Stea, D., Aren, E. (1995). "The Home: words, interpretations, meanings and environments", Aldershot, Avebury.

Best, A., Hanhimaki, J. M., Maiolo, J. A., Schulze, K. E. (2015). "International History of the Twentieth century and Beyond", Taylor & Francis e-Library.

Boys, J. (1984). "Is there a Feminist Analysis of Architecture?".

Cătălina-Ionela, R. (2015). "The Relationship between Domestic Space and Gender Identity: Some signs of emergence of alternative domestic femininity and masculinity", Journal of Comparative Research in Anthropology and Sociology, 6, pp 9-29.

Chapman, T., Hockey, J. L. (1999). "Ideal homes? Social change and domestic life", London, Routledge.

Chuko, C., Chen, L. (2016). "Gender Consciousness and Design", Bulletin of Japanese Society for the Science of Design, 63 (1), pp 57-66.

Drucker, P. F. (1994). "The Age of Social Transformation", The Atlantic Monthly.

Franck, K. (1985). "Social Construction of the Physical Environment: The Case of Gender". Sociological Focus, 18 (2), pp 143-160.

Hasell, M. J., Peatross, F. D., Bono, C. A., (1993). "Gender Choice and Domestic Space: preferences for kitchen in married households", Journal of Architectural and Planning Research, 10 (1), pp 1-22.

Havenband L.K., M.A., M.Phil. (2008). "Looking Through the Lens of Gender: a postmodern critique of a modern housing paradigm", Journal of Interior Design, 28 (2), pp 1-14.

Hendy, A. (2015). "Gender Differences Necessities in Interior Design", International Design Journal, 5, pp 173-182.

Husaini, J. (2021). "Speculations about the New Lifestyle Privacy Needs in Domestic Space for Post-Capitalist Families"- [Unpublished master thesis], Eastern Mediterranean University, North Cyprus.

Keeley, R. M., Edney, J. (1983). "Model House Designs for Privacy, Security, and Social Interaction", The Journal of Social Psychology, 119 (2), pp 219-228.

Lefebvre, H., Nicholson-Smith, D., & Harvey, D. (1991). "The Production of Space".

Lico, G. R. (2001). "Architecture and Sexuality: the politics of gendered space". Humanities Diliman, 2 (1), pp 30-44.

Loustau, J. (2008). "A Theoretical Base for Interior Design: a review of four approaches from related fields", Journal of Interior Design, vol. 14 (3), pp 3-8.

Madigan, R., & Munro, M. (1991). "Gender, House and "Home": social meanings and domestic architecture in Britain". Journal of Architectural and Planning Research, ooo8 (2), pp 116-132.

Madigan. R., Munro. M., Smith S.J. (1990). "Gender and the Meaning of Home". Universities of Glasgow and Edinburgh, UK, pp 626 – 647.

Massey, D. (2005). "For Space", Sage Publications LTD.

Mustafa, F. A., Hassan, A., Baper, S. (2010). "Using Space Syntax Analysis in Detecting Privacy: a comparative study of traditional and modern house layouts in Erbil city, Iraq", Asian Social Science, 6 (8), pp 157-166.

Peatross, F. D., Hasell, M. J. (1992). "Changing Lives/Changing Spaces: an investigation of the relationships between gender orientations and behaviors,and spatial preferences in residential kitchens". Journal of Architectural and Planning Research, 9 (3), pp 239–257.

Pellegrino, P. & Jeanneret, E. (2009). "Meaning of Space and Architecture of Place", Semiotica, 75 (1/4), pp 269–296.

Radics, P., Gracanin, D. (2011). "Privacy in Domestic Environments", Conference on Human Factors in Computing Systems – Proceedings, pp 1735-1740.

Ravetz, A. (1984). "The Home of Woman: a view from the interior", Built Environment (1978-), vol. 10 (1), pp 8-17.

Roberts, M., (1990). "Gender and Housing: the impact of design", Built Environment (1978-), 16 (4), pp 257-268.

Tognoli, J., (1980), "Differences in Women's and Men's Responses to Domestic Space", Sex Roles, 6 (6), pp 833–842.

Varoufakis, Y. [Sustainable Human]. (2020). "What comes after capitalism?", [Video]. YouTube, from https://www.youtube.com/watch?v=T8sAHG1JQPY&t=64s

Winton, A. G., (2013). "Inhabited Space: critical theories and the domestic interior", The Handbook of Interior Architecture and Design. London and New York: Bloomsbury Press, pp 40-49.

The Collaged and Layered nature of Settlements:

the case of Mammari village

Christakis Chatzichristou

University of Cyprus, Department of Architecture, Ledra Street 68, 1010, Nicosia, Cyprus-mail:
hadjichristos@ucy.ac.cy

Abstract

Mammari village, in the Nicosia district of Cyprus, lies in the Buffer zone which was created due to the Turkish invasion of 1974. Before those events, the settlement seemed to naturally grow towards the capital in the northeast, but after the events, it literally redirected its growth towards the plateau in the south and away from the occupied area in the north. This shift was encouraged by a state housing scheme which, in an effort to keep the younger generation in the area, offered young couples from the village, free plots on the state-owned plateau. The resulting settlement is a collaged spatial configuration with a dying vernacular nucleus in the valley and an increased building activity on the plateau. The paper discusses the collage-like patchwork created by these policies or interventions, and the naturally layered nature of each of the units making up this mosaic.

Keywords: House, village, collaged, layered, housing schemes

(three lines)

Introduction

(two lines)

There are a number of ways one can go about describing or examining a situation, a phenomenon or a any set of relationships for that matter. Any such 'way' could be seen as using a specific system of reference. Such systems are the spatial, the temporal, the social, the economic, the aesthetic, the political, the psychological and so on. Rarely if ever can a situation be even simply looked at without having to involve, deliberately or not, more than one of these systems. And while a scientific analysis requires that we isolate parameters as much as possible in order to study the relationship between them, it is clear that this is a dangerous operation especially when it is performed on a living entity such as the human subject or a community.

Rather than seeing the difficulty in dealing with such complexity as an obstacle, it is embraced as a kind of a new conceptual system which can appear and be available for use only when the fuzzy nature of any situation is acknlowledged. Fuzzy is here referring to the unstable nature of any element, parameter or force which refuses to be contained within only one system of reference, continuously transgressing boundaried, shapes and forms. What is in fact claimed here is that every situation results from the layering of many different systems of reference, with elements navigating fluidly between them. It is also argued that the vewing subject performs such wonderings in an effort to understand and cope with the overwhelming complexity of any situation.

A settlement is a living entity and as such it indeed exhibits the characteristic of fuzziness or instability mentioned above. This is even more the case with the village of Mammari which, since the Turkish invasion of Cyprus in 1974, is in the buffer zone between the northern occupied area and the part of the

island controlled by the Cypriot governement. This paper used the case of Mammari village in order to examine and discuss the claim made earlier: any view of a situation cannot but vibrate between systems of reference. It is hoped that the present study will allow for a better understanding of the mechanisms behind such a ubiquitous process.

The analysis starts by first looking at three snapshots of the village: one before 1974, one just after 1974, and one of the situation today. This rather flat horizontal first view will be complemented by three narratives that navigate vertically through time and tell the stories of specific families and people. The first view can be compared to the panorama offered by a viewing point that is at some distance from what is viewed. The image presented may give an overall picture, but is, nevertheless, more of a mosaic or a collage. The second view may comparatevily be more focused and local, yet it allows for a closer look at the flows, transactions and transformations that operate between and thus form the three snapshots offered by the first view.

The three snapshots

Figure 1. An aerial view of the Mammari Village area (taken from The Department of Lands and Surveys Web Portal)

Mammari village is located about 4 km west of the capital of Cyprus, Nicosia. The Pentadaktylos mountains rise in the north and in the south there is a low plateau that nevertheless manages to divide, at least visually, the village from what lies in that direction. The evolution of the settlement was, and is still greatly influenced by the events that took place in 1974 when, after a coup by Greek Cypriot rightwing extremists in an attempt to oust president Makarios, Turkey, as one of the three quarrantors

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

of the Republic, invaded the island and since then occupies 74% of the island. What follows attempts to describe three rather distinct and important stages in the development of the village.

The 'natural' growth of the village before 1974

Figure 2. The old village from the plateau

The main occupation of the less than one thousand inhabitants of the village before 1974, was agriculture and animal raising. Wheat, artichokes, and cauliflower were produced while many farmers also raised sheep and goats. There was also one cow farm. The trend was that those coming of age would not follow their parents' occupation but get an education and find work in the government or a private company. Still, many of them would help their parents and would try and unofficially combine both occupations whenever possible.

The houses of the period reflect this trend, with the older parents living in a vernacular house, the younger parents or children living in a house that was a sort of updated version of the vernacular and only a few living in a modern house that totally deviated from the vernacular and the life it accomodated.

Figure 3. Vernacular houses in ruins. The empty space left after the collapse of one of the old houses is now ready for a new construction.

The vernacular house had stone foundations with adobe walls and a wooden roof structure with mud or roof tiles. It is organized around a courtyard which serves not only as the main space for the social activities of the family but for keeping animals there as well. The rooms used for living and storage create not only the boundary of the courtyard but the boundary between the interior of the house and the public space outside. Only the rooms facing the street may have windows while all the other spaces open, if at all, into the courtyard. Totally introverted, they are cells that together compose a larger organism whose public space is made up of the narrow streets between the houses and the village square.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Figure 4. The 'updated' vernacular house.

The updated vernacular house was more compact and had more rooms, offering comparatively more privacy to the family members. It also now had a front garden and a verandha which created an extended threshold condition between the private house and back yard, with the public street. Stone and adobe were still used. Many were still attached to each other thus preservung the closely knit core of the settlement yet some were detached, allowing for some space between them and their neighbours.

Figure 5. One of the earliest modern houses in the village.

The modern house used concrete and bricks and had plastered walls. It was detached form all sides, was usually elevated from the ground, sepparated spatially from the garden space around it. It was more compact than the previous types, and had more rooms which were organized along a corridor, a feature that was totally absent before.

People married within the village or with someone from the nearby settlements. The husband would normally move to the bride's village since, in the region of Mammari, it was the bride who would provide a dowry which included, at least in some cases, the building of a house. Due to the topography, with the plateau creating a vertical natural boundary, the village, with the new houses being built for every new family, tended to grow in the valley in the north. This was also the direction that would bring the settlement closer to the main road that connected the area to Nicosia in the east, Morphou in the west, and Kyrenia in the north.

The main narrow street that runs along the center of the core of the old settlement now continued broadened towards the north, with the new houses scattered along it. The spatially compact vernacular settlement was already exhibiting signs of dispersal.

Falling into the Buffer zone and the 'artificial' growth of the village after 1974

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Except for a handful, everybody left Mammari during the war, finding temporary refuge in Nicosia or the villages further south. It was only after a year or so that some returned in order to continue, as much as it was allowed, their farming and animal raising activities. Some would spend their weekends and holidays there while residing elsewhere during working days. Apart from feeling insecure, another problem was that the main road towards Nicosia could not be used. Instead, a much longer route had to be travelled, making the choice of commuting to work in Nicosia rather impractical.

It was during this period that many couples decided to built their house elsewhere. Not knowing how things would develop, they chose to leave their ancestral home and the occupation of their parents and seek security predominantly in Nicosia.

Eventually most of the older generation did return to their homes and some managed to continue working with the available land after aquiring a special permission from the United Nations, while some of them also found work in factories nearby. Those of the younger generation who decided to stay, built their houses either by demolishing their parents' house which was found within the core of the vernacular settlement, or used a plot as far away from the occupied area as possible.

With the political situation stabilized, people felt more secure and confident to choose to settle in Mammari. It is therefore quite common for the parents and the younger siblings to live in Mammari, with the older siblings having settled in other places. Still, with the distances being short, and family ties being strong, most of them visited quite frequently their place of origin. Whether the invation of 1974 simply accellerated a process that would eventually happen anyway, will always remain a topic of speculation.

The state of the village today

Apart from the war and the creation of the buffer zone, what also had enormous impact on the evolution of Mammari were the governement plans for the region. In an effort to discourage the younger generation from leaving the village, the government came up with a number of special schemes through which it offered financial aid for those desiring to stay.

Figure 6. Left incomplete due to the war of 1974, it is located at the far north and, located in the middle of the buffer zone, it has been used as an outpost fort he UN Peace Keeping Forces.

The first scheme offered young people from the village practically free plots of land on the plateau to built a house. Many took advantage of it despite the fact that they did own land in the valley. The reason was that they either felt inscure being so close to the turkish army in the south, or they felt that what was offered to them was a free gift that they could not but accept.

The scheme was eventually extended to refuggees at large. This resulted in the mixed population of the upper village and the increasing sense of not belonging, felt by the people originally from Mammari. Those who do not wish to built on the plateau and decide to built in the old village are still offered loans

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

with very low interest as an encourement.

If the main purpose of the schemes described above were to increase the number of residents, it clearly succeeded. The second settlement thus created on the plateau is now much larger than the original settlement and is referred to as the 'Upper Mammari'. Unlike the old village, this new growth may be organized by a grid of streets but it feels as if it is a labyrith. No reference points, no hierarchy, no centre, no element that allows for a reading of the overall space. The houses themselves present a cacophony of shapes, each trying to utter something unique but end mumbling what sounds, or looks like visual noise. Following the planning regulations, they are all detached, while the overwhelming majority is organized on two levels.

Figure 7. A street in 'Upper' Mammari.

Since the scheme was open to any refuggee, the residents of the new settlement are from different parts of Cyprus. The closed society of the old village is here replaced by the spatial gathering of people that may not know each other and may indeed have no desire to be integrated in a community of strangers. Even if some did want to feel more part of a community, the spatial configuration emerging does not really offer much towards that direction. The only two places people could meet is the church which is located in the old village, and the community park which is located at the edge of the plateau, offering a panoramic view of the Pentadaktylos Mountain range, the valley, and the old village. A third place of potential encounters is the Lidl supermarket located at a short distance in the south.

A more recent development which further diluted any feeling of community was the creation of another settlement on the plateau. Carrying its own name, Danae, this new entity is made up of about 50 units, most of which are three bedroom houses organized on two levels. Located at a distance from Upper Mammari, it is near but far enough to be a separate entity. What renders the area attractive for living is that, because of the new highway running just a kilometer away connecting Nicosia with Troodos, one can be in the centre of the capital in less than half an hour.

The three narratives

After the overview given above using the three periods in the recent history of Mammari, three narratives attempt to compliment the information by offering a closer look at specific people and their connection to the village. The first tells the story of a family who lived there before the war and was engaged in farming and animal raising, the second follows a family that lived there before the war but was not that much tied to the land as far as the occupation of its members goes, and the third looks at a family that came to the village after the war.

First narrative: tied to the land

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

He married a woman from the next village, only 1.5 km in the south. He and his wife had three sons and two daughters. They had about a hundred sheep before the war but their main occupation was cultivatng their fields in the valley. Their eldest son studied engineering in the UK, got married there and comes to visit his parents every few years. The second son married a woman from the village whose family was also engaged in agriculture. He was initially a policeman but chose to get a job that allowed him to spend as much time as possible in helping his parents in the fields. This was also the case with the third son. He also married a woman from the village and had a job that allowed him to cultivate the fields he inherited from his family. Both daughters married men that are not from the village and now live in the suburb of Nicosia that is closest to the village. The eldest daughter took advantage of the government scheme in order to built a weekend house in Mammari and spends holidays there. The house is now inhabited by one of her children, the only one of the four that chose to settle in Mammari.

With both parents dead, the old family house is now falling into ruins. This is the case with most of the adobe vernacular houses in the village. Only a few have been renovated and are still lived in. One of the reasons is that it costs a lot to renovate and another is that in many cases, it is the inheritance of all the children, making it more difficult for any one of them to take the intiative to invest in it. In any case, from the ten grandchildren of the family only three are now living at their grandparents village.

Second narrative: oscilating between freedom and attachment

He came from another village and married into a family that owned land but was not engaged in agriculture or animal raising. He was a governement emploee and his wife stayed at home raising their four children. During the war they moved to Nicosia and opened a grocery shop in a building they already owed. The whole family lived in one space, with the shop space divided from the family private space by a curtain. They would visit the village only for the weekend a few months after the invation, when it felt safe to do so, and after many of the other villagers moved back. They moved permanenttly back only after two years have passed.

Still, when the two older daughters got married and needed to decided where to built, they both chose to settle in Nicosia. It was only the younger daughter who decided to built next to their family house since by then it felt totally safe to do so. Her husband is from the village, as is the case with the second daughter, but none of them works the land himself. One of the husbands is only involved in renting fields from different owners on behalf of his father who still engages in agriculture.

As is the case with the family in the first narrative, from the seven grandschildren, the four that are already married, live elsewhere.

Third narrative: A little bit of choice and tons of necessity

They both come from refuggee families. They grew up in refuggee settlements and they both work in Nicosia. After they got married, they decided, with the financial help of their parents, to built a house. Given a free plot through the scheme mentioned above, placed this option first on their list. The house is around 230 square meters, has three bedrooms, is organized on two levels and is detouched. Fifteen years later, they still pay for the loan they took from the bank with quite favourable rates. Their children are teenagers now and they will soon need financial support to go to the university. Things are tied but still manageable.

They know some of the people living in the neighbourhood but most of their friends are elsewhere. They do not visit the old village in the valley except for Sundays when they go to church. They may not feel so attached to the place but their children do. It is the only home they know and most of their friends live there. They meet with their friends at the park in the afternoons after school. When asked if they feel they are from Mammari, they were hesitant to answer either way.

The Collaged and Layered nature of Settlements

Any snapshot of Mammari village at a specific point in time may appear like a collage, with each entity making the whole, occupying a specific area of the surface. On the other hand, any narrative related to the history of the people living there is more of a line that may navigate on the surface but it cannot but also add layers to the picture formimg. This is only partly due to the dimension of time and mainly due to the presence and influence of many more systems of reference. The spatial and temporal systems alone cannot but give a distorted represenation of the topic we are discussing.

The complexity of the setup can perhaps be appreciated more if at least some of the active reference systems encountered in the above discussion are mentioned: the topography of the land; the distance from Nicosia; the war and the buffer zone status; sense of impermanence and political instability; occupation and degree of dependence on the land; local dowry system; allegiance to and/or nostalgia for the place of origin; romantic relationships; personal economic situation; government schemes.

The rather crude list above still serves its purpose. If all these systems of reference coexist and interract with each other, then any serious analysis of an entity such as a settlement cannot but at least be aware of them. One is here reminded of Actant Network Theory, a conceptual framework which allows for agency in any entity, living or inert, that has an impact on a configuration of relationships (Latour, 2005). What also comes to mind is the story of Hassan Fathy and his project for New Gourna (Fathy, 1973). The people for whom he designed and built the new settlement would not move from their seemingly miserable abodes into the much upgraded houses he designed. The reason was that they were tombrobbers and their houses were literally the gate to the ancient artifacts underneath. They would basically lose their livelihood if they moved to the new settlement offerred to them.

So, how could we best describe the setup? The analysis above has hopefully demonstrated that it is both collaged as well as layered. We also need to see it as a dynamic setup where elements from one reference layer can navigate to other layers and thus be transformed, translated or transported into a new entity that belongs more to the new system of reference. The concept of phenomenal transparency comes to mind here since it is seen as caused by the presence of more than one reference systems (Rowe and Slutzky, 1963). In other words, we need to see the setup as vibrating or as fluid as well. Any analysis cannot but acknowledge the slippery nature of the material handled and make allowances for this quite important property. As Marshall Sahlins described, symbolic synapses are very important in creating some sort of manageable coherence where there is otherwise basically complexity and potential confusion (Sahlins, 1976).

Settlements are living entities and as such, there is nothing simple about them. The conceptual framework through which we look at them though may indeed be, or attempt to be simple. Space Syntax (Hillier, B., Hanson, J.1984) argues that all the other systems are mapped into the spatial. Research shows that this is indeed true up to a significant statistical degree. The model it offers seems to still fall short of totally managing the complexity of the real through a simplicity on the conceptual level. It is the presenation of such a conceptual framework that was, succesfully or not, attempted here.

References

Fathy, H. (1973) Architecture For the Poor: An Experiment in Rural Egypt, The Ubiversity of Chicago Press: Chicago and London.

Hillier, B., Hanson, J. (1984) The Social Logic of Space,   Cambridge University Press, Cambridge.

Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford UP.

Rowe, Colin, and Robert Slutzky. (1963). "Transparency: Literal and Phenomenal," Perspecta, 8: 45-54

Sahlins, M., (1976) *Culture and Practical Reason*. Chicago : University of Chicago Press

https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

The Multilayered Meaning of Home:
Journey Between Rural and Urban Context

Siddi Zeynep Yilmaz Kilic

Ozyegin University, Faculty of Architecture and Design, Cekmekoy, 34794 Istanbul, Turkey
e-mail: yilmaz.siddizeynep@gmail.com

Hulya Turgut

Ozyegin University, Faculty of Architecture and Design, Cekmekoy, 34794 Istanbul, Turkey
e-mail: hulya.turgut@ozyegin.edu.tr

Abstract

Home is a variable and original place where different layers grow to create a new layer by overlapping. Home is both composed and changed by culture, place and temporality especially given the mobility. The changes in the meaning of home can be read through identity, belonging and memory that form some of the layers of meaning of home. This paper aims to reveal how the meaning of home changes over time and the role of identity, belonging and memory in the process. Within this scope, 20 households who have migrated from rural to urban context in Turkey, have homes in both contexts are selected as cases. To reveal the change of meaning in the journey between homes, drawing plan and view, in-depth interviews, observations, questionnaires have been conducted. Along with the analysis results the transformations of identity, belonging and memory and the future meanings of home are discussed.

Keywords: meaning of home, identity, belonging, memory

Introduction

The home has flexible, temporary, ambivalent and changeable meanings, which include continuities and discontinuities. It also creates its meaning with experiences in daily life and establishing relationships with many disciplines such as sociology, psychology and anthropology. As a result of the interaction between such meanings and each other, the multi-layered meaning of home arises as it contains many meanings and derives new meanings and these meanings are all interconnected. At the same time, a holistic perspective is needed to understand the multi-layered structure of the meaning of home, which has ongoing changes and transformations.

The multilayered meaning of home is the result of the concepts that are the semantic component and the constant interaction of these concepts. In the meaning of home, which is reproduced in an endless cycle, with constant interactions, the old meanings do not completely disappear with the new contact encountered; an interaction zone between the previous meaning and the new meanings is created, and thus the previous and new meanings are exchanged. Then, the home is a kind of palimpsest that is continually produced throughout life, a combination of many layers of meaning, each layer of meaning is infinitely articulate. The ongoing way to interact, the home that constantly produces new meanings, also traces the past and the present, which allows different proposals to be made and discussed for the future meaning of home.

When movement and mobility are a way of life, the new manifesto with concepts such as migration, consumption, speed, technology, identity and memories is being created in the context of multi-layered meaning of home. Temporality is also another concept, which triggers mobility, as a substantial layer in the meaning of home since it also brings dynamism and movement. Briefly, mobility which is our way of life and the changes that have taken place in the 21st century significantly alter all layers of meaning of home. Because of all these, this paper based on ongoing research mainly aims to reveal how the meaning of home changes over time and the role of mobility in the process of reinventing home's meaning.

Conceptual Overview: The Multilayered Meaning of Home

The meaning of the home is examined from the perspectives developed in different disciplines, first of all, phenomenology focuses on the way the home is experienced. In social psychology, the psychological dimension of the home, concepts such as security, control, status, privacy, and the relationship between the identity of the user and the home are examined. At the same time, sociologists define the home as a social entity and as a system that conveys cultures and meanings. In the historical approach, the home is accepted as a process and the relationship of the home with temporality is discussed together with many topics such as sociology, sociocultural components, design. In behavioral geography, home is accepted as a physical, social and cultural place, and discourses related to home, place and sense of place (topophilia) are produced. In anthropology, the home is associated with the cultural structures and social behaviors of societies.

Thus, the home is a complex system that includes and is defined by many social, cultural, psychological, historical, behavioral and experiential parameters. Since there are many components that create the home and these components are in constant interaction, the home should be examined with a more holistic approach. Werner, Altman, Oxley (1985), Despres (1991), Somerville (1997), Turgut and Uraz (1997), Moore (2000), Mallett (2004), who examine the home with a holistic approach, considered that it is insufficient to deal with the home with a single discipline. It emphasizes that the meaning of the home should be handled in a holistic approach. Among these researchers, Werner, Altman, Oxley (1985) develops a holistic approach and defines the home in a transactional perspective, together with the user, psychological processes, environment and physical components, linear and cyclical time. Turgut and Uraz (1997) examine the home from a transactional perspective. Turgut and Uraz (1997) consider the home in a transactional perspective with its spatial, sociocultural and temporal components. The conceptual framework established by Turgut and Uraz (1997) is supported by cultural relations, phenomenological experiences, belonging, and personal expressions. On the other hand, Depres (1991), Somerville (1997), Moore (2000) and Mallet (2004) discuss the meaning of home with concepts such as cultural components, place, social relations, belonging, identity, ethnicity, psychological relations, privacy, experience, environmental components.

In summary, the meaning of home has many components and these components are in constant interaction with each other. Therefore, a holistic approach is preferred to understand the home. In this direction, the home is examined in a transactional perspective and the meaning of home is theoretically based on environmental psychology. According to the results obtained from the literature review, the basic components that create the home are culture, place and time. In addition, mobility constitutes one of the basic components of the home, as it has become a lifestyle with the 21st century. The following describes the basic components of the home.

Home and Culture: Altman (1980) and Turgut (1990), who study on home and culture, define the home as an expression of culture. Researchers consider the relationship between culture and home through beliefs, values, norms, behaviors and habits. According to them, culture is reflected in the home through the lifestyle. So, culture, which is the main component of the home, is the way of self-expression of the individual or society, it is a symbol of social relations, it is evaluated a unity that includes many components such as the system of thoughts. At the same time, culture initiates the identity creation process with the reflection of the characters of the user group to the home. In addition, while the relationship between culture and home is established with social relations, values, norms, traditions and customs, it

also initiates the process of belonging.

Home and Place: Easthope (2004) defines the home as an important kind of place and distinguishes it from other spaces by being a place or its potential to become a place. Since the home is defined through the place, the place must first be understood. Creswell (2009) defines the place as the center of daily life and the social structure and describes the place as an entity full of experiences, emotions and meanings. According to Moore (2000), place is the result of relationships between actions, concepts, and physical attributes. According to Mallett (2004), place is an expression of identity, therefore it adapts to changes and transformations of lifestyles. So, like the place, the home can be thought of as an expression of identity. At the same time, the place produced by the social structure can also trigger the memory creation of the home.

Home and Temporality: Heidegger (1997) defines time as a kind of continuity in the daily life cycle. According to Heidegger, the main thing is the actions, events and places in time. Guvenc (2005), who studies on architecture and time, defines time through spatial change. According to Guvenc, time is a difficult concept to perceive and it is change that enables time visible. Werner, Altman, Oxley (1985), who developed a discourse on home and time, mentions two dimensions of time for home: linear time, circular and spiral time. Linear time consists of past, present and future. on the other hand, circular and spiral time is based on routine and repetitive actions and meanings. Cierrad (2010) emphasizes that the meaning of home is formed by experiences over time. So the meaning of home is formed and changes over time. Also, time is a component in the meaning of home, as is culture and place.

Home and Mobility: Mobility is separated from culture, place and temporality, which are the other layers of meaning of the home. Because mobility is not a layer of meaning that comes from the existence of the home, it becomes one of the layers of meaning of home with the age we live in. The mobility referred to here is not short-term physical displacements, because nowadays such displacements are only a matter of hours. The mobility mentioned is not only spatial, but also temporal mobility. Bocaggni (2017) interprets mobility as breaking the ties between social and geographic spaces. Ahmed et al. (2003) interprets home and mobility as concepts that redefine, change and transform each other. Then, mobility can break and redefine the bonds between the layers of meaning of the home. Thus, the home that meets mobility recreates itself endlessly. Blunt and Dowling (2016) conclude that the movement is a part of the home, and they also emphasize that the restructuring of the home in every displacement is provided by identity and belonging. So, identity and belonging are important layers of meaning that redefine the home as a result of mobility encounters.

In summary, the meaning of the home has a multi-layered structure. These meanings affect each other from time to time and new meanings may emerge. Then, the home is a palimpsest that has relations between its layers and where each layer of meaning articulates each other. The main components that construct this palimpsest are culture, place, time and mobility. These components lead us to the other layer of meaning of home: the user, identity, experience, belonging, context, memory, social relations and spatial organization.

Conceptual Framework: Multilayered Meaning of Home from the Perspective of Culture, Place, Temporality and Mobility

The home is not a fixed place but is rediscovered and given meaning in different places at different times. This ensures that the meaning of home is multi-layered and there is a hierarchy between these layers of meaning. Some layers that create the meaning of home are both more inclusive than others and create meaning for others. These layers are identity, belonging and memory. In this paper, identity, belonging and memory are called thick layer. Because the effect of any change in its layers on the meaning of the home can be detected through thick layers. Now it will be examined how identity, belonging and memory are thick layers and how they are related to the main components of the home.

Home as Identity: The identity, which is the thick layer in the multilayered meaning of home, takes its reference from the place that the main component of the home. According to Easthope (2004), identity is based on the consciousness of the place, not the personal consciousness. Concepts such as place attachment and sense of place are the basis for the creation of identity. According to Casey (2001), the relationship between user and home develops with social, psychological and emotional bonds, and these bonds create identity. In summary, place attachment, emotion, cognition, time, culture and social relations are actually parameters of identity.

Jenksin (2008) defines identity as a cognitive mechanism that defines who we are and others and consists of information such as language, religion, color, lifestyle. Additionally, Jenksin defines the home as a symbol of identity. According to Mallet (2004), in the encounter between the person and the space, the person transfers the data of identity such as experiences, needs, emotions to the space, thus the space turns into a home. In other words, identity is a layer of meaning that has existed since the formation of the home. It also includes information of the user, which is a layer of the meaning of home. The user isn't the only case covered by the identity. Identity is very important for the spatial character of home and the status and social class represented by this spatial character. According to Cox (2016), the material used in the physical construction of the home and the application process carried out are an expression of identity. Because the construction material used in the home is chosen according to the conditions of the context in which it is located, so in a way it is an expression of context. In addition, the spatial relations of the home, the positioning of the spaces on the plan or section with each other and spatial experiences are also an expression of identity. At the same time, the home is a parameter that reflects its social class, therefore, it is an expression of identity. The identity relations with the home mentioned so far actually include personal/familial identity and social relations. Therefore, identity is inclusive and thick layer for the other layers of meaning of home.

Home as Belonging: Another thick layer in the multilayered meaning of home is belonging. Belonging is based on the place like identity and so belonging develops with identity. For this reason, the relationship between home and belonging is considered together with identity. In fact, Ralph and Staeheli (2011) define home as a place where identity and belonging are shaped together. While the identity is reflected in the experiences and behaviors in the space, it also initiates the development of the belonging to that space. Thus, the relationship between the user and the home becomes more unifying and integrative. Now the user begins to define the home as territoriality. The definition of the home as a territoriality by the user is not only related to identity, but also related to social relations and culture. Turgut and Tunalı (2016) emphasize that belonging has a social dimension and this social dimension is very critical in the creation of belonging, researchers discuss social belonging over identity and memory. In short, belonging is one of the main layers meaning of home, as it encompasses experience, social relations and emotions along with identity.

Home as Memory: The last thick layer in the multilayered meaning of home is memory. Memory is also based on the place and memory is a concept that gives meaning to the home through the transfer of experiences. The memory needs to be considered together with identity and belonging to be understood. Because memory can transfer how identity and belonging are created. According to Pink (2004), the senses and sensational experiences at home are intertwined with memory and identity, and they make sense of the home in this way. The memory, which consists of events and objects in daily life, can be transferred between homes due to them. Memory, which is at a critical point especially in the journey between homes, transmits experiences and even identity through this way. Thus, these senses, emotions and experiences also provide the interaction between the previous home and the future home. Cervantes and Duyvendak (2017) examine the homes of displaced communities. Researchers analyze the connection between homes through memories and traditions in these communities. It is especially narratives that enable the transmission of memory (McLaughlin, 2015). Narratives contain data such as users' daily life practices, social relationships, senses and emotions, thus giving information about the layers of meaning of the home. In brief, memory is an inclusive concept for the user, experience, social relations, senses and emotions, which are the other layers of meaning of home.

To sum up, identity is thick layer because it reflects the user group individually and socially, is shaped by context, and includes social and spatial relationships. Belonging is a thick layer because it includes the unique experiences of the user and is established with social relations as well as with a place. Memory is a thick layer because it belongs to the place, includes spatial and social characters, and develops with the context and experiences of the user.
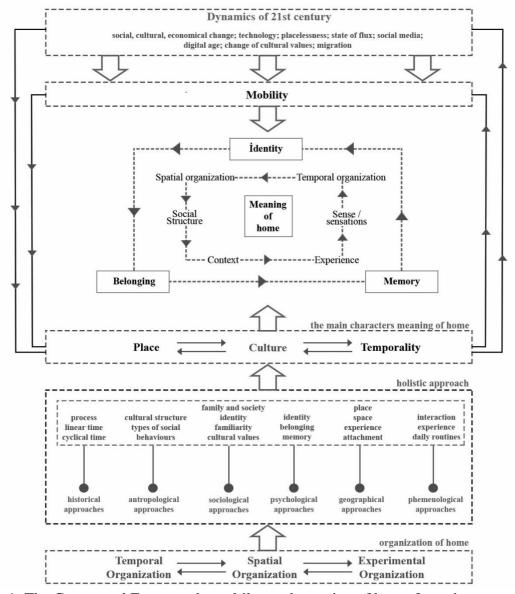
Figure 1: The Conceptual Framework: multilayered meaning of home from the perspective of culture, place, temporality and mobility (Yilmaz Kilic, 2021)

In the light of all this information, the conceptual framework created is as in Figure 1. Culture, place and time, which come from the organizations of the home and different approaches to the meaning of the home, constitute the main characters of the home. With the inclusion of mobility, one of the dynamics of the 21st century, into the main characters of the home, the interactions between the layers begin. In this endless cycle, the layers of meaning of home are redefined. The concepts at the intersection of these interactions are user, spatial organization, social structure, context, experience, sense/sensation, identity, belonging and memory. Among these layers, identity, belonging and memory are more inclusive than other meaning layers, so they are highlighted in the conceptual framework. So, it is necessary to analyze identity, belonging and memory in order to detect the change of meaning of home over time. The reasons

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

for this are as follows: identity reflects the user, is shaped by context, and includes social and spatial relationships. Belonging is formed by the user's experiences, spatial characteristics and social relations. Memory includes spatial and social characters. And memory evolves with the user's experiences. The conceptual framework in Figure 1 was developed based on all these relationships. On the other hand, this conceptual framework is based on the transactional perspective developed by Werner, Altman and Oxley (1985), Dovey (1985), Turgut and İnalhan (2007) and Turgut (2010). Accordingly, the layers of meaning of home are discussed with the transactional perspective. In the next section, the case study based on this conceptual framework is developed.

Case Study: The Journey Between Homes from Malatya to Istanbul

A case study is carried out to examine the change of meaning of home with mobility over time. While selecting the case sample, the following situations are taken into consideration; participants experience the journey between homes, the home they were born in and the home they live in are different, both homes are built by the participants spatially and conceptually. Similarly, it is also considered that sharp change in the context facilitate the detection of change of meaning of home, while determining the case study. Thus, a case sample consisting of 20 households who have experienced the journey between homes and built their own homes in both contexts is determined. In addition, the case sample continue to experience their homes in both contexts as well. As the first step of the journey, 20 homes in Uzuntaş village of Pütürge district of Malatya, located in the Eastern Anatolian region of Turkey, are considered (Figure 2). The second step of the journey is consisting of 20 households who leave their homes in the village and built their urban homes in Kazımkarabekir Neighborhood in Gaziosmanpaşa District, İstanbul (Figure 2). 20 households needed to establish a home in the urban context due to the economic difficulties in the rural context and the inability to meet their basic needs such as health and education. The specific reason for selecting this case in the journey between rural and urban contexts is that the researcher can make the necessary analyzes in this region.

a) Map of Turkey

a) Map of Malatya – Puturge - Uzuntas | b) Map of Istanbul and Gazıosmanpasa
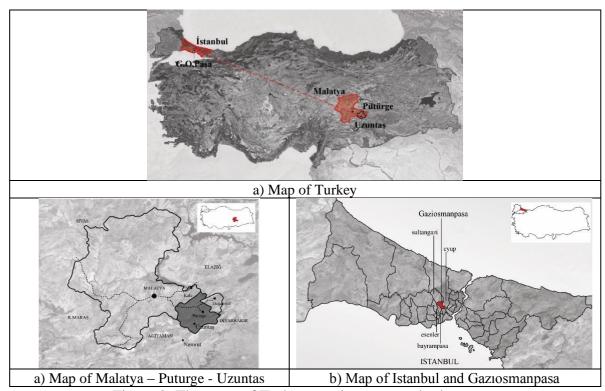
Figure 2: The maps of Turkey, rural context and urban context

In the method developed within the scope of the paper, quantitative and qualitative research methods are used together in order to analyze the change of meaning of home comparatively. Observation reports, field study and experiences in quantitative methods are used to analyze the physical data of homes, the way participants use and experience their homes, home and context relationship and change of home over time. Similarly, observational, phenomenological, historical, ethnographic and discursive research methods are used to analyze and compare the meanings attributed to homes in both contexts, the relationship between social structure and home, and the relationship of linear and cyclical time with home.

In the quantitative research method, homes are measured, then, plans and views are drawn for data analysis. In addition, diagrams describing the dimensional properties and functions of the units of homes are designed. These created diagrams show the spatial organization of homes and how the spaces connect with each other. In the plan scheme, the relations of the spaces with each other are formed by taking into account the function, area and connections of the spaces. Further, close-ended questions are asked to the participants so that objective data are obtained. Behavioral and normative analysis, which is frequently used in environmental-behavioral research, is chosen as a qualitative research method. This analysis provides the opportunity to obtain data by supporting the physical environment analysis and reveal the change of meaning of home both spatially and socially. The case study determined for the journey between Uzuntaş and Kazımkarabekir is based on the compiled data from information, interviews, and archive research of the last 100 years. The households that came to Istanbul from Uzuntaş and built their homes in Kazımkarabekir preserve the spatial data, cultural and social characteristics of rural homes. These continuities or discontinuities are reflected in the change of meaning of home. As a result, the components of culture, place, temporality and mobility are related to behavior and space, and they constitute the behavioral environment analysis.

Home in Rural Context: The one of the main features that distinguishes Uzuntaş Village from other villages in Pütürge is that every family in the village has a home in Istanbul (Güner and Çifçi, 2013). Families who went to İstanbul with economic, health and education problems did not leave the village completely. While the families spend the winter months in Istanbul, they spend the summer months in their homes in the village. The settlement pattern of the village is scattered, some homes are adjacent while some homes are located at a distance (Figure 3).

1- Mehmet Altay	5- Ramazan Bali	9- Hıdır Tutuk	13- Bayram Öz	17- RURAL 4
2- Abdullah Altay	6- Hanifi Pulat	10- Salih İnanç	14- Şevket İnanç	18- Ramazan Avşar
3- Bayram Altay (küçük)	7-Mustafa Altay	11- Mustafa Sağın	15- Bekir Altay	19- RURAL 2
4- Bayram Altay (büyük)	8- Ahmet İnanç	12- Havva Mustafa İlter	16- İsmail Koşak	20- Yılmaz İli

* Households of URBAN 17 and URBAN 19 are grandchildren of RURAL 4 and RURAL 2, therefore, URBAN 17 and URBAN 19 are compared with RURAL 4 and RURAL 2.

Figure 3: The settlement pattern of Uzuntas and the homes examined within the scope of the case study

Stone, adobe and wood are used as building materials in the homes in Uzuntaş Village. The roofs are covered with sheet metal later. Since the village is small, the homes do not show the civil architectural features of the traditional Turkish home. The lower floors of the homes are used as barns or warehouses, while the upper floors are living floors. For this reason, only the upper floors of the homes are examined within the scope of the study. When the rural homes are examined through an example as seen in Figure 4, the homes generally consist of courtyard, living room, room, storage and wet spaces. The courtyard acts as an extension of the home and it is the place where daily life experiences such as sitting, eating and drinking take place during the summer months. Hayat is the living space of the home. Hayat, which is at the center of the home and where all the spaces are connected, is the space where daily time is spent. The room is mostly the space in which the guests who come to the home are hosted. On the other hand, the kitchen is a space that fulfills the functions of wet spaces such as cooking, bathing and storing. The storeroom is a space where excess goods and supplies are stored. Finally, rural homes are generally similar in terms of their spatial organization.
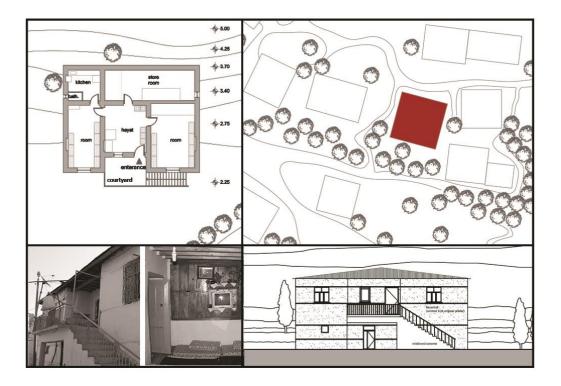
Figure 4: An example of the rural home: plan, site plan, view and photos (RURAL NO:18)

Home in Urban Context: Gaziosmanpaşa, formerly known as Taşlıtarla, is one of the late settlements of Istanbul (Karahasanoglu, 2013). While Gaziosmanpaşa was a place where Thrace, Bulgarian and Yugoslav immigrants came and settled respectively throughout its history, it received immigrants from the Black Sea and Eastern Anatolia Regions of Turkey as of the 1970s (Perouse, 2011). In this region received immigration from different ethnic origins, people from similar cultures started to live in the same neighborhood. For instance, while those coming from the Black Sea live in the Black Sea neighborhood, those coming from Eastern Anatolia live in the Kazımkarabekir neighborhood. For this reason, Kazımkarabekir neighborhood was selected as the case study. This neighborhood had a residential texture consisting of squatters in its early periods, however, as the families became crowded and the population of the neighborhood increased, the squatters turned into apartments as of the 1990s. The current texture of the neighborhood and the selected homes are seen in Figure 5.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

1- Mehmet Altay	5- Ramazan Bali	9- Hıdır Tutuk	13- Bayram Öz	17- Enes Altay
2- Abdullah Altay	6- Hanifi Pulat	10- Salih İnanç	14- Şevket İnanç	18- Ramazan Avşar
3- Bayram Altay (küçük)	7-Mustafa Altay	11- Mustafa Sağın	15- Bekir Altay	19- Ayşegül Altay
4- Bayram Altay (büyük)	8- Ahmet İnanç	12- Havva Mustafa İlter	16- İsmail Koşak	20- Yılmaz İli

Figure 5: The settlement pattern of Kazımkarabekir and the homes examined within the scope of the case study

An urban home is examined to clearly understand the general organization of urban homes. (Figure 6). In these 20 urban homes, the apartment entrances and landings are used as an extension of the homes just like the courtyard in the rural homes. Since the siblings in the family live together in the apartments, the building is arranged like a home beginning from its entrance. In some buildings, excess items in the homes are stored on the landings. The first space in the homes is the entry. It provides the connection between the spaces and has no other function. Some homes have one and some homes have two living rooms. While one of these living rooms is used as a daily room, the other living room is used to host guests. The master bedroom is only used by the parents. The kitchen, toilet and bathroom are used as separate spaces in accordance with their functions. In addition, the balcony provides the interaction between outdoor and indoor space.
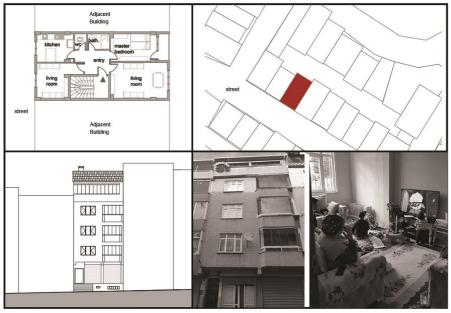
Figure 6: An example of the urban home: plan, site plan, view and photos (URBAN NO: 6)

Analysis of Physical Environment: When the spatial organizations of rural and urban homes are examined to analyze the change of meaning of home, it is seen that homes in both contexts form common plan schemas. The parameters in the creation of common plan schemas are thresholds, living spaces, wet spaces, storage and rooms. As a result of the comparison of the plan schemas created in the journey between homes, transformations, continuities and discontinuities are determined in these parameters. Therefore, this analysis reveals the stratification of the meaning of home and the relationship between home and identity, belonging and memory.
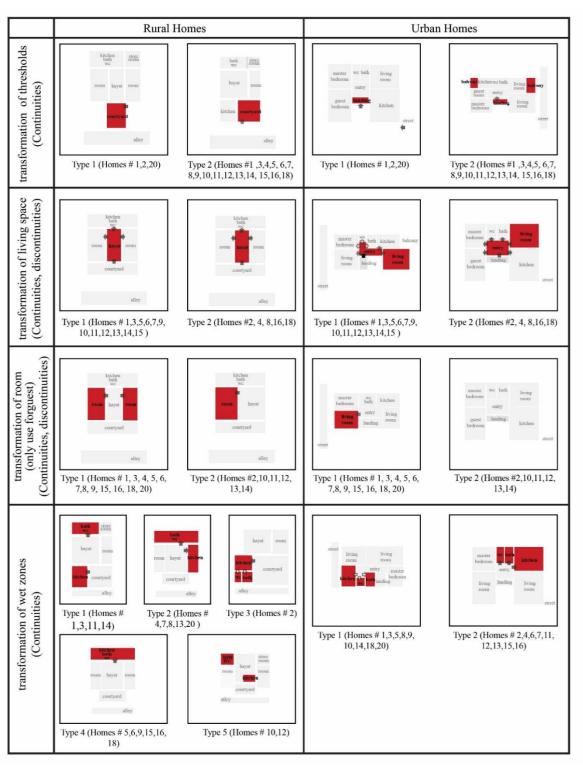
Figure 7: Transformation of thresholds, living spaces, rooms and wet spaces in the journey between homes

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Firstly, the transformation of the thresholds is examined as seen in Figure 7. There are two types of transformations for the thresholds. In the first transformation, the courtyard transforms into a landing only. In the second transformation, the courtyard transforms into landing and balcony. However, the thresholds show continuity in the journey between homes in both cases. The maintenance of the relationship between indoor and outdoor spaces is supported in the second case by balconies. Even though the shape of the thresholds changes spatially, their functional continuity is an indicator of the continuity of identity and spatial memory.

Secondly, the transformation of living spaces is examined as shown in Figure 7. There are two types of transformation for living spaces. The common point of these two types of transformation is the functional fragmentation of hayat, which is the living center of home, into an entry and a living room. The living room here is the space used by the household as a daily room. In the first type of transformation, there is a morphological discontinuity between hayat and entry, in other words, hayat loses its functions and turns into a linear corridor in the urban context. This situation is interpreted as a discontinuity in spatial memory. In the second type of transformation, hayat and entry are spatially continuous, thus, there is continuity in spatial memory. The emergence of living room in both types of urban homes is an indication of discontinuity. Because there is no space in a rural home that is exclusively for the use of the family members. As a result, it is analyzed that spatial identity and thus belonging show continuity and discontinuity.

Thirdly, room - living room transformation is examined and given in Figure 7. There are two types of transformations. In the first type of transformation, rooms used for hosting guests in the rural home are transformed into living rooms used for hosting guests in the urban home. Here, spatial continuity is actually a result of social continuity. Further, continuities in some norms such as the value given to the guest in the families lead to spatial continuity. Thus, spatial, social and social identity are maintained and accordingly belonging is also maintained as well. However, there is a discontinuity in the second transformation type, therefore, there is no inference similar to the first transformation type.

Fourthly, the transformation of wet volumes is examined in Figure 7. In this transformation, unlike the others, many types of transformations emerge, thus, it is not possible to group them. For this reason, types are formed by grouping the plan schemes of rural and urban homes. These types are compared for both contexts to analyze the transformations of these spaces. There are 5 and 2 types of wet space relationships in rural and urban homes respectively. In Type 1 of rural home, while the kitchen is connected to the courtyard as a separate space, the toilet and bathroom are in a single space and they are connected to hayat. In Type 2 of rural home, the kitchen is again connected to hayat as a separate space, the toilet and bathroom are together and they are connected to hayat. In Type 3 of rural home, the kitchen, toilet and bathroom are in one space and are connected to the courtyard. In Type 4, the kitchen, toilet and bathroom are together, however, they are connected to hayat. In Type 5 of rural home, the kitchen is not a separate space, it is a zone in hayat. The toilet and bathroom are in a single space and are connected to hayat. On the other hand, there are two types in urban homes. The common feature of Type 1 and Type 2 in the urban home is that wet spaces continue to be together. This continuity is the result of the reflection of the spatial identity created in the rural home to the urban home. The difference between Type 1 and Type 2 in the urban home is the way of connection of wet spaces to the entry. In Type 1 of urban home, the kitchen, toilet and bathroom are connected to the entry by a hall. On the other hand, the kitchen, toilet and bathroom are directly connected to the entry in Type 2 of urban home. The way these wet spaces in the urban home are connected to the entry is actually a continuity of spatial identity and memory.

The table given below shows the discontinuities in the journey between homes. First, the discontinuity of storage is examined as seen in Figure 8. There are 4 types of storages for rural home. In Type 1, it is connected to the toilet and bathroom, while in Type 2, it is connected to hayat. In Type 3, the storageis no longer a separate space, instead, it is a zone within the space. In Type 4, there is no storage. Moreover, there is no space equivalent to storage in urban homes. Thus, there is a continuity for this space and this situation is related to the dynamics of the context. In the rural context, since the needs cannot be reached immediately, stocking is required. However, it is not the case in the urban context because the needs are easily accessed. In short, the reason of disappearance of storage is that this room is no longer necessary for the users.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Secondly, the discontinuity of the master bedroom, bedroom and guestroom is examined as given in Figure 8. There are two types in rural homes. Type 1 has a room in which family members use to sleep. On the other hand, Type 2 in the rural home does not have a place used only by the family members. Further, there are 3 types in the urban homes. While Type 1 of urban homes has a bedroom used only by the parents, there is another bedroom used by other family members in addition to the master bedroom in Type 2. In Type 3 of the urban home, there is a guest room which is used by overnight guests for sleeping purposes in addition to the master room. Thus, the discontinuity in these spaces is detected. Living in the urban context causes family members to increase the privacy, thus, this situation ensures the formation of such spaces. In other words, these newly emerging spaces are the result of adaptation to the context. Thus, it is observed that new spatial relations are formed in identity and therefore belonging.
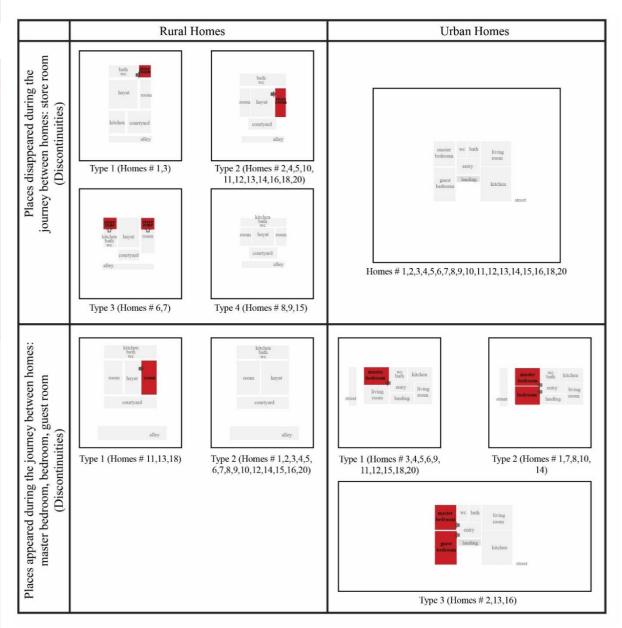
Figure 8: Discontinuities of storage, master bedroom, bedroom and guest room

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Behavioral Analysis: For behavioral analysis conducted with qualitative research methods, in-depth interviews, participant observation, group interviews, creation of family biographies, outside observations, open-ended survey questions are applied. Temporal organization, social relations, home and context relation, experiences, senses-sensetions are analyzed with the collected data. Thus, the meaning layers of home are associated with the findings obtained from the collected data.

The Analysis of Temporal Organization Between Rural and Urban Context: In the interviews held with 20 households at regular intervals over 2 years, a process is examined rather than a specific time. Interviews, information and archive researches are compiled from the past 100 years in village homes. For 20 households, the journey between homes actually started in 1969, and for these families, it was their great-grandfathers who started the journey. First ones who started the journey from village home to İstanbul stayed in single rooms. Then, homes in the city began to be built since the process of journey get longer. During this journey, a discontinuity is detected when the time perceptions are compared between homes in both contexts. In the interviews, while time is associated with the daily life cycle independent of the clock in the rural context, time is associated with the clock in the urban context. In addition, the participants emphasize that there is a race with time in the urban context, which makes life meaningless. While the place where leisure activities take place in the rural context is home, it is outdoor spaces such as shopping malls and cafes in the urban context, therefore, the identity of home is discontinuous. In both contexts, the state of routines for coming together such as birth, death and holidays, which are the cyclical features of time, shows continuity. This situation shows continuity in social identity and belonging. Finally, families are aware of changes in temporal organization in both contexts and they relate this to age, gender, and technology instead of the journey.

The Analysis of Social Structure Between Rural and Urban Context: 90 of 130 people formed in the rural context for the study continue the journey between homes actively. The majority of the studied group in the rural context come to the city as primary school graduates and they have reached the level of high school graduates by continuing their education in the urban context. This is the result of adaptation to the context. While the number of people living in rural homes is 7, the average number of people living in urban homes is 3. The reason for the decrease in the number of living people is the change in the family structure. Further, while the family members who get married in the rural context continue to live in the same home together with family members, the users who get married in the urban context leave their families and move to separate home. Therefore, this situation leads to changes in the identity of the family.

Figure 9: The comparison of social relationships of the rural and urban homes

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

When the socioeconomic structure is examined, it is seen that the economy of the families has improved in the urban context. This inference is made through the analysis of ownership status. While families have only one home and a small garden in the rural context, they have a home, shop and workshop in the urban context. The improvement in economy affects positively on family and social life. At the same time, the improved economy and ownership status have a positive effect on the development of belonging as well. Moreover, some continuities are determined when social relations are investigated (Figure 9). In the interviews, 18 of 20 families state that they visit their neighbors and relatives every day. Similarly, they emphasize that close social relation is the constative keystone of their culture, therefore, they take care to protect and maintain it. It is also an important information obtained from the interviews that they established village association so that the villagers gather easily and regularly. Thus, this is another indicator of the continuity of identity and belonging.

The Analysis of Context Relationship of Rural and Urban Homes: Thresholds play an important role in the relationship between home and context. As stated in the physical analysis previously, the functional continuity of thresholds continues between rural and urban homes. Another significant issue in the relationship of home to the context is security. Although the users in rural context do not have any problem related to the safety when they are outside of their homes, they feel themselves worried outside of their urban homes. Even women and children stated that they experience security problems when they go out of the streets near their homes.

Rural context	Urban context
Use of thresholds in the rural context	Use of thresholds in the urban context
User-street relationship in the rural context	User-street relationship in the urban context

Figure 10: The comparative of the relationship between home and context for urban and rural homes

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

The Analysis of Sense – Sensations Between Rural Context and Urban Context: During the interviews in this section, the answers to the question of "What does home mean to you?" in both contexts can be examined under 4 headings: economy, hometown, social relations and property. These titles are actually the situations that create the meaning layers of home. As understood from the answers to the question of "where do you feel you belong?", the belonging in both context is continues. Another situation that ensures the continuity of belonging is that the users are in the construction process of their homes. This also ensures the continuity of identity and memory as well. Belonging to their home is also associated with time spent by families, social relations and lairdship. At the same time, it is found based on the questions related to the longing emotions that the longing for the both contexts are continous. Thus, this situation can be interpreted as a reason for maintaining belonging.

In the answers to the questions about home and memory, it is seen that the continuity of memory between contexts continues through objects, meals, photographs and memories. The senses and sensetions that create memory are not always positive. 2 families make memory discontinues due to bad memories in rural home.

Conclusions of the Case Study: The change of meaning of home in time is read through the identity, belonging and memory, which are the main layers of meaning of home. First, when the spatial relations of home are analyzed, the continuity in the thresholds, living spaces and rooms are determined. Thus, the state of this continuity leads to the continuity of identity and belonging as well. However, the transformation of spaces include both physical and functional changes. Therefore, identity and belonging adapt to the context in which they are. A similar inference is also made through behavioral analysis. Social relations show continuity despite the change of context, this ensures the continuity of social identity and social belonging. However, when users come together, the main space in the rural context is home, while in the urban context, the main space is no longer home. This situation is an indication that lifestyles change with the change of context. The ways of perceiving time show discontinuity between contexts because the way of perceiving time of families develops with the dynamics of context. The senses and sensetions created at home as a result of experiences ensure the continuity of belonging and are transferred between contexts with the memory. Thus, memory plays a carrier role here.

Conclusions

Within the scope of this paper, the change of meaning of home with temporality and mobility is examined. When we focus on the structure of meaning of home to examine the change, a multilayered relationship is detected. Thus it is discovered that the meaning of home is a palimpsest that constantly produces itself throughout life, that is formed by the combination of many layers of meaning, and that these layers of meaning articulate each other endlessly. A conceptual framework is established on the axis of culture, place, temporality and mobility which are the layers of meaning of home and also it is based on this network of relationships. Culture defines the spatial character, social relations, the way the home is experienced, the user, the identity of the home over time, and the contextual relationships. At the same time, culture is one of the main characters that form the conceptual framework because it constructs the interaction between the concepts it defines. The place is the other main character in the meaning of home as it defines the home and the place has an identity, memory and belonging. Temporality affects all these main components and shapes memory, belonging, identity, social relations, spatial character and even the user, so it is the other main character. Mobility is becoming the main layer of the home as it is a 21st century lifestyle. Mobility changes all dynamics of meaning as it breaks and reconnects the ties between place and temporality in the home. Identity, belonging and memory come to the fore as it constructs all these relations between these layers and is a part of the interactions. For this reason, these concepts are called thick layers. At the same time, the multilayered meaning of home is made through thick layers.

The change of identity, belonging and memory with mobility is examined through the journey between homes. In this journey, changes are determined by comparisons of homes and households in rural and

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

urban contexts. The necessary data for this comparison are obtained by quantitative and qualitative research methods. Physical environment and behavior-normative analyzes of homes in both contexts are made. Data is obtained by making drawing of homes, questionnaires containing open and closed-ended questions, in-depth interviews, observations, semi-structured group interviews, biographies and archival research. As a result, it is determined that the homes provide spatial continuity, some space have functional changes and some space show discontinuity. In this case, the identity is both continuous and adapts to the context and time. Another issue, the continuity in social relations ensures the continuity of identity and belonging. The change of lifestyles along with the change of the context leads to the evolution of identity and belonging. Also, it is founded that belonging are continuous and memory is the transmitter with senses and emotions. Namely, identity and belonging show continuity because of the relationship with other layers of meaning of home, also evolve according to the context and time. On the other hand, memory is the transmitter for identity, belonging and other layers of meaning of home.

Consequently, the change of meaning of home is read through spatial character, temporal organization, social relations, experience of context, sense and sensations of transformations, continuities and discontinuities. In this process, it is concluded that identity and belonging, which are the main layers of meaning of the home, are fluid concepts in time and space. Therefore, with the dynamics of the 21st century, identity and belonging are turning into "contemporary identity" and "contemporary belonging". In this process, memory turns into "transmission memory" as it provides the transfer of meaning between contexts and times. In brief, the concepts of the layers of meaning of home are being transformed. In this case, it is seen that new layers of meaning are possible for the home in the future.

References

Ahmed, S., Castañeda, C., Fortier, A., Sheller, M. (2003). Introduction: Uprootings/Regroundings: Questions of Home and Migration. In S. Ahmed, C. Castañeda, A. Fortier & M. Sheller (Eds.). Uprootings/Regroundings: Questions of Home and Migration (pp. 1–20). London: Bloomsbury Academic. Retrieved June 20, 2021, from http://dx.doi.org/10.5040/9781474215909.0006

Altman, I & Rogoff B. (1987). "World views in psychology's: trait, interactional, organismic, and transactional perspectives" Handbook of Environmental Psychology. New York: John Wiley.

Altman, I., Chemers, M.M., (1980). Culture and Environment, Cambridge University Press, Cambridge, pp. 75-157.

Boccagni, P. (2017). Migration and the Search for Home: Mapping Domestic Space in Migrants' Everyday Lives: Palgrave Macmillan US.

Blunt, A., Dowling, R. (2006). Home. Oxon: Routledge.

Casey, E. S. (2001) "Body, Self and Landscape: A Geophilosophical Inquiry into the Place World", in P. C. Adams, S. Hoelscher and K. E. Till (eds) Textures of Place: Exploring Humanist Geographies. Minneapolis: University of Minnesota Press, pp. 403–425.

Cieraad, I. (2010). Homes from Home: Memories and Projections. Home Cultures, 7, 85-102. doi:10.2752/175174210X12591523182788

Cox, R. (2016). What are Homes Made of Building Materials, DIY and the Homeyness of Homes, Home Cultures, 13:1, 63-82, DOI: 10.1080/17406315.2016.1122966

Cresswell, T. (2009). Place. In N. Thrift, & R. Kitchen (Eds.), International Encyclopedia of Human Geography (Vol. 8, pp. 169-177). Oxford: Elsevier.

Despres, C. (1991). The meaning of home: Literature review and directions for future research and theoretical development (Vol. 8).

Dovey, K. (1985). Home and Homelessness in Home Environments. Human Behavior and Environment, I. Altman, C.Werner, Vol. 8, Plenum Pres, New York.

Easthope, H. (2004). A place called home. Housing, Theory and Society, 21(3), 128- 138. doi:10.1080/14036090410021360.

Güner, B., Citci, M. (2013). Pütürge Ilcesi'nde (Malatya) Cumhuriyet Döneminde Nüfusun Gelisimi ve Göc. Fırat Universitesi Sosyal Bilimler Dergisi, 23 (2), 0-0. Retrieved from https://dergipark.org.tr/tr/pub/firatsbed/issue/45176/565582

Güvenc, B., (2005). Mimarlık: Zaman, Mekan ve Değişim, International Philosophy and Architecture Symposium organized by ITU, Yapı- Endüstri Merkezi Yayınları, İstanbul.

Heidegger, M., (1997). Zaman Kavramı, Conference Presented at the Marburg Theological Society in July 1924. Cogito, 11.

Jenkins, R. (2008) Social identity. (3rd ed.). Oxon: Routledge.

Karahasanoğlu, S., (2013), Gaziosmanpasa Bir İlcenin Oykusu, Gaziosmanpasa Belediyesi Yayınları. İstanbul.

Ley-Cervantes, M., Duyvendak, J. W. (2017). At home in generic places: Personalising strategies of the mobile rich. Journal of Housing and Built Environment, 32(1), 63–76.

Mallett, S. (2004). Understanding Home: A Critical Review of the Literature. The Sociological Review, 52(1), 62-89. doi:10.1111/j.1467-954X.2004.00442.x

McLaughlin, J. (2015). Family ties in genes and stories: The importance of value and recognition in the narratives people tell of family. The Sociological Review, 63(3), 626–643.

Moore, J. (2000). Placing Home in Context. Journal of Environmental Psychology, 20(3), 207-217. doi:10.1006/jevp.2000.0178.

Perouse, F. J., (2011), İstanbul'la Yüzleşme Denemeleri, İletişim Yayınları, İstanbul.

Pink, S. (2004). Home truths: Gender, domestic objects and everyday life. New York: Berg.

Ralph, D., Staeheli, L. (2011). Home and Migration: Mobilities, Belongings and Identities. Geography Compass. 5. 517 - 530. 10.1111/j.1749-8198.2011.00434. x.

Somerville, P. (1997). The Socıal Constructıon of Home. Journal of Architectural and Planning Research, 14(3), 226-245.

Turgut, H., (1990). Kültür-davranış mekân etkileşiminin saptanmasında kullanılabilecek bir yöntem. PhD Thesis, Istanbul Technical University, Institute of Science, Istanbul.

Turgut, H., Tunali S. (2016). Kentsel Dönüşüm Bağlamında Toplumsal ve Mekansal Bağlılık ve Aidiyet. IAPS – Kültür ve MekanToplantıları, Ulusal Sempozyum 3, Ozyegin University, Turkey, 15 -16 December 2016.

Uraz, T. U., Turgut, H. (1997). Culture, Space, Change and Continuity from Traditional Turkish House to Squatter House. Culture & Space in the Home Environment. Dünya Yayıncılık.

Wegner, C.M., Altman., Oxley, D. (1985). Temporal Aspects of Homes, A Transactional Perspective, I. Altman C.M. Wegner, Home Environments: Human Behaviour and Environment, Vol.8, 1-32, New York: Plenum.

Yılmaz Kilic, Z. (2021). The Journey Between Homes: The multilayered meaning of home from the identity,

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

belonging and memory. (Unpublished Master Thesis). Ozyegın University. Graduate School of Engineering and Science. Istanbul.

Rising Home Ownership among Chinese Migrant workers: Determinants and Differences between Cities

Qian Zhang

Southeast University, Faculty of Architecture, Sipailou 2, Nanjing 210096, China
e-mail: qian_zhang@seu.edu.cn

Joris Hoekstra

Department of Management in the Built Environment, Faculty of Architecture and the Built Environment, Delft University of Technology, Julianalaan 134, 2628 BL Delft, The Netherlands
e-mail: j.s.c.m.hoekstra@tudelft.nl

Abstract

Traditionally, Chinese migrant workers are housed in dormitories or in the private rental sector. In recent years, however, an increasing proportion of the migrant workers has managed to become home owners. This paper further analyzes this trend, which may signify a new phase in the Chinese urbanization process. After a review of the existing literature, we carry out a statistical analysis (binary regression modelling) on the China Migrants Dynamic Survey, thereby focusing on twenty cities in the Yangtze River delta urban region. For these cities, we determine the micro-level (characteristics of individual migrants) as well as of the city level (city size, local migration policies, housing market development) determinants of migrant home ownership, and we assess how these determinants have changed between 2012 and 2017. This will provide insight into changing housing pathways of Chinese migrant workers, and the interaction of these pathways with local policies..

Keywords: homeownership, migrants, China.

1. Introduction

Promoting the urbanization of migrant population has been an important issue for the development of economy and urban society. According to the government report of P. R. China (2019), the urbanization rate of long-term residents (including both migrants and local residents) has maintained the average growth rate of 1 percent per year ever since the 2000. However, due to the special household registration system in China called "hukou", which records one's original residential location, internal migrants are differed from original local citizens not only in holding a different hukou (non-local hukou), but also are shut out from certain welfare benefits, including access to local government jobs, access to subsided housing and access to various social services (Deng, Hoekstra and Elsinga 2017). So there has been a large gap in between local urban residents and long-term residents in Chinese cities (44.4% and 60% respectively according to the data of NBS, 2019). In 2019, about 218 million migrant population living in cities would likely to settle down there and demand for adequate housing.

Housing for international and domestic migrants has long been a global challenge for scholars and policy makers. In many countries, migrants are a predominantly disadvantaged group who suffers the most of poor housing conditions including informal housing, over-crowding, lack of basic utilities and services, substandard housing quality, as well as discrimination and marginalization by local policy and society. For example, affordable housing provided or assisted by governments is rare and hard to get for migrants or immigrants, especially in developing countries. Meanwhile, the homeownership rate of migrants is

lower comparing to local residents due to their relatively weak socio-economic position or less willingness of permanent settlement in destination cities (Borjas 2002, Sinning 2009, DeSilva and Elmelech 2012, Painter and Yu 2010). Similar trends are observed in China. Due to the unique hukou registration system, migrants in China are often facing discrimination and disadvantaged treatment in both labor market, housing market and welfare sector. The most common housing tenure choice of migrants in China is private rental, followed by dormitories provided by employers and then owner occupation (Cui, Geertman and Hooimeijer 2016, Huang, He and Gan 2021). The relatively low homeownership rate for migrants can be explained by both the institutional constraints caused by local policy and the socio-economic situations of migrants. Firstly, unstable employment and low salary as well as rising housing prices directly lead to unaffordability of good housing. Secondly, municipalities usually set purchase constrains towards migrants in market and social housing sector in order to take the lead in solving housing problems for local citizens. Thirdly, low-involvement in the housing welfare program hinders the chances of getting lower mortgage rates for housing purchase (Lin and Zhu 2010).

However, despite all the disadvantages, the ratio of homeownership is still growing substantially among migrants. According to the China Migrants Dynamic Survey, which is conducted by the National Health and Family Planning Commission of P. R. China annually, the average home-ownership rates of migrants living in Yangtze River urban delta region has increased from approximately 5.9% in 2011 to 23% in 2017. Thus, it has almost quadrupled during six years.

This paper investigates the trend of growing migrants' homeownership rates in 20 selected cities in Yangtze River delta urban region. The following questions will be addressed:

1. What determinants have contributed to the rising homeownership of migrants?

2. How to explain the heterogeneity among different levels of cities in terms of migrants' homeownership?

The next section of this paper presents a literature review of previous studies on migrants' homeownership (Section 2), then follows a description of the study area and research data (Section 3). Section 4 contains a quantitative comparative study and attempts to answer research question 1, whereas Section 5 tries to answer research question 2 by regression analysis and comparative data analysis. The conclusion and discussion part are presented in Section 6.

2.   Literature review

2.1 Housing market development in China and the housing opportunities for migrants

The housing market of China has experienced a sweeping institutional reform since 1980, related to the economic reform and opening-up. Before 1980, urban housing was built by governments or work units, and rented to civil servant and employees at predefined prices. Housing was seen as one of the items of the socialist welfare economy for urban citizens. The results of this housing distribution system depended greatly on the empowerment of one's work unit and one's political affiliation (Deng et al. 2017).

Since 1980, the state began to promote housing reform in order to cut the financial burden for governments and work units as well as to meet the housing needs of citizens. Firstly, private enterprises were permitted to enter housing market. Real estate developers could build commodity dwellings and sell them at market prices on the condition of paying land leasing fees to local municipalities. Secondly, previous welfare housing owned by work units and governments was sold to sitting tenants at highly subsidized prices in order to repatriate construction costs. Thirdly, work units with abundant capital or construction land were encouraged to buy or build more dwellings and sell them to employees at subsidized prices. This dual provision system lasted until 1998 when the state council called for a full freeze of the in-kind housing distribution by work units (State Council, 1998). In the same period, the Housing Provident Fund (HPF) and Economic Comfortable Housing (ECH) provision were launched. The HPF is a housing deposit fund that can be used for personal housing expenditure and to which work units (employers) and employees jointly contribute. ECH is a kind of affordable commodity housing

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

aiming to meet the housing needs for mid- and low-income households. However, both HPF and ECH are offered to local urban hukou holders only, just as work units' subsidized housing. Rural hukou holders were assigned to a land parcel in their municipality or origin where they could build their own housing (Logan, Fang and Zhang 2009).

After 1998, the construction of commodity housing experienced a rapid development as a result of promoting policies at both the supply and the consumption side. Large amounts of dwellings have been built and housing price have soared in the first decade of the 2000s. As a reaction to this, new regulations were adopted to prevent speculation and housing price bubbles. In terms of the supply side, the proportion construction land for ECH and low- and mid-priced commodity housing construction was raised. New subsidized rental housing schemes of Low-rent Housing (2004) and Public Rental Housing (2010) were adopted. In terms of the consumption side, the required down payment was increased and stricter mortgage loan requirements and purchase limitations were implemented. Targeting restrictions were put forward especially towards the migrant population. People who did not have a local hukou or did not participate in local social security funds for a given number of years were forbidden to purchase local dwellings. Besides, non-local residents were also excluded from Low-rent Housing schemes, which only benefited households with the lowest-incomes and a local hukou (Wu 2007).

Despite the restrictions that were introduced, the homeownership rate in China has skyrocketed since the market reform, reaching more than 90% in 2017 nationwide (87% in urban areas and 96% in rural areas) (Huang et al. 2021).

In 2014, the central government implemented the hukou reform policy in order to encourage migrants to permanently settle down in small- and medium-sized urban cities and better make use of the public services and welfare provisions in urban areas (State council, 2014), including HPF (Zhang and Hoekstra 2020).

In summary, during the reform and development process of the housing market in China, getting access to home ownership was much more difficult for migrants than for residents with a local hukou. Firstly, during the reform period, households employed in work units have gained more capital than households working outside work units such as self-employed people or peasants without an urban hukou. The average price of reformed housing was about one fifth of the price of commodity housing on the open market (Logan et al. 2009). Moreover, households in wealthy work units or more close to decision-makers are the ones who have gained most capital through the housing reform. Secondly, the wealth gap between local residents and migrants widened when housing prices soared after 2000s, particularly disadvantaging rural households (Cui, Deng and Lu 2019). Thirdly, ECH as the biggest source of government subsidized housing for sale, is still forbidden for migrants. As a result, though today in most cities, locals and migrants have equal access to commodity home ownership, the difference in capital accumulation between new arrivers and native households is still large and plays a decisive role in homeownership acquisition. Moreover, some larger Chinese cities still maintain purchasing restrictions for migrants (Xing and Zhang 2017, Li, Cheng and Cheong 2017).

2.2 Determinants of migrants' home ownership in destination cities

Despite all the discriminations and difficulties in house-purchasing for migrants, homeownership is still strongly desired. After all, owning a dwelling in a destination city is considered a sign of integration and entails a rise in social status. On the one hand, becoming home owner will offer migrants access to local public services, for example, access to local public schools. On the other hand, achieving homeownership represents a symbol of success, thus leading to a rise in social class (Fleischer 2007, Huang and Tao 2015).

A lot of researchers have focused on the studies of migrants' housing tenure choices in destination cities. Many studies have focused on explaining the determinants of housing tenure for migrants. Institutional factors, demographic factors and socio-economic status are proven to be the most statistically significant variables (Huang et al. 2013, Wu and Zhang 2018, Clark, Huang and Yi 2019, Tang, Feng and Li 2016, Cui et al. 2016). It has been found that institutional arrangements play a more important role in more

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

developed cities while socio-economic status is more relevant to homeownership attainment in less developed cities after the hukou reform (Huang et al. 2013, Wu and Zhang 2018). Others have made a comparison between locals and migrants on homeownership attainment. Clark et al. (Clark et al. 2019) found that migrants are much less likely to became homeowners compared to their local counterparts. Also, hukou status remains a dominant hurdle in migrants' homeownership attainment while other institutional factors such as party membership are no longer significant. Cui et al. (Cui et al. 2016) have made a comparison between skilled migrants and local residents with regard to homeownership. They found that skilled migrants enter into homeownership later than their local peers, mainly due to the limited intergenerational wealth transmission, later partnership and restricted knowledge about local housing market.

Some studies also take the characteristics of origin and destination cities into consideration. Cui et al. (Cui et al. 2020) found that regional inequality plays a role with regard to migrants' homeownership in Shanghai, related to both socio-economic development and intergenerational transmission. Migrants form centrally administered cities are the most advantaged group, followed by those from provincial capitals and other cities. Migrants from towns and rural areas are the least likely to enter homeownership. Song and Zhang (Song and Zhang 2019) have analyzed the impact of city size on the willingness of purchasing local dwellings of migrants and found a converted U-shape curve with the expansion of city size. They explained this phenomenon with spatial equilibrium theory, stating that amenities and housing costs have reached the best balance in large cities, while megacities and small cities are less attractive for migrants.

In this paper, we focus on the actual homeownership of migrants. First, we try to determine the main drivers behind the rise in home ownership among migrants between 2012 and 2017. Subsequently, we try to explain why the patterns of home ownership among migrants take a different shape in cities of different cities.

3.   Study area and data

3.1 Study areas[1]

The Yangtze River delta urban region spreads over the alluvial plain along the lower reaches of Yangtze River. The whole region has an area over 0.2 million square km (2% of the total territorial area), a total population over 150 million (18% of the total population) and a GDP that equals 23% of the national GDP (2016). It is one of the most developed, wealthy and crowed urban regions in China and it also enjoyed one of the most coordinated regional governance as well as local government autonomy (Li and Wu 2018). The region includes one direct state-controlled municipality (Shanghai), 25 prefectural level cities, 40 county-level cities and a large number of towns, distributed over the provinces of Jiangsu, Zhejiang and Anhui (2016). According to the report on regional migration (National Health Commission 2018), the Yangtze River delta urban region has the biggest migrant population (25.9 million) of all Chinese urban regions. This large migrant population, as well as the great diversity of cities of different sizes, makes the Yangtze River delta urban region a good case study for the purposes of our research.

Of the 66 main cities in the region, 20 have been chosen as the study objects, including 1 national-level city (Shanghai), 11 prefectural-level cities (Nanjing, Hangzhou, Suzhou, Changzhou, Hefei, Wuxi, Shaoxing, Nantong, Huzhou, Jinhua, Chuzhou), and 8 county-level cities (Kunshan, Jiangyin, Yiwu, Jiaxing, Yixing, Zhuji, Ma'anshan, Tongling). The city selection process was based on 3 criteria:

1.   The selected cities needed to have a balanced spread over the three provinces.

2.   The selected cities needed to represent different population sizes, economic characteristics and

---

[1] As a follow-up to previous research, the study areas of this paper are in consistent with that of our previous paper: Zhang, Q. & J. Hoekstra (2020) Policies towards Migrants in the Yangtze River Delta Urban Region, China: Does Local Hukou Still Matter after the Hukou Reform? *Sustainability,* 12.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

administrative levels.

Some basic information of the selected cities is presented in table 1 and figure 1.

For each city, the city boundary is confined to the scope of the city's urban districts instead of the municipality as a whole. This implies that rural spaces attached to the city administration are eliminated from the study area[2].

Table 1 Names and numbers of
20 study cities

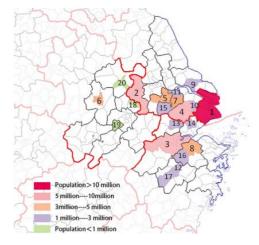| No.	City	No.	City
1	Shanghai	11	Jiangyin
2	Nanjing	12	Yiwu
3	Hangzhou	13	Huzhou
4	Suzhou	14	Jiaxing
5	Changzhou	15	Yixing
6	Hefei	16	Zhuji
7	Wuxi	17	Jinhua
8	Shaoxing	18	Ma'anshan
9	Nantong	19	Tongling
10	Kunshan	20	Chuzhou

Figure 1 Location and population
size of 20 study cities

---

[2] A more detailed explanation can be found in the article of Chan, K. W. (2007) Misconceptions and complexities in the study of China's cities: Definitions, statistics, and implications. *Eurasian Geography and Economics,* 48**,** 383-412, ibid..

3.2 Data

The data for this study comes from the China Migrants Dynamic Survey (CMDS) 2012 and 2017. The CMDS is an annual survey conducted by National Health and Family Planning Commission of P.R. China. The survey targets migrant population in order to understand their sociodemographic characteristics, the migration and settlement trends, employment and social security, housing and financial situations, health and family planning as well as social integration. The sample size in this survey reaches 200,000 per year, and the survey covers almost all provinces and cities in China using a probability proportional to size sampling method. Respondents are selected by the criteria of non-local hukou holders, living in destination cities for more than one month and aging from 15 to 59. The survey data used in this paper yield a total of 24,146 (2012) and 19,100 (2017) valid questionnaires respectively, covering all 20 study cities. The sample size per city level depends on the population size and is listed in table 2.

Table 2 Sample size of study areas

Level	Population size	City	Sample size (2012/2017)
1	More than 10 millions	Shanghai	14194/7000
2	5-10 millions	Nanjing, Hangzhou, Suzhou	3637/4760
3	3-5 millions	Changzhou, Hefei, Wuxi, Shaoxing	2556/3900
4	1-3 millions	Nantong, Kunshan, Jiangyin, Yiwu, Huzhou, Jiaxing, Yixing, Zhuji, Jinhua,	3159/2920
5	Less than 1 million	Ma'anshan, Tongling, Chuzhou	400/520

Source: CMDS, 2012 and 2017

4. Homeownership changes between 2012 and 2017

In this section, we make a comparison between the homeownership rates of 2012 and 2017 of the 20 study cities according to the CMDS survey data in order to answer the first research question: What determinants have contributed to the rising homeownership rates among migrants?

As table 3 shows, even though private rental is still the most common tenure choice for migrants, more and more migrants have become home-owners in the Yangtze Delta River urban region. The overall homeownership rate of migrants has been more than doubled in five years. Homeownership has exceeded the tenure choice of staying in dormitories and became the second common tenure for migrants in the study area.

Table 3 Migrants' housing tenure changes between 2012 and 2017

Tenure type	2012	2017	Change rate
Home-ownership	11.8%	26.0%	14.2%
Private rental	65.1%	59.7%	-5.3%
Dormitories	17.2%	12.4%	-4.8%
Others	5.9%	1.9%	-4.0%

Source: CMDS, 2012 and 2017

Previous studies have pointed out that demographic factors (gender, marital status, age, education, family size, duration of stay), socio-economic factors (income, employment, occupation category, local interaction) and institutional factors (local migration policy, housing price, hukou type, hukou location) are closely related to migrant's homeownership rates (Huang et al. 2013, Wu and Zhang 2018, Clark et al. 2019, Tang et al. 2016, Cui et al. 2016). To further understand the changing patterns of homeownership among migrants, the aforementioned variables are compared for 2012 and 2017 as table

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

4 shows.

Table 4 Variable changes between 2012 and 2017

Number	Variables	2012	2017	Change rate
1	Gender (male)	49.7%	51.3%	8.4%
2	Marital status (married)	77.3%	83.8%	6.5%
3	Age (years)	33.3	35.7	7.2%
4	Education (years)	10.09	10.71	6.9%
5	Family size (persons)	2.97	3.19	7.4%
6	Local migration duration (years)	5.5	6.6	20%
7	Monthly income (yuan)	6474.6	10026.2	54.9%
8	In employment (employee)	61.6%	62.6%	1.0%
9	Occupation category (Professionals)	11.7%	13.1%	1.8%
10	Hukou type (agricultural-hukou)	80.9%	77.7%	-3.2%
11	Hukou location (intra-region)[3]	15.1%	24.1%	9.0%
12	Local interaction (with locals)	27.3%	24.2%	-3.1%
13	Average housing price (yuan)	5430	7614	40.2%
14	Migration policy index[4]	9.09	9.93	9.2%

Source: CMDS, 2012 and 2017

Line 1 to 6 shows the changes of demographic features of migrants in study areas. In general, migrants tend to be older, more male over female, more married, more well-educated, more family-accompanied and stay longer in destination cities from 2012 to 2017. All these variables have the same growth trend as the variable of homeownership. Monthly income of migrants increased greatly along time. The employment and occupation structure, however, did not change much between years of 2012 and 2017.

Compared to 2012, study cities attracted more migrants with non-agricultural hukou and migrants that came from other urban regions or provinces (hukou location: intra-region). The hukou access policy in 20 study cities actually became stricter and the housing price soared within those five years. Increasing housing price can cause two consequences: depressing the homeownership rate, especially for low income and young families, or pushing people to purchase a house as early as they can in case of a continuous rise in housing price (Li and Zhang 2011). In the case of our study, the increasing housing price promoted the housing purchase of migrants. Furthermore, by comparing the growth rate of average income and housing price, it can be found that the growth of income outpaced the growth of housing price. This may also explain the growing homeownership for migrants since housing actually became more affordable for them.

5. Homeownership change among different city sizes

5.1 Introduction and regression analysis

This section deals with the second research question: How to explain the heterogeneity among different levels of cities in terms of migrants' homeownership? In order to answer this question, we first carried out a binary logistic regression model on the homeownership of migrants using the 2017 CMDS data. Then, we compared the related variables based on 5 different city size levels to better observe the

---

[3] Intra-regional migrants represent those whose original hukou location are within Yangtze River delta urban region, while inter-regional migrants indicate that these migrants are come from other parts of China.

[4] Migration index is a way to quantitatively measure the stringency of local hukou registration policy. The migration index value we used here comes from: Zhang, J., R. Wang & C. Lu (2019) A quantitative analysis of Hukou reform in Chinese cities: 2000-2016. *Growth and Change,* 50, 201-221.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

changing patterns.

Figure 2 shows the relationship between homeownership and 5 different city sizes. The figure shows that more than half of migrants living in small cities (level 5) has become homeowners, followed by level 3 (3-5 million population) and level 1 (more than 10 million population) cities. While migrants living in level 2 (5-10 million population) cities and level 4 cities (1-3 million population) has the least ratio to purchase their own dwellings. In summary, a W-shape curve can be used to generalize the distribution features of migrants' homeownership change according to city size.

Figure 2 Homeownership rate in 5 different city sizes
Source: CMDS, 2017

Table 5 shows the variables selected for regression analysis. The dependent variable is the home ownership of migrants in current destination cities (1=yes, 0=no). City level and 12 other independent variables referring to individual characteristics of migrants are selected based on previous literatures. The percentages or means of each variable can also be seen in table 5.

Table 5. Descriptive statistics of variables.

Variables		Number of cases	Percentage (%)/Mean
Dependent variables			
Homeownership	Yes	6180	32,4
	No	12920	67,6
Independent variables			
City level based on population	level 1 (more than 10 million)	7000	36.6
	level 2 (5-10 million)	4760	24.9
	level 3 (3-5 million)	3900	20.4
	level 4 (1-3 million)	2920	15.3
	level 5 (less than 1 million)	520	2.7
Gender	Male	9804	51.3
	Female	9296	48.7

Age	15 to 30 years old	6395	33.5
	30 to 45 years old	9124	47.8
	45 years old and above	3581	18.7
Marital status	Married	15999	83.8
	Not married	3101	16.2
Education	Junior high and below	10665	55.8
	Secondary school/ senior	4010	21.0
	College and above	4425	23.2
Family size in	-	19100	3.19
Hukou type	Agricultural hukou	14830	77.7
	Non-agricultural hukou	4263	22.3
Migration scope	Inter-province	14505	75.9
	Intra-province	4595	24.1
Local migration duration (years)	Less than 3 years	6252	32.7
	3 to 10 years	7793	40.8
	More than 10 years	5055	26.5
Monthly family income	< 4000 yuan	2233	11.7
	4000-8000 yuan	8528	44.6
	8000-12000 yuan	4647	24.3
	> 12000 yuan	3692	19.3
Employment status	Self-employed or employer	4370	22.9
	Employee	12100	63.4
	Unemployed	2630	13.8
Occupation category	Low-skill workers	5543	29.0
	Business and service sector	7746	40.6
	Professionals and public	2501	13.1
	Unemployed and others	3309	17.3
Homestead	Homestead in possession	12650	66.2
	No homestead in	6450	33.8
Local interaction	With local friends	4614	24.2
	With non-local friends	9964	52.2
	Rarely interacts with others	4522	23.7

Source: CMDS, 2017

Table 6 shows the results of the binary regression analysis that were carried out, these results are presented and interpreted as below.

Firstly, in line with the results figure 2 showed above, the binary logistic regression model revealed a statistically significant relationship of a W-shape curve between homeownership of migrants and 5 different city sizes. The homeownership rate in small cities is highest, followed by level 3 cities and level 1 cities. Xing and Zhang (Xing and Zhang 2017) also found that migrants had a preference for larger cities, even though their income may be lower. Their explanation for this phenomenon is that larger cities may provide better work and life opportunities as well as a more migrant-friendly social environment. In our previous research, we also observed that migrants are most willingly to settle in megacities like Shanghai or smallest cities like Ma'anshan compared to other cities (Zhang and Hoekstra 2020). We assumed that the hukou access criteria standard and the corresponding welfare benefits attached to local hukou may also play a role in migrants' settlement decision-making process. Largest cities like Shanghai can offer not only better career and income opportunities, but also better social

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

benefits such as medical care and education for children. Small cities, on the other hand, owes to its inexpensive living cost, closer location to home village and comparatively decent social benefits.

Socio-demographic features, like gender, generation, education, marital status and hukou type are of significance in becoming homeowners. The model shows that female migrants, older migrants, more educated migrants, married migrants and migrants with a bigger family accompanied are more likely to become homeowners. This is consistent with the work of Huang et al. (Huang et al. 2013) and Song and Zhang (Song and Zhang 2019) whose studies also observe that human-capital accumulation can increase the homeownership of migrants. Compared with migrants owning a non-agricultural hukou, those with an agricultural hukou are less likely to purchase dwelling in destination cities. This is possibly related to the wealth accumulation gap of previous and present generation caused by different hukou types (Cui et al. 2020). Migration scope and length also turned to be statistically significant factors. Migrants coming from same provinces as the destination city and migrants that have a longer migration duration are more likely to purchase homes in cities (Wu and Zhang 2018).

Financial aspects also play an important role in statistically explaining home ownership. In this respect, family income is a significant variable. The higher the income, the more likely it is that migrants become homeowners. This is related to the fact that purchase a dwelling in the destination city may not be a feasible option for low income migrants who can barely make ends meet (Wu and Zhang 2018). Also, migrants who work as low-skill workers are the least likely group to become homeowners. The possession of homestead also have a statistically significant influence on the homeownership in destination cities. Same conclusion is also found by Wang et al. (Wang, Liu and Ming 2020). However, self-employed migrants and migrants who work for an employer dose not showed a statistically significance in homeownership attainment.

Finally, the integration of migrants in the destination city is of clear importance. Frequent interaction with local people effectively encourages the homeownership of migrants. This finding is consistent with the research of Song and Zhang (Song and Zhang 2019), since interactions with locals also may provide more information on local housing markets to migrants.

Table 6. Predictors of migrants' homeownership in a binary logistic regression analysis.

Variables	b	P	Exp(b)
City level (ref: Level 5)		0.000	
Level 1	-1.176	0.000	0.309
Level 2	-2.374	0.000	0.093
Level 3	-1.015	0.000	0.362
Level 4	-1.158	0.000	0.314
Gender (ref: male)	0.176	0.000	1.192
Age (ref: less than 30)		0.000	
30-45	0.244	0.000	1.276
More than 45	0.526	0.000	1.692
Education (ref: junior high and below)		0.000	
Secondary school/senior high	0.661	0.000	1.936
College and above	1.348	0.000	3.848
Marital status (ref: not married)	0.655	0.000	1.925
Family size	0.219	0.000	1.244
Hukou type (ref: agricultural hukou)	0.132	0.031	1.141
Migration scope (ref: inter-province)	1.161	0.000	3.192
Local migration duration (ref: less than 3 years)		0.000	
3-10 years	0.844	0.000	2.325
10 years and more	1.290	0.000	3.634

Monthly family income (ref: < 4000 yuan)		0.000	
4000-8000 yuan	0.443	0.000	1.557
8000-12000 yuan	0.955	0.000	2.598
>12000 yuan	1.622	0.000	5.061
Employment status (ref: Self-employed/employer)		0.000	
Employee	0.046	0.430	1.047
Unemployed	0.584	0.000	1.794
Occupation category (ref: low-skill workers)		0.000	
Service and business	0.383	0.000	1.467
Professionals	0.525	0.000	1.691
Others and unemployed	0.690	0.000	1.993
Homestead (ref: homestead in possess)	0.573	0.000	1.774
Local interaction (ref: Local friends)		0.000	
Non-local friends	-0.865	0.000	0.421
Rarely interacting with others	-0.637	0.000	0.529
Constant	-4.016	0.000	0.018
Nagelkerke R-square	0.445 (p<0.001)		
Number of valid cases	19100		

Source: CMDS, 2017

5.2 Comparison among different city sizes

To further understand the cohort differences of migrant homeowners among different city sizes, comparison of related variables is made in table 7 below.

Table 7 Features of migrant homeowners in different city sizes

Number	Variables	Level 1	Level 2	Level 3	Level 4	Level 5
1	Gender (male)	41.8%	45.3%	49.8%	48.6%	49.7%
2	Marital status (married)	92.3%	92.0%	96.6%	90.9%	93.4%
3	Age (years)	39.2	36.3	34.6	36.3	35.2
4	Education (years)	13.5	12.7	11.5	11.0	10.0
5	Family size (persons)	3.49	3.34	3.40	3.70	3.33
6	Local migration duration (years)	10.4	7.7	6.8	8.3	5.6
7	Monthly income (yuan)	18682.1	14289.1	9682.2	10911.8	6128.9
8	Employmen (employer or self-employer)	16.5%	25.5%	23.6%	31.6%	29.4%
9	Occupation category (Professionals)	28.1%	23.1%	12.6%	15.9%	8.5%
10	Hukou type (agricultural-hukou)	36.8%	71.8%	83.8%	78.7%	90.2%
11	Local interaction (with locals)	45.9%	45.1%	40.4%	36.0%	59.8%

Source: CMDS, 2017

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Firstly, demographic features of migrant homeowners including gender, age, education and local duration differed according to city size changes. Female migrants, older migrants, more educated migrants and migrants stayed longer in destination cities tend to choose to purchase housing in larger cities, while the other way around. Demographic features of marital status and family size remain basically stable. Secondly, monthly income and employment status differed greatly of migrant homeowners in different city sizes. The average income of migrant homeowners of level 1 cities is 3 times than migrant homeowners of level 5 cities. And it is easier for migrants working for themselves to become homeowners in smaller cities. Thirdly, migrants with rural hukou are more likely to become homeowners in smaller cities while urban migrants prefer larger cities.

Table 8 Price/income ratio of migrant homeowners in different city sizes

Variables	Level 1	Level 2	Level 3	Level 4	Level 5
Monthly income (yuan)	18682.1	14289.1	9682.2	10911.8	6128.9
Housing price (yuan /m2)	24866.1 (Shanghai)	18272.9 (Suzhou)	9788.1 (Wuxi)	7343.2 (Jiangyin)	4943.4 (Ma'anshan)
Price/income ratio	1.33	1.28	1.01	0.67	0.80

Source: Year book of each city, 2018

Table 8 compared the difficulty of housing purchase for migrants though price-income ratio. It proves that buying a house in level 1 city is the most difficult while in level 4 and level 5 cities are much more affordable. Anyway, becoming homeowners in larger cities are more difficult to achieve for migrants. It will take more years and ask for better education and earnings as well as family supports (Clark et al. 2019). On the other hand, purchasing dwellings in smaller cities requires less financial and occupational supports.

6. Conclusion and discussion

Migrant population has long been depicted as a group of low-skilled, low-paid rural to urban labor workers and lived in inferior dwellings such as urban villages, overcrowded dormitories and poor neighborhoods locating in urban fringe. However, migrants nowadays have becoming more diverse and heterogenous, they tend to have higher education and occupational class as well as stronger willingness and propensity to consume, desiring for better living quality and housing conditions, and much stronger intention to stay and integrate into the destination cities. By studying the homeownership of 20 different cities in the Yangtze River delta urban region, this paper shed some lights on the homeownership changes as long as determinants of migrants. Based on our analysis, three main conclusions may be drawn.

Firstly, it has become clear that the homeownership rate of migrants has increased substantially in spite of the soaring housing price. Both the private rental and dormitories sector has been declined in 20 study cities. On the one hand, this shows a growing interest of integration into urban life. On the other hand, it indicates the potential consumption power of migrant population.

Secondly, we observed that the different sizes have an influence on the homeownership of migrants. According to our analysis, a W- shape curve can be used to illustrate the relation between homeownership and city size. Migrants living in level 5 cities are most likely to become homeowners, followed by migrants living in level 3 and level 1 cities. Migrants living in level 4 and level 2 cities are the least to become homeowners. We assume that the varied homeownership rate may be explained as

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

follows: firstly, housing price and price/income ratio in level 5 cities is relatively low and small cities have the advantage of low living cost and comparatively decent public services. Secondly, level 1 cities contain the largest amount of urban to urban migrants who enjoy better household wealth accumulation so that quite a few of them can afford to buy a house there regardless of the unaffordable housing price. Plus, better income and career opportunities, superior public services and greater concentration of talents is also the reason why migrants would to permanently settle in level 1 cities.

Thirdly, we compared the features of migrant homeowners based on different city sizes and found that it is much easier for migrants to purchase dwellings in level 5 and level 4 cities. And becoming homeowners in level 1 cities tend to be the most unaffordable and difficult. However, lots of migrants still has a preference for larger cities.

Based on our study of 20 cities in the Yangtze River delta urban region, we believe that migrants in different cities have different housing choices and needs. So it is important to make different housing policy for migrants in order to not only boost the homeownership of migrants but also to influence their long-term stay through fulfilling the different housing needs in different city sizes.

References

2016. Development plan of Yangtze River delta urban region. Internal Migration, Demographic Transition, and Evaluation of Policy. National Development and Reform Commission.

Borjas, G. J. (2002) Homeownership in the immigrant population. *Journal of Urban Economics,* 52**,** 448-476.

Chan, K. W. (2007) Misconceptions and complexities in the study of China's cities: Definitions, statistics, and implications. *Eurasian Geography and Economics,* 48**,** 383-412.

Clark, W. A. V., Y. Huang & D. Yi (2019) Can millennials access homeownership in urban China? *Journal of Housing and the Built Environment,* 36**,** 69-87.

Cui, C., W. Deng & T. Lu (2019) Pathways to homeownership in urban China: transitions and generational fractures. *Journal of Housing and the Built Environment,* 36**,** 9-27.

Cui, C., S. Geertman & P. Hooimeijer (2016) Access to homeownership in urban China: A comparison between skilled migrants and skilled locals in Nanjing. *Cities,* 50**,** 188-196.

Cui, J., C. Cui, X. Mu & P. Hao (2020) Home in the big city: does place of origin affect homeownership among the post-80s generation in Shanghai. *Housing Studies***,** 1-20.

Deng, W., J. Hoekstra & M. Elsinga (2017) Redistribution, Growth, and Inclusion: The Development of the Urban Housing System in China, 1949-2015. *Current Urban Studies,* 05**,** 423-443.

DeSilva, S. & Y. Elmelech (2012) Housing Inequality in the United States: Explaining the White-Minority Disparities in Homeownership. *Housing Studies,* 27**,** 1-26.

Fleischer, F. (2007) "To Choose a House Means to Choose a Lifestyle." The Consumption of Housing and Class-Structuration in Urban China. *City & Society,* 19**,** 287-311.

Huang, X., M. Dijst, J. van Weesep & N. Zou (2013) Residential mobility in China: home ownership among rural–urban migrants after reform of the hukou registration system. *Journal of Housing and the Built Environment,* 29**,** 615-636.

Huang, Y., S. He & L. Gan (2021) Introduction to SI: Homeownership and housing divide in China. *Cities,* 108.

Huang, Y. & R. Tao (2015) Housing migrants in Chinese cities: current status and policy design. *Environment and Planning C: Government and Policy,* 33**,** 640-660.

Li, B. & Y. Zhang (2011) Housing Provision for Rural-Urban Migrant Workers in Chinese Cities: The Roles of the State, Employers and the Market. *Social Policy & Administration,* 45**,** 694-713.

Li, V. J., A. W. W. Cheng & T. S. Cheong (2017) Home purchase restriction and housing price: A distribution dynamics analysis. *Regional Science and Urban Economics,* 67**,** 1-10.

Li, Y. & F. Wu (2018) Understanding city-regionalism in China: regional cooperation in the Yangtze River Delta. *Regional Studies,* 52**,** 313-324.

Lin, L. & Y. Zhu (2010) The diverse housing needs of rural to urban migrants and policy responses in China: insights from a survey in Fuzhou. *IDS Bulletin,* 41**,** 12-21.

Logan, J. R., Y. Fang & Z. Zhang (2009) Access to Housing in Urban China. *Int J Urban Reg Res,* 33**,** 914-935.

National Health Commission. 2018. *Report on China's Migration Population Development*. Beijing, China: China Population Publishing House.

Painter, G. & Z. Yu (2010) Immigrants and Housing Markets in Mid-Size Metropolitan Areas. 44**,** 442-476.

Sinning, M. (2009) Homeownership and Economic Performance of Immigrants in Germany. *Urban Studies,* 47**,** 387-409.

Song, Y. & C. Zhang (2019) City size and housing purchase intention: Evidence from rural–urban migrants in China. *Urban Studies,* 57**,** 1866-1886.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Tang, S., J. Feng & M. Li (2016) Housing tenure choices of rural migrants in urban destinations: a case study of Jiangsu Province, China. *Housing Studies,* 32**,** 361-378.

Wang, Z., J. Liu & J. Ming (2020) Owned a House in an Urban Destination or Made Housing Investments in the Hometown? Determinants of Rural Migrants' Housing Attainments in China. *Housing Policy Debate,* 30**,** 348-369.

Wu, L. & W. Zhang (2018) Rural migrants' homeownership in Chinese urban destinations: Do institutional arrangements still matter after Hukou reform? *Cities,* 79**,** 151-158.

Wu, W. (2007) Migrant Intra-urban Residential Mobility in Urban China. *Housing Studies,* 21**,** 745-765.

Xing, C. & J. Zhang (2017) The preference for larger cities in China: Evidence from rural-urban migrants. *China Economic Review,* 43**,** 72-90.

Zhang, J., R. Wang & C. Lu (2019) A quantitative analysis of Hukou reform in Chinese cities: 2000-2016. *Growth and Change,* 50**,** 201-221.

Zhang, Q. & J. Hoekstra (2020) Policies towards Migrants in the Yangtze River Delta Urban Region, China: Does Local Hukou Still Matter after the Hukou Reform? *Sustainability,* 12.

Moving from the city in the year of Covid
- will they return after the pandemic?

Marianne Tønnessen

Norwegian Institute for Urban and Regional Research, Oslo Metropolitan University
e-mail: mariton@oslomet.no

Abstract

Cities across the world have been severely affected by the Covid-19 pandemic, and out-migration from many cities was exceptionally high in 2020. Some moved to other parts of the same country, others moved abroad.

Using Oslo in Norway as a case, this study examines the characteristics of those moving from the city in 2020, in order to uncover reasons for leaving in the (first) year of Covid. Based on these findings I discuss whether the leavers will return when the pandemic is over.

Preliminary results show that those moving from Oslo in 2020 were older compared to those who moved out in 2019. To a larger extent than in 2019, the 2020-movers had jobs where home office was possible, they were not born in Oslo, and they were homeowners when living in Oslo. This may indicate that a large part of those who left Oslo in 2020, will not move back to the city after the pandemic.

Introduction

In 2020, an exceptionally high number of people moved out of cities. Out-migration was record high in, for instance, Tokyo (Gomi and Fukushima 2021), Stockholm (Statistics Sweden 2021) and Melbourne (Pollard 2021), and figures from the first six months of the Covid pandemic in the US show substantially increased net out-migration from New York, Chicago, San Francisco, Washington DC, Houston and Philadelphia (Bowman 2021). Britain also sees signs of a covid exodus from the cities (Marsh 2021), and high out-migration due to the pandemic is reported from other cities such as Paris (Cuthbertson 2021), New Delhi (Sen and Pandya 2021), Istanbul (Daily Sabah 2021) and Dublin (Weckler 2020).

The motivations for leaving a city during the Covid pandemic are probably diverse. Some may want to escape higher infection rates and the fear of living alongside too many people with little social distancing, some may want to get away from strict lockdowns and the lack of cultural activities and social life which are normally attractive qualities of a city, others cannot afford the combination of job loss and high housing costs in the city, and some may have used these extraordinary times to re-examine their life and found that they want to live closer to nature and/or family. During the pandemic the options for remote work increased considerably, which made physical distance to work less important, and which also may have induced the want for more space in order to work from home.

A survey conducted by Pew Research Center among more than 9,000 US adults in June 2020, shows that about 3% had moved due to Covid-19. Among these, the most important reason was to reduce the risk of contracting the virus. Other important reasons were closed college campuses, money-related reasons such as job loss, or the wish to be with family.

The consequences of the high out-migration from the city may be large, both for the cities themselves, which may experience lack of labor and needed skills as well as decreased demand for housing, and also for the places that receive the former city dwellers. For some places where population has been shrinking, these in-movers may give hope of a new trend. However, such consequences strongly depend on whether the 'covid exodus' from the cities will be reversed as soon as the pandemic is over, or

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

whether the moves are more permanent. This is the topic of the current study, which uses data from Oslo to examine the characteristics of those who moved from the city in 2020.

Oslo is the capital of Norway and by far the country's largest city. Also from Oslo, the total out-migration was record-high in 2020. As shown in figure 1 (left panel), there was an increase in the emigration from Oslo to other countries (blue line), and a larger increase in the internal migration to other parts of Norway (orange line).
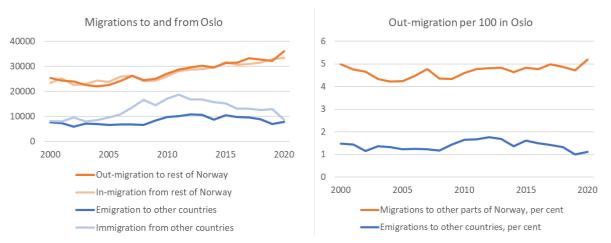
Figure 1: Migration to and from Oslo (left panel), and out-migration per 100 Oslo inhabitants (right panel), to other countries and to other parts of Norway.

Part of the increased out-migration in 2020 has to do with Oslo's growing population, with more people at risk of leaving. However, even the crude rates of out-migration (number of persons leaving divided by the total population of Oslo) increased in 2020, as shown in the right panel of figure 1. The propensity to move from Oslo was historically high for internal migration to other parts of Norway. Whether this high out-migration is only a temporary exception, which will be translated into higher return migration into the city in the next years, depends on the motivations for moving. These may be illuminated by studying the characteristics of the movers.

Data and methods

This study uses rich Norwegian register data which covers every person in Norway's population register, linked with information from several other registers. The movers are identified as those who lived in Oslo on January 1st, and were still alive but living in another municipality, or had emigrated, by January 1st the next year. Information about characteristics such as age, sex, occupation, place of birth, immigrant background, number of people in the family, income and whether they were homeowners or renters, are linked to each of these movers as well as to those who remained in Oslo.

To explore how the movers (to other parts of Norway and abroad) differ from those who stayed in Oslo, and whether these differences changed in 2020, multinomial logistic regressions are used. Visualizations of descriptive differences are used to highlight some of the most relevant findings.

For this extended abstract, data from 2020 are compared to data from 2019 only. The conference presentation will use longer time series as well as more detailed data on the movers' destination.

Analytical approach

Studies on motivations for moving (and staying) in Norway have identified four main reasons determining where people live: Work, family, housing and a place's attractiveness (Sørlie et al. 2009). The analytical approach of this extended abstract is built around these four motivations.

Work: If 2020 and the lockdowns made it easier to work from home, that may be a reason why people left the city. If this was a main reason, we would expect a higher out-migration among people with remote-friendly occupations. Another work-related reason for leaving the city could be that the movers

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

are (temporarily) laid off. In Norway, layoffs during the pandemic were particularly high in the cities' sales and service sectors. And whereas possibilities to work remotely from home may continue after the pandemic, Oslo's service and sale sectors will probably to a large extent have people back at work when the pandemic is over. Hence, investigating out-migration by occupation may give indications of whether the out-movers will return.

Family: People moving away from their families may eventually want to return 'home'. Hence, there may be reason to believe that out-movers who are originally from Oslo are more inclined to return later. Furthermore, moving may also be a more definite decisions for households with children, as it may be demanding for children to adjust to a new place. Hence, information on whether those who moved from Oslo in 2020 were born in Oslo and whether their household included children, may indicate to what extent they will return when the pandemic is over.

Housing: In Norway, homeownership is common, and renting often indicates intentions of a shorter stay, or lack of financial resources to buy a home. We may hypothesize that leaving a city is a more definite decision for people who owned a house in Oslo, and who will most probably have the financial resources to buy a new home and settle permanently somewhere else. On the other hand, since life in the city may be considered less attractive and beneficial during a pandemic breakdown, we may assume that some people with lower incomes may consider the costs associated with living there higher than the benefits. This will indicate that people with lower incomes move to a larger degree during a pandemic. They may also likely come back once the benefits of living in the city are back. However, this may crucially depend on the housing market in Oslo and how the housing costs evolve.

A places' attractiveness: Related to the above, the attractiveness of the city (before the pandemic) may have been particularly high among young people who are intensive users of the city's services most affected by lockdown, such as bars and restaurants, entertainment, shopping and cultural activities. Hence, whenever these services open again, we would expect many of the young out-movers to come back.

To summarize, we can expect high return migration to the city if the out-migrants were young people, workers in the sales and service industries, people with low incomes, people who rented their home, and people who were born in Oslo. On the other hand, if the out-migrants were older and born outside Oslo, with remote-friendly jobs and with children in the household, we can expect a lower share of them to return.

Preliminary results

Figure 2 shows the rates of migration out of Oslo by age, in 2019 (dotted lines) and 2020. Most of the increased emigration from Oslo seems to be driven by people in their late 20s and their 60s moving to other parts of Norway, and by people in their 30s and 40s moving abroad.
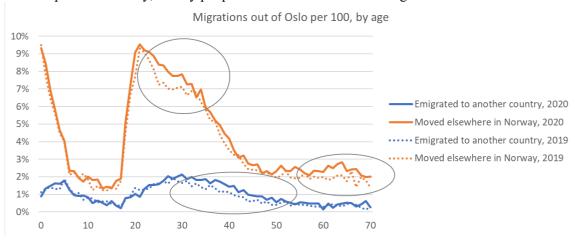

Figure 2: Migrations out of Oslo per 100 to other parts of Norway and abroad, by age. 2019 and 2020

OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

As shown in figure 3, out-migration rates from Oslo to the rest of Norway increased among all main occupational groups. In particular, the increase was high among clerical support workers (and 'Other occupations', which is a small and diverse group), but we also see a clear increase in the large group of professionals and among managers as well as service and sales workers. Almost no change is seen for the elementary occupations (such as cleaners). An analysis of how remote-friendly each of these occupational groups are in Norway (Holgersen et al. 2020) concludes that clerical support workers as well as managers and professionals have particularly high shares of remote-friendly jobs. On the other side of the scale, elementary occupations had almost no opportunities for working from home.

For emigration to other countries, the picture is different. People without registered occupation had the largest increased emigration rates, and it is hard to see any remote-work effect for clerical workers, managers or professionals.

Migrations from Oslo to other parts of Norway per 100, by occupation

Migrations from Oslo to another country per 100, by occupation
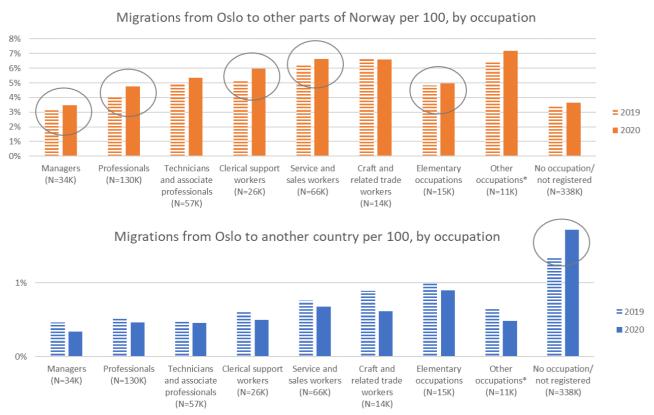
Figure 3: Migration from Oslo per 100 by occupation, to other parts of Norway (top panel) or abroad (lower panel).
* Includes military occupations, plant and machine operators and assemblers and skilled agricultural, forestry and fishery workers.

The first preliminary results from the binomial logistic regressions (Table 1) show the propensity to move out of Oslo in 2019 and 2020, after controlling for occupation and age groups.

Being born in Oslo appears to reduce risks of moving out to a larger extent in 2020 than in 2019. The same is the case for being a woman, and to some extent for having children in the household. And although the propensity of moving abroad was higher for immigrants also in 2019, this difference between immigrants and natives was even more pronounced in 2020. Further, although people renting a home still has a higher propensity for moving to other parts of Norway than the homeowners, this difference was smaller in 2020 than in 2019. For income, the highest out-migration is (still) found among the groups with lowest incomes (less than NOK 200,000 annually, which equals about USD 20,000), and the difference to wealthier people (incomes of NOK 200,000-999,999) has become larger.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Table 1: Results from binomial logistic regressions on risks of moving out of Oslo

		Moved to another part of Norway				Moved abroad			
		2019		**2020**		**2019**		**2020**	
		Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|
Male (ref=female)		0.022	0.086	**0.046**	0.000	-0.049	0.061	**0.202**	0.000
Born in Oslo		**-0.481**	0.000	**-0.520**	0.000	**-0.124**	0.006	**-0.166**	0.001
Immigrant		**-0.484**	0.000	**-0.459**	0.000	**1.986**	0.000	**2.300**	0.000
2gen immigrant		**-0.362**	0.000	**-0.298**	0.000	**1.207**	0.000	**1.207**	0.000
Living alone		0.010	0.505	**0.051**	0.000	**0.505**	0.000	**0.141**	0.000
Children in household		**-0.457**	0.000	**-0.480**	0.000	**-0.205**	0.002	**-1.387**	0.000
Renting home (ref=owning)		**0.410**	0.000	**0.158**	0.000	**0.364**	0.000	**0.428**	0.000
Income (ref = < NOK 200000)	NOK 200,000 - 499,999	-0.018	0.367	-0.015	0.457	**-0.755**	0.000	**-1.420**	0.000
	NOK 500,000 - 999,999	-0.057	0.025	**-0.105**	0.000	**-0.736**	0.000	**-1.386**	0.000
	above NOK 1,000,000	**-0.280**	0.000	**-0.247**	0.000	-0.125	0.124	**-0.890**	0.000

Also controlled for occupation and age groups (age 0-5 years, 6-17, 18-24, 25-34, 35-44 and 45+). Estimates in **bold:** Significant at the 0.01 level

Discussion and further work

Although the increased out-migration among sales and service workers and those with low incomes suggest that we may see some return migration to Oslo once the pandemic is over (depending on the housing market), other results indicate that a large part of those who left Oslo in 2020 will not move back: Many of the out-movers were people in remote-friendly occupations, they were not born in Oslo and they were not particularly young. Many of them also moved out from a home they owned.

For further work, I plan to compare the 2020 data with longer time series, and to investigate more about the destinations of the out-movers, as well as to run separate analyses for subgroups such as immigrants and natives or high- and low-income persons, to identify different types of out-movers who may have different motivations for leaving the city and thus different propensities to come back again, which again may illuminate whether the 'exodus from the cities' will continue also after the pandemic.

References

Bowman, Cynthia P. (2021) Coronavirus Moving Study: People Left Big Cities, Temporary Moves Spiked In First 6 Months of COVID-19 Pandemic. Mymove.com. https://www.mymove.com/moving/covid-19/coronavirus-moving-trends/

Cuthbertson, A. (2021) Latest Paris lockdown prompts mass scramble to flee French capital. Independent. https://www.independent.co.uk/news/world/europe/paris-lockdown-france-covid-latest-b1819648.html

Daily Sabah (2021) COVID-19 exodus from big cities begins in Turkey despite warnings. https://www.dailysabah.com/turkey/covid-19-exodus-from-big-cities-begins-in-turkey-despite-warnings/news

Gomi, R. and Fukushima, A. (2021) Over 400,000 flee Tokyo in 2020 coronavirus exodus https://asia.nikkei.com/Spotlight/Coronavirus/Over-400-000-flee-Tokyo-in-2020-coronavirus-exodus

Holgersen, H., Jia, Z. and Svenkerud, S (2020) Who and how many can work from home in Norway? Discussion Papers No. 935, Statistics Norway. www.ssb.no/en/forskning/discussion-papers/_attachment/425729?_ts=17303e44798

Marsh, S. (2021) Escape to the country: how Covid is driving an exodus from Britain's cities. The Guardian. www.theguardian.com/world/2020/sep/26/escape-country-covid-exodus-britain-cities-pandemic-urban-green-space

Pollard, E. (2021) Net migration to Australia's regions highest on record, Queensland among the most popular migration destinations. Australian Broadcasting Corporation (ABC) www.abc.net.au/news/2021-05-05/qld-coronavirus-internal-migration-melbourne-lockdown-regional/100114442

Sen, S. R. and Pandya, D. (2021) New Virus Wave Sparks Fresh Worker Exodus From India's Cities. Bloomberg. www.bloomberg.com/news/articles/2021-04-20/new-virus-wave-sparks-fresh-worker-exodus-from-india-s-cities

Statistics Sweden (2021) Migration by region, age and sex. Year 1997 – 2020. www.statistikdatabasen.scb.se/pxweb/en/ssd/START__BE__BE0101__BE0101J/Flyttningar97/ Accessed 13.05.2021

Sørlie, K., Aure, M. and Langset, B. (2012) Hvorfor flytte? Hvorfor bli boende? NIBR report 2012:22

Weckler, A. (2020) Property report claims thousands of tech workers left Dublin during pandemic. Independent.ie www.independent.ie/business/technology/property-report-claims-thousands-of-tech-workers-left-dublin-during-pandemic-39572891.html

DRAFT PAPAER
Airport noise as public bads: challenges in resolving the neighbor conflict and protecting homeowners

Magdalena Habdas (Associate Prof. Dr. hab.)
University of Silesia, Faculty of Law and Administration, ul. Bankowa 11B, 40-007 Katowice, Poland
e-mail: magdalena.habdas@us.edu.pl

Abstract

Incompatible uses of land create neighbor conflicts connected with the notions of civil law immissions (non trespassory invasions) or common law nuisance. These traditional instruments of resolving the neighbor conflict have their limitations when intereference with use and enjoyment of land is caused by pollution (such as noise pollution produced by aviation) that affects numerous landowners. Additionally, although planning law has always aimed to protect the welfare of the public from negative externalities caused by industrialization and rapid urbanization, the past century has shown that the efficacy of zoning often leaves a lot to be desired. In such circumstances lawmakers seek to resolve the neighbor conflict with the use of public intervention. Instead of relying on market, the state allocates entitlements, indicates how parties must behave and prescribes the conditions under which they should conclude an agreement. This should allow to balance the interests of conflicted parties, particularly when negative externalities are created by the provision of public goods, such as air transport.

Interestingly, despite the fact that nuisance caused by airport noise has the same characteristics all over the world, there are no uniform solutions applied. The object of this paper is to provide a comparative overview of how lawmakers seek to protect homeowners and to establish whether this protection is effective. In order to make such an assessment the object of protection and protective mechanisms (injunction and compensation) will be considered. This will allow to conclude, whether the lawmaker has in fact been successful in protecting homeowners, or whether he has created undesirable residential areas, inhabited by economic captives who are forced to live subjected to public bads. Inconsistencies in policies as compared to the applied economic and legal instruments will be identified in an attempt to indicate good practices in resolving this particular neighbor conflict.

Keywords: airport noise, nuisance, homeowners.

CONTENTS

1. Introduction

Incompatible uses of land create neighbor conflicts connected with the notion of civil law non-trespassory invasions (immissions) or common law nuisance. These traditional instruments of resolving the neighbor conflict have their limitations when interference with use and enjoyment of land is caused by pollution that affects numerous landowners. This is due to the fact that private law instruments fail to provide mechanisms effective in resolving a dispute involving many persons. Unlike in a typical neighbor conflict, there is no possibility to individually negotiate a resolution of the conflict and agree on a desirable transfer of entitlements.

The above is particularly true when the neighbor conflict involves pollution which takes the form of aviation noise. Currently it remains an unavoidable, although to some extent possible to mitigate, side effect of air transport which has become a fundamental element of the globalized world economy.[1] Planes produce onerous noise mostly during take-offs and landings. Although the airport, being an infrastructure plant, is not itself the source of aviation noise, it provides the indispensable services that allow planes to land and take-off. Its existence is the reason why neighboring landowners experience increased levels of noise.

---

[1] P. McManners, *Fly and be Damned*, Zed Books: London-New York 2012, 27-8, 55-6.

Thus, as a simplification, it is possible to state that airports generate public bads, however they do so in the process of providing socially beneficial services in the form of enabling air transport to function and develop. Their economic activity is simultaneously beneficial to some, but detrimental to others. The challenge is to identify solutions which adequately balance the interests of two opposing groups, namely the augmenters, who benefit from the public service, and the depleters, who suffer from it.[2] This is important not only from an economic perspective, but also from a legal and social one. Achieving a balance in this particular neighbor conflict may either prevent the public good from turning into a public bad, or at least minimize the extent to which public bads are produced.

In the case of the neighbor conflict involving airports and owners of surrounding land, particularly with residential uses, the balancing act requires public intervention. Individual negotiations by the neighbors are not viable due to the number of persons involved in the conflict and the public utility of services provided by the airport. Moreover, there is no inexpensive way to remove or substantially limit negative externalities produced by the airport.[3] Therefore, instead of relying on the market, the state coerces certain behaviors by allocating entitlements, indicating how parties must behave and prescribing the conditions under which they should conclude an agreement.[4] Interestingly, despite the fact that nuisance caused by airport noise has the same characteristics all over the world, there are no uniform solutions applied in resolving the conflict and balancing the interests of the airport and neighboring landowners.

The object of this paper is to consider how lawmakers in selected jurisdictions of the continental Europe seek to resolve the neighbor conflict between the airport and landowners in its vicinity. This is done in the context of regulations on non-trespassory invasions and subsequent public intervention utilized to the extent neighbor law is insufficient in resolving the conflict. The paper begins with an analysis of the neighbor conflict and of its legal and economic characteristics. It then considers how public intervention is structured and whether

---

[2] W. Buchholz, R. Cornes, D. Rübbelke, 'Public goods and public bads', 20 (2018) *J Public Econ Theory* 525–526, 539.

[3] K. Boudreaux, B. Yandle, 'Public Bads and Public Nuisance: Common Law Remedies for Environmental Decline', 14 (2002) *Fordham Environmental Law Review* 59-61.

[4] H. Demsetz, 'The Problem of Social Cost: What Problem? A Critique of the Reasoning of A.C. Pigou and R.H. Coase', 7 (2011) *Review of Law and Economics* 12-13.

its application allows to achieve the lawmaker's goals. According to R. A. Posner's differentiation between positive and normative economic analysis of law,[5] the purpose of the paper is to provide a positive analysis in order to understand and explain the existent legal provisions and their effects, also from the point of view of their efficiency. The object of the analysis is the regulating behavior of the state, which introduces public intervention.[6] An analysis of the legal mechanisms employed to balance the interests of the parties will allow to conclude, whether the lawmaker has in fact been successful in the difficult balancing act. The inconsistencies in policies as compared to the applied economic and legal instruments will be identified in an attempt to indicate good practices in resolving this particular neighbor conflict and possibly create a basis for normative analysis and *de lege ferenda* suggestions.

2. Legal characteristics of non-trespassory invasions

By the time World War II ended it was obvious that air transport of people and cargo would continue to develop and a new "Air Age" was dawning.[7] Airports became increasingly important infrastructure plants, necessary for the desired growth of civil aviation. Simultaneously it was apparent that due to the onerous nature of airport operations, land uses in the vicinity of airports required careful consideration. On the one hand, it would seem that this matter could have been effectively addressed by spatial planning, which had been developing over centuries, with arguably the world's oldest national planning law enacted in Great Britain already in 1909.[8] Unfortunately, although spatial planning emerged as a means of preventing nuisance and the resulting neighbor conflicts created by rapid urbanization and industrialization, the past century has shown that land use regulation is not in itself sufficient to eliminate neighbor conflicts caused by negative externalities.[9] Consequently, planning law,

---

[5] R.A. Posner, *Economic analysis of law*, Wolters Kluwer/Aspen Publishers: Austin-Boston-Chicago-New York-The Netherlands 2011, 31-33

[6] R.A. Posner, 'Uses and Abuses of Economics in Law', 46 (1979) *University of Chicago Law Review* 285-287.

[7] P. Svik, *Civil Aviation and the Globalization of the Cold War*, Palgrave-Macmillan 2020, 12-13; for more see A. Dobson, *A History of International Civil Aviation: From Its Origins Through Transformative Evolution*, Routledge: London-New York, 2017.

[8] See A. Sutcliffe, 'Britain's First Town Planning Act: A Review of the 1909 Achievement' Vol. 59, No. 3 (1988) *The Town Planning Review* 289-303; R. Alterman, *Takings International. A Comparative Perspective on Land Use Regulations and Compensation Rights*, ABA Publishing: Chicago 2010, 2-5.

[9] J. F McDonald, D. P. McMillen, 'The Economics of Zoning', in (eds) N. Brooks, K. Donaghy, G. J. Knaap, *The Oxford Handbook of Urban Economics and Planning*, Oxford University Press: Oxford 2012, 439, 441-443.

aimed at preventing the neighbor conflict, will often not be able to achieve that objective alone.

On the other hand, the resolution of a neighbor conflict traditionally takes place with the use of neighbor law, which is a set of casuistic rules governing typical neighbor disputes connected with land use. It is designed to provide solutions to individual matters on a case-by case basis,[10] with an *ex post* approach, i.e. when a conflict already exists. Although non-trespassory invasions (equivalent to nuisance in common law and immissions in private law), caused by noise, smoke, smell, vibrations and the like, cannot realistically be completely prohibited, neighbor law motivates landowners to limit their activities to socially optimal levels, by imposing liability, in the form of damages or an injunction, for externalities which cause excessive losses to affected persons.[11]

Regardless of the legal system one is considering, it is safe to say that resolving a neighbor conflict regarding non-trespassory invasions is not designed to completely exclude immissions and fully protect the adversely affected landowner.[12] The objective is to find an arrangement which reduces immissions to an acceptable level, i.e. one which allows all conflicted persons to use and enjoy their land to the fullest extent, accepting necessary limitations and inconvenience connected with the corresponding right to such use of other landowners.[13] This is particularly true when nuisance is caused by noise, which usually cannot be completely eliminated. Moreover, in the case of noise it is not contested that resolving the problem will depend on the type of noise (constant noise, temporary noise, sudden noise, etc.) and the time it occurs.[14] Nighttime noise is viewed as particularly onerous, especially when its level is high enough to interfere with sleep. In such situations, the resolution of the neighbor conflict may involve a substantial limitation on the right to produce noise at night, or even require a complete termination of noisy activities in specified nighttime hours.[15]

---

[10] Cornelius G. van der Merve, *The Law of Things*, Butterworths: Durban 1987, 102.

[11] K. Hylton, 'The Economics of Nuisance Law', No. 09-05 (2010) Boston University School of Law Working Paper 1, 20-21. available at: https://scholarship.law.bu.edu/faculty_scholarship/441

[12] J. L. Lewin, 'Comparative Nuisance', 50 (1989) U. PITT. L. REV. 1009, 1026.

[13]; G. P. Smith II, M. Saunig, 'Reconceptualizing the Law of Nuisance Through a Theory of Economic Captivity', 75 (2011/2012) *Albany Law Review*, 60-61.

[14] William H. Lloyd, 'Noise as a Nuisance', 82 (1933-1934) U. PA. L. REV. 570-572; M. Habdas, *Property and Trust Law in Poland,* Wolters Kluwer: The Netherlands 2018, 198.

[15] J. L. Cohen, L., 'Noise and the Law: A Survey', 11 (1972) *Duquesne Law Review* 138-140.

In addition one should consider that a balancing of the interests will be influenced by conditions prevalent in a given locality. Although, leaving aside detailed considerations, the locality is not in itself a sufficient defense of non-trespassory invasions both in common law as well as private law systems,[16] it does play a role in what solutions are ultimately applied. The locality influences the assessment of whether non-trespassory invasions are of such intensity that they warrant legal protection, as well as of what legal instruments are available, i.e. whether an injunction may be awarded, or only damages, or both.[17]

In regular neighbor conflicts caused by non-trespassory invasions the involved parties either come to an agreement on how to use the land or seek resolution in a court. Balancing the interests of the parties through the application of an injunction or damages does not usually pose serious difficulties since only individual interests of the parties are taken into consideration.[18] However when the conflict involves numerous persons, who are not immediate neighbors, and additionally involves public bads generated by an economic activity with significant social utility, neighbor law struggles to provide satisfactory solutions.

Consequently, lawmakers decide to rely on additional regulations which precisely determine how the conflict is to be resolved, i.e. whose interests prevail and at what cost. The decision is inextricably connected with the need to decide whether property or liability rules are to be employed or whether the conflict requires public intervention through a tax, subsidy or other direct regulation.[19] Property rules have less impact when parties affected by non-trespassory invasions are not immediate neighbors, are numerous, and cannot be identifies *ex ante*. In the case of industrial pollution, this is commonplace. In such situations liability rules, particularly connected with strict liability, yield better results. Nevertheless achieving the objectives of health and environmental protection increasingly requires areliance on administrative regulations and various forms of public intervention.[20]

---

[16] S. Steel, 'The Locality Principle in Private Nuisance', 76 (2017) Cambridge L J 145-146, 149-150.

[17] M. Fordham, 'Nuisance by Noise – the UK Supreme Court on Interference with the Use and Enjoyment of Land', (2014) Singapore Journal of Legal Studies, 400-402, 405-406; Smith II, Saunig, Reconceptualizing, 63-65.

[18] S. J. Spurr, *Economic Foundations of Law*, Routledge: London-New York 2019, 74.

[19] Spurr, 75.

[20] V. C. Perez, C. G. Liguerre, 'From Nuisance to Environmental Protection in Continental Europe', 92 (2019) Southern California Law Review 1004, 1007-1008.

This is connected with the fact that the legislators have devised a series of administrative permits which allow certain types of activities to continue, despite the negative externalities. The traditional remedy for non-trespassory invasions, namely the injunction (cessation action, *actio negatoria*), is often completely excluded and substituted by damages, with possible additional entitlements.[21] In the case of airports these are usually claims for reimbursement of costs spent on acoustic retrofitting of buildings. The above is a consequence of the fact that technological development has created activities which may be onerous to large, neighboring areas, but are nonetheless desirable from the point of view of public utility. The legislator thus intervenes to assist in properly balancing the interests of the parties.[22]

3. Balancing opposing interests through public intervention

An adequate resolution of the neighbor conflict will be one in which interests of all opposing parties are protected and efficiency is achieved. The latter must be understood as embodying social justice and maximizing society's aggregate wealth.[23] These may be difficult to achieve when traditional legal instruments allow to protect the interests of only or mainly one party. Modifying general property and liability rules is a regulating activity that confirms the relationship between private property and public interests. Property cannot be absolutely protected when significant public interests are at stake, which denotes that both injunction as well as compensation may have limited scope.[24] The regulating activity of the state is thus aimed at identifying the acceptable levels of immisions, the types of available claims, and the scope, manner and cost of exchanging entitlements.

Representatives of both neoliberal and welfare economics agree that public intervention is needed when due to market failure it is impossible to eliminate or minimize negative externalities. When it comes to non-trespassory invasions which are simultaneously environmental concerns, as in the case of noise pollution, there are significant difficulties in devising market mechanisms that could resolve the problem and adequately protect private

---

[21] J. L. Cohen, L., 'Noise and the Law: A Survey', 11 (1972) *Duquesne Law Review* 162.

[22] G. C. Keating, 'Nuisance as a Strict Liability Wrong, 4 (2012) *Journal of Tort Law* 58.

[23] Smith II, Saunig, Reconceptualizing, 62-63; A. Lehavi, 'Mixing Property', 38 (2008) Seton HALL L. REV. 147-148.

[24] M. Lee, 'The Public Interest in Private Nuisance', 74 (2015) *Cambridge Law Journal* 355-356.

interests and public need for services. In such situations public intervention is usually justified.[25] It may utilize tools that are market based, regulatory, or a combination of the two, however its application must be efficient, so that its benefits are higher than its costs.[26] In other words, the costs of conflict resolution must be lower after introducing public intervention than they would have been or were before its implementation. If this condition is not met, public intervention is unjustified because the conflict can be solved faster and cheaper on the market, by negotiations of the opposing parties, deciding about who should get what rights and at what price.[27]

In numerous cases, transaction costs of reaching a market agreement are insignificant and in order to negotiate a satisfactory outcome it is sufficient for the parties to utilize rights and instruments provided by the legal system.[28] Sometimes, the cost of public intervention is too high for it to be introduced as a way to provide consistent conflict resolution. The lawmaker should then consider amending the law so that it supports and facilitates resolving the conflict on the market, even if such a solution is not always efficient.[29] If despite the existing legal instruments available to the parties, conflict resolution requires frequent court involvement,[30] public intervention may be warranted, because the lawmaker prescribes a specified manner and price for the exchange of entitlements, eliminating market behavior which results in frequent court disputes.[31]

In the case of neighbor conflicts connected with pollution that affects numerous landowners, high transition costs frequently exist and prevent parties from reaching an agreement. This is caused by the fact that land is immovable and subject to site specific circumstances, which require developing non-standard solutions and obtaining extensive

[25] E. Sternberg, 'Justifying Public Intervention Without Market Externalities: Karl Polanyi's Theory of Planning in Capitalism', 53 (1993) *Public Administration Review* 103-104; see also B. D. Richman, Ch. Boerner, 'A Transaction Cost Economizing Approach to Regulation: Understanding the NIMBY Problem and Improving Regulatory Responses', 23 (2006) *Yale Journal on Regulation* 48.

[26] A. Coggan, S. M. Whitten, J. Bennett, 'Influences of transaction costs in environmental policy', 69 (2010) *Ecological Economics* 1777.

[27] Ronald H. Coase, 'The Problem of Social Cost', 56 (2013) J.L. & ECON. 844-845; 850-851.

[28] Spurr, *Economic*, 78-79.

[29] Coase, The Problem (n. 35) 852-853; H. Demsetz, 'The Problem of Social Cost: What Problem? A Critique of the Reasoning of A.C. Pigou and R.H. Coase', 7 (2011) *Review of Law and Economics* 12-13.

[30] A. W. Dnes, *Principles of Law and Economics*, Edward Elgar: Cheltenham, UK- Northampton, MA., USA 2018, 61; D. Campbell, M. Klaes, 'What Did Ronald Coase Know About the Law of Tort?' 39 (2016) *Melbourne Law Journal* 836-837.

[31] Coase, The Problem, 852-853.

market data. In effect, concluding a non-standard contract on the market is precluded by high transaction costs.[32] A proper understanding of the latter is decisive in efficient implementation, continuation and assessment of public intervention.[33] If the intervention does not lower transaction costs, it is either unnecessary, improperly designed, implemented or executed and does not achieve its goal of enhancing social welfare.[34]

It is important to note that an assessment of public intervention should not be performed only from the point of view of legality, by the introduction of primary norms (which prevent certain types of behavior) or secondary norms (which establish legal competences). Although they are necessary building blocks of the intervention, they must additionally be designed in a manner that creates certainty on the market and civility in social relations.[35] Without their integration into the society through an adequate formulation within the legal framework with easily accessible information about their aim and function, the intervention will not effectively eliminate irrational and opportunistic decisions, the latter being often the reason for not resolving the conflict on the market.[36]

The above comments are particularly important in resolving neighbor conflicts caused by non-trespassory invasions. The application of Coase's Theorem to consider and design public intervention when negative externalities exist allows to understand that when transaction costs are negligible, the conflict will be resolved on the market, regardless of which party has the right to demand the cessation of or create immissions.[37] The Theorem also indicates that when transaction costs are significant or one is additionally dealing with opportunistic, strategic or misleading behavior, the assignment of rights and entitlements is of paramount importance if transaction costs are to be reduced.[38] Additionally, a conscious decision must be made as to the application of property or liability rules to resolve the conflict. The former are not efficient when transaction costs are significant, but may be utilized if there is possibility of

---

[32] Coggan, Whitten, Bennett, Influences, 1780-1781.

[33] L. McCann, B. Colby, K. W. Easter, A. Kasterine, K.V. Kuperan, 'Transaction cost measurement for evaluating environmental policies', 52 (2005) *Ecological Economics* 533.

[34] Coase, The Problem, 852-853.

[35] M. V. Ch. Feres, Law as Integrity and Law as Identity: Legal Reasoning, State Intervention, and Public Policies, 14 (2013) *German Law Journal* 1158-1159.

[36] R. W. Loewen, Nuisance Damages as an Alternative to Compensation of Land Use Restrictions in Eminent Domain, 47 (1974) *California Law Review* 1015-1021.

[37] Spurr, Economic, 77.

[38] Demsetz, The Problem, 11-12; Dnes, Principles, 70-71

market negotiation and the intervention only has an augmenting function.[39] However in relation to public bads, due to the number of involved parties, it is justified to conclude that market negotiations are not possible.[40]

As a consequence, public intervention is employed and liability rules, connected with compensation, become of paramount importance. The intervention is a legal activity of the government, if it is performed within constitutional constraints. Compensation is therefore awarded to the extent property needs to be protected, but with consideration of the public interest involved. This denotes that it may not cover all possible losses resulting from negative externalities.[41] In the case of airport noise, the lawmaker needs to carefully consider if, what and to what extent should be compensated. This follows from the rule that resolution of neighbor conflicts requires balancing the interests of opposing parties, rather than affording absolute protection to only one party. It also results from the fact that public bads may need to be tolerated to some extent in order not to hinder civilizational development. [42]

4.   The French approach to the neighbor conflict involving airports

Balancing the interest of the airport and neighboring landowners is not a new dilemma and discussions concerning the best way to tackle the problem were already present in the mid XXth century. In France, nuisance created by airport noise became the subject matter of court disputes already in the 1960s. Interestingly, attention was focused not on airports, but on airlines, whose planes are direct producers of noise. Firstly, in a judgement of 27 Jan. 1964[43] the French *Tribunal des Conflits* (a tribunal that resolves competency disputes among public bodies, including courts) determined that conflicts concerning claims connected with aviation noise were to be tried by common courts, because claims are directed against airlines which are legal persons and the matter was a private law dispute. It was also noted that common courts do not have competence to adjudicate on any technical or operational matters, such as

---

[39] E. Mackaay, *Law and Economics for Civil Law Systems*, Edward Elgar: Cheltenham, UK- Northampton, MA., USA 2013, 228; Perez, Liguerre, From,1004, 1006-1009.

[40] Dnes, Principles, 74-76.

[41] M. Habdas, 'Polish dilemmas in compensating landowners in the vicinity of airports – black letter law vs. law in action', 4 (2020) *Legal Studies of The John Paul II Catholic University of Lublin* 33-34, 36-37; M. Habdas, J. Konowalczuk, J. Sluysmans, Compensating Owners of Residential Properties Located Near Airports – A Comparative Prespective on the Netherlands and Poland 114 (2020) *World of Real Estate Journal* 16.

[42] Loewen, Nuisance, 1001-1004.

[43] Le Tribunal des conflits, du 27 janvier 1964, L'Actualité Juridique Droit Administratif 1964, p. 152.

flight paths or restrictions on take offs and landings, because these issues are within the exclusive competence of public administration bodies. Claims against airlines were being brought not only by landowners, but also by municipalities. In the case of *Cne de Villeneuve-Le-Roi/Air France*[44] it was confirmed that a municipality has legal capacity to bring a case concerning aviation noise, because expert opinions showed that plane take offs and landings created noise that exceeded standards for urban areas thus causing significant acoustic disturbance in municipal administration buildings and schools.

In a judgment of the French Supreme Court (*Cour de Cassation*) of 8 May 1968[45] it was confirmed that persons living near airports may claim compensation from airlines for the inconvenience and other losses caused by aviation noise. This position was derived from the French Civil Aviation Code 1955[46] and three articles, namely 17, 18 and 36 (after the 1967 revision L. 131-1, L. 131-2 and L.141 – 2 respectively) which expressed the general right of aircraft to fly over French territory, with a simultaneous obligation not to interfere with the exercise of rights by landowners and absolute liability of the aircraft operator for any damage caused to persons or objects on land.[47] The court held that even if aircraft observed administrative rules on the performance of flights, airlines were still liable for damage caused by aviation noise, including loss of property value. An important limitation of that finding was, however, made, because the court allowed damages only for noise exceeding levels normally encountered in a given location. Consequently, plaintiffs who had purchased or developed land after the airport had already began operations and who could and should have adopted adequate construction plans and materials to limit exposure to noise, would either not receive any or only limited compensation. Another problem was establishing what share of damages was to be paid by each airline using the airport, however in the case at hand the court

---

[44] Le Tribunal de Grande Instance de Paris, du 13 juillet 1971, (*la procédure de Cne de Villeneuve contre Le-Roi/Air France*), L'Actualité Juridique Droit Administratif 1979, p. 427.

[45] Compagnie Air-France/Société E.R.V.E. 1968 ; La Cour de cassation, Chambre civile 2, du 8 mai 1968, N° de pourvoi 66-11.568 et 66-12.621, publié au bulletin

[46] Code de l'aviation civile et commerciale 1955 - Décret n° 55-1590 du 30 novembre 1955 portant codification des textes législatifs concernant l'aviation civile et commerciale, Journal Officiel de la République Française n° 0284 du 6 décembre 1955

[47] R.H. Mankiewicz, 'Airport Noise – Compensation of Adjoining Landowners under French Law: A Report on a Case and Some Further Considerations', 35 (1969) *Journal of Air Law and Commerce* 238-239.

avoided answering that question by stating that Air France aircraft operated the vast majority of flights at the considered airport.[48]

Airports were considered to be exempted from liability, because their location, construction and operation was obtained through administrative procedures and permits which took into account the interests of various parties. A legally established airport, functioning within the granted permits, could not therefore be held liable for its operation.[49] As R.H. Mankiewicz rightly pointed out, the matter was too complex to be left to an *ad casum* resolution by the judges, particularly since there was a lot of room for discretion regarding what the plaintiffs should and should not have foreseen or taken into account. The lawmaker's intervention was required to establish who should be liable and who should ultimately pay the price for public bads: airline customers (higher plane ticket prices if airline were liable) or the public at large (through government taxes, if airports were to be liable).[50]

The French legislator ultimately adopted a solution involving land use restrictions in areas close to airports. In 1971 the Ministry of Transport issues guidelines on recommended land use restrictions in areas subjected to aviation noise.[51] In 1973 these guidelines became binding and in that same year a trial program of collecting fees for passenger flights at the Paris Orly and Roissy airports was implemented. The proceeds were to be utilized for acoustic retrofitting of building subjected to excessive noise.[52] The next step taken was the introduction in the Urban Code 1973 (UC) of noise exposure maps (*plan d'exposition aux bruits* – PEB) in 1985.[53] The purpose of the maps is to regulate land use in the vicinity of

---

[48] Mankiewicz, Airport, 241-243.

[49] However see case where airlines recovered the damages paid for noise from the airport in a dispute before an administrative court, which held that it is the airport's location that ultimately causes noise to affect given neighborhoods: R. Goy, 'Dommages subis par les riverains d'aéroport. Recours des compagnies aériennes condamnées à indemniser les victimes. Responsabilité des gestionnaires d'aéroports. Responsabilité de l'Etat (non). Conseil d'État, 6 février 1987 Compagnie nationale Air France (Req. n° 36-586). Avec commentaires.' 1 (1998) *Revue Juridique de l'Environnement* 31-38.

[50] Mankiewicz, Airport, 244.

[51] Ministère des Transports. SGAC.DBA. 1971. Note générale d'information surl'ex- position au bruit des avions et la réglementation de la construction dansl'environnement des aéroports. Paris 5p,p5.

[52] I. E. Abdhulhay, B. H. Malkawi, 'De l'efficacité des mesures administratives contre les nuisances sonores des avions en droit français et émirati', 42 (2017) *Annals of Air and Space* 157.

[53] The Urban Code (Code de l'urbanisme) of 24 Feb. 1973 - Décret n° 73-1022 du 8 novembre 1973 relatif à la codification des textes législatifs concernant l'urbanisme et portant revision du code de l'urbanisme et de l'habitation, Journal Officiel de la République Française n°0264 du 13 novembre 1973.; PEBs are currently regulated in art. L.112-6 et seq. of the code.

airports indicated in art. L.112-5 UC with a timeline of 15-20 years.[54] PEB indicates the boundaries of 4 noise zone, with zones A and B being high noise zones, C being a moderate noise zone. Optionally, zone D may be established, however it is mandatory for airports indicated in art. 1609 of the General Tax Code (GTC).[55] Currently PEBs have been established for approximately 250 airports.[56] In art. L.112-10 UC building restrictions in the particular zones are indicated.[57]

It should be noted that the introduction of PEBs was not accompanied by compensation entitlements of landowners. Consequently, landowners continued to bring actinos for damages caused by aviation noise against airlines.[58] However, since 1 Jan. 2016, it is possible to claim compensation for land use restriction pursuant to art. L 105-1 UC, in which it is stipulated

---

[54] https://www.acnusa.fr/fr/le-bruit-et-la-cartographie/la-cartographie/peb-plan-dexposition-au-bruit/14

[55] Code général des impôts - Article 1609 quatervicies A. These are airports for which the annual number of movements of aircraft with a maximum take-off mass of 20 tons or more has exceeded twenty thousand during one of the five preceding calendar years as well as airports for which the annual number of movements of aircraft with a maximum take-off mass greater than or equal to two tons has exceeded fifty thousand during any of the preceding five calendar years, if the noise exposure or noise annoyance plans for that aerodrome overlap with the noise exposure or noise annoyance plans of an aerodrome having the characteristics defined in the first part of the sentence.

[56] https://www.geoportail.gouv.fr

[57] In the areas defined by the noise exposure plan, the extension of urbanization and the creation or extension of public facilities are prohibited when they lead to the immediate or long-term exposure of new populations to noise pollution. For this reason: **1.** Buildings for residential use are prohibited in these areas with the exception of: **a)** Those which are necessary for or connected with the aeronautical activity; **b)** In zones B and C and in the already urbanized sectors located in zone A, official accommodation necessary for industrial or commercial activities permitted in the zone and constructions directly linked or necessary for agricultural activity; **c)** In zone C, individual buildings not grouped together located in areas already urbanized and served by public facilities as long as they only lead to a small increase in the reception capacity of inhabitants exposed to nuisances and reconstruction operations made necessary by a demolition operation in zone A or B provided that they do not lead to an increase in the population exposed to nuisances, that the sound insulation standards set by the administrative authority are respected and that the cost of insulation is the sole responsibility of the manufacturer; **2.** Renovation, rehabilitation, improvement, measured extension or reconstruction of existing buildings may be permitted when they do not lead to an increase in the capacity to accommodate residents exposed to nuisances; **3.** In zones A and B, public or collective facilities are only allowed when they are necessary for aeronautical activity or essential for existing populations; **4.** In zones D, constructions are authorized but must be subject to the acoustic insulation measures provided for in article L. 112-12; **5.** In zones C, noise exposure plans may delimit sectors where, in order to allow the urban renewal of existing districts or villages, rehabilitation and urban redevelopment operations may be authorized, provided that they do not lead to an increase in the population subjected to noise pollution. Such an increase is however possible within the framework of the operations provided for in I of Article 166 of Law No. 2014-366 of 24 March 2014 for access to housing and renovated town planning, under the conditions set out in I and II of said article. After the publication of the noise exposure plans, at the request of the municipality or the public inter-municipal cooperation establishment competent in the area of local urban planning, such sectors may also be delimited by the competent administrative authority. of the State after a public inquiry carried out in accordance with Chapter III of Title II of Book I of the Environment Code.

[58] E.g. judgement of Tribunal de Grande Instance de Paris, 15 Novembre 1989. Dalloz 1990 IR 4.

that: *Restrictions instituted by application of this code in terms of roads, hygiene and aesthetics or for other objects and concerning, in particular, the use of the ground, the height of the constructions, the proportion of built and non-built surfaces in each property, the ban on building in certain zones and along certain roads, the distribution of buildings between various zones* **do not create a right to compensation**. *However,* **compensation is due** *if the result of these restrictions is an infringement of acquired rights or a modification of the prior condition of the premises causing direct, material and certain damage. This compensation, in the absence of an amicable agreement, is fixed by the administrative court, which takes into account the added value given to the buildings by the realization of the approved local urban plan or the document in lieu thereof.*

Finally, an additional element of the intervention was introduced by the act no. 92-1444 of dnia 31 Dec. 1992 r.,[59] and later in the Environmental Protection Code 1983 (EPC).[60] The lawmaker introduced another institution, namely the sound annoyance maps (*Plan de gêne sonore* - **PGS**), which delineate zones where landowners are eligible to obtain financial assistance in acoustic retrofitting of their homes. This is connected with a special tax on noise pollution, collected from airports which meet the criteria specified in the already mentioned section I of article 1609 A GTC. The collected tax is then utilized to finance the reimbursement of building soundproofing costs. This solution is based on the Pigouvian concept of taxing the entities producing negative externalities.[61] Its practical applicability depends on a relatively easy and inexpensive access to the necessary information and the existence of a governmental entity which can operate at a cost sufficiently low, not to consume the benefits of collecting the tax and controlling pollution.[62] In the case on the tax on

---

[59] P. Bijou, 'Sujétions administratives aux abords des aérodromes', 304 (1998) *La Revue administrative, 51e Année* 542.

[60] Law no. 83-05 of 28 Jan. 1983 - Code de l'environnement - Décret n° 2007-1467 du 12 octobre 2007 relatif au livre V de la partie réglementaire du code de l'environnement et modifiant certaines autres dispositions de ce code Les dispositions réglementaires du code de l'environnement font l'objet d'une publication spéciale annexée au Journal officiel de ce jour (voir à la fin du sommaire), Journal Officiel de la République Française n°0240 du 16 octobre 2007

[61] Mackaay, Law, 205-206

[62] Dnes, Principles, 64; also see McDonald, McMillen, The Economics, 446.

noise, these conditions can be met and taxation can be utilized as one of the mechanisms of internalizing the negative externality.[63]

Currently the following major French airports have a PGS: Paris-Charles-de-Gaulle; Paris-Orly; Lyon-Satolas; Nice-Côte d'Azur; Marseille-Provence; Toulouse-Blagnac; Mulhouse-Bâle; Bordeaux-Mérignac; Strasbourg-Entzheim; Beauvais-Tillé; Paris-Le Bourget.[64] As a consequence, pursuant to art. R 571-85 of the EPC, residents in the vicinity of airports indicated in section I of article 1609 A GTC may receive financial assistance from the operators of these airports, when they experience real discomfort confirmed by the sound annoyance plan established pursuant to articles R. 571-66 to R. 571-69 EPC. Aid is granted under the conditions specified in articles R. 571-85-1. to R. 571-87-1 EPC for the soundproofing of residential premises, other than hotels, educational establishments and premises of a health or social nature. Obtaining financial aid for soundproofing is subject to a specified procedure which ensures that soundproofing is planned and executed according to technical requirements and within the scope eligible for compensation. In addition, ceilings on reimbursed costs apply.[65] It has been observed that they do not cover the entire costs of soundproofing, however it is unclear whether this is due to the high costs of retrofitting or the existent disrepair of buildings.[66]

Finally it should be noted that that as a result of introducing a formalized system of protection from aviation noise, currently compensation claims against airlines are no longer pursued. This is probably due to the court's significant discretion in awarding damages based on an assessment of whether the plaintiffs encountered conditions unforeseeable and extraordinary in a given locality and whether they behaved in a manner that mitigated their loss. Instead disputes now concentrate on ascertaining whether a given immovable is located within a PGS, has been constructed in accordance with PEB requirements, or other matters

---

[63] The French Civil Aviation Authority has created a fiscal one-stop office called *Guichet Fiscal Unique* which combines the administration and collection of its four aeronautical taxes, namely the: Civil Aviation Tax, Solidarity Tax on Aircraft Tickets, Airport Tax, and Tax on Air Transport Noise Pollution; see https://www.ecologie.gouv.fr/en/aeronautical-taxes#scroll-nav__1

[64] See : https://www.acnusa.fr/fr/le-bruit-et-la-cartographie/la-cartographie/pgs-plan-de-gene-sonore/15

[65] https://www.service-public.fr/particuliers/vosdroits/F15837?lang=en

[66] A. Florette, B. Lebental, J.M. Malerba, 'Coordination des aides à l'insonorisation et à la rénovation énergétique des logements à proximité des aérodromes', Rapport CGEDD n°009392-02 (2017) 54.

connected with receiving financial reimbursement for soundproofing of buildings.[67] This denotes that disputes have shifted from typical neighbor conflicts tried by common courts, to administrative courts which hear disputes involving the observance of administrative requirements connected with airport operations. The resolution of the neighbor conflict relies on the involvement of the state, which through its public authorities implements the public intervention. Additionally, in 2009 the French lawmaker introduced a ban on the construction of new airports by stipulating that their construction is limited to cases of relocating traffic for environmental reasons.[68] This is connected with the fact that France has the highest number of airports per capita in Europe, namely: 475 sites including about 170 commercial airports; with 45 commercial airports being home to significant traffic.[69]

5.   Managing the neighbor conflict during the development of Schiphol Airport

Like the French, the Dutch solution of the neighbor conflict created by airport operations relied heavily on land use regulation, particularly since the Netherlands have been hailed as the proverbial "planner's paradise".[70] For the purpose of this paper it will be useful to examine the development of Schiphol Airport and the implemented public intervention aimed at mitigating the neighbor conflict. The airport underwent change over time and four distinct stages of its growth may be identified, namely: initial operations (1916-1945), growth within limits (1945-1967), rapid development, airport expansion, and relocation plans (1967-1985), mainport function (post 1985). These stages document the growing tensions between economic development, job creation, international connectivity and the protection of the environment, congestion, liveability.[71] In order to manage the above interests, conscious and long-term decisions about the future development of the airport had to be made. In particular, an option to relocate the airport to an alternative site (one of the considered sites was an

---

[67] See e.g. judgment of Conseil d'État, 6ème - 5ème chambres réunies, 11/04/2019, 411903.

[68] Article 12 II paragraph 2, law no. 2009-967 of 3 August 2009 relating to the implementation of the Grenelle de l'Environnement.

[69] L. Grosclaude, 'Les contraintes environnementales liées au développement des plateformes aéroportuaires', (2019) *Revue européenne de Droit de l'Environnement* 110.

[70] L. Gerrits, W. Rauws, G. de Roo, 'Policy & Planning Brief. Dutch Spatial Planning Policies in Transition', (2012) *Planning Theory & Practice* 4.

[71] M. van Wijk, K. Brattinga, M.A. Bontje, 'Exploit or Protect Airport Regions from Urbanization? Assessment of Land-use Restrictions in Amsterdam-Schiphol', 19 (2011) *European Planning Studies* 262, 264.

artificial island on the North Sea)[72] was ultimately abandoned at the onset of the XXIst century. Simultaneously with the airport's growth, towns near the airport were also expanding, bringing residential uses closer to the airport.

The decision that Schiphol required substantial expansion to become a mainport hub was taken in 1980s which subsequently resulted in initiating spatial planning procedures to establish the future land use regulations in the airport's vicinity. In 1996 key spatial planning modifications regarding infrastructure and land use in the Schiphol area came into force and included the construction of a fifth runway, additional roads, nature areas and bike paths, as well as the designation of noise and safety zones.[73] One of the aims was to substantially limit residential uses in the highest noise zones.[74] Land use restrictions were specified in the Schiphol Airport Planning Decree (Luchthavenindelingbesluit Schiphol - LIB). In the highest noise level areas they included voluntary sale by the owner and demolition of buildings. In areas with lower noise levels, construction of residential buildings, schools and hospitals was prohibited, however commercial uses were allowed. Practice showed that restrictions were viewed as too rigid and local authorities advocated their liberalization and introducing more flexibility and consideration of local conditions.[75] Another measure employed was the introduction of restrictive land use policies for companies, as only ones with airport relations were allowed to locate in business parks next to the airport.[76] Such robust spatial planning changes required considering compensation payments pursuant to the Spatial Planning Act 2006 (SPA)[77].

According to art. 6.1 (1) SPA[78] compensation may be granted to a person who suffers or will suffer damage as a result of introducing planning instruments enumerated in art. 6.1 (2)

---

[72] See D. Hulsewe, 'In the Tradition of Grotius: Building an Airport in the EEZ' 24 (1999) *Annals of Air Space Law* 63 et seq., particularly 68-69.

[73] F. Homba, W. Wijting, 'Land-use planning and the right to compensation in the Netherlands', 6 (2007) *Washington University Global Studies Law Review* 21-22.

[74] P. S. Dempsey, 'Local Airport Regulation: The Constitutional Tension between Police Power, Preemption & Takings' 11 (2002) *Penn State Environmental Law Review* 4.

[75] Ministry of Transport, Public Works and Water Management - Directorate General for Transport and Aviation, 'Evaluation of the Schiphol Policy. Final Report', February 2006, 28-29, https://puc.overheid.nl; Ministry of Infrastructure and the Environment, Ministry of Economic Affairs, 'Schiphol Action Programme', The Hague, April 2016, 45-49, https://www.government.nl

[76] van Wijk, Brattinga, Bontje, Exploit, 266-268.

[77] Wet ruimtelijke ordening, act of 20 October 2006.

[78] Similar solutions existed in art. 49 of the previous Wet ruimtelijke ordening from 1965.

SPA. Compensable damage may take the form of a loss of income or a reduction in the value of an immovable property, but does not include loss that should reasonably remain at the expense of the applicant or that has been sufficiently reimbursed through other means. Planning instruments that may trigger compensation at the request of the applicant include the introduction of a land use provision, an amendment of a previous land use provision, a deferral of granting permission to construct or demolish, or the grant of environmental permissions to conduct an activity. The persons who may claim compensation need not be landowners subject to new land use provisions, but also persons whose land value is negatively affected by change of land use in the vicinity. Both capital losses and income losses may be compensated, the former due to a reduction of light, obstructed view, onset of odors, increased noise and the like.[79]

It must also be emphasized that the above compensation has not been designed as full compensation, because according to art. 6.1 (1) SPA damage falling within the normal social risk remains at the expense of the applicant. Moreover, the legislator has introduced deductible thresholds, because the applicant will not be reimbursed for the first 2% loss of income, calculated with reference to the level of income immediately before the occurrence of the damage nor for the first 2% of the loss of capital value of an immovable property calculated with reference to the value immediately before the occurrence of the damage (art. 6.2 (2 ab) SPA). Furthermore, with regard to the damage eligible for compensation, the responsible public authority will take into account the foreseeability of the cause of the damage and the applicant's ability to prevent or limit the damage (art. 6.3 SPA).

With regard to the Schiphol airport, due to intensive intervention through planning law and the connected environmental permissions allowing the airport to function, the Minister of Transport, Public Works and Water Management, the provincial council of the province of North-Holland, the board of the water authority of Groot-Haarlemmermeer and some nineteen municipal councils created a 'one-stop-shop' for compensation claims resulting from administrative acts connected with the expansion of Schiphol Airport. As a result, a new public entity called the Damages Authority for Schiphol Airport (Schadeschap Luchthaven Schiphol) was set up in order to process claims and facilitate conflict resolution by providing

---

[79] For more see Alterman, Takings, Chapter 17.

one easily identifiable entity which was competent in all compensation matters connected with the development of the Schiphol Airport, regardless of which particular public body issued an administrative act that triggered liability. The Authority operated from 1998 to June 2020, by which time all the eligible claims had been handled. Its functioning was indirectly financed by a fee paid by airlines, which were later partly reimbursed to the extent the procedures were found to have been handled inefficiently and in an untimely manner by the Authority.[80]

In accordance with SPA provisions mentioned above, compensation was subject to the foreseeability test, because reimbursement for legal acts of the government is exceptional and occurs only to the extent specified by the legislator. Additionally, as has already been stated, only capital loss or loss of income is compensated, so no separate compensation for immaterial losses, like inconvenience and reduced enjoyment of land caused by increased noise and changes in the surroundings, may be awarded. Dutch law accepts the principle of risk acceptance, which denotes that that no or only limited compensation is due if the aggrieved party accepted risk of his/her action or inaction that resulted in not being able to avoid or minimize risk. In particular active risk acceptance is connected with making investment decision without considering reasonable challenges or threats these investments may be subjected to in the foreseeable future. In the case of planning and environmental administrative acts, parties are expected to take into account possible future changes signaled by the preparation and publication of policies, draft plans, public consultations, and the like.[81] In almost 20% of the available case law, the Damages Authority for Schiphol Airport found that affected parties actively accepted risk, because public consultation of land use plans or the demarcation of noise zones and contours provided foreseeability of noise pollution and a change in permissible land development.[82]

Apart from land use restriction, a sound insulation program for sensitive buildings, such as homes and schools was put into place. The program was financed through a GIS levy paid by

---

[80] M. Habdas, J. Konowalczuk, J. Sluysmans, 'Compensating Owners of Residential Properties Located Near Airports – A Comparative Prespective on the Netherlands and Poland', 114 (2020) *World of Real Estate Journal* 17-18, 20-21.

[81] Homba, Wijting, Land, 19.

[82] Habdas, Konowalczuk, Sluysmans, Compensating, 21.

the airlines and consisted of three phases: GIS1 commenced in 1984, GIS2 commenced in 1997, and GIS3 commenced in 2006 and was completed in 2012. The total costs for carrying out the phases amounted to approximately € 577 million. Upon the completion of the last stage, the major insulation project which had begun in 1984 was completed. Consequently the GIS levy was extinguished in July 2015.[83]

Similarly to the French solutions, the Dutch recovered the costs of acoustic renovation of buildings from the airlines. The Dutch solution also relied heavily on the involvement of the state to implement the intervention, but unlike in France, the Dutch decided to create a dedicated public body to deal with the entirety of claims connected with the development of their main airport. This reflects the institutional maturity of public administration as well as the level of state involvement in implementing and sustaining the intervention. Despite noted inefficiencies of the special authority, it is justified to conclude that the intervention achieved its objective and created the needed certainty on the market and civility in social relations.

6.   The German approach to protection from aviation noise

In Germany the debate on the best way to resolve the neighbor conflict between the airport and owners of neighboring land began in the late 1960s when work on the Act on the Protection from Aviation Noise commenced and ultimately resulted in passing the law on 30 March 1971 (PAN 1971).[84] The act was amended in 2007 (PAN 2007)[85] and remains in force today. During discussions on PAN 1971 it was emphasized that a balance between environmental, human health considerations, the national economy and the interest of airports had to be achieved. It was noted that a robust protection of households exposed to aviation noise would imply the necessity to provide similar protection to households subjected to noise from other forms of transport (e.g. roads and railroads) and this could lead to grave financial burdens for the economy.[86]

---

[83] Ministry of Infrastructure and the Environment, Ministry of Economic Affairs, Schiphol, 24.
[84] Gesetz zum Schutz gegen Fluglärm (FluLärmG), BGBl. I 282.
[85] Gesetz zum Schutz gegen Fluglärm in der Fassung der Bekanntmachung vom 31. Oktober 2007 (FluLärmG 2007), BGBl. I S. 2550.
[86] T. M. Zimmer, W. E. Burhenne, Airfield Noise Abatement in the Federal Republic of Germany, 12 (1972) *Natural Resources Journal* 369, 379.

Consequently, the initial plan to relocate residents in the vicinity of airports was abandoned as it would be connected with high costs of expropriation, buy-outs or similar types of compensation. Simultaneously it was decided that the liable party would not be the government, but the airport, which in practice could not meet such high financial requirements. Furthermore, a direct intrusion into residential areas near airports was deemed as artificial and extremely onerous for the residents.[87] Therefore, PAN 1971 was based on the concept of protection from noise rather than on the concept of relocation and freeze of land development. Apart from establishing special areas around airports, additional protective measures were introduced, namely: aircraft operational measures for noise reduction, noise related take-off and landing charges, aircraft noise measuring and public participation in procedures connected with noise mitigation.[88]

In Germany, public intervention into the neighbor conflict consists of establishing noise protection areas around civil and military airports (§4 PAN 2007). The lawmaker explains in §1 PAN 2007 that this is done in order to protect the general public and the neighborhood from dangers, considerable disadvantages and considerable nuisance caused by aircraft noise. The noise protection area always contains two daytime protection zones and one nighttime protection zone. The noise values for each zone are specified in §2 II PAN 2007. The values differ depending on whether they apply to a newly constructed (as well as substantially altered) or an existing airport, as well as whether they apply to a civil or military airport. Higher noise contours apply to existing as opposed to newly constructed airports. Similarly, higher noise contours apply to military, as opposed to civil airports. This means that their noise protection areas are less extensive.

Pursuant to §1 i §2 I PAN 2007, establishing noise protection areas is connected with introducing land use restrictions as well as technical requirements for buildings, the latter ensuring their proper soundproofing. Land use restrictions introduce a ban on new construction of three categories of buildings, namely: 1) hospitals, senior/care homes and similar buildings, 2) schools, kindergartens and similar buildings, 3) residential buildings. Buildings from the first category cannot be constructed in any of the noise protection zones.

---

[87] Zimmer, Burhenne, Airfield, 363-364.

[88] R. Therbach, R. Weinandy, T. Myck, Aircraft noise protection strategy in Germany, (2016) Proceedings of the 22nd International Congress on Acoustics, 6
http://www.ica2016.org.ar/ica2016proceedings/ica2016/ICA2016-0056.pdf 3-4, 6.

Buildings from the second category cannot be constructed in the two daytime protection zones, but are allowed in the nighttime protection zones, as such buildings are not utilized at night. Buildings from the third category, that is residential ones, cannot be constructed in the first daytime protection zone and in the nighttime protection zone (see §5 I and II PAN).

Apart from introducing land use restrictions, the German legislator also implements technical requirements designed to ensure adequate acoustic insulation of buildings. All new buildings erected in the noise protection area, including buildings that may be erected as an exception to the prohibition discussed above,[89] must fulfill sound insulation requirements. Detailed rules are specified in subordinate legislation, namely the second ordinance to PAN 2007.[90] Buildings that have already been erected at the time the noise protection area was established may be voluntarily retrofitted acoustically and it is the decision of the owner to undertake such renovation.

Since the legislator intervenes in order to resolve the neighbor conflict, a decision on how the parties are to financially equalize the imposed transfer of entitlements has to be made. The lawmaker enforces rules regarding the payments that are to be made between the airport and the aggrieved landowner.[91] They take the form of compensation payments and reimbursement of costs within the scope specified in PAN 2007 and subordinate legislation, namely the second ordinance and the third ordinance.[92] The intervention excludes the application of private law provisions on-non trespassory invasions[93] due to an explicit provision in § 14 BImSchG,[94] which finds application to airports through §11 LuftVG.[95] Landowners must

---

[89] See §5 I sentence 2, §5 III PAN 2007.

[90] Flugplatz - Schallschutzmaßnahmenverordnung (2. FlugLSV) of 8 Sept. 2009, BGBl. I S. 2992.

[91] Habdas, Konowalczuk, Sluysmans, Compensating, 7-8.

[92] Flugplatz - Schallschutzmaßnahmenverordnung (2. FlugLSV) of 8 Sept. 2009, BGBl. I S. 2992; Fluglärm-Außenwohnbereichsentschädigungs-Verordnung (3. FlugLSV) vom 20. August 2013, BGBl. I S. 3292.

[93] §906 and §1004 Bürgerliches Gesetzbuch in der Fassung der Bekanntmachung vom 2. Januar 2002 (BGBl. I S. 42, 2909; 2003 I S. 738), das zuletzt durch Artikel 12 des Gesetzes vom 5. Juli 2021 (BGBl. I S. 3338) geändert worden ist.

[94] Law on the protection against harmful environmental effects caused by air pollution, noise, vibrations and similar processes: Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge (Bundes-Immissionsschutzgesetz - BImSchG) vom 17. Mai 2013, BGBl. I S. 1274; 2021 I S. 123), das zuletzt durch Artikel 2 Absatz 1 des Gesetzes vom 9. Dezember 2020 (BGBl. I S. 2873) geändert worden ist.

[95] Aviation Act: Luftverkehrsgesetz in der Fassung der Bekanntmachung (LuftVG) vom 10. Mai 2007 (BGBl. I S. 698), das zuletzt durch Artikel 340 der Verordnung vom 19. Juni 2020 (BGBl. I S. 1328) geändert worden ist.

therefore tolerate immissions within the scope permitted by public law,[96] since the activity of the airport is not illegal if operations are conducted according to the relevant permits.[97]

The German legislator has introduced three heads of compensation for the public intervention that takes the form of noise protection areas. Firstly, compensation is due for a reduction in land value caused by land use restrictions that apply to the land of a given applicant (§6 I PAN 2007).[98] Loss of value can by virtue of the restrictions apply to undeveloped land only and is calculated as the difference in land value with no applicable land use restrictions and the land value subject to land use restrictions. Values are determined according to data as of the date the competent public authority issues its decision.[99] Compensation also includes costs connected with preparing the site for future construction (e.g. costs of an architectural plan, cost of preparing the ground for construction) which have lost their utility.[100]

Secondly, compensation includes costs spent on acoustic retrofitting of existent buildings or meeting higher acoustic standards for newly constructed buildings. Detailed rules on reimbursement are specified in §9 PAN 2007, however it should be noted that acoustic insulation costs are reimbursed only for buildings located in the first daytime protection zone (§9 I PAN 2007). In addition, reimbursement of acoustic insulation costs will also apply to buildings located in the nighttime protection zone, but only with respect to rooms used mainly for nighttime sleep. Pursuant to § 5 s. 4 of the second ordinance to PAN 2007 the reimbursement is subject to a maximum amount of 150 EUR per square meter of the residential space requiring insulation.

Thirdly, the German lawmaker has included compensation for immaterial damage, namely the inconvenience and decreased enjoyment of outside recreational areas due to noise (Beeinträchtigungen des Außenwohnbereichs). This element of compensation is, however, accessible only to a limited number of persons, because several conditions have to be met in order to be eligible for its award (§9 V PAN). Firstly, the considered compensation only applies to noise protection areas established for new or significantly altered airports. The

---

[96] OLG Schleswig, judgement of 11.09.2019 - 9 U 103/15.
[97] LG Bonn, Urteil judgement of 12.11.2003 - 9 O 41/01.
[98] FluLärmG 2007, §6 I
[99] F. Ekardt, *Fluglärmschutzgesetz. Nomos Kommentar,* Nomos: Baden Baden 2012, § 8, side no. 6.
[100] M. Beckmann, W. Durner, T. Mann, M. Röckinghausen, *Landmann/Rohmer Umweltrecht. Kommentar* C.H. Beck: München 2020, §8 side no. 16

lawmaker assumes that persons who decide to continue living near an existing airport or move there accept the risk of increased noise levels as well as future intensification of airport operations. [101] Secondly, it may be claimed only with respect to residential buildings located in the first daytime protection zone.

Consequently, this element of compensation does not apply to buildings near existing airports, or ones located in the second daytime protection zone or the nighttime protection zone. In addition, a building or apartment must have outside residential areas, which cannot be used in comfort due to aviation noise. Outside recreational areas are balconies, gardens terraces, and the like which supplement the residential function of a building.[102] Compensation is awarded according to flat rates specified by the legislator in §5 I –IV of the third ordinance to PAN 2007. For example, for a single family home located in the first daytime protection zone within noise countour 1 (more than 65 Db - civil airports or 68 Db - military airports) the flat rate is 5 000 EUR. However, §6 of the ordinance allows the amount of compensation for a single-family house, a two-family house or an apartment building equal to 2.00 percent of the market value of a property located in noise contour 1 and 1.48 percent of the market value of a property located in noise contour 2, provided that the claimant proves that the compensation determined according to this calculation exceeds the compensation pursuant to § 5. Finally, pursuant to §8 I of the ordinance, a higher or lower compensation may be set in deviation from §§ 5 to 7 if a significantly different amount of compensation is appropriate due to special circumstances of the individual case.

Public intervention in Germany is carried out with the application of administrative procedures modified and supplemented by requirements contained in protection from aviation noise provisions. Disputes are heard by administrative courts. Like in the French and Dutch interventions, the German intervention is performed with a significant involvement of the state, which regulates, organizes and implements the intervention. The involvement is less intense than the Dutch public intervention regarding Schiphol airport, as no separate authority has been established to deal exclusively with airport nuisance claims. It is however more specific than in the French solution, as the legislator has created provisions on protection from

---

[101] VG Neustadt a.d. Weinstraße judgement of 12.2.2007 – 3 K 2158/04, BeckRS 2007, 23410 side no. 182.
[102] § 3 I-III of the third ordinance to PAN 2007.

airport noise in a dedicated act and subordinate legislation, rather than incorporating it in general acts concerning spatial planning or the environmental protection law.

7.   Polish restricted use areas as in instrument of mitigating negative externalities

Unlike in Germany, the Netherlands and France, in Poland the discussion about protection from airport noise emerged around 2010. Before that time the issue was of marginal interest due to slow economic development and a relatively small number of airports and airport operations.[103] Only after the shift to a democratic system and a market economy in 1989/90, and particularly after access to the European Union on 1 May 2004 did the aviation industry in Poland began to rapidly develop.[104] To illustrate the above one can indicate that the national airport in Warsaw (Warsaw Chopin Airport) upon accession to the EU had connections with 43 cities and 4 years later that number increased to 80. In 2003 the airport served 5.3 million passengers and in 2008 - 9.5 million. In addition regional airports (particularly KRK, KTW, PZN, GDN) were experiencing intensive growth.[105] For this reason the problem of airport noise began to be noticed as a matter that required attention.

Leaving aside the historical development of legislation concerning special zones created around plants creating immissions in the form of environmental pollution, the current Law on the Protection of the Environment 2001 (LPE)[106] contains provisions on the establishment of restricted use areas (RUAs). Pursuant to art. 135 s. 1 LPE if the ecological review or the environmental impact assessment of the project, or the post-implementation analysis shows that despite the use of available technical, technological and organizational solutions, environmental quality standards outside the premises of the plant or other facility cannot be met, a restricted use area is created. In this provision, the legislator also enumerates plants that this provision applys to and they are as follows: airports, sewage treatment plants, landfill sites, composting plants, highways, electrical supply lines and stations, radio communication, radio navigation and radiolocation installations. Establishing a RUA in effect denotes that not

---

[103] J. Kaliński, *Lotniska komunikacyjne w Polsce po 1918 roku* [Communication Airports in Poland after 1918] 3 (2020) *Prace Historyczne Zeszyty Naukowe Uniwersytetu Jagiellońskiego* 574-582.

[104] Urząd Lotnictwa Cywilnego, '100 lat lotnictwa w Polsce. [100 Years of Aviation in Poland]', 5 (2018) Okolicznościowy Biuletyn Urzędu Lotnictwa Cywilnego, 7 https://www.ulc.gov.pl/_download/wiadomosci/2018/Biuletyn/Biuletyn562018-historia-internet.pdf.

[105] Kaliński, *Lotniska*, 585-589.

[106] Act of 27 April 2001, consolidated version Journal of Statutes 2020, item 1219.

observing environmental protection standards outside the enumerated types of facilities is legal within the boundaries of a RUA. It is a form of public intervention because its effect is to implement new rules of resolving the neighbor conflict.

The purpose of creating a RUA is to prescribe such current and future uses of land that reduce potential, negative effects to human health caused by the activity of the neighbouring enterprise and allow for the development of sustainable land uses in the vicinity of airports[107], or other enterprises expressly enumerated by the legislator in art. 135 s. 1 LPE. Therefore, when establishing a restricted use area for an airport (in the form of a resolution taken by the highest tier of local government) the legislator requires identifying: 1) restrictions on designating land for particular uses, 2) technical requirements for buildings, and 3) the permissible use of land (art. 135 s. 3a POE). The above constitute three main elements of the intervention. The last two elements are addressed to landowners, however the first one is directed to municipalities, who must reflect restrictions on land use specified in a RUA in their local development plans.[108]

Restrictions implemented in special zones are thus formulated as particular prohibitions regarding land use, but may also include requirements to take activities regarding the land or buildings, or to obtain a permit to use land for a given purpose[109]. The most commonly encountered prohibitions or restrictions introduced in RUAs are prohibitions on developing land, altering the terrain, changing the use of land to specified uses, cultivating specified crops, collecting specified fruits of land,[110] erecting specified types of buildings, changing the use of existing buildings to other, specified uses, extending or modifying buildings of specified uses[111]. All of the prohibitions or requirements must be justified by the conclusions

---

[107] J. Jendrośka, M. Bar, *Prawo ochrony środowiska. Podręcznik* [Environmental protection law. A textbook], Centrum Prawa Ekologicznego: Wrocław 2005, 696.

[108] art. 73 s. 1 point. 2 LPE

[109] B. Rakoczy [in:] *Prawo ochrony środowiska. Komentarz* [Environmental protection law. A commentary], Lexis Nexis: Warszawa 2013, s. 222; T. Suchar, *Ograniczenia sposobu korzystania z nieruchomości w związku z ochroną środowiska* [Restrictions in the use of land in connection with environmental protection], 59 (20110 *Casus* 16.

[110] K. Czajkowska-Matosiuk, *Ograniczenie korzystania z nieruchomości w związku z wymogami ochrony środowiska* [Restriction in the use of land in connection with environmental protection requirements], 1 (2015) *Prawo i Środowisko* 62-63; M. Pchałek [in:] *Prawo ochrony środowiska. Komentarz* [Environmental protection law. A commentary.] C.H. Beck: Warszawa 2019, 399-400.

[111] K.B. Wojciechowska, *Lotniskowy obszar ograniczonego użytkowania [The restricted use area of an airport],* C.H. Beck: Warszawa 2019, 118.

resulting from the assessment of the environmental impact, the post-completion analysis, or the ecological review[112].

In the case of airports, RUAs are created because of increased noise levels regarding the so-called sensitive buildings (i.e. hospitals, senior/care homes, or buildings connected with permanent or temporary presence of children or youth) or residential ones.[113] As a consequence, airport RUAs do not contain land use restrictions on any other types of buildings (e.g. office, commercial, industrial, etc.). Airport RUAs are established in the form of a resolution taken by the highest tier of local government, however the legislator does not specify whether the RUA should be subdivided into zones (like e.g. in Germany) and what land use restrictions should be introduced.[114] This introduces flexibility in the provisions of RUAs, however simultaneously it causes confusion as to why different land use restrictions apply to properties subjected to the same level and type of noise only because they are located next to different airports.

In practice, despite the fact that in Poland there are 35 airports qualified as onerous, only 11 of them have a RUA. All of the RUAs differ when it comes to subdivision into zones (e.g. WAW – 3 zones, KRK – 3 zones, KTW – 1 zone, PZN – 2 zones, GDN - 2 zones) and the type of land use restrictions that have been introduced. In general it may be stated that in the existent RUAs a prohibition on the construction of new, sensitive buildings is introduced in the whole RUA, regardless of subdivision into zones. Differences concern residential buildings, because some RUAs contain prohibition on new residential construction in the zone closest to the airport (e.g. KRK – zone A, WAW- zone Z1), while others allow such construction in the whole RUA, as long as buildings meet technical requirements of adequate sound insulation (e.g. GDN, PZN). Other differences may occur, e.g. in zone A RUA for KRK there is a prohibition on converting existing buildings to residential uses while in Z1 RUA for WAW this prohibition applies to conversion for residential uses as well as to sensitive uses. In zone Z2 RUA for WAW only conversion to sensitive uses is forbidden. In

---

[112] Rakoczy [in:] Prawo, 222.

[113] Rozporządzenie Ministra Środowiska z dnia 14 czerwca 2007 r. w sprawie dopuszczalnych poziomów hałasu w środowisku, tekst jednolity: Dziennik Ustaw 2014, poz.112.

[114] Więcej na temat procedury uchwalania OOU zob. *Jakub Bryła*, Resolutions Introducing Restricted Use Areas around Airports as Special Local Legislative Acts, Based on the Example of Restrictions on Residential Development 114 (2020) World of Real Estate Journal 39-42.

the RUA for KTW no zones have been delineated and new residential construction as well as conversion to residential uses is allowed when it accompanies a non-residential use. On the whole, a prohibition on new residential construction is exceptional and there are no bans on expanding, rebuilding or adding storeys to existing residential buildings.[115]

The second element of the intervention which is addressed to landowner are technical requirements connected with sound insulation of buildings. All RUAs contain a similarly worded requirement that buildings should meet technical criteria specified in the relevant construction law provisions for areas with increased noise levels. The obligation to observe these requirements relates only to newly constructed buildings. This follows from the fact that the law does not have retroactive effects. There is no legal obligation, although it is recommended, to acoustically retrofit the existing buildings.[116]

In the light of the above, the Polish legislator has decided to compensate owners in the vicinity of airports, whose land is located within the created RUA, for the loss which has been caused by the introduced restrictions (i.e. prohibitions and requirements). Liability for this compensation has, pursuant to art. 136 s. 2 LPE been placed on the airports. The relevant provisions of art. 129 s. 1 and s. 2 LPE,[117] regulate the cause and extent of compensable loss and apply not only to RUAs, but also other special zones, created pursuant to art. 130 LPE (various nature protection areas) or art. 136a LPE (industrial zones). The premise of applying art. 129 LPE is the introduction of a restriction which impacts the designation or use of a given piece of real estate[118]. No compensatory claims arise out of the mere fact of creating a RUA, the fact that noise levels are or potentially may be exceeded (RUAs for airports are designated on the basis of a prognosis of equivalent noise) or the fact that the use of land within a RUA is less comfortable due to airport noise. The legislator is not obliged to

---

[115] For more details see J. Bryła, 'Resolutions Introducing Restricted Use Areas around Airports as Special Local Legislative Acts, Based on the Example of Restrictions on Residential Development', 114 (2020) *World of Real Estate Journal* 43-49.

[116] Art. 136 III LPE in connection with art. 129 II LPE; for more see M. Habdas, 'Polish dilemmas in compensating landowners in the vicinity of airports – black letter law vs. law in action', 4 (2020) *Legal Studies of The John Paul II Catholic University of Lublin* 50.

[117] Article 129 LPE opens Part IX of LPE, entitled: Restrictions on the use of land connected with the protection of the environment. In section 1 of art. 129 the legislator states that: *if in connection with restricting the manner of the use of land, its use or the use of its part in a manner consistent with past use or past designation has become impossible or materially limited, the owner may demand that the land or its part be bought.* In art. 129 s. 2 the legislator provides: *in connection with restricting the manner of the use of land, its owner may demand compensation for the suffered loss; the loss also includes the decrease of the value of land.*

[118] Rakoczy [in:] Prawo, 210.

compensate all effects of introducing a special zone, which is a legal intervention of the government. Even if the mere fact of implementing a RUA may cause loss of value due to its negative perception by potential buyers, compensating the effects of a legal activity of public authorities may be limited in scope and subject to modified principles[119] when compared to general rules on liability for loss as regulated in PCC[120].

Apart from compensation provided in art. 129 s. 2 LPE, owners within RUAs are also entitled to the reimbursement of costs (i.e. money actually spent) resulting from fulfilling technical requirements concerning buildings, introduced in a RUA (art. 136 s. 3 LPE). Like the former head of compensation (i.e. land use restrictions affecting the value of land or causing other loss), liability for these claims has also been placed on airports, whose activities are the reason for establishing a RUA (art. 136 s. 2 LPE). This compensation applies to newly constructed buildings to the extent that the landowner bears increased costs of construction resulting from the mandatory technical requirements of increased sound insulation.[121] In addition, owners of existing, residential or sensitive buildings located within the RUA, regardless of the zone, will be reimbursed for the costs of acoustic retrofitting of the building even though undertaking the renovation is voluntary.[122]

It should be noted that disputes regarding compensation connected with RUAs are to be heard by civil courts. Interestingly, their interpretation of the LPE provisions has completely changed the meaning of the law in force. The Supreme Court presented a very extensive interpretation of the meaning of art. 129 s. 2 LPE[123] and was followed by a rather indiscriminate acceptance of this view in academic writings[124]. Article 129 s. 2 LPE was

---

[119] Supreme Court judgment of 25 June 2015, III CSK 381/14, LEX no. 1793696.

[120] T. Dybowski, 'Naprawienie szkody [Compensating damage]', [in:] *System Prawa Cywilnego. Tom III, część pierwsza. Prawo zobowiązań. Część ogólna* [The system of private law. Vol. III, firt part. The law of obligation. The general part], (ed.) W. Czachórski, Ossolineum: Wrocław-Warszawa-Kraków-Gdańsk-Łódź 1981, 189-190; J. Parchomiuk, *Odpowiedzialność odszkodowawcza za legalne działania administracji publicznej* [Liability for damages in cases of legal activities of public authority], C.H. Beck: Warszawa 2007, 360 et seq.

[121] Art. 129 II LPE.

[122] Art. 136 III LPE in connection with art. 129 II LPE.

[123] Initially in three Supreme Court judgments of: 25 Feb. 2009, II CSK 546/08, LEX no. 503415, of 24 Feb. 2010 r., III CZP 128/09, LEX no. 578138 and 6 May 2010, II CSK 602/09, LEX no. 585768; this line of judgment was later followed in numerous judgments of lower instance courts that are easily accessible and listed in the LEX database, under art. 129 LPE.

[124] See e.g. E. Stawicka, 'Czy art. 129 ustawy-prawo ochrony środowiska stanowi wyczerpującą podstawę roszczeń właścicieli nieruchomości o wyrównanie strat wynikających z ustanowienia obszaru ograniczonego użytkowania wokół lotnisk, tras komunikacyjnych i tym podobnych zakładów? [Does art. 129 of the

found to introduce liability for all losses caused by the mere introduction of a RUA, regardless of whether it contained restrictions that impacted the use of land. The Supreme Court held that despite the lack of any restrictions concerning the use of the claimant's residential house (there were no restrictions in the RUA concerning continuing the use of residential real estate) all premises of liability prescribed in art. 129 POE have been met. The Supreme Court argued that even though the RUA did not introduce any restrictions which concerned the use of the claimants' land for residential purposes, it did impact the claimants' right of ownership which led to a loss of value.

According to this reasoning, the introduction of a RUA confirms loss of comfort and convenience, because it is established for areas in which environmental protection standards are not observed. Since increased noise levels have been "legalized" within a RUA, the right of ownership has been restricted, because landowners cannot utilize nuisance claims and demand that the noise is decreased to meet environmental protection standards. The court has identified the loss of comfort and convenience, as well as the restriction of the right of ownership (through the exclusion of the nuisance claim) with restrictions in the use of land which, in the case of RUA, may only consist of particular restrictions on land use or technical requirements concerning buildings. Such an interpretation is very extensive and difficult to justify. The court's imprecise identification of the cause of compensable loss creates conditions for speculative behavior of landowners. These activities are supported, intentionally or unintentionally, by lawyers and valuers, all of whom have considerable possibilities of linking various losses with the imprecisely defined cause.[125]

In addition the courts have held that money necessary for acoustic retrofitting of existent buildings may be awarded even before it has been spent, because the very obligation to

---

environmental protection act is the sole basis of landowners' claims to compensate losses resulting from implementing restricted use areas for airports, highways and similar enterprises?]', 11-12 (2012) *Palestra* 205; B. Rakoczy, 'Glosa do wyroku Sądu Najwyższego z dnia 25 lutego 2009 r., II CSK 546/08 [A commentary on the Supreme Court judgment of 25 Feb. 2009, II CSK 546/08], 2 (2010) *Przegląd Prawa Ochrony Środowiska* 167; E. Kacprzak-Szymańska, 'Problematyka obszaru ograniczonego użytkowania w orzeczeniach sądów cywilnych [The matter of the restricted use area in judgments of private law courts], 2 (2013) *Rocznik Samorządowy* 87-88; K. Gruszecki, *Prawo ochrony środowiska. Komentarz [The protection of the environment law. A commentary],* Wolters Kluwer: Warszawa 2019, 341-342.

[125] For more see Habdas, Polish, 39-48

perform acoustic improvements constitutes loss.[126] The courts have neglected to understand that in relation to existent buildings there is no legal obligation to retrofit, there are no sanctions for not retrofitting and there is no time limit within which the retrofitting is to be performed.[127]

The extensive interpretation currently employed essentially equates restrictions in land use to inconvenience caused by noise and thus causes loss of value to be confused with loss of convenience. This leads to the expansion of compensation obligations beyond the scope expressly prescribed in art. 129 LPE. The vast discrepancy between the provisions in force and their actual application leads to a complete disregard for the cause and effect relationship between introduced restrictions in land use and their effect on land values. The *ratio legis* of the analyzed provisions designed to solve the conflict between airports and neighbouring landowners has not been properly considered in legal practice and thus the legal as well as the economic purpose of intervention remains overlooked, if not completely lost. Transaction costs instead of being reduced after the public intervention have increased, because conflicts are not being resolved on the market according to the rules mandated by public intervention. Airports refuse to pay compensation not expressly envisaged by the legislator and landowners are motivated to pursue their claims in courts knowing that they will be awarded compensation for immaterial losses not designed for compensation (loss of convenience) as well as for unrealized losses, in the case of acoustic improvements that have not been actually carried out.

8. Conclusions

A positive analysis of the regulating behavior regarding the manner in which the neighbor conflict between the airport and landowners is resolved in selected European jurisdictions reveals that lawmakers have devised differing regulations, however there are important similarities between them. It should be noted that classical neighbor law instruments derived

---

[126] See e.g. the following judgments: Court of Appeals in Kraków, 17 March 2015, I ACa 1773/14, LEX no. 1711428; and 15 May 2015, I ACa 295/15, LEX no 1740679; Court of Appeals in Poznań 17 July 2013, I ACa 388/13, LEX no. 1356638 and 17 Jan. 2013, I ACa 1104/12, LEX no. 1271919, Court of Appeals in Łódź, 10 July 2015, I ACa 94/15, LEX no. 1771294.
[127] See Habdas, Polish, 48-52.

from the doctrine of non-tresspassory invasions have been deemed as insufficient to resolve the conflict and in all jurisdictions public intervention was utilized. The applied legal solutions are consistent with findings of a law and economics approach which helps to understand when an imposed transfer of rights at a set price is required and additionally when a Pigouvian tax may be employed to help achieve the objective of adequately balancing the opposing interests.

Due to the large number of persons involved in the conflict and the public utility of the service provided, injunctory relief is unattainable and undesirable. Liability rules are preferred to property rules, and the former are utilized in zones delineated around airports on the basis of noise contours. This helps to identify the conflict area and the persons involved in the conflict as clear boundaries are set and other landowners are excluded from the dispute. Simultaneously it is possible to predict the costs connected with the introduced liability rules. This helps in achieving certainty on the market and promotes social civility. Imissions created by airports are also controlled in order to protect the environment and human health. This is done through a series of administrative measures resulting in permits that allow airports to function but also oblige them to employ all available measures that mitigate noise.

In all analyzed jurisdictions the public intervention focuses on two pillars, namely: introducing land use restrictions in zones with specified, high noise levels and ensuring reimbursement of costs spent on proper acoustic insulation of buildings. Unsurprisingly, further details of the interventions vary greatly, as different land use restrictions are introduced and different procedures and levels of financial aid for sound insulation of buildings are employed. The relevant provisions are also differently situated within each legal system. It is worth noting that In France, Germany and the Netherlands the land use restrictions are defined in a uniform manner and are not independently designed by local authorities. A completely different approach was taken in Poland, where land use restrictions are to be set out for each airport by local governments. On the one hand, this gives a lot of flexibility and the possibility to take into account local conditions. This was an argument raised by local authorities in the Netherlands who objected to too stringent and uniform land use restriction in the Schiphol area. On the other hand it may cause unsubstantiated differences in land use restrictions for properties exposed to the same levels of noise but located near different airports. It may also facilitate a lax approach of local authorities to land

use restrictions in the sense that very few are introduced and thus airport liability is significantly decreased.

In all analyzed jurisdictions the legislator introduces compensation for loss caused by the introduced land restrictions. Only in Germany an additional head of compensation is introduced and allows to compensate for inconvenience caused by aviation noise in the use of outside residential areas. In France and the Netherlands compensation for land use restrictions is limited by the doctrine of social risk acceptance, so not all cases of land use restrictions will lead to compensation or full compensation. In contrast, in Germany and in Poland land use restrictions are to be compensated in full and reflect the difference in land value subject to land use restrictions in comparison to the value of that land without such restrictions.

Sound insulation of buildings in all jurisdictions is reimbursed if proper technical works have been performed, however France and Germany have ceiling values of compensation levels and differentiate the amount of financial aid depending on where in the zone a property is located. In this context, Poland has the most generous provisions, as all necessary sound insulation costs are to be reimbursed regardless of where within the zone a property is located.

A surprising finding is that despite the fact that Polish public intervention is consistent with models employed in the analyzed countries, and in some aspects it contains a more generous compensation of landowners, the Polish courts have completely misunderstood the provisions in force. The extensive interpretation currently employed essentially equates restrictions in land use to inconvenience caused by noise and thus causes loss of value to be confused with loss of convenience. This leads to the expansion of compensation obligations beyond the scope expressly prescribed in art. 129 LPE and instead of promoting market certainty and social civility it stimulates speculative and careless behavior as well as neglect of social risk.

If one is to accept the prevailing practice in Poland a paradox occurs. The scope of compensable loss is so great that there is no economic and financial possibility for airports to function and yet it was their operations that the legislator wanted to maintain by introducing the discussed LPE provisions. The correct application of the current POE provisions ensures the compensation of direct and verifiable consequences of restrictions in land use that the legislator introduces within RUAs. Current practice may suggest that the courts are attempting to award damages for non-economic loss (pain and suffering) as opposed to economic loss,

which would explain the vague and theoretical identification of the occurrence (i.e. the "constriction" of the right of ownership) that triggers liability for loss. In this context, the solution applied by the German legislator is noteworthy, because the element of inconvenience is compensated, however in a limited and controlled manner. It applies to residential properties in the vicinity of only new or significantly enlarged airports and its level is a lump sum predetermined by the legislator.

It should be concluded that public intervention regarding the airport-landowners neighbor conflict works best when the state is involved in its practical implementation through public body authorities and administrative procedures. The Polish example shows that implementing the resolution of this difficult and also emotionally charged neighbor conflict without active oversight of public administration does not achieve the legislator's objective. It is also important to clearly devise rules on compensation so that eligibility and scope are unambiguous. In this respect the German solution provides most certainty, as there is little room for discretion in deductions made for accepting active risk. It is also safe to conclude that regulations dedicated to the neighbor conflict involving airports, as opposed to the conflict involving immisions from other types of plants, allows to devise solutions that target the particular nature of aviation noise. It is also undeniable that land use regulation, sound insulation of buildings and compensation schemes do not provide full protection of the interests of either of the opposing sides. It cannot be denied homeowners in the vicinity of airports have not been awarded extensive protection, as compensation payments subject to many limitations. Consequently, aggrieved landowners must also focus on measures the airport must or should take to mitigate noise.

Although it is currently unrealistic to assume that residential and other developments will eventually be relocated away from airports and not exposed to airport noise, an understanding of the existent public intervention does provide ground for normative analysis. It would allow to assess solutions aimed at motivating homeowners to relocate, transforming residential uses to ones compatible with the vicinity of an airport, preventing the creation of economic captivity in residential areas located near sources of immisions and embracing the concept of sustainable development.

Critical Success Factors for Effective Resident Participation in Community Retrofit: A Systematic Review

Yu Li

Faculty of Architecture and the Built Environment, Delft University of Technology, Julianalaan 134, 2628BL Delft, Netherlands
e-mail: Y.Li-30@tudelft.nl

Queena K. Qian

Faculty of Architecture and the Built Environment, Delft Univ. of Technology, Julianalaan 134, 2628BL Delft, Netherlands
e-mail: K.Qian@tudelft.nl

Erwin Mlecnik

Faculty of Architecture and the Built Environment, Delft Univ. of Technology, Julianalaan 134, 2628BL Delft, Netherlands
e-mail: E.Mlecnik@tudelft.nl

Henk J. Visscher

Faculty of Architecture and the Built Environment, Delft Univ. of Technology, Julianalaan 134, 2628BL Delft, Netherlands
e-mail: H.J.Visscher@tudelft.nl

Abstract

Community residents possess first-hand knowledge of the community and effective execution of retrofit methods. Their understanding, acceptance and ultimately participation determine the smoothness of working process and the success of the project. Although the introduction of regulations and policies has increased resident participation in retrofit projects in China, the effectiveness of participation is far from guaranteed. This may be partly due to a failure to identify critical factors underlying. Thus, this paper aims to develop a set of critical success factors (CSFs) for effective resident participation in community retrofit projects. Based on the findings of the systematic review and data analysis, 29 CSFs are identified, which will influence resident participation from four dimensions: context, project, process and stakeholder. The review is presented for the reference of governments and practitioners, especially when it comes to policy making and promotion of community retrofit by improving resident participation.

Keywords: community retrofit; resident participation; critical success factors

Introduction

Our common future is threatened by climate change and resource depletion. As an energy-intensive industry with high environmental impacts, the building and construction sector accounts for over 30% of global greenhouse gas (GHG) emissions and 40% of primary energy consumption (Commission, 2019; J. Li et al., 2017). Meanwhile, the majority of buildings existing in 2050 have already been built in developed countries due to its long lifespan nature (SBCI, 2009). In European Union, 97% of the existing buildings are considered inefficient with an annual renovation rate ranging from 0.4% to 1.2% in 2019 (Commission, 2019). For developing countries, such as China, one third of the existing buildings (around 27.8 billion square meters) was built before the year of 2000 and has reached the stage of functional

failure and degradation (Qiu, 2016). Considering the inefficient energy performance and high stock volume with a limited replacement rate, retrofitting is a desirable way to mitigate environment issues and achieve the goal of energy conservation and GHG emission reduction in existing building stock (Ma et al., 2012).

Community retrofit preserves and upgrades residential buildings and their neighbourhood environment through a series of physical works and the complementary services. In addition to the conservation or upgrading of individual building within the neighbourhood, community retrofit looks at the district as a whole, taking the environmental quality of common area, efficiency of resource utilization, arrangement of traffic and sanitation facilities, and operation and maintenance of property into consideration. As such, renewal of urban district can not only alleviate the negative environmental effects caused by inappropriate human activities, but also tackle social issues that are hard-to-reach by physical renovation methods.

Community residents possess critical information about existing conditions of the community, or the way in which retrofit measures can be implemented. Therefore, they are encouraged to participate in various stages of retrofitting, including decision-making, planning, construction and operation. But in practice, inefficient and ineffective participation occurs and results in residents' lack of understanding and support. This seriously maximizes the cost and delays the progress of the retrofit programme (D. Li et al., 2020; Mo, 2014). The optimal operation of the retrofitting measures is constrained as well (W. Liu et al., 2015).

Citizen's potential impact on the success of construction projects has long been recognized and constantly emphasized by academic researchers as well as policy makers in western and developed countries since the 1960s (Arnstein, 1969; Beierle et al., 2002; Davidoff, 1965; Smith, 1984; Wulz, 1986). With a rising urbanisation rate, it has also gained increasing attention from developing countries in the last decade (B. Liu et al., 2018a; Luo et al., 2020; Mo, 2014). Since 2017, the central and local governments in China have promulgated regulations and guidance to promote residents' participation in community retrofit projects. Publicity efforts have been stepped up in parallel to build public awareness of participation. Although the introduction of laws and regulations has increased resident involvement in practice, the effectiveness of their participation is far from guaranteed. (Mo, 2014).

Considering opportunities and challenges in resident participation practices, this research aims to improve the process from a perspective of critical success factors (CSFs). A method of systematic review is adopted to retrieve most relevant journal articles from three academic databases. Based on the selected publications, this paper fulfils the research aim by identifying a set of CSFs for resident participation in community retrofit projects, as well as their relative importance.

The rest of this paper is outlined as follows: Section 2 outlines the existing literature on community retrofit, resident participation process and critical success factors. Section 3 introduces the research methodology and protocol, i.e. the methods for data collection, presentation and analysis. Section 4 summarizes the findings of the data analysis. Section 5 concludes the study and points out possible directions for future research.

Literature Review

Community Retrofit — A Sustainable Way of Urban Renewal

In comparison with newly built neighbourhoods, old urban communities are less liveable, with difficulty in meeting the daily living demand of residents, greater safety hazards in residential buildings and aging public infrastructure. Like the shantytowns, they are old urban areas with deteriorating living conditions that have failed to keep up with the pace of the urbanization process. However, in contrast to shantytown redevelopment project, the retrofit of old urban community is a revamp of the site and buildings rather than a complete replacement. It makes full use of the essence of existing buildings and infrastructure and preserves the historical and social value of the original site to the greatest extent. In this sense, community retrofit is a promising way of sustainable urban renewal. It breathes new life into the neighbourhood in

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

a comparatively economic, eco-friendly, and socially stable manner.

Based on the national conditions and regulations in China, the term "community" in community retrofit stands for a specific geographic area with residual as its primary purpose of land use. This notion can be interpreted differently in academic research and practices, such as residential district, residential area, or neighbourhood. As the primary unit of modern society (Hui et al., 2021), 220,000 urban residential communities were built before 2000 across China and over two thirds of them have reached a stage of functional failure and degradation (Hou, 2020). On the basis of the existing conditions in the residential area and renovation needs, economical and reasonable technical measures are used to carry out a comprehensive and systematic upgrading of residential buildings, neighbourhood environment, facilities and infrastructure, and services (Province, 2018). In a nutshell, community retrofit aims to improve the physical and social environment of deteriorated neighbourhoods while maintaining existing urban fabrics.

Resident Participation in Community Retrofit

Since the introduction of the concept 'participatory democracy' in 1960, the definition of public participation has long been a battleground for debate. Public participation can refer to public engagement, public involvement, citizen participation or involvement, or in a broad sense, stakeholder involvement, etc. It is 'an umbrella term that encompasses diverse definitions of who the public is, how the public is represented, why the public is involved, and what the public is involved in' (Beierle et al., 2002).

Regarding to public participation in urban planning, Davidoff (1965) emphasized that citizen participation was not about reacting to agency program but presenting their understandings of appropriate goals and future actions. Based on the analysis of three urban renewal projects in the United States in the 1960s, Arnstein (1969) argued that 'citizen participation is a categorical term for citizen power'. The emphasis is on the redistribution of power to the have-nots. Citizen participates to share 'the benefits of the affluent society'.

With old urban community retrofit, in this study, residents refer to those who reside and live within the old neighbourhood. Resident participation in community retrofit is an organized process for consulting and involving the resident in retrofit planning and decision-making. It is a pattern of reciprocal communication, interaction and education between decision makers and the resident, through which resident's concerns, needs and values are incorporated into the final decision.

In view of the critical role of residents in retrofit program (Creighton, 2005), central and local governments in both developed and developing countries formulate laws and regulations to affirm residents' power and value of their participation. Since 2017, two rounds of pilot projects have been launched in China to explore appropriate mechanism and framework for stakeholder coordination and resident involvement. Meanwhile, technical guidance and economic incentives are rolled out to promote resident participation in the whole life circle of community retrofit. However, as for community retrofit practices in China, the effectiveness of residents' participation remains uncertain (Mo, 2014). One of the main reasons for this is a failure to identify critical factors underlying.

Critical Success Factors for Effective Resident Participation

Taking 'success factors' as origin, the concept of critical success factor (CSF) was introduced by a research team led by John F. Rockart between 1979 and 1981 (Bullen et al., 1981; Rockart, 1979). CSFs are defined as key factors or activities that contribute to the success of a project. Identifying CSFs is absolutely essential for managers to determine the information required to meet their expectations as well as well-being of their organizations (Rockart, 1980).

Given that participation process is an ad hoc organization or stakeholder assembly, CSF identification has attracted great academic attention for the purpose of improving the effectiveness of public participation in various construction related fields, including sustainable energy projects (B. Liu et al.,

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

2018a), community settlement (Serrao-Neumann et al., 2015), urban conservation (Yung et al., 2012), and urban renewal (B. Liu et al., 2018b).

Compared to new building, retrofit project, especially community and residential building retrofit represent some of the riskiest, most complex, and most uncertain projects to manage (Liang et al., 2017; W. Liu et al., 2015; Xin et al., 2015). The involvement of heterogeneous stakeholders results in more interests and conflicts to be balanced and handled. However, there is still a dearth of research directly related to CSFs for resident participation in community retrofit. To fill this gap, this research employs a method of systematic review to collect, select and analyse publications associated with community retrofit and resident participation. Then, the selected papers are reviewed to identify and categorize a set of latent factors that are critical to the success of resident participation process.

Research Methodology

A two-step framework is developed to fulfil the study aim. Firstly, a method of systematic review is employed to collect and collate a list of factors affecting the successful implementation of resident participation in retrofit projects. Secondly (ongoing), semi-structured interviews will be conducted with stakeholders involved in public participation in renovation projects in China. This step will validate and modify the initial list of CSFs to meet Chinese context. As the second phase of the study is currently in progress, this paper focuses on presenting the results from the systematic review.

Before a comprehensive exploration of the databases, a test search is employed to identify interchangeable concepts of the keywords "resident participation" and "community retrofit". The identified alternatives are synthesized into a search query to collect publications relevant to the factors affecting the organization and operation of resident participation in retrofit projects. The publications studied are limited to English papers that have been published in peer-reviewed journals before the search date (21st May 2021). Academic databases used for retrieving include Scopus, Web of Science (WoS) and ProQuest. In all, 336 papers are retrieved from these three databases.

The title, abstract and text of the identified articles are scanned to determine whether they are eligible for the research dataset. By applying the quality appraisal criteria to the collected studies, 18 publications are left for further process. Seven additional papers are found after examining the reference lists of these papers. In total, we develop a dataset of 25 journal articles to conduct a full paper review.

Data Analysis

Ranking of CSFs

The content of the 25 papers is carefully analyzed to develop a comprehensive list of CSFs. By counting how many times the CSFs have been mentioned in the database papers, a preliminary understanding of the relative importance of these factors to resident participation is obtained. It is worth noting that, on one hand, there is a lack of uniform terminology among scholars to describe similar factors in general. On the other hand, scholars can have varied interpretations of the scope that a CSF should cover. Therefore, considering the results of the cross-sectional comparison of the dataset papers and personal understanding of the proposed concepts, authors recapitulate the scope and content of the identified factors.

Categorize the Identified CSFs

In practice, a large number of CSFs can be identified in literature studies. Taking *few* and *vital* as the keywords of CSF approach (Benchtell, 2002; Lu et al., 2008), to obtain a more concise list of CSFs, scholars employ school of thoughts or theories as a reference for classification (Ebrahimigharehbaghi et al., 2019), heritage classification methods of similar studies (T. H. Li et al., 2012; B. Liu et al., 2018a; G. Liu et al., 2020) or utilize statistical models to combine interrelated variables (Lu et al., 2008; Xu et

al., 2011). A smaller set of new extracts allows research audience to directly capture the source of the factor and the potential area of its influence. Based on B. Liu et al. (2018a)'s way of classification, this review incorporates the research of Plummer et al. (2013) to compensate for the lack of attention to contextual variables in such method. The 29 CSFs identified in the previous phase of the literature study are expected to affect the success of resident participation from four dimensions: context, retrofit project, participation process, and people.

Results and Discussion

Based on the findings of data analysis, in general, 29 CSFs are identified from the database literature. As is shown in the concept model in Figure 1, these factors are further categorised into four groups regarding their proximity to issues of context, retrofit project, participation process, and people. Among the identified factors, most of them (10) arise from people dimension, 9 factors from the process. 6 factors affect the effectiveness on a project level. The least but the most important, 4 factors affect from a macro level.
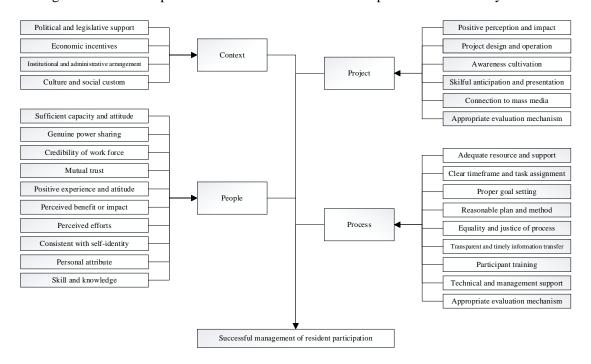
Figure 1. The Concept Model of Success Resident Participation in Community Retrofit

Among these factors, five more important ones, from most mentioned to least, are: 1) **reasonable planning of process and method selection** (Aitken, 2017; Boyle et al., 2020; Brown et al., 2016; Dickens, 2013; B. Liu et al., 2018a; B. Liu et al., 2018b; Moran et al., 2019; Plummer et al., 2013; Serrao-Neumann et al., 2015; Uittenbroek et al., 2019; Webler et al., 2001); 2) **adequate resource and support for participation process** (Boyle et al., 2020; B. Liu et al., 2018a; B. Liu et al., 2018b; Plummer et al., 2013; Serrao-Neumann et al., 2015; Uittenbroek et al., 2019; Wiseman, 2006); 3) **capacity and attitude of organizer** (Aitken, 2017; Fahmi et al., 2016; B. Liu et al., 2018b; Plummer et al., 2013; Raerino et al., 2021; Wiseman, 2006); 4) **equality and justice of participation process** (B. Liu et al., 2018a; B. Liu et al., 2018b; Moran et al., 2019; Niitamo, 2021; Serrao-Neumann et al., 2015; Webler et al., 2001); and 5) **positive experience and attitude of residents** (Aitken, 2017; Brown et al., 2016; Dickens, 2013; B. Liu et al., 2018a; Niitamo, 2021; Uittenbroek et al., 2019).

As can be noticed in concept model, three of five the most important factors come from the group of participation process. Resident participation in community retrofit is an organized process for consulting and involving the resident in retrofit planning and decision-making. Therefore, it is plausible that the careful planning of participation process and deliberate selection of engagement methods can contribute

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

to effective participation. Meanwhile, sufficient time, adequate financial resources and a diverse mix of human resources are prerequisite for success as well. Furthermore, managers should not lose sight of the equality and fairness of the process when organising it.

On people dimension, as a temporary organization, community retrofit can no longer exist without stakeholders' support. Therefore, manager's capacity to identify and coordinate relevant stakeholders and their objectives is crucial to the achievement of project goals. The other widely accepted concept among scholars is that perceived benefit is the underlying motivation for participation. If the resident can anticipate tangible benefits for themselves, they are willing to and can really make creative decisions. However, it is worth noticing that the practical barriers and efforts participant perceived, including a lack of capability, money, venue and time can constrain the engagement.

Conclusion

Through comprehensive upgrading of residential buildings, neighbourhood environment and service systems, community retrofit attempts to bridge the gap between residents' growing demand for a better life and their dilapidated living environment. As one of the crucial stakeholders, residents' understanding, acceptance and further participation in the project determine the smoothness of implementation process and further the success of the project. (Creighton, 2005).

In practice, the efficiency and effectiveness of resident participation are far from guaranteed, which results in residents' lack of understanding and support. This in turn seriously maximizes the cost and delays the progress of the retrofit programme (D. Li et al., 2020; Mo, 2014). The lack of understanding of underlying critical factors has led to unsuccessful efforts in promoting resident participation in retrofit projects. To fill this gap, this paper aims to summarize and categorize critical success factors (CSFs) for resident participation in community retrofit projects. The findings are as follows: a total of 29 CSFs is identified through a critical review of 25 journal articles retrieved from three academic databases. These factors are categorized into four clusters and are expected to influence the effectiveness of resident participation in following dimensions: context, retrofit project, participation process, and stakeholder. Also, with reference to their frequency of use in the selected papers, the five more important factors are: 1) reasonable planning and method selection; 2) adequate resource and support for participation process; 3) capacity and attitude of organizer/manager; 4) equality and justice of process; and 5) positive experience and attitude of participants.

However, the list of 29 factors hardly satisfies the *few* and *vital* principles of the CSF methodology (Lu et al., 2008; Rockart, 1979, 1980). Therefore, in authors' subsequent research, the concept model will be validated in the Chinese context. With the help of local stakeholders, review identified factors will be reduced to manageable ones that deserve more attention from policy makers and process organizers in China.

References

Aitken, D. (2017). The Influence Fallacy: Resident Motivations for Participation in an English Housing Regeneration Project. *Planning Theory & Practice, 18*(4), 549-565.

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners, 35*(4), 216-224.

Beierle, T. C., and Cayford, J. (2002). *Democracy in practice: public participation in environmental decisions*: Resources for the Future.

Benchtell, M. (2002). On target: How to conduct effective business review. In: Berrett-Koehler, San Francisco.

Boyle, L., and Michell, K. (2020). Key ingredients for a collaborative urban regeneration strategy in the Global South. *Construction Economics and Building, 20*(2), 150-164.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Brown, H. L., Bos, D. G., Walsh, C. J., Fletcher, T. D., and RossRakesh, S. (2016). More than money: how multiple factors influence householder participation in at-source stormwater management. *Journal of environmental planning and management, 59*(1), 79-97.

Bullen, C. V., and Rockart, J. F. (1981). A primer on critical success factors.

Commission, E. (2019). *The European Green Deal*. (COM(2019) 640 final). Brussels Retrieved from https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

Creighton, J. L. (2005). *The public participation handbook: Making better decisions through citizen involvement*: John Wiley & Sons.

Davidoff, P. (1965). Advocacy and pluralism in planning. *Journal of the American Institute of planners, 31*(4), 331-338.

Dickens, B. (2013). *ENGAGING TO HARNESS COMMUNITY CREATIVITY FOR SUSTAINABLE URBAN PLANNING.* Paper presented at the Proceedings of the 57th Annual Meeting of the ISSS-2013 HaiPhong, Vietnam.

Ebrahimigharehbaghi, S., Qian, Q. K., Meijer, F. M., and Visscher, H. J. (2019). Unravelling Dutch homeowners' behaviour towards energy efficiency renovations: What drives and hinders their decision-making? *Energy Policy, 129*, 546. doi:10.1016/j.enpol.2019.02.046

Fahmi, F. Z., Prawira, M. I., Hudalah, D., and Firman, T. (2016). Leadership and collaborative planning: The case of Surakarta, Indonesia. *Planning Theory, 15*(3), 294-315.

Hou, L. (2020). Urban renovations to aid economic growth. *China Daily*. Retrieved from http://english.www.gov.cn/news/pressbriefings/202007/22/content_WS5f17806cc6d029c1c263670f.html

Hui, E. C.-m., Chen, T., Lang, W., and Ou, Y. (2021). Urban community regeneration and community vitality revitalization through participatory planning in China. *Cities, 110*, 103072.

Li, D., Gu, T., and Zhu, S. (2020). Influencing Factors of Residents' intention to Participate in the Governance of Old Community Renewal: A Case Study of Nanjing. *Modern Urban Research*(02), 19. doi:10.3969

Li, J., Ng, S. T., and Skitmore, M. (2017). Review of low-carbon refurbishment solutions for residential buildings with particular reference to multi-story buildings in Hong Kong. *Renewable and Sustainable Energy Reviews, 73*, 393-407. doi:10.1016/j.rser.2017.01.105

Li, T. H., Ng, S. T., and Skitmore, M. (2012). Public participation in infrastructure and construction projects in China: From an EIA-based to a whole-cycle process. *Habitat International, 36*(1), 47-56.

Liang, X., Yu, T., and Guo, L. (2017). Understanding stakeholders' influence on project success with a new SNA method: A case study of the green retrofit in China. *Sustainability, 9*(10), 1927.

Liu, B., Hu, Y., Wu, X., Yu, J., Yu, Z., and Wang, A. (2018a). Critical Factors of Effective Public Participation in Sustainable Energy Projects. *Journal of Management in Engineering, 34*(5). doi:10.1061/(ASCE)ME.1943-5479.0000635

Liu, B., Wang, X., Xia, N., and Ni, W. (2018b). Critical success factors for the management of public participation in urban renewal projects: Perspectives from governments and the public in China. *Journal of Urban Planning and Development, 144*(3), 04018026.

Liu, G., Li, X., Tan, Y., and Zhang, G. (2020). Building green retrofit in China: Policies, barriers and recommendations. *Energy Policy, 139*, 111356.

Liu, W., Zhang, J., Bluemling, B., Mol, A. P. J., and Wang, C. (2015). Public participation in energy saving retrofitting of residential buildings in China. *Applied Energy, 147*, 287-296.

Lu, W., Shen, L., and Yam, M. C. (2008). Critical success factors for competitiveness of contractors: China study. *Journal of Construction Engineering and Management, 134*(12), 972-982.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Luo, J., Wu, H., and Peng, Y. (2020). Research on Community Planning under the Concept of Co-Governance and Sharing —— A Case of the Micro-Reconstruction of Shuilu Community in Wuhan. *Urbanism and Architecture, 17*, 52-59.

Ma, X., Guo, H., and Shang, L. (2012). Analysis on Owners' Behavior during Energy-saving Retrofit of Existing Buildings Based on Market Characteristics. *Building Science, 28*, 52-56.

Mo, W. (2014). A Classification Study of Western Public Participation Approaches in Urban Planning: Based on the Theoretical Perspective. *Urban Planning International, 29*, 76.

Moran, S., Perreault, M., and Smardon, R. (2019). Finding our way: A case study of urban waterway restoration and participatory process. *Landscape and Urban Planning, 191*, 102982.

Niitamo, A. (2021). Planning in no one's backyard: municipal planners' discourses of participation in brownfield projects in Helsinki, Amsterdam and Copenhagen. *European Planning Studies, 29*(5), 844-861.

Plummer, J., and Taylor, J. G. (2013). *Community participation in China: Issues and processes for capacity building*: Routledge.

Province, D. o. H. a. U.-R. D. o. H. (2018). *Guidelines for the renovation of old districts in Hubei Province*.

Qiu, B. (2016). Green Retroftting of Old Urban Communities - A New Way to Increase Effective Investment in China. *Urban Development Studies, 23*, 1-6+150-152.

Raerino, K., Macmillan, A., Field, A., and Hoskins, R. (2021). Local-Indigenous Autonomy and Community Streetscape Enhancement: Learnings from Māori and Te Ara Mua—Future Streets Project. *International Journal of Environmental Research and Public Health, 18*(3), 865.

Rockart, J. F. (1979). Chief executives define their own data needs. *Harvard business review, 57*(2), 81-93.

Rockart, J. F. (1980). The changing role of the information systems executive: a critical success factors perspective.

SBCI. (2009). *Buildings and Climate Change: Summary for Decision-Makers* (978-92-807-0000-0). Retrieved from https://ledsgp.org/resource/buildings-climate-change-a-summary-for-decision-makers/?loclang=en_gb

Serrao-Neumann, S., Harman, B., Leitch, A., and Low Choy, D. (2015). Public engagement and climate adaptation: insights from three local governments in Australia. *Journal of environmental planning and management, 58*(7), 1196-1216.

Smith, L. G. (1984). Public participation in policy making: the state-of-the-art in Canada. *Geoforum, 15*(2), 253-259.

Uittenbroek, C. J., Mees, H. L., Hegger, D. L., and Driessen, P. P. (2019). The design of public participation: who participates, when and how? Insights in climate adaptation planning from the Netherlands. *Journal of environmental planning and management, 62*(14), 2529-2547.

Webler, T., Tuler, S., and Krueger, R. (2001). What is a good public participation process? Five perspectives from the public. *Environmental management, 27*(3), 435-450.

Wiseman, J. (2006). Local heroes? Learning from recent community strengthening initiatives in Victoria 1. *Australian Journal of Public Administration, 65*(2), 95-107.

Wulz, F. (1986). The concept of participation. *Design studies, 7*(3), 153-162.

Xin, L., Geoffrey Qiping, S., and Li, G. (2015). Improving Management of Green Retrofits from a Stakeholder Perspective: A Case Study in China. *International Journal of Environmental Research and Public Health, 12*(11), 13823-13842. doi:10.3390/ijerph121113823

Xu, P., Chan, E. H.-W., and Qian, Q. K. (2011). Success factors of energy performance contracting (EPC) for sustainable building energy efficiency retrofit (BEER) of hotel buildings in China. *Energy Policy, 39*(11), 7389-7398.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Yung, H. K. E., and Chan, H. W. E. (2012). Critical social sustainability factors in urban conservation. *Facilities*.

Future Use Framework for Post-Disaster and Post-Conflict Temporary Accommodation Settlements and Units in Turkey

Nil Akdede

Atilim University, Faculty of Fine Arts, Design and Architecture, Gölbaşı, 06830 Ankara, Turkey
Technische Universität Braunschweig, Institute for Building Climatology and Energy of Architecture,
Universitätsplatz 2, 38106 Braunschweig, Germany
e-mail: nil.akdede@atilim.edu.tr

Bekir Özer Ay

Middle East Technical University, Faculty of Architecture, Çankaya, 06800 Ankara, Turkey
e-mail: ozer@metu.edu.tr

İpek Gürsel Dino

Middle East Technical University, Faculty of Architecture, Çankaya, 06800 Ankara, Turkey
e-mail: ipekg@metu.edu.tr

Abstract

Providing temporary accommodation units following natural hazards and social conflicts is usually an urgent action for affected communities. Besides the significance of the configuration of temporary accommodation units in the 'preparedness' period, their future use is a crucial task to be emphasized on considering their lifespan. Despite the vast pre-planned and simultaneous future use techniques in the literature, thousands of temporary accommodation units with their infrastructure stand idle after their use. This paper mainly aims to present the future use framework for post-disaster and post-conflict (PDPC) temporary accommodation settlements and units in Turkey from the perspective of experts in AFAD to establish a more sustainable approach for these settlements. In this study, a two-stepped methodology is adopted. First, a comprehensive literature review is conducted to determine the conceptual and applied approaches to the future use of these units and settlements. Then, in-depth interviews with the experts are conducted through the current situation, the concept of convertibility, and potential future uses. Results display the necessity of a sustainable future use roadmap proceeding step by step managed by the contributors of the process. Towards understanding Turkey's current future use framework for PD&PC temporary accommodation settlements and units, this study proposes a systematic future use framework that can be useful for scholars and policymakers.

Keywords: post-disaster, post-confict, temporary accommodation, future use

Introduction

Disasters have been one of the most catastrophic incidents of societies following the start of life in semi-permanent clusters (Quarantelli, 2006). Either due to natural hazards or social, political, and environmental crises, people confront the loss of housing, resulting in the need for 'accommodation', which is defined as one of the crucial actions in risk management. Beyond the physical construction of spaces, providing accommodation affects the psychology of affected groups positively (Arslan & Unlu, 2006). Therefore, the configuration of accommodation response following the loss of housing due to natural hazards or any other crisis resulted in a disaster is inevitable.

Despite the significance of accommodation response, it is a contradictory task in risk management (As cited in McCarthy, 2012) due to the limited time. Accordingly, it would not be wrong to declare that accommodation response following disasters and crises is mainly based on timing. Indeed, to deal with timing, four accommodation types, 'emergency sheltering', 'temporary sheltering', 'temporary housing', and 'permanent housing', are configured to meet the needs of affected communities at different periods (Quarantelli, 1995). While emergency and temporary shelters aim to accommodate affected people for a short period of time mainly to deal with the current physical conditions, temporary and permanent housing units aim to enable people to turn back their daily activities (Quarantelli, 1995). Considering the contradiction in-betweenness temporariness and normality together with the current situation in Turkey – where thousands of temporary accommodation units with their infrastructure stand idle after their use[1] – , this study emphasizes the future use of post-disaster and post-conflict (PDPC) temporary accommodation settlements and units, including both temporary shelters and housing units as an umbrella term (Johnson, 2002), in Turkey.

Drawing attention to the future use of PDPC temporary accommodation settlements and units, this paper aims to present the future use framework in Turkey from the perspective of experts in AFAD. Towards understanding the current future use framework for PDPC temporary accommodation settlements and units, this study tries to introduce a sustainable and context-based future use roadmap alternative considering the noticed obstacles and problems.

Methodology

To present the future use framework for PDPC temporary accommodation settlements and units in Turkey, a two-stepped methodology was adopted. First, a comprehensive literature review was conducted to determine the conceptual and applied approaches to the future use of these units and settlements. It was followed by in-depth interviews with the experts, who specifically have active roles on PDPC temporary settlements or have written an institutional thesis on this particular topic, in AFAD, Turkey. The sample group, experts in AFAD, were asked about three main topics as the current situation, the concept of convertibility, and potential future uses. By presenting the current future use framework, including problems, obstacles and potentials from the perspectives of experts in AFAD, a more sustainable approach in terms of economy, environment, and society, is aimed to be established.

In-depth interviews

As this study aims to present the future use framework for PDPC temporary accommodation settlements and units in Turkey, experts in the AFAD, who specifically have responsibility at PDPC temporary settlements or have written an institutional thesis on this particular topic, in AFAD, are determined as the sample group in consideration of the responsibility of the AFAD at disasters and emergencies. Hence, after disasters triggered by natural hazards and social crises, AFAD is responsible for organizing PDPC accommodation settlements. In collaboration with the AFAD, the Directorate General of Migration Management (DGMM) of the Ministry of Interior has also been authorized the responsibility of the settlements prepared for post-crisis settlements (Ombudsman Institution of the Republic of Turkey, 2018). Therefore, as the AFAD is the presidency that organizes both post-disaster and post-conflict settlements, AFAD is determined as the sample group; however, as a future step, experts in the DGMM are also planning to be asked about their approach on the specific topic.

While the sample group is examined deeply, in-depth interviews were conducted with 14 experts working in AFAD. 11 of them are working under the department, which is directly responsible for the settlements, whereas the other three are not directly working on the PDPC settlements and units. However, these three experts have written their institution thesis based upon these settlements and

---

[1] 12 settlements, where Syrian people who are under temporary protection had been living, have been closed and 4 settlements have been decongested between 2018 and 2020 (3RP, 2020).

units. What is significant is that besides being an expert in this topic, almost all of them had a chance to observe the settlements and units in-situ following several events. Therefore, besides their experience in the configuration or management process, the sample group also mentioned their experiences and observations in the settlements together with the expressions of inhabitants.

Future Use of PDPC Temporary Accommodation Settlements

As timing is one of the determinants of future use, the duration of the use of PDPC temporary accommodation settlements and units can be defined as critical. While the duration period of use is declared as up to three years (Quarantelli, 1995), Ueda & Shaw (2016) limit it to two years. However, experiences show that the usage period usually extends more; indeed, several PDPC cases proves that communities have never been moved from temporary settlements so that they have transformed into permanent settlements. On the other hand, there are also cases that these units stand idle with their infrastructure after people leave these settlements.

In consideration of these experiences, the future use, in other words *'second life'* (Johnson, 2007b), of PDPC temporary accommodation settlements and units call up to a new discussion directing researchers to search this topic through conceptual and applied approaches. Indeed, three phases are defined for temporary accommodation units as provision, operation, and second life phase (Hosseini et al., 2020). As similar but different phasing, construction, operation, and demolition phases are defined for PDPC temporary housing units (Atmaca & Atmaca, 2016). By considering all, future use, second life, reusability, recyclability or convertibility are frequently mentioned terms for PDPC temporary settlements and units in the literature (Asfour, 2019; di Gregorio & Soares, 2017; Hong, 2017; Hosseini et al., 2020; Salvalai et al., 2017; Song et al., 2016; Torus & Şener, 2015). Besides comprehensive studies, numerous studies emphasize this vital task: future use.

By focusing on temporary housing units, Johnson (2007b) lists the possible future uses of temporary housing units after accommodating people 4 years as 1) the sale of the unit entirely or partially, 2) taking into possession of squatters, 3) renting, 4) repairing units for reuse in any sudden event, 5) refunctioning as community buildings, 6) disassembly of units, and 7) maintaining the unit as a core house as permanently.

Arslan (2007) examines the potentiality of the reuse of temporary housing units through a case study: Beci temporary housing in Düzce, in Turkey. The researcher suggests a new permanent design alternative, transformed from a temporary unit, through three design considerations: product recycle, material recycle, and feedstock recycle (Arslan, 2007). Moreover, the researcher analyzes the recycle and reuse project through three categories as temporary housing units, temporary housing land, and temporary housing infrastructure (Table 1) (Arslan, 2007). As a similar approach, Arslan & Cosgun (2008) investigate the potentiality of the reuse of four post-disaster temporary housing units, constructed after 1999 earthquakes in Turkey, through interviews and surveys. As a result, reassessment of temporary units has been categorized under two major titles as 'reassessment with passive measures' and 'reassessment with active measures'; furthermore, the former approach is branched into to as the 'reuse and recycle with the same function', either without or with additional part, and 'reuse and recycle with different functions'.

Table 1 Recycle and reuse process of the temporary housing sites

Categories		Possible Steps Suggested For Recycle and Reuse Process	
Temporary Housing Sites	Temporary Housing Units	Decomposition to Main Building Components	Recombination of Panels
		Decomposition to Lower Building Components	Raw Material
	Temporary Housing Land	New function	
		The use of temporary housing units and infrastructure	
	Temporary Housing Infrastructure	Integration to the regions general system	
		Excavation of the sites and remove process of the infrastructure	

Source: adapted from (Arslan, 2007)

Besides studies seeking pre-planned reusability approaches, Johnson (2007a) assesses the conditions of temporary housing units provided after the 1999 earthquakes in Turkey. The research evaluates the conditions of settlements through five tasks: physical conditions of settlements and units, the profile of inhabitants of settlements, disassembly processes, maintenance of settlements, and supplied services for the residents, as shown in Table 2.

Table 2 Evaluation of Temporary Housing Projects after 1999 earthquakes, in Turkey

Project Name		Date of Assessment	Impacts
Kiremit Ocağı	government	August 2004	- 100% of housing is still occupied mostly by affected families who were renters and by gypsies.
Gümüspinar	government	August 2004	- Housing is 80% vacant. - 600 have been dismantled and sold. - 150 families not directly affected by disaster occupy housing. - Site pollution to due slab foundations, roads and other infrastructure.
Fidanlik	NGO	August 2004	- Housing as been 100% dismantled. - Wood material was recycled. - Some site pollution but no foundations to clean up.
UMCOR	NGO	August 2004	- 136 units still occupied mostly by young families. Some families occupy 2 units and remove the walls. - 56 units (7 buildings) dismantled, reconstructed in new locations as new functions: school, community center, civic buildings, etc. - All units to be dismantled by spring 2005 when lease for land expires.

Source: adopted from (Johnson, 2007a).

This table reveals that if disassembly or recycling are not applied, these units are either abandoned by affected groups or people who needs shelter. Moreover, people, who continue living in these units, convert them according to their needs by getting two or more units together. Besides, it is possible to interpret that although the units are reused in any way, concrete foundations should be cleaned up or re-considered accordingly. Indeed, Sener & Altun (2009) underline this environmental problem that in situ slab foundations of temporary housing units cause 'fields of concrete' after the demolition of units.

In addition to the studies focusing on reusability and recyclability, Parva & Rahimian (2014) seek the design considerations through transformability. In their study, 189 post-earthquake temporary units in Lar city, in Iran, are investigated; and transformations were observed in five components: layout, typology, materials, openings, and ornamental elements. What is significant is that 98% of the post-disaster units have been transformed by the users (Parva & Rahimian, 2014).

In addition to various studies, container housing is pointed out as a sustainable solution in terms of upcycling, healthy materials, and social responsibility (Hong, 2017). By means of upcycling, a circular economy is constructed besides recycling materials and low environmental impact. In addition to the benefits of upcycling, the use of healthy materials results in environmental sustainability and a healthier indoor climate.

Lastly, as a relatively recent academic study, Seike et al. (2018) deal with the intraregional reuse of temporary housing units constructed in Japan after the 2011 Great East Japan Earthquake. In their study, two evaluation stages are introduced to be applied in reusability as the reconstruction planning stage and reconstruction work stage. In the former stage, the alterations are evaluated under three as changes in the dimensions and quantity of components, changes in the specifications of components, and other factors; on the other hand, the latter is also presented under three: disassembly, storage of materials, and reconstruction (Seike et al., 2018).

Besides methodological studies in the literature, several applied approaches can be introduced as critical cases. Among these, the convertibility approach is one of the effective solutions instead of planning or making decisions after inhabitants move on permanent housing. For instance, Humanitarian House International (HHI) was configured as a two-stepped model with the aim of convertibility (Ohlson & Melich, 2014). In this project, two models, as seen in Figure 1, the Emergency Shelter (ES) and the Long-Term Dwelling (LTD), were designed with the exact dimensions, framing and flooring, but the coating replaces with rigid materials instead of light materials so that upgrade is achieved with minimum modifications (Ohlson & Melich, 2014).

Figure 1 The two models of HHI - Long-Term Dwelling (LTD) & Emergency Shelter (ES)
Source: http://www.uoalumni.com/s/1540/uoaa/index.aspx?sid=1540&gid=3&pgid=3223

In addition to the convertibility method, incremental housing is presented as a methodology providing affordable housing with minimum standards, yet enabling flexible expansion by the residents (Askar et al., 2019). The aim of incremental housing is defined as sharing the responsibility, in other words, the decision-making process, of the design principles of the housing (Mathabella, 1999) together with the government and the private sector (Hasgül, 2016). One of the examples applied through this methodology is 'Quinta Monroy', in Chile, by Aravena, ELEMENTAL that a space is left between two houses for the decision of the inhabitant (Figure 2).

Figure 2 Quinta Monroy by ELEMENTAL - before & after
Source: https://www.archdaily.com/10775/quinta-monroy-elemental.

As future use of these units is crucial, several countries determine the legal policies for this concept. For instance, according to the legal framework of temporary housing in Japan, although the disassembly of the units within two to five years is legal, a limited procedure is applied not to affect the market circulation negatively by contractors while reusing them through the leasing (Seike, Yoshiba, & Kim, 2014). For instance, among 50.000 units, while the number of units limited with 10.000 for the reuse as office function via leasing, the remaining 40.000 units have been used by local governments (Japan Prefabricated Construction Suppliers and Manufacturers Association, 2011). This limitation reveals that despite the efficiency of the reusability of the units, the reusability of excessive numbers configured for the affected communities can affect the economy, so a pre-planning is essential.

Analysis of the In-depth Interviews: Future Use Framework for PDPC Settlements and Units in Turkey

In light of the research question, three sub-topics, which are the current situation, the concept of convertibility, and potential future uses, are determined to be discussed by researchers considering the conceptual and applied approaches. Although perceptions vary mainly depending on the respondents' departments, a consensus is built on that accommodation supply is one of the two remarkable tasks with the food supply that should be well-organized following disasters and emergencies. Therefore, as a critical sub-topic of accommodation response, future use of the PDPC temporary settlements is also a critical discussion that should be well-organized and planned.

By commenting on the future use of PDPC temporary accommodation settlements and units, it is significant to underline that 'reusability' or 'reconfigurability', in other words, the future use, of temporary settlements, were declared as significant not to abandon these places for criminal activities. In other words, the future use was stated as essential not to serve any inappropriate placemaking.

Current situation

Evaluating the current situation of future use of PDPC temporary accommodation settlements and units, experts commonly evaluated the future use concept by separating it into two as infrastructure and superstructure. While experts identified the infrastructure as 'reusable' depending on the owner of the land, the superstructure was categorized as 'trash' or 'reusable' depending on the period that inhabitants have accommodated in.

For the reusability of the infrastructure, the ownership status of the settlements was frequently highlighted due to the different land ownership statuses of settlements. While settlements' infrastructure on lands, which are owned by the government, were mentioned as comparatively free to be re-configured; lands owned by individuals and rented by the government, were mentioned as not legal to maintain the infrastructure. In fact, it is frequently mentioned that the government of Turkey commonly have agreed with the owners to hand them over as they have received.

By discussing the future use of the superstructure, it was frequently interrelated with the themes of 'the policy of taking-back', 'lifespan', and 'repair' underlining that their storage for a long-term period cause them to become unusable.

Following disasters triggered by natural hazards, 'the policy of taking-back' of the units supplied for the citizens was pointed out as one of the most experienced problems. Experts drew attention to the problem that accommodation units supplied for the citizens commonly cannot be re-collected since they adopted units as their goods. A respondent explained the problem of receiving together with distributing as: 'We hear that the tent is sold; we find embedded tents. When the human factor is involved, anything can happen. People want to turn the crisis into an opportunity. A more controlled path can be achieved.' (R2).

Another critical theme mentioned by the experts as a problem threatening the future use path is the 'lifespan' of the superstructure. Indeed, the lifespan period is interrelated with the characteristics of crisis. As the crisis in Syria still continues, thousands of Syrian people, who are under temporary protection, have been accommodating in the same units for more than 8 years so that the superstructure was commonly indicated as 'trash' by the experts. However, considering the temporary units supplied for the affected groups of 2011 Van earthquakes, experts exemplified their reusability applications mainly used for the same function following disasters. However, this time, different uses of units by affected groups were pointed out as an obstacle for future use of the superstructure. For instance, a respondent stated that citizens do not want to give them back for using them 'barns for their animals', which directly affects the 'lifespan'. Moreover, a respondent asserted the task through a problem following the earthquake in the city of Adıyaman that;

> 'Containers, which were used following the 2011 Van earthquakes, were sent to Adıyaman. However, people chose to live in tents, instead of accommodating in containers. All containers stood empty on the roads. Since people put their animals in the city of Van, no one wants to live in it. No recycling, is it possible to be used? It's not being used, it just stands.' (R6).

Besides, the future use of superstructure was interrelated with the 'culture' of the user that a respondent who had visited settlements configured both for Syrian people under temporary protection and victims of 2011 Van earthquakes stated that 'We used most of the containers supplied following the earthquakes in Van for the affected group after Syrian crisis. However, it is controversial that whether we can reuse the ones we use for the Syrian crisis in another earthquake or not. Because they are washing their containers, they have a habit of washing their homes. Due to differences in culture, this material is unavailable to use, so it cannot be used. '(R8).

Considering the problems of 'the policy of taking-back' and 'lifespan', experts highlighted the necessity of 'repair' and 'elimination' of the units for future use. By adding these two processes to the current framework, a more efficient framework can be achieved through avoiding the transportation of unrepairable units to the new disaster areas causing to the creation of abandoned places.

The concept of convertibility

The concept of convertibility is one of the applied approaches in the international humanitarian sector; however, no convertibility application have been observed in the future use framework of the Republic of Turkey. Therefore, researchers determined to evaluate this concept with the experts in Turkey due to its economic and environmental sustainability.

Although all the respondents appreciated the idea of 'convertibility' due to sustainability, 'the ownership statuses of the site of the settlements' and 'neighborhood' were pointed out as an obstacle. Similarly with the current situation for future use of the infrastructure, the ownership statuses of the settlements were addressed as an obstacle to the convertibility.

Another theme related to the 'convertibility' was pointed out as the 'neighborhood'. Evaluating the convertibility concept for Turkish citizens, an expert expressed, 'Neighborhood is very important for us. We also have a habit like this; if you decide as your own neighborhood instead of determination of the state, people are more satisfied. I don't know how our society responds to this. I don't think it is applicable for a Turkish citizen, they will prefer to live in their neighborhoods again.' (R4). Additionally, another respondent stated the same obstacle for 'convertibility' as;

> 'If you're going to be permanent in a place where you're temporarily settled, at least the place must be well-determined at the beginning. … I'm going to be a neighbor with the people in the next tent for the rest of my life. It would be much more beneficial in terms of cost, but it may cause other problems as well. As I said, I'm in a place that I perceive as temporary. Two years later, I do not see myself there; however, it is said to me that my entire life will be there. Therefore, the planning on the site should be done accordingly.' (R2).

Both of these statements claim that besides 'the ownership statuses of the site of the settlements', 'neighborhood' is a significant task that can affect the convertibility of units. On the other hand, it can be dealt with a successful pre-planning process to achieve social sustainability.

Another underlined issue as an obstacle to convertibility was gathering only the people who witnessed a disaster in a single settlement considering their psychology. A respondent stated this problem as: 'When you gather all the disaster victims in a project, you force those people to live the impact of the disaster during their entire lives.' (R8). Therefore, in consideration of all the obstacles and problems, 'pre-planning' comes into prominence to supply convertible units which can accommodate people from the emergency period to next accommodation steps.

Potential future uses

With the closure of 12 settlements and the decongestion of 4 settlements of Syrian people who are under temporary protection between 2018 and 2020, the future use of these settlements has been opened for discussion through the possibilities (3RP, 2020). Evaluating the potential future uses for the current settlements and already closed or decongested ones, 'urgent national needs' were frequently underlined in addition to the use for the same or different functions.

An expert, who has worked in the 'Commission of the Evaluation of Containers' following the 2011 earthquakes in Van, emphasized the location of the current settlements as: 'We have a container city in the city of Maraş. Maraş can face with an earthquake with a magnitude of 7. As a similar approach that we previously applied the strategy in Van as accommodating people in different cities, if an earthquake happens in Erzurum, Erzincan, or Bingöl, we can transport these people to settlements in Maraş.' (R5). In addition, another expert expressed the needs changes according to the hazard-prone areas that 'The need in the Black Sea region is more due to the risk of landslides and rockfall. Therefore, containers are evaluated as transferring them to the required provinces.' (R1). Besides, as the crisis in Syria continues, several experts suggested sending these units to provide a home for

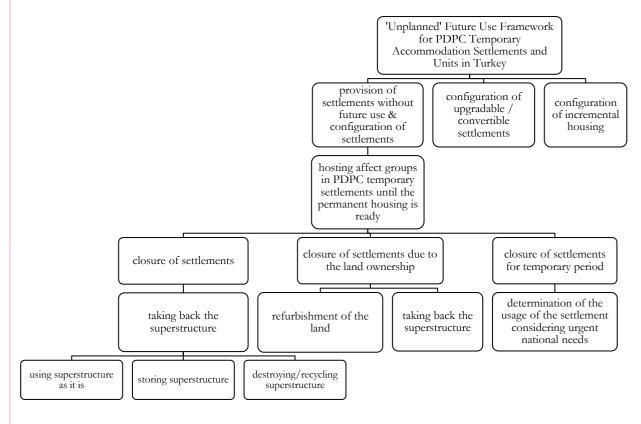Syrian people in their own land when the peace is established.

Besides, considering the 'urgent national needs', respondents suggested several reusability approaches with different functions such as dormitory, home for orphans, retirement home, educational purposes, and observation points for police.

Spontaneous Current Future Use Framework in Turkey

Considering the literature review and the in-depth interviews conducted by experts, the spontaneous current future use framework for PDPC temporary accommodation settlements and units in Turkey is tried to be presented in Figure 3.

Figure 3 The Spontaneous Current Future Use Framework for PDPC Temporary Accommodation Settlements and Units in Turkey
Source: source: prepared by authors.

Conclusion

Although future use of PDPC temporary accommodation settlements and units is a widely discussed and experienced topic in the literature, the in-depth interviews reveal the unplanned framework as presented in Figure 3. By considering the significance of the systematic framework, the time period hosting the affected groups can be made use as an opportunity to plan the impending future use act in consideration of the sensitiveness of the 'pre-planning' period. To conclude:
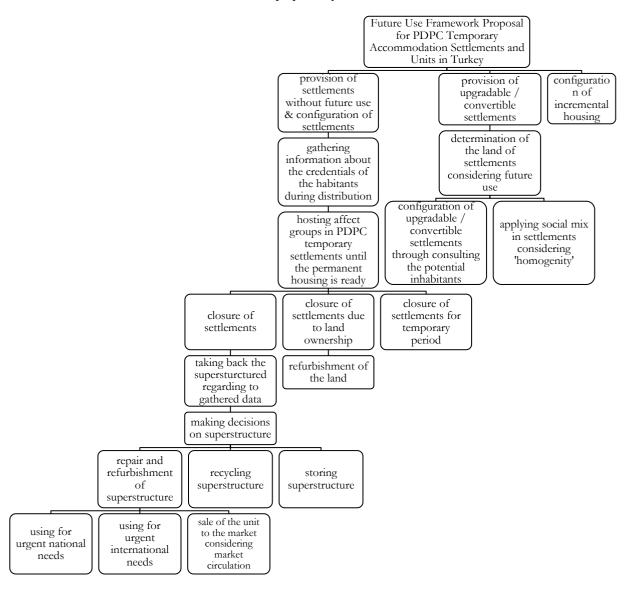
- Future use planning should start with the planning of the provision period. Therefore, 'pre-planning' beginning from the provision is crucial for the future use framework of PDPC temporary accommodation settlements and units regarding the reusability and convertibility of superstructure, infrastructure, and land. Indeed, the determination of the land can be made in consideration of these future use plans.

- Unique framework paths can be applied for the settlements of different affected groups considering the uniqueness of the crisis and the users.

- Future use framework can be successfully applied when the distribution, the taking-back policy, and the elimination and repair processes can be achieved. By thinking it as a circular system, any disruption can affect the whole process.

- Although convertibility is one of the efficient methods for future use, gathering crisis or disaster victims in a settlement or a neighborhood can irreversibly affect their entire life rather than recovery. Therefore, a social-mix strategy can be applied to these settlements.

In consideration of the analysis of the research, a future use framework for PDPC temporary accommodation settlements and units can be proposed considering the literature review, the in-depth interviews, and the conclusions (Figure 4).

Figure 4 Future Use Framework Proposal for PDPC Temporary Accommodation Settlements and Units in Turkey
source: prepared by the authors.

Limitations of the Study

This research has a number of limitations due to the sample group. Firstly, although in-depth interviews were conducted with one of the contributors of the PDPC temporary accommodation settlements and units as AFAD, the DGMM of the Ministry of Interior has been authorized the responsibility of the settlements prepared for post-crisis settlements, including their closure and decongestion. Therefore, the sample group of in-depth interviews should be extended to DGMM for a comprehensive discussion.

Another limitation can be considered as the lack of different voices in the sample group of the in-depth interviews. Although the experts at AFAD tried to mention their observations and experiences on the future use of PDPC temporary accommodation settlements and units, the results of this study still only reflect the situation through only the experts' perspective. Therefore, for further studies, inhabitants or volunteer workers can also be added to the sample group.

Lastly, although the conclusion underlines the significance of configuring unique future use frameworks for different crises, the proposed framework was not configured accordingly due to the lack of data.

Acknowledgements

References

3RP. (2020). *Turkey: Regional Refugee and Resilience Plan in Response to the Syria Crisis* (Issue January). https://data2.unhcr.org/en/documents/details/74179

Arslan, H. (2007). Re-design, re-use and recycle of temporary houses. *Building and Environment*, *42*, 400–406. https://doi.org/10.1016/j.buildenv.2005.07.032

Arslan, H., & Cosgun, N. (2008). Reuse and recycle potentials of the temporary houses after occupancy: Example of Duzce, Turkey. *Building and Environment*, *43*, 702–709. https://doi.org/10.1016/j.buildenv.2007.01.051

Arslan, H., & Unlu, A. (2006). The Evaluation of Community Participation in Housing Reconstruction Projects After Düzce Earthquake. *International Conference and Student Competition on Post-Disaster Reconstruction "Meeting Stakeholder Interests."*

Asfour, O. S. (2019). Learning from the past: Temporary housing criteria in conflict areas with reference to thermal comfort. *International Journal of Disaster Risk Reduction*, *38*. https://doi.org/10.1016/j.ijdrr.2019.101206

Askar, R., Rodrigues, A. L., Bragança, L., & Pinheiro, D. (2019). From Temporary to Permanent; A Circular Approach for Post-disaster Housing Reconstruction. *IOP Conference Series: Earth and Environmental Science*, *225*. https://doi.org/10.1088/1755-1315/225/1/012032

Atmaca, A., & Atmaca, N. (2016). Comparative life cycle energy and cost analysis of post-disaster temporary housings. *Applied Energy*, *171*, 429–443. https://doi.org/10.1016/j.apenergy.2016.03.058

di Gregorio, L. T., & Soares, C. A. P. (2017). Post-disaster housing recovery guidelines for development countries based on experiences in the American continent. *International Journal of Disaster Risk Reduction*, *24*, 340–347. https://doi.org/10.1016/j.ijdrr.2017.06.027

Hasgül, E. (2016). Incremental housing: A participation process solution for informal housing. *A/Z ITU Journal of the Faculty of Architecture*, *13*(1), 15–27. https://doi.org/10.5505/itujfa.2016.08370

Hong, Y. (2017). A study on the condition of temporary housing following disasters: Focus on container housing. *Frontiers of Architectural Research*, *6*(3), 374–383. https://doi.org/10.1016/j.foar.2017.04.005

Hosseini, S. M. A., Fuente, A. de, & Pons, O. (2020). A Decision Methodology for Determining Suitable Post-Disaster Accommodations: Reconsidering Effective Indicators for Decision-making Processes. *Journal of Homeland Security and Emergency Management*, *17*(3).

Johnson, C. (2002). What's the Big Deal About Temporary Housing? Planning Considerations for Temporary Accomodation After Disasters : Example of the 1999 Turkish Earthquakes. *2002 TIEMS Disaster Management Conference*.

Johnson, C. (2007a). Impacts of prefabricated temporary housing after disasters: 1999 earthquakes in Turkey. *Habitat International*, *31*(1), 36–52. https://doi.org/10.1016/j.habitatint.2006.03.002

Johnson, C. (2007b). Strategic planning for post-disaster temporary housing. *Disasters*, *31*(4), 435–458. https://doi.org/doi:10.1111/j.0361-3666.2007.01018.x

McCarthy, F. X. (2012). FEMA disaster housing: From sheltering to permanent housing. *Disaster Assistance and Recovery Programs: Types and Policies*, 49–78. http://www.scopus.com/inward/record.url?eid=2-s2.0-84896580096&partnerID=tZOtx3y1

Parva, M., & Rahimian, F. P. (2014). Transformability as a factor of sustainability in post-earthquake houses in Iran: the case study of Lar city. *Procedia Economics and Finance*, *18*, 431–438. https://doi.org/10.1016/S2212-5671(14)00960-5

Salvalai, G., Imperadori, M., Lumina, F., Mutti, E., & Polese, I. (2017). Architecture for Refugees, Resilience Shelter Project: A Case Study Using Recycled Skis. *Procedia Engineering*, *180*, 1110–1120. https://doi.org/10.1016/j.proeng.2017.04.271

Seike, T., Kim, Y., Hosaka, Y., Ida, S., & Masuda, T. (2018). Intraregional reuse of emergency temporary housing in Japan. *Sustainable Cities and Society*, *42*, 650–662. https://doi.org/10.1016/j.scs.2017.11.001

Sener, S. M., & Altun, M. C. (2009). Design of a post disaster temporary shelter unit. *A|Z ITU Journal of Faculty of Architecture*, *6*(2), 58–74.

Song, Y., Mithraratne, N., & Zhang, H. (2016). Life-time performance of post-disaster temporary housing: A case study in Nanjing. *Energy and Buildings*, *128*, 394–404. https://doi.org/10.1016/j.enbuild.2016.07.019

Torus, B., & Şener, S. M. (2015). Post-disaster shelter design and CPoDS. *ITU A|Z*, *12*(1), 269–282. http://www.scopus.com/inward/record.url?eid=2-s2.0-84924531879&partnerID=40&md5=7c1c92cf3e4be56318ee029687c5e321

Ueda, Y., & Shaw, R. (2016). Managing and bridging communities in temporary housing: case of the Great East Japan Earthquake and Tsunami in Kesennuma City, Japan. *Natural Hazards*, *80*, 567–587. https://doi.org/10.1007/s11069-015-1984-3

Will plans to ease energy poverty go up in smoke?
An analysis of the impact of Hungarian energy transition policies on energy poor households

Anna Zsófia Bajomi

PhD candidate in Urban Planning, Design and Policy
Department of Architecture and Urban Planning, Politecnico di Milano, Via Bonardi 9, Milano, Italy,
e-mail: annazsofia.bajomi@polimi.it

Abstract

Member States of the European Union are required to assess energy poverty in their country and outline policy responses to, as part of their National Energy and Climate Plans (NECP). These plans are core elements of the Clean Energy for all Europeans Package, the legislative framework managing the European energy transition. As energy poverty is a relatively new policy field, member states without prior policy focus to is, face challenges in complying with the energy poverty-related requirements of the EU. This paper carries out aims to assess to what extent energy poverty-related chapters of the Hungarian NECP address root causes of energy poverty. Criticalities of the analyzed chapters are shortly discussed in the sense of policy studies, using mostly the framework of barriers and complex roots of compliance-related problems. The paper offers recommendations to effectively tackle energy poverty by addressing its root causes. This could serve to reach a higher level of compliance and to avoid the prospect of symbolic compliance The paper emphasizes that the NECP must analyse determining factors of energy poverty, assess the number and type of households affected, and set ambitious but achievable targets . Least but not last, it should also develop policies that effectively address the root causes of energy poverty.

Keywords: Energy poverty, biomass, National Energy and Climate Plans, Hungary, policy analysis.

Introduction

The transition to a low-carbon society is inevitable to reduce the devastating impacts of climate change. This transition "requires far-reaching transformations of electricity, heat, agricultural, transport and other systems"(Geels et al., 2017, p. 1), and consequently will substantially affect the situation of households trough changing energy prices, the increase of energy efficiency, changes in energy use, and at a macro level changes in the job-market among others. This transition will thus have a major effect on energy poverty as well. Energy poverty can be described as "the inability to attain a socially and materially necessitated level of domestic energy services" (Bouzarovski & Petrova, 2015, p. 1). Main driving forces of energy poverty are low household incomes, high energy prices, and low levels of residential energy efficiency, and they way in which energy is used in the home also plays a role in it. (Thomson & Bouzarovski, 2018) All factors that predict energy poverty will most probably be affected by the current energy transition. Both synergies and trade-offs can be identified between climate change mitigation (and as part of it, energy transition) and energy poverty alleviation. Energy transition might potentially increase energy prices but at the same time, it also has a great potential in energy poverty alleviation through deploying deep energy-efficient retrofits (Ürge-Vorsatz & Tirado Herrero, 2012), renewable energy, sustainable heating solutions, or efficient households appliance to vulnerable households as well. The combat climate change the European Union aims to become carbon-free. To reach this aim, imporant To reach this goal, a set of new and reinforced policy directions have been set under climate and energy regulation of the European Union. The *Clean Energy for All Europeans* is the energy rulebook of the EU and it contributes to the decarbonization and the mitigation of climate change through maganing the Euorpean energy transition. Besides the coordination of the energy transition itself it includes legislavtive elements regarding energy efficiency, energy performance of buildings, of renewable energies and the design of an integrated electicity market. (European Commission, 2019a). Energy poverty mitigation objectives are include in all relevant elements of the packge (Bouzarovski et

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

al., 2020) The Governance Regulation of the Energy Union and Climate Action, (2018) has been accepted as part of the Clean Energy for All European package and it sets a framework for the facilitation of the energy transition. This regulation requires all Member States to establish their National Energy and Climate Plans (NECP) that include objectives and measures regarding all fields of the Clean Energy Package, including objectives and policy measures regarding energy poverty.

By being integrated into the Clean Energy Package, energy poverty alleviation has gained important policy momentum. But the exploitation of synergies between energy transition and energy poverty alleviation requires carefully planned objectives and measures and guarantees for their implementation. Hungary, as a Central-Eastern European country has a significantly higher incidence of energy poverty than core countries of the EU (Bouzarovski & Tirado Herrero, 2017). Will the requirement of dedicating chapters to energy poverty-related in NECP motivate the Hungarian government to assess energy poverty and outline integrated measures to tackle it or the writing of these chapters will remain a box-ticking practice?

This paper aims to analyze the energy poverty-related chapters of the NECP of Hungary, by assessing to what extent it complies with EU regulation and provide effective responses to key determining factors of energy poverty.

Methods

Energy poverty traditionally has been explained by the triad of low income levels, high energy prices and low energy efficiency of the dwelling and applieances. Though, these factors could not , four key determining factors of energy poverty ("low household incomes, high energy prices, and low levels of residential energy efficiency, with the manner in which is used in the home also playing a role" (Thomson & Bouzarovski, 2018, p. 6) were used to frame the identification of key issues of energy poverty in Hungary. Then, the two energy-poverty-related chapters of the NECP were analyzed using goals, targets, and instruments as elements of the analysis. (Hübscher, 2020) In the case of the instruments, the four determining factors of energy poverty used to identify energy poverty-related key problems were taken to assess to what extent policies and measures outlined of the Hungarian NECP can tackle effectively energy poverty. Theories of the policy cycle and compliance (Treib & Falkner, 2007; Weaver, 2014) served to outline explanations shortcomings of the energy poverty-related chapter of the Hungarian NECP. Finally, policy recommendations were formulated following the logic of the analysis, responding to key problems related to goals, targets, and instruments, and addressing key factors of energy poverty.
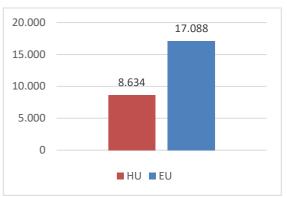
Energy poverty in Hungary

Prior to a detailed analysis of aims and measures related to energy poverty in the NECP, it is important to overview the state of the art of the knowledge about energy poverty and related policies in Hungary. This section thus provides a short overview of energy poverty-related data, suing the four key determining factors of energy poverty of Thomson & Bouzarovski (2018). This is followed by a summary of energy-poverty-related policies between 2010 and 2020

Incomes

Household incomes have a high relevance when it comes to energy poverty, as with a tight household budget it is difficult to cover energy costs along with other necessities.
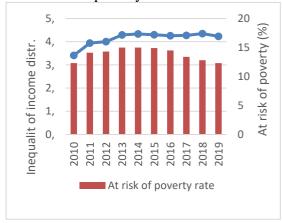
Figure 1 median equivalised net income in purchasing power standard, 2018

Source: Eurostat, 2020

Figure 2 Inequality of income distribution and at risk of poverty rate
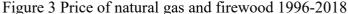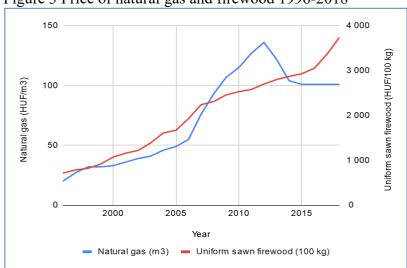

Source: (Eurostat, 2020a)

In Hungary (Brückner, 2018) between 2010 and 2019 net median incomes (in purchasing power standard) increased by 40 percent(Eurostat, 2020b). Still, in 2018 the Hungarian median net income was the third lowest in the EU and half of the EU 28 average (see Figure 1). This increase was more intense in the higher income groups, thus as Figure 2 shows, inequality of income distribution has also increased. The risk of poverty rate increased until 2014 and since then it decreased until it reached the level of 2010 (Figure 2) in 2019. Still, in 2019, 12.3 percent of the population was at risk of poverty. The increase of inequalities and the temporary increase in the poverty rate was partly due to radical changes in welfare policy aimed to support higher income groups (Szikra, 2018a).

Energy prices

Compared to other EU capitals, in 2019 residential electricity price in Purchasing Power Standards (PPS) was the 9th cheapest and 14% cheaper than the EU average. Residential gas price at PPS was the 5th lowest, which equated to 78% of the EU average(MEKH et al., 2020).

Figure 3 Price of natural gas and firewood 1996-2018
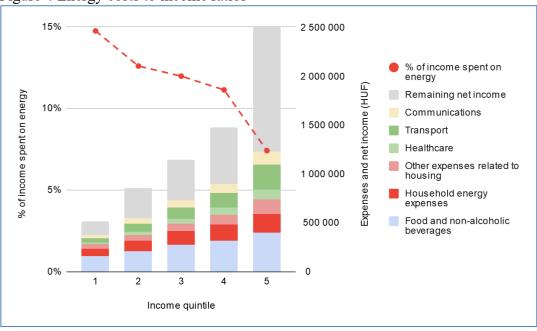
Source: Bajomi et al., 2021, p. 41; data retrieved from Hungarian Central Statistical Office, 2019

While electricity, gas, and district heating prices were reduced and later stabilized since 2014 following government intervention, the price of biomass has been steadily increasing for more than a decade. The

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

dynamic of the price increase can be observed in figure 3. As will be showed later (Figure 8), biomass as a source of domestic energy is predominantly used by low-income groups.
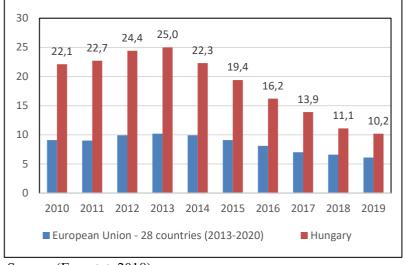
Figure 4 Energy costs to income ratios

Source: (Bajomi et al., 2020)

Regarding **affordability**, in 2017 average energy expenditure to household income ratio was 10.33% (own calculation based on Hungarian Central Statistical Office, 2018b, 2018a). As Figure 4 shows, households in the lowest income quintile spend two times more of their income on energy than those in the highest income decile (Hungarian Central Statistical Office, 2018b, 2018a). Despite the high energy cost burden, absolute energy spending within the lowest income group is 2.5 times lower than in the highest income group.

Figure 5 Househoolds having arrears on utility bills (2018, %)

Source: (Eurostat, 2018)

As Figure 5 shows, the share of the population having arrears in utility bills has been reduced by half in a decade. ill,, in 2019 10 percent of the population could not pay their bills on time.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Table 2: Consumer With Arrears Longer Than 60 Days (2018)

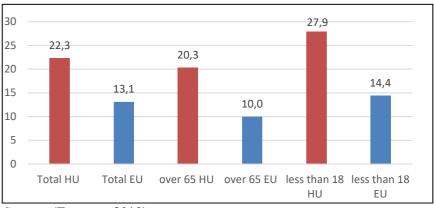| gas	electricity	district heating
107,728	523,807	97,789

Source: (MEKH, 2018)

Table 1 shows the number of consumers having energy utility arrears longer than three months. If one consumer represents one household, we can say that in 2017 12% of households had arrears in the payment of electricity bills longer than 60 days, which means that utility service can be cut off.
It is important to note that affordability problems of solid fuel users do not appear in utility-related statistics as wood and other solid fuels are not distributed through utility providers and are not paid through billing.

Low levels of residential energy efficiency

70% of Hungarian residential buildings do not reach modern technical and thermal requirements (NFM, 2011, p. 11), thus have very low energy performance and high energy need. The share of dwellings with very low energy performance represents the 5th highest among EU countries and the UK (IMF, 2020). The efficiency of buildings is a key factor of energy poverty, as lower-income households tend to live in less efficient. dwellings, thus heating their homes need more energy.
Figure 7 shows that 22% of the total population and 27% of children in Hungary live in dwellings that have serious **quality problems**, such as leaking roof, damp walls, floor or foundation or rot in window frames or floor, while the EU average is nearly half of the Hungarian data (13.1% and 14.4%). The elderly population is less affected by serious quality problems. Severe housing quality problems indirectly may indicate severe energy poverty-related problems as well.

Figure 6 Population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor (%)
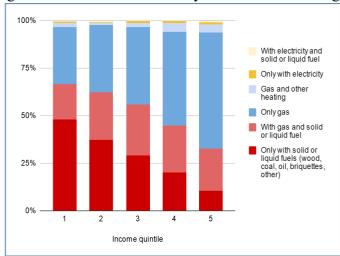

Source: (Eurostat, 2019)

It is important to highlight that there are approximately 1,633 segregated poor and Roma *settlements* or segregated blocks embedded into the urban fabric (Domokos & Herczeg, 2010). These areas are characterized by a lack of infrastructure (piped water, sewage, gas, and telecommunication services). In many cases, dwellings were already built as substandard and temporary housing units and now are degraded. These conditions indicate cases of extreme energy poverty as well. The Roma population's housing situation in Hungary is worse than the average population that increases their risk of facing energy poverty. 81% of Roma households heat with wood (Peric, 2012), and more than a third of Roma households lack basic amenities (such as running water or a bathroom). In 2011, 44 percent of the Roma population lived in apartments with a leaking roof, damp walls, floor or foundation or rot in window frames or floor, and 25% face pollution in their environment (UNDP, 2013).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

The way energy is used at home

Figure 7 Share of households by the source of heating by income quintiles 2016

Source: Bajomi et al., 2020, p36)

As Figure 8 shows, nearly half of the lowest income quintile (47,9%) entirely relies on solid fuels for heating, while in the highest income quintile prevalence of solid fuels is only 10%. Thus, the lower the income, the higher the chance that the households would rely on solid fuels. Meanwhile, gas is becoming more prevalent as income increases. 39% of the population in the lowest income quintile use individual heaters that are, in many cases, extremely inefficient solid fuel stoves.

Picture 1 Individual heaters in a rural home

Picture: Nóra Feldmár

Picture 1 shows two individual space heaters. The metal stove on the left was the original heating device of a low-income rural household, while the tiled stove (a type of masonry heater) on the right was built by volunteer stove masters using reclaimed tiles in the autumn of 2020 (HfHH, 2020). These metal stoves are the cheapest heating device on the market and are widely used by low-income families. These stoves heat up rapidly; however, they also cool down shortly after the fuel was combusted. Therefore, they need constant feeding and are highly inefficient and produce high air pollution per unit of biomass burnt. Furthermore, they heat the space unevenly. In contrast, tiled stoves have a significantly higher installation cost, but the large thermal mass of the materials and an appropriately designed combustion chamber retain heat and are therefore significantly more efficient. They also emit substantially less air pollutants.

As seen before, contrary to gas prices, the price of wood, the typical fuel of low-income households, is continuously increasing. Beyond the complex problem of affordability related to inefficient homes and heaters and increasing biomass prices, solid fuel heating causes severe health risks due to air pollution in some regions of the country, directly affecting the health of residents using solid fuels.

In summary:

Hungarian low-income households face a **high energy costs burden**. As of the late 2010s, approximately 10 percent of the population hds difficulties with paying their utility bills on time. **Low incomes** and the **low energy performance and quality of dwellings** (the latter being especially present within the Roma population) partially explain the high energy cost burden. Furthermore, nearly half of

ENHR
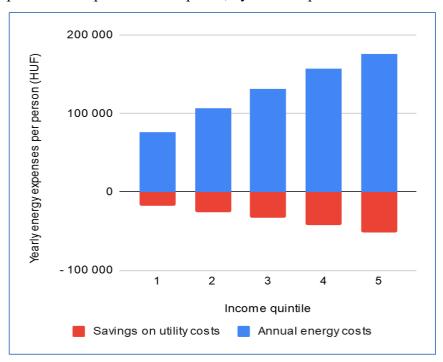OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

households in the lowest income group rely on the **increasingly expensive biomass commonly burnt in traditional, inefficient stoves.**

Have policy interventions reduced energy poverty so far?

Energy costs

Figure 8 Yearly energy expenses per person and savings after utility price cut compared to 2012 prices, by income quintile

Source: (Bajomi & Feldmár, 2018)

In terms of affordability**,** the most crucial policy that affected household's energy prices was the **utility cost reduction** (rezsicsökkentés) introduced in 2013 that cut back utility prices and then regulated them at that level (Act 2013/LIV). This measure resulted in considerable savings in higher-income groups and entirely left out households that rely on solid fuels (See Figure 9).

Low-income solid fuel users were targeted by the **social solid fuel subsidy** introduced in 2013. It is a form of in-kind support that provideslow-income households living in small settlements with a certain amount of wood and coal per year. It has been criticized for, contrary to the utility price cut, not being universal; in fact, it excludes families living in larger settlements. Furthermore, its distribution is uneven: higher income villages distribute multiple times more elevated amounts of wood for their inhabitants than disadvantaged villages. (Bajomi, 2018)

Furthermore, the quality of the distributed fuel in some cases is poor (e.g., wet wood being distributed), and lignite is also distributed. These have lower calorific value and creates important air-pollution and damages on chimney and heating devices. (Katus, 2020)

Energy efficiency

In terms of the **efficiency of buildings and appliances**, schemes supporting energy-efficient retrofits were scarce (reaching a very low number of households), sporadic (thus unpredictable), and, most importantly, financially unaccessible to low-income households. A supported saving scheme for housing purposes, accessible for lower-income households and indirectly contributing to energy-efficient retrofits was eliminated. (Brückner, 2018) Thus, energy retrofit rates remained in general low and did not target low-income households.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

In the operative programs, **social rehabilitation and desegregation programs** are being carried out in approximately a third of the 1,600 segregated urban and rural areas. Most of the projects include infrastructural (renovation of public spaces, deployment of sewage system, etc.) and housing interventions that allow the vulnerable household to move out from the segregated settlement into better quality housing or public dwellings renovated. When housing interventions are part of the program, partial energy efficiency measures must be carried out. (ITM, 2016).Still, housing interventions in most of the projects "can only reduce deficiencies to a minimal degree" and concerns only a "few dwellings [and] families per settlement" (Roma Civil Monitor, 2019).

Energy use

The 'Warmth of the home' program financed the upgrade of heating devices and large household appliances. The former targeted gas and district heating users, and due to its post-financing set-up, it was not available for low-income households. A study showed that the boiler exchange subprogram winners in Budapest were mostly residents of the wealthiest districts (MEHI, 2014). The household appliance program was more accessible for families with lower incomes as only half of the device's price had to be paid at the store. Still, the application process required quick response and internet access during working hours. An awareness-raising campaign was launched to motivate households to use solid fuels in an environmentally friendly way, though this campaign was rather cynical as it did not offer any support for vulnerable households to overcome their heating-related difficulties that result in polluting heating methods.

In summary:
Recent policies that could have contributed to the alleviation of energy poverty were not very much effective. The major measure affecting **energy prices** accumulated more benefit to high-income groups and did not affect the price of fuel use predominantly of the poor. Large-scale **energy efficiency measures** were not available to vulnerable households. Measures to change **energy usage** did not result in a significant change in the situation of vulnerable households.

Does the Hungarian National Energy and Climate Plan guarantee energy poverty alleviation?

In this section, the two energy-poverty-related chapters of the Hungarian NECP are being analyzed. The first chapter, section 2.4.4, requires defining "national objectives with regard to energy poverty, including a timeframe for when the objectives are to be met". In the second, section 3.4.4. "policies and measures to achieve the objectives set out in point 2.4.4" have to be outlined. (Governance of the Energy Union and Climate Action, 2018) The following parts are focusing on these two specific chapters. First, objectives and timeframes of section 2.4.4 are analyzed, with particular attention, the level of compliance with the Governance Regulation requirements'. Then, instruments are explored in detail to demonstrate whether they respond to key determinant factors of energy poverty.

Objectives & timeframes

The document declares that the "Hungarian Government is committed to maintaining sustainable overhead costs for Hungarian households in the future" (Ministry of Innovation and Technology, 2019., p. 118). This statement and other elements highlighting the success of price regulation policy suggest that the Government's energy poverty-related policy focuses on energy prices. But there are neither "national objectives with regard to energy poverty", nor a "timeframe for when the objectives are to be met" set in the NECP, even though these are the two requirements defined by the Governance regulation (Regulation on the Governance of the Energy Union and Climate Action, 2018, annex I, part 1. Section 2.4.4).

The success of policies aimed to further easing heating-related difficulties of households is planned to be monitored through "the share of households spending at least 25 % of their income on energy costs (9.8 % in 2016)" (Ministry of Innovation and Technology, 2019, p. 70). This approach reflects the logic of

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

the "high share of energy expenditure in income" indicator, which "presents the proportion of households whose share of energy expenditure in income is more than twice the national median share" (European Energy Poverty Observatory, 2015). Looking at household income and spending statistics, 25 percent of income spent on energy bills approximately equals twice the average energy expenditures (the median expenditure data was not accessible) (Hungarian Central Statistical Office, 2016, 2018a, 2018a). However, in its actual state, without associated objectives such as when and to what extent the share of households with high energy expenditure is to be decreased, this indicator cannot measure policy success. Lack of associated objectives jeopardizes effective policy design, implementation, and monitoring as well. The brief introduction of this indicator leaves some further questions unanswered. Will this indicator only serve to measure efficiency of policies? Or it will be developed to an official national indicator of energy poverty? Will it serve to identify target groups of policies? What is the goal of policies that it aims to measure? Eliminate, decrease, or stabilise the share of households that have a high energy costs burden? Besides lacking objectives, there are some minor further shortcomings related the monitoring of energy poverty-related policies, such as the lack of elaboration on how data will be collected for the indicator (and from where the cited data of 2016 has been taken). Also, the measurement of energy poverty if applied in its current form, under-consuming households (for example those who underheat their apartment due to lack of financial resources) will not be regarded as energy poor.

In summary, the declared aim of energy poverty-related policies is to provide affordable energy, primarily through low utility prices. Still, there are no clear energy poverty reduction objectives and timeframes set. Thus, the NECP fails to comply with the specific requirement of the Governance regulation.

Targets groups

After discussing the objectives of energy poverty-related policies, it is time to discuss who is targeted by the outlined policies? Whose situation is supposed to change? The NECP states that when assisting vulnerable groups, the focus will be "on two clearly distinct social groups: large families living in single-family houses in small municipalities and single pensioners living in apartment blocks (or to a lesser extent in single-family houses)". The is no information regarding how these two specific target groups were selected. Are their energy bills the highest compared to their income, and their remaining income is low? Are they the households occupying the worst-performing dwellings? Information is also missing on the energy poverty-related specificities of the two-target groups; thus, it is unclear how policies will be designed to overcome their problems. The target groups' current identification does not provide information on factors that would be crucial o take into consideration when developing policies, such as type of fuel and heating device, income, arrears, and energy performance and quality of dwellings. Also, it is not demonstrated to what extent the identified target groups are households spending at least 25 % of their income on energy costs – the indicator selected by the NECP to measure the success of energy poverty-related policies.

Shortly, the rationale behind identifying target groups for energy poverty-related policies is unclear. There is a lack of characterization of target groups regarding basic socio-economic data and their energy poverty-related problems.

Instruments

In terms of instruments, this analysis focuses on the extent to which listed measures respond to the four determining factors of energy poverty.

The document states that the goal of maintaining sustainable household energy prices, to which the Government is highly committed, demands a "complex strategy that extends to energy efficiency, an increase in the use of decentralised ('household') heating solutions and in the penetration of power generation, and the optimisation of supply methods". (Ministry of Innovation and Technology, 2019, p. 118) No further details are provided regarding the elements of the complex strategy.

Other policies and measures are the following:

- A "subscription-based electricity connection scheme for households living in buildings that are deteriorated or unsuitable for renovation, which ensures the electric heating of at least one room for

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

families with small children" (Ministry of Innovation and Technology, n.d., p. 119)

- A program to improve conditions for vulnerable customers.
- Taking into consideration vulnerable consumers when planning the energy-saving obligation scheme
- Development of various service packages" to "ensure that the energy fees of the most deprived persons do not increase" (Ministry of Innovation and Technology, n.d., p. 118)
- Awareness-raising, information and consulting campaigns "promoting low-cost energy efficiency investments that can be implemented by homeowners themselves, resulting in substantial savings. The social fuel programme, for example, could be linked to promoting 'out-of-the-box floor insulation". (Ministry of Innovation and Technology, n.d., p. 119)

The measures are outlined very briefly: the assessment of the NECP by the EC also highlights that "further measures will take account of the interests of vulnerable households. However, no further details are provided." (European Commission, 2020b, p. 25). Having presented measures regarding energy poverty, the following section will address how far these measures respond to energy poverty's four key determining factors.

Low household incomes

Low-income levels are not discussed explicitly in the chapter; low-income households are referred to as vulnerable consumers and most deprived persons. Income levels as the threshold for support or measures that could expressly or implicitly increase household levels so that energy costs represent a lower burden are not present.

High energy prices

Energy prices are the central focus of energy poverty-related policies outlined in the NECP. The document states that the "Hungarian Government is committed to maintain sustainable overhead costs for Hungarian households in the future" (Ministry of Innovation and Technology, 2019., p. 70). This goal is supported by various elements:

1. A quite general element is the already cited aim of providing **"sustainable energy prices" for consumers that needs a complex strategy** including "energy efficiency, an increase in the use of decentralised ('household') heating solutions and in the penetration of power generation, and the optimisation of supply methods". No more information is provided on the elaboration of the strategy.

2. Then as part of the planned energy market reform **"development of various service packages" to "ensure that the energy fees of the most deprived persons do not increase"** (Ministry of Innovation and Technology, n.d., p. 118) will also potentially reduce energy costs of vulnerable households. Compared to the current energy price regulation policy, the outlined future policies are more sustainable in the sense that they aim to ensure sustainable prices through more dedicated measures related to energy efficiency, decentralized heating, and supply. The introduction of services packages guaranteeing stable energy price for deprived persons projects the introduction of a tariff system with progressive energy prices. This system would be a more sustainable and socially fair way of energy price regulation than the current form of energy price regulation, which results in higher savings in higher-income groups. The plan of introducing a social tariff system might be a result of the need for compliance with the energy market regulations of the EU, as an infringement process has been started against Hungary related to utility tariff regulation (European Commission, 2018). Measures aiming to provide affordable energyprices are described as possible future interventions that need a strategy or reform adopted before.

3. Part of the process of drawing up a **"programme to improve conditions for vulnerable customers"** will be assessed targeted programs adjusted to the needs of the social groups concerned will be drafted. This element is in the initial stage of development. Thus it is difficult to assess what this program will consist of, but it might tackle high energy cost burden, as it targets energy consumers.

As discussed earlier, the price of biomass for residential use is rising. Thus it pauses a growing energy price burden on its preliminary users, low-income households. Despite that energy prices are the center of energy poverty-related policies, increasing solid fuel prices are not addressed.

Low levels of residential energy efficiency

Energy efficiency is first mentioned as part of the larger strategy aiming to secure sustainable energy

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

prices that still to be developed. Further efficiency related elements are
1)   the promotion of low-cost energy efficiency investments implemented by the homeowners of an awareness-raising campaign; and
2)   the promotion of 'out-of-the-box' floor insulation' as part of the solid fuel subsidy program.

Small-scale and low-cost energy efficiency investments are proven to decrease energy costs, especially if accompanied by technical and social professionals. (Bajomi & Gosztonyi, 2017) According to the European Energy poverty Observatory, "financing improvements in the energy situation of households is the most preferred option to solve energy poverty structurally through directly facilitating the improvement of building insulation, cooling systems, energy storage, heating system, household appliances, renewable energy and/or transport" (Guidance *for* Policymakers, 2017). Any detailed measures addressing energy efficiency expect for small-scale improvements are lacking from the policies. Given the deficient performance of Hungarian housing stock and the importance of energy efficiency in tackling energy poverty, it is striking that energy-efficient retrofits are not part of energy poverty-related policies and measures. Energy poverty-related chapters do not even refer to the chapter of the Long-Term Renovation Strategy on renovation of the worst-performing building stock (NECP section XXX), which will be an integral part of the NECPs, once elaborated. (European Commission, 2019b) As energy-poor households tend to live in the worst-performing segment of the stock, by renovating it energy poverty could be tackled efficiently.

The way energy is used in the home

Energy poverty-related policies and measures listed in the NECP include some elements that could affect household energy practices.
1)   The suggested complex strategy to maintain sustainable energy costs would increase among other decentralized household heating solutions and power generation penetration. These could potentially ameliorate heating and electricity-use related practices. Though, as the strategy itself is still to be developed, and there is no further information on the mentioned elements, it is difficult to assess its effect on energy-poor households.
2)   The "subscription-based electricity connection scheme for households living in buildings that are deteriorated or unsuitable for renovation, which ensures the electric heating of at least one room for families". This program is already being tested in a disadvantaged village (Maltai.hu, 2020), could have a substantial effect on the heating problems of vulnerable households. Energy poverty related issues will be eased, basic, and essential amount of heat will be provided through access to renewable energy. As the extremely deteriorated dwellings that typically serve as home for the targeted households remain untouched, serious issues will be left intact (e.g., humidity, wind blowing through broken windows and doors, etc.).
3)   Planned awareness-raising campaigns, including the promotion of low-cost energy efficiency measures and out-of-the-box insulations, also affect how households use energy. Even if inappropriate solid fuel heating practices (deriving from financial difficulties and lack of information) represent a crucial side-effect of energy poverty that contributes to Hungary's severe air-pollution problem, this issue is neither outlined nor addressed, specifically in the document. As interventions related to awareness-raising (as all other measures) are lacking details, the already launched heating-related awareness-raising campaign may be continued, just it is not highlighted in the document.

Summary of the analysis

The energy poverty-related chapters of the Hungarian NECP introduce measures and policies to tackle energy poverty and an indicator to measure their success. Still energy poverty-related chapters of the NECP fail to meet the requirement of setting measurable objectives and a timeframe to meet energy poverty objectives. Target groups for policies and measures are identified, but they are not justified why these specific groups were selected and their characteristics, and how measures will address their vulnerabilities. Listed policies are very brief, and some are very generic. The implementation of the policies is not guaranteed as no information is provided on target groups, goals, financial resources, and responsible bodies. None of the four key determining factors of energy poverty are addressed in a complex way. High energy prices and the way energy is used in households are the ones that are

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

addressed in the most complex form. However, few key aspects are overlooked, such as the increasing price of wood and inadequate heating methods causing pollution. Low household income and low levels of residential efficiency are factors that NECP fails to address. The former is less relevant in the context of an energy strategy. Even if that the latter would be the most crucial policy area to tackle energy poverty structurally, the renovation of the building stock is not explicitly mentioned. Other small-scale interventions are not able to address the severity of efficiency problems. The lack of measures aiming to increase the efficiency of dwellings and heating devices of energy-poor households is the most critical weakness of the subchapter on energy-poverty-related measures.

Despite these carious shortcoming, it is important to acknowledge that for the first time in Hungary, measures to ease energy-poor households' situation are specially outlined in a strategic document such as the NECP.

Policy study implication of the analysis

The production of these two analyzed chapters of the Hungarian NECP (sections 2.4.4. and 3.4.4) dedicated to energy poverty can be identified as key policy formulation activities. The formulation of policies is a rather initial part of the policy cycle in which objectives are defined in terms of what the policy should achieve. Different action alternatives are considered and selected to achieve the specified objective, and that will then be implemented at the next stage. (Wegrich & Jann, 2017). Member states in their NECP outline their energy and climate action for the next decade, including targets and measures regarding energy poverty. In the case of Hungary, before the submission of the NECP no strategic document addressed energy poverty specifically.

The formulation of energy poverty-related policies is a result of a policy transfer process, framed by the EU Regulation of the Energy Union and Climate Action (Regulation (EU) 2018/1999 of the European Parliament). The package aims to facilitate the "transition away from fossil fuels towards cleaner energy" and to reduce greenhouse gas emissions (European Commission, 2017). Using the framework of Dolowitz & Marsh (2000), the integration of the European policy framework of energy and climate policy into the national contexts can be set somewhere between voluntary and coercive transfer. On the one hand, Member States are obliged to outline and submit their NECP, which provides a framework for the national energy transition by presenting integrated manner targets and measures related to the directives of the Clean Energy of All European Package. They should also adapt their national legislation and implement measures to fulfill specific targets and aims of the directives, that cover key areas of the energy package (energy efficiency, renewable energies, reduction of greenhouse gases, internal energy market, etc.).Though the Member States have liberties in setting most of the targets and to decide on which policies they would follow to reach them.

The formulation of energy poverty-related measures in the Hungarian NECP results from international pressure (obligation to define targets and measures in the NECP) rather than from a voluntary lesson drawing activity (Dolowitz & Marsh, 2000). As outlined earlier, the compliance with energy poverty-related requirements of the NECP was only partial. One out of the two required elements, the definition of objectives with timeframes was not achieved. Also, the outline of policies and measures was lacking any detail on targets and financial resources for the implementation (European Commission, 2020b).

The weak elaboration of measures and lack of guarantees for implementation suggest that we face the case of symbolic compliance, which "occurs when (…) a member state pretends to align its behaviour with the prescribed rule or changes its behaviour in superficial ways that leave the addressee's original objective intact." (Batory, 2016, p. 689). Symbolic compliance happens when "measures are accepted but in their totality, they "render enforcement action inconsequential" (Batory, 2016, p. 689). A similar approach to this compliance problem is described by Falkner & Treib (2008) as the 'Word of Dead Letters', which is used to describe compliance pattern of CEE countries (n case of working time and equal treatment policies) that "transpose EU Directives in a compliant manner (…) but then there is noncompliance at the later stage of monitoring and enforcement." Thus, "what is written on the statute books simply does not become effective in practice" (Falkner & Treib, 2008). As some measures have been listed in the NECP, thus one out of two energy poverty related requirements are ticked.

Furthermore, some of the listed measures are already under implementation (e.g., the installation of electric heaters in homes in vulnerable households). But as there is no proper analysis of causes of energy poverty, no targets are set and measures are hardly offering systematic solution to energy poverty, the objective of the EU to assess energy poverty and tackle it in a complex way will be most probably jeopardized.

Batory (2016) points to the importance of two factors determining the circumstances under which "symbolic and/or creative compliance is most likely to occur" (Batory, 2016, p. 689). The first factor is "the political salience of the substantive issue at stake" (Batory, 2016, p. 689). In the case of energy poverty, energy costs have high political importance, as the utility price cut introduced in 2013 was the leading public policy topic for several years, communicated as the 'fighting utility costs. The price cut primarily served political rather than policy goals. It proved to be politically effective, as it contributed significantly to the growing popularity of the Government and helped to win the elections. (Böcskei, 2015). Since then, other topics overtook the political agenda, but the effects of the utility cost cut is still an important 'achievement' of the Government, highlighted also the NECP. Acknowledging that energy poverty is a persistent problem that needs complex intervention could seem as an admittance of the failure of its main policy tool for years (utility price cut). The second factor contributing to symbolic compliance is the "visibility of the discrepancy between the intended EU objective and real life developments on the ground" (Batory, 2016, p.689). In Hungary, public policy was characterized by the disinvestment from welfare measures targeting the poor (Szikra, 2018b), the refusal of launching large-scale energy-efficient retrofits (Dr. Tóth, 2020), and the targeting of higher-income groups in housing and other energy efficiency schemes (Bajomi et al., 2020; Elek & Szikra, 2018; Pósfai, 2018). The effective tackling of energy poverty (the objective of the EU) would require a radical reorientation of social, energy, and housing policy to produce real-life developments on the ground, which is barely likely to happen, thus here we face a discrepancy.

Energy poverty-related objectives and policy measures are new requirements from the European Union. Since national NECPs are monitored and must be updated regularly, there isa possibility to ameliorate the energy poverty chapters in the future. In case progress in implementing policies and reaching targets is considered insufficient by the European Commission, non-binding recommendations are provided to support the implementation of the outlined policies. (Governance of the Energy Union and Climate Action, 2018). Energy poverty related targets and measures are subjects of this soft method of policy transfer. As part of this process, the EC in its recommendations to the draft integrated NECP of Hungary, outlined a key compliance issue related to the energy poverty chapter suggesting to "further develop the approach to addressing energy poverty issues, including by providing a dedicated assessment of energy poverty as required by the Regulation (EU) 2018/1999" (European Commission, 2019). According to the assessment of the final document, recommendations on the draft NECP were only partially considered in the final version. It highlights the lack of measurable targets and of details regarding policies and measures. This assessment suggests further elements to improve the energy poverty related elements of NECP (European Commission, 2020).

Why energy poverty related elements of the NECP do not meet requirements and are assessed as weak in general? The following paragraphs aim to answer this question by using the tool of Weaver (2014) to assess barriers to compliance. Energy poverty is more in the phase of policy formulation, and implementation will take place in the next years. Thus, compliance with EU requirements to outline energy poverty related targets and measures is analysed, rather than compliance with energy poverty targets itself.

Firsts, *lack of knowledge* is important factor. Energy poverty is a relatively newly emerged policy field in the EU, and it is addressed in different levels of complexity across the continent (Thomson & Bouzarovski, 2018). Thus, not necessary all decision makers and bureaucrats are prepared to deliver in relatively short time a deep analysis, targets, and complex measures to address a relatively new policy field. The Commission has published a Recommendation on Energy Poverty, which include various elements that help Member States to address energy poverty in their NECPs. (European Commission, 2020a) Still, the document was only released in October 2020, when the final NECP had to be already submitted. Hopefully, the EC recommendation document will be used when the update of the NECP will be actual in two-years.

Incentives and sanctions are also key factors to guarantee compliance. There are neither direct incentives nor sanctions related to the fulfillment of energy poverty related requirements of the NECP. There is a monitoring process established, that provide feedback on the elements of the NECP, but its effectiveness considering the lack of concrete enforcement measures (in case of energy poverty), might be weak.

Weaver states that a "*belief-based barrier to compliance* is where there is a wide chasm between those who set compliance expectations and deeply held cultural beliefs of those who are expected to comply"

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

(Weaver, 2014, p. 248), referring more to a state-citizen relationship. This approach can be used in the relation between Hungary and the EU. The Government of Hungary has been in many fields radically opposing "Brussels" in its political discourse. Also, as it was highlighted earlier, there would be a need for an important reorientation of key policy fields (housing, retrofits, welfare) to successfully tackle energy poverty. Thus, there is an important disaccord with the general policy-line of the Government and the requirement of providing support specifically for vulnerable (energy poor) households. Finally, regarding *peer effect,* it can be observed that in countries in the Central- Eastern European (CEE)countries region of Hungary are mostly in the early stage of the development of energy poverty related policies. They have not developed yet an official definition of energy poverty and address it as a partial issue of social welfare or disability (Thomson & Bouzarovski, 2018) and are not taking into account the complexity and energy efficiency related aspects of it. Thus, there is a lack of motivation from countries in a similar situation to "bring forward" Hungary to address energy poverty in a careful way. A recent analysis of NECPs of 6 CEE countries highlighted that despite high energy poverty rates, all countries failed to set measurable targets to reduce energy poverty. (LIFEUnify, 2020)

Recommendations: how to improve energy poverty related chapters of the NECP

*1.	Establish a target to reduce energy poverty and align it with a timeframe.*

Setting a target and timeframe regarding energy poverty is a necessary step to reach formal compliance with the related requirements of the (Governance of the Energy Union and Climate Action, 2018). This is also recommended by the final assessment of the NECP provided by the EC, suggesting to "continue to carefully monitor developments in energy poverty, set an indicative and measurable reduction target" (European Commission, 2020b). One option for setting a target could be to assign a target and a timeframe for the already selected indicator to monitor progress in energy poverty alleviation, such as, in X years share of households spending more than 25% of their income on energy to heat their apartment to 21 degrees should be reduced to Y %. This currently missing requirement of the NECP can be met seemingly easily, though in order, to set a realistic target, analysis of energy poverty and assessments of potential measures should be carried out.

2. Select target groups that are identified as highly affected by energy poverty.

This should be done based on an analysis of households, as part of the suggested careful monitoring of "developments in energy poverty" (European Commission, 2020b) using criteria that reflect key energy poverty determining factors, such as:
- Households having the lowest income (low income)
- Households having high energy cost to income ratio (high energy costs)
- Households occupying the worst segment of the housing stock (regarding energy performance and quality) with special attention to segregated settlements (low residential energy efficiency)
- Household relying on traditional heating sources and devices (fuel usage)

3. Include policies and measures that address the root causes of energy poverty unaffected by current policies.

Include policies and measures that answer key factors of energy poverty following issues, not or only partially addressed in the current state of the energy-poverty-related chapters of the NECP. The following aspects are highlighted in this regard:

Residential energy efficiency

Energy-efficient retrofits of dwellings inhabited by energy poor households must be a key energy poverty alleviation policy. Measures aiming for the renovation of such dwellings should be in line and integrated with policies outlined in other areas, such as the retrofit of the worst performing building stock (part of Hungary's long-term renovation strategy), the implementation of the EU's Renovation Wave, and other programs targeting residential energy efficiency. It has been proved that supporting energy efficiency of low-income households has a multiple-times higher return compared to programs aiming at higher income groups. Alternative measures should be developed for dwellings in which complex

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

energy-efficient retrofit is not possible, including individual but combinable measures. Financing schemes and subsidies must be developed that make energy-efficient investments accessible especially for low-income households. The assessment of the NECP also suggests "to take the opportunity of the 'renovation wave' initiative of the European Green Deal (…) to tackle energy poverty by improving the energy performance of the existing building stock through specific measures" (European Commission, 2020b)

Price of (solid) fuels

A high share of low-income groups relies on biomass as a source of domestic heat. The price of biomass is steadily increasing for more than a decade. Therefore it is necessary to introduce measures that address energy costs of households depending on solid fuels, e.g., by reforming the current solid fuel subsidy so that it becomes accessible for all low-income households relying on solid fuel in, in an equal way (not generating substantial differences in the level of support depending on the capacities, resources and priorities of the local municipality).

Use of energy

The awareness-raising campaigns mentioned among policies outlined in the NECP should specifically target users of solid fuels, by offering specific knowledge on how to heat efficiently and in a clean way and by avoiding blaming them.
The upgrade of inefficient domestic energy devices, especially heaters should be a core element of energy poverty alleviation. The heating device upgrade program mentioned in the NECP chapter describing policies related to Renewable Energy (3.1.2) should be directly linked to energy poverty-related measures and targeted to low-income households. The Commission in its assessment of the Hungarian NECP suggested to "support of socially innovative solutions and social enterprises (…) addressing the challenge" (European Commission, 2020a, p. 25) of energy poverty. The field of energy use can be an ideal field for social innovation.

Include further information on policies and measures.

To guarantee the implementation of policies and measure, it is recommended that NECP provides further details on:

- Include specific measures under general policy elements
- Links with the specific energy-poverty-related issue the policy or measure aims to address.
- Objectives, timeframes, and target groups
- Outline of inancial resources for the implementation of policies (European Commission, 2020b, p. 20)
- Responsible bodies for implementation of policies and measures

References

Act 2013/LIV on act on the enforcement of utility cost reduction [2013. Évi LIV. törvény a

rezsicsökkentések végrehajtásáról], Pub. L. No. 2013. LIV. (2013).

https://net.jogtar.hu/jogszabaly?docid=A1300054.TV

Bajomi A. Z. (2018). *A szociális tüzelőanyag-támogatás Magyarországon [The social fuel subsidy in

Hungary]*. Habitat For Humanity Hungary. https://habitat.hu/wp-

content/uploads/2018/09/hfhh_tuzifa_tanulmany.pdf

Bajomi, A. Z., Feldmár, N., & Kőszeghy, L. (2020). Energy Poverty in Hungary: Trapped in Politics. In *Perspectives on Energy Poverty in Post-Communist Europe* (Jiglau, G. (Ed.), Sinea, A. (Ed.), Dubois, U. (Ed.), Biermann, P. (Ed.). (2021).). Routledge.

Bajomi, A. Z., & Gosztonyi, Á. (2017). *Good practices aiming to end energy poverty.* Publications Office of the European Union. http://op.europa.eu/en/publication-detail/-/publication/2c5602d0-e9dc-11e6-ad7c-01aa75ed71a1

Batory, A. (2016). Defying the Commission: Creative Compliance and Respect for the Rule of Law in the Eu. *Public Administration*, *94*(3), 685–699. https://doi.org/10.1111/padm.12254

Böcskei B. (2015). REZSICSÖKKENTÉS: A KÖZPOLITIKAI VÁLTOZÁS MINT POLITIKAI INNOVÁCIÓ. *Politikatudományi Szemle*, *24*(4), 94–114.

Bouzarovski, S., & Petrova, S. (2015). A global perspective on domestic energy deprivation: Overcoming the energy poverty–fuel poverty binary. *Energy Research & Social Science*, *10*, 31–40. https://doi.org/10.1016/j.erss.2015.06.007

Bouzarovski, S., Thomson, H., Cornelis, M., Varo, A., & Guyet, R. (2020). *Towards an inclusive energy transition in the European Union: Confronting energy poverty amidst a global crisis.* European Commission. Directorate General for Energy. https://data.europa.eu/doi/10.2833/103649

Bouzarovski, S., & Tirado Herrero, S. (2017). The energy divide: Integrating energy transitions, regional inequalities and poverty trends in the European Union. *European Urban and Regional Studies*, *24*(1), 69–86. https://doi.org/10.1177/0969776415596449

Brückner G. (2018, October 16). *Lakástakarék: Két nap alatt ledöftek egy iparágat.* https://index.hu/gazdasag/2018/10/16/ltp_ket_nap_alatt_ledoftek_az_iparagunkat/

Dolowitz, D. P., & Marsh, D. (2000). Learning from Abroad: The Role of Policy Transfer in Contemporary Policy-Making. *Governance*, *13*(1), 5–23. https://doi.org/10.1111/0952-1895.00121

Domokos, V., & Herczeg, B. (2010). Terra Incognita. *Szociológiai Szemle*, *2010*(3), 82–100.

"Ki kezdeményezte, hogy az energiastratégiában ne szerepeljen a családi házak, társasházak felújítását célzó program? - Question for the Minister of Innovation and Technology, no. K/9352 (2020). https://www.parlament.hu/irom41/09352/09352.pdf

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Elek Z., & Szikra D. (2018, April 3). Fordított újraelosztás a lakáspolitikában: A CSOK versengő céljai.

   Új Egyenlőség. http://ujegyenloseg.hu/forditott-ujraelosztas-a-lakaspolitikaban-a-csok-versengo-

   celjai/

Energy Poverty Observatory. (2015). *High share of energy expenditure in income (2M)*. EU Energy

   Poverty Observatory. https://www.energypoverty.eu/indicator

European Commission. (2017, October 20). *Clean energy for all Europeans package* [Text]. Energy -

   European Commission. https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-

   union/clean-energy-all-europeans

European Commission. (2018). *C* [Text]. European Commission - European Commission.

   https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4487

European Commission. (2019a). *Clean energy for all Europeans package* [Text]. Energy - European

   Commission. https://ec.europa.eu/energy/topics/energy-strategy/clean-energy-all-europeans_en

European Commission. (2019b, February 21). *Long-term renovation strategies* [Text]. Energy - European

   Commission. https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/long-

   term-renovation-strategies_en

European Commission. (2020a). *COMMISSION RECOMMENDATIONof 14.10.2020on energy poverty*.

European Commission. (2020b). *Assessment of the final national energy and climate plan of Hungary*.

   https://ec.europa.eu/energy/sites/ener/files/documents/staff_working_document_assessment_necp

   _hungary.pdf

EUROPEAN COMMISSION, E. (2019, June 18). *COMMISSION RECOMMENDATION on the draft

   integrated National Energy and Climate Plan of Hungary covering the period 2021-2030*.

   https://eur-lex.europa.eu/legal-

   content/EN/TXT/?qid=1576058180537&uri=CELEX:32019H0903(17)

Regulation on the Governance of the Energy Union and Climate Action, (EU) 2018/1999, EP, CONSIL,

   OJ L (2018). http://data.europa.eu/eli/reg/2018/1999/oj/eng

Eurostat. (2018). *Arrears on utility bills—EU-SILC survey [ilc_mdes07] Last update: 18-03-2019*.

Eurostat. (2019). *Total population living in a dwelling with a leaking roof, damp walls, floors or

   foundation, or rot in window frames or floor—EU-SILC survey [ilc_mdho01]*.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Eurostat. (2020a). *Inequality of income distribution (online data code: TESPM151).*

https://ec.europa.eu/eurostat/databrowser/view/tespm151/default/table?lang=en

Eurostat. (2020b). *Mean and median income by household type—EU-SILC and ECHP surveys [ilc_di04].*

http://appsso.eurostat.ec.europa.eu/nui/show.do

Falkner, G., & Treib, O. (2008). Three Worlds of Compliance or Four? The EU-15 Compared to New

Member States*. *JCMS: Journal of Common Market Studies*, *46*(2), 293–313.

https://doi.org/10.1111/j.1468-5965.2007.00777.x

Geels, F. W., Sovacool, B. K., Schwanen, T., & Sorrell, S. (2017). Reviewing the socio-technical

dynamics of low- carbon transitions. *Joule*, *1*(3), 19.

Guidance for Policymakers. (2017, September 19). EU Energy Poverty Observatory.

https://www.energypoverty.eu/guidance-policymakers

HfHH, H. for H. H. (2020, October 23). Ágon már fűthetnek is a szeptemberi táborban épített kályhákkal.

Habitat for Humanity Magyarország. https://www.habitat.hu/blog/2020/10/agon-mar-futhetnek-is-

a-szeptemberi-taborban-epitett-kalyhakkal/

Hübscher, E. (2020, October 28). *Policy Analysis Decision-Making, Policy Formulation and Instruments*.

Hungarian Central Statistical Office. (2016). *A háztartások életszínvonala, 2016 [The living standard of*

households, 2016]. 56.

Hungarian Central Statistical Office. (2018a). *Annual expenditure per capita [STADAT – 2.2.3.4. Az egy*

főre jutó éves kiadások részletezése COICOP-csoportosítás, jövedelmi tizedek (decilisek), régiók

és a települések típusa szerint (2010–)].

http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_zhc021a.html?down=29008

Hungarian Central Statistical Office. (2018b). *STADAT – 2.2.1.1. Az összes háztartás adatai jövedelmi*

tizedek (decilisek), régiók és a települések típusa szerint (2010–).

http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_zhc014b.html?down=1975.199951171875

Hungarian Central Statistical Office. (2019). *Energy 2006-2017 (3.1.2. Energia)*.

http://www.ksh.hu/thm/3/indi3_1_2.html

IMF. (2020). *Sectoral Policies for Climate Change Mitigation in the EU*. https://www.imf.org/-

/media/Files/Publications/DP/2020/English/SPCCMEUEA.ashx

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

ITM, M. of I. and T. (2016). *A leromlott településrészeken élő alacsony státuszú lakosság életkörülményeinek javítása, társadalmi és fizikai rehabilitációjaBudapesten*. palyazat.gov.hu. https://www.palyazat.gov.hu/node/57883/revisions/61635/view#

Katus E. (2020, September 8). Rossz minőségű szenet osztanak a szociális tüzelő program keretében, Leisztinger is profitál. *atlatszo.hu*. https://atlatszo.hu/2020/09/08/rossz-minosegu-szenet-osztanak-a-szocialis-tuzelo-program-kereteben-leisztinger-is-profital/

LIFEUnify. (2020). *TACKLING ENERGY POVERTYTHROUGH NATIONAL ENERGYAND CLIMATE PLANS:PRIORITY OR EMPTYPROMISE?* http://www.caneurope.org/docman/energy-union-governance/3681-energy-poverty-report-final-december-2020/file

Maltai.hu. (2020, September 11). *Szociális naperőmű segítségével fűtik a kisgyermekes családok otthonait.* maltai.hu. maltai.hu

MEHI, Ma. E. I. (2014). *Támogatott kazáncsere – csak gazdagoknak?* http://www.mehi.hu/sites/default/files/mehi_kozlemeny_kaznfeluj_28_jan_14.pdf

MEKH, H. E. and P. U. R. A., Energie-Control Austria, & VaasaETT. (2020). *Household Energy Price Index—2020*. http://www.mekh.hu/download/a/64/e0000/HEPI_Press_Release_November_2020.pdf

Ministry of Innovation and Technology. (2019). *National Energy and Climate Plan*. https://ec.europa.eu/energy/sites/ener/files/documents/hu_final_necp_main_en.pdf

NFM, N. F. M. (2011). *Magyarország II. Nemzeti Energiahatékonysági Cselekvési Terve2016-ig, kitekintéssel 2020-ra [Energy Efficiency Action Plan]*. http://www.buildup.eu/sites/default/files/content/HU%20-%20Energy%20Efficiency%20Action%20Plan%20HU.pdf

Peric, T. (2012). *THE HOUSING SITUATION OF ROMA COMMUNITIES: Regional Roma Survey 2011*. UNDP.

Pósfai, Z. (2018). *Annual report on housing poverty in Hungary, 2018. English Summary*. Habitat For Humanity Hungary. https://habitat.hu/wp-content/uploads/2018/11/HFHH_HousingPoverty_Report_2018_Final.pdf

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

REGULATION (EU) 2018/1999 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11

December 2018 on the Governance of the Energy Union and Climate Action., no. (EU)

2018/1999, European Parliament and Council (2018).

Roma Civil Monitor. (2019). *Civil society monitoring report on implementation of the national Roma

integration strategyin Hungary*. EUROPEAN COMMISSION, Directorate-General for Justice and

Consumers. https://cps.ceu.edu/sites/cps.ceu.edu/files/attachment/basicpage/3034/rcm-civil-

society-monitoring-report-2-hungary-2018-eprint-fin-2.pdf

Szikra, D. (2018a). Ideológia vagy pragmatizmus? Családpolitika az orbáni illiberális demokráciában. In

A. Bozóki & K. Füzér (Eds.), *Lépték és irónia* (pp. 219–240). L'Harmattan; MTA

Társadalomtudományi Kutatóközpont. http://real.mtak.hu/84674/

Szikra D. (2018b). Távolodás ez európai szociális modelltől – a szegénység társadalompolitikája. *Magyar

Tudomány*. https://doi.org/10.1556/2065.179.2018.6.14

Thomson, H., & Bouzarovski, S. (2018). *AddressingEnergyPoverty in the European Union:State of Play

and Action*. https://www.energypoverty.eu/sites/default/files/downloads/publications/19-

05/paneureport2018_updated2019.pdf

Treib, O., & Falkner, G. (2007). *Making Dead Letters Live*. 26.

UNDP, E. U. A. for F. R. (2013). *The situation of Roma in 11 EU Member States: Survey results at a

glance*. Publications Office. https://data.europa.eu/doi/10.2811/76056

Ürge-Vorsatz, D., & Tirado Herrero, S. (2012). Building synergies between climate change mitigation and

energy poverty alleviation. *Energy Policy*, *49*, 83–90. https://doi.org/10.1016/j.enpol.2011.11.093

Weaver, R. K. (2014). Compliance Regimes and Barriers to Behavioral Change. *Governance*, *27*(2), 243–

265. https://doi.org/10.1111/gove.12032

Wegrich, K., & Jann, W. (2017). Theories of the Policy Cycle. In *Theories of the Policy Cycle* (pp. 69–

88). Routledge. https://doi.org/10.4324/9781315093192-12

Urban, Social and Community Resilience: Understanding the concepts through the post-crisis, South European context

Andreas Savvides

University of Cyprus

e-mail: als@ucy.ac.cy

Andreas Panagidis

University of Cyprus

e-mail: panagidis.andreas@ucy.ac.cy

Abstract

The term "resilience" is beginning to replace "sustainability" as the new term for responding to urban uncertainties, environmental, social and economic, which are increasingly being addressed as interrelated problems. Since the financial crisis of 2008, in an effort to critically examine the structural causes of urban vulnerabilities and a wide-ranging urban housing crisis, recent literature specifically advances the social domain of resilience, bringing issues of governance and social innovation to the fore. In this sense, resilience involves the "right to the city" as a major collective effort, while recovering from a sequence of recent urban crises. This paper develops the argument for planning within a community resilience framework on the one hand, through a wider understanding of the resilience framework that particularly implicates opportunities for affordable and sustainable housing and on the other, examining local, community-led processes of urban governance that are drawn from South-European, post-crisis contexts. The concluding remarks aim to shed light on the integration of rights and justice within a progressive view of urban resilience that can shift urban planning discourses towards reducing housing inequalities linked to community/neighbourhood-level vulnerabilities.

Keywords: community resilience, southern Europe, right to housing, social innovation, urban governance

Introduction

Urban crises are continuously developing in cities in Europe and in many other nations affected by economic recessions in addition to extreme weather events as well as the current global pandemic. Such unpredictable events are becoming more common and are disproportionately affecting the least advantaged, often lacking a financial safety net or access to affordable and good quality housing. Accordingly, the provision of adequate housing in urban areas particularly for lower-income households, is affected by many interconnected challenges, communicated through many perspectives such as the balance of power relations, civic participation and agency, vulnerability to economic risks and social problems, growing housing costs, uneven climate change impacts and more.

In response, a 'justice-oriented turn' in sustainability literature focuses on the overlap of social and ecological objectives, ensuring "the right to the city" and social equity in general is concomitant to urban climate politics (Cohen, 2018). Within this discussion, the term "resilience" is beginning to replace "sustainability" as the new term for responding to the complexity of coupled socio-environmental problems and to long-term housing instability whether from extreme weather events or exposure to different socio-environmental, economic, energy, water and other risks. As there is still much debate for defining resilience for whom specifically and how it can be meaningfully utilised, we will first examine the recent developments in resilience theory, reviewing the theoretical evolution of the term urban resilience followed by *social* and *community resilience*, developing a conceptual framework with a more explicit focus on community strengths examined from the perspective of social justice and social equity. Urban resilience is also analysed from the perspective of *evolutionary resilience* proposing a more inclusive society, establishing equity as a core principle, seeking potential transformative opportunities and "bouncing forward" rather than merely bouncing back (Davoudi, 2012; Davoudi et al., 2013).

We then discuss a more progressive application of resilience theory in urban planning by investigating the many trajectories of a post-crisis "resilient" urbanism that unfold through various power and discourses struggles involving social resilience cells (Paidakaki & Moulaert, 2017). Finally, the aim is to potentially forge new pathways by connecting the concepts of community and social resilience to engage with the right to housing and the right to the city (Aalbers & Gibb, 2014). By addressing marginalised and more vulnerable social groups, an examination of social innovation and social resilience cells focusing on the perspective of post-crisis South European community initiatives, will provide the opportunity to operationalise the conceptual framework developed regarding resilience. This paper therefore takes a closer look at these relationships by untangling the multifarious concept of urban resilience and by contextualising the theory in the post-crisis events of certain key cities that provide unique challenges and opportunities in the South European context.

Urban Resilience

With roots in engineering and ecology, resilience has been defined in different ways, but in general, it is defined as "the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure and feedbacks, and therefore identity" (Folke et al., 2010). In order to develop a better understanding of how to address the increasing complexity and uncertainty of urban systems, urban theorists are turning towards a critical understanding of urban resilience that more directly implicates socio-spatial inequalities. Such an approach also involves diverse actor groups, collective action, political interactions, institutional arrangements and power relations that posit resilience across multiple scales and social dimensions (Folke et al., 2010), whereby resilience is not to be merely conceived as a response to emergency or a return to normality, but instead engaging in interdependent and dynamic urban systems towards a vision that cities should strive for (Meerow et al., 2016). Importantly, theory by Davoudi et al. (2013) that focuses on an evolutionary approach to resilience draws more attention to human foresight intentionality and social learning capacity. Their term *evolutionary resilience* adds the dimension of "preparedness" (learning capacity) to the dimensions "persistence" (being robust), "adaptability" (being flexible), while highlighting "transformability" (being innovative) to see beyond a crisis towards renewal and pursuit of alternative futures.

Additionally, Paidakaki and Moulaert (2018, p. 433) reconceptualise resilience as "a highly political, continuously changing, socially transformative process, with various 'bounce-forward' imaginations – or resilience trajectories". Therefore, a "bounce-forward" rather than "bounce-back" approach to urban resilience has the potential of operationalising a somewhat general theory by carefully adjusting its application in urban policy and with emphasis on planning according to local needs.

Therefore, a decisively urban resilience that deals with planning for the resilience of cities and their communities in order to respond to hazards such as those produced by climate uncertainty, places more emphasis on citizen participation and decision-making in the urban context. Urban resilience therefore can be especially relevant as "a proactive rather than reactive view to planning, policy-making and strategic steering in which communities play a vital role for resilient place shaping" (Mehmood, 2016, p. 413). How is the concept of resilient place shaping then actually witnessed in urban communities?

Extending the Concept of Urban Resilience Through Social/Community Resilience

Community resilience is broadly defined as "a community's collective capacity to function in, respond to, and potentially influence an environment characterized by continuous change, uncertainty, and crisis" (Faulkner et al., 2018). It is important to point out that the common condition in most cases of community resilience is the response to a problem or potential risks that affect a community collectively and "a key advantage of the phrase resilient city over the various – and perpetually elusive – invocations of 'sustainability', 'sustainable development' or 'sustainable urbanism' is that resilience is a more explicit challenge to the inadequacy of existing systems" (Vale, 2014, p. 195). In this statement, Vale (2014) applies resilience to planning as a form of resistance, "remaining constantly alert to questions of equity" and conveying a strength in human efforts by focusing on who makes decisions and embracing the politics of resilience.

Therefore, community or social resilience is ultimately not only a matter of responding the global challenges of climate change, but also to local decisions taken by more powerful decision-makers, pointing to the need to consider resilience "as having the potential to develop as a more radical and transformational agenda that opens up opportunities for political voice, resistance, and the challenging of power structures and accepted ways of thinking" (Shaw, 2012, pp. 309–310).

With respect to the social aspects of resilience, Maclean, Cuthill and Ross (2014) identify various attributes that help in understanding how theory may be translated into practice. The attribute of "engaged governance" deals with aspects of decision making, participation and collaborative partnerships and brings to the fore the involvement of both state and non-state actors to learn and adjust in collaborative, problem-solving processes. This approach to resilience also necessitates institutional change by "eliminating the divide between those governing and those being governed" (Berkes, 2017), in which various kinds of collaborative networks are involved in an ongoing process. Hence resilience scholars are shifting their interest in particular, upon institutions and governance systems that can practice adaptive management and learning that build on community strengths (Maclean et al., 2017), recognising resilience as a process rather than an outcome. Great responsibility is therefore placed in the hands of planners and policy-makers in collaboration with other disciplines in the design of resilient, urban communities and the development of policies to support such novel and integrative perspectives.

Towards a Progressive Application of Resilience Theory in Urban Planning

The multiple levels of analysis have made the theory of social and community resilience both highly transferable to different contexts but also hard to define in spatial terms. While the social turn in resilience thinking builds on the social aspects of adaptive governance, capacity building and engagement of communities, more attention needs to be paid to the built environment and how it contributes to resilience, involving the provision of infrastructure and services that contribute to the adaptive capacity of communities (Maclean et al., 2017). An in depth analysis of neighbourhood social innovation in Europe by Moulaert et al. (2010), in the edited book named Can Neighbourhoods Save the City? concludes with the outcome that local action involves the broader scales of government through (a) interaction between changing and challenging modes of governance; (b) demonstrative effects of action showing that change is possible; and (c) networking, involving the sharing of knowledge and social capital built at the local level that resonates at the national level. Hence, without state support, social innovation initiatives as resilience-building practices are insufficient in themselves to actually trigger long-term reorganisation of local urban governance and sustain social resilience.

Critical questions remain regarding resilience from what, how, and for whom in the task of minimising one of the most prescient urban problems - housing unaffordability, which arguably requires an approach that links the scale of the neighbourhood or community to the scale of the wider market factors, political decisions and ecological implications. It is therefore crucial to expand the agenda of housing to consider factors beyond the boundaries of buildings. Vale et al (2014, p. 22) for the Resilient Cities Housing Initiative explain that well-designed, affordable housing is central to resilient cities and begin to shed light on some of the ambiguities of resilience in relation to housing needs: "specifically, housing can help residents address the struggle to maintain economic livelihood, the threats of a changing climate, the challenges of urban violence, and the inequities of governance". With this approach, the authors argue that community resilience efforts and institutional housing policy should not be mutually exclusive. The involvement of state agencies and social movements that advocate for a more just distribution of affordable housing is explained through the concept of counter-hegemonic social resilience cells (Paidakaki & Moulaert, 2017). The theory of social resilience cells is pivotal as it involves social groups who defend their rights based on common values, needs and aspirations, and can be responsible for their own social reproduction and housing reconstruction, for example, through grassroots initiatives and neighbourhood associations. As a way forward, the progressive urban resilience framework developed in this paper articulates resilience as a political question with a focus on more inclusive governance processes claiming the right to housing.

Housing crisis in Southern Europe

In many Southern and some Eastern European countries, policies supporting home purchase linked to high-risk lending, as well as a very limited supply if not a near elimination of public social housing and increasing public indebtedness have caused an unsustainable housing development model, especially vulnerable to a globally interconnected urban problems (Fields & Hodkinson, 2018). The 2008 financial crisis heavily exacerbated socio-economic and political consequences of years of uneven urban development, especially in EU peripheral countries that proved more vulnerable, like Ireland, Portugal, Spain, Italy, Greece and Cyprus (Alexandri & Janoschka, 2018; Maloutas et al., 2020).

The countries of Southern Europe that were affected the most by the financial crisis, as well as some post-Soviet countries of eastern Europe have witnessed the loss of legitimacy of existing urban governance processes and the evident inability of planning systems to prove resilient over the post-crisis period. These wide-ranging realisations have posed the conditions for urban activism, adaptive governance practices, possibilities of institutional change and housing reform, especially within a South European context. Planning for urban futures by utilising a theory of social and evolutionary resilience as defined previously arguably presents the most promising direction to challenge the inadequacy of existing systems.

Crisis as Opportunity in Southern Europe

In the face of rising inequality and a lack of affordable housing, many self-organised community-driven initiatives that aim to meet local needs at the neighbourhood scale have proliferated. The importance of the growing social movements and grassroots initiatives as a form of community resilience have recently been revealed as emergent forms of urban governance and for their potential of articulating more equitable urban futures. After more than a decade since the economic crisis, alternative models of meeting housing needs are becoming more prominent, framed within the discussion of community resistance as resilience (Álvarez de Andrés et al., 2019; Cabré & Andrés, 2018). However, there has been limited research on the relationship of resilience and the responses to the financial-economic crisis.

From here on, the aim is to investigate further the possible links between progressive urban resilience with the recent opportunities for a restructuring of the housing and planning system inspired by various social innovation practices from the South European context. Perhaps because of the unprecedented scale of the impact that the post-crisis events have had, a number of activist groups and platforms concerned with the right to housing have grown in urban spaces. In the struggle for the equitable distribution of housing and services, following a progressive and evolutionary approach to urban resilience, social innovation and processes of adaptation are witnessed in many different forms of social movements. These experiences are expected to build social resilience and explore the potential of developing new models of housing, often in the form of pilot interventions and configurations of community services.

Especially in Spain, a rejection of the neoliberal urban development model and austerity regimes has gained momentum affecting urban discourses in planning and participatory governance appealing to the right to housing (Janoschka & Mota, 2020). Grassroots movements and neighbourhood-scale projects that favour of alternative governance processes and incorporate greater civic participation are evidence of the initial transformational responses to the crisis. Furthermore, recent planning and governance transitions such as government reforms in housing policy, strategic planning being replaced by normative, small-scale urban actions, as well as a focus of municipal investments on peripheral neighbourhoods, suggest new types of governance being promoted at the local level (Piñeira Mantiñán et al., 2019). Proposals at the neighbourhood level including projects that have been proposed by neighbourhood councils and residents' initiatives targeting especially people with greatest need. These new practices increase civic participation in urban governance and develop in parallel to new urban policies. The implementation of socially innovative co-housing initiatives such as the notable La Borda project for example, offer a high level of community participation in decision-making and self-management processes (Cabré & Andrés, 2018).

In Greece, a lack of socio-economic support by the state for lower-income groups, degraded housing environments due to energy poverty, unemployment and financial problems faced by households after the crisis overlap with pre-crisis hazards, for example, extreme weather events and chronic risks related to lack of access to services (Sapountzaki & Chalkias, 2014), making urban vulnerability a non-uniform, multi-dimensional problem of exposure to a set of interconnected risks. The responses to the crisis once again placed self-organisation and community empowerment at the heart of local counter-austerity movements of solidarity in neighbourhoods, especially in Athens (Arampatzi, 2017). The local initiatives include "emergent 'common spaces'" constituting informality and spontaneity as key organisational characteristics and which according to Leontidou (2014), are quintessentially Mediterranean urban traits. The urban solidarity spaces that Arampatzi (2017) explores, feature aspects of resilience in the form of neighbourhood-scale economic activities and participatory processes. These initiatives function both as "buffer mechanisms" to weakening welfare system but also as experiments for alternatives, firstly to austerity, but also as contributions to the formation of social/solidarity economies and emergent transformation in urban governance which "renders the territorial level of the neighbourhood crucial to this process" (Arampatzi, 2017, p. 2165).

New evidence of solidarity-oriented practices which tend to be grassroots, bottom-up initiatives in countries confronting the enduring socio-economic impacts of the 2008 crisis demonstrate alternative forms of resilience (Kousis, 2017) often involving non-state actors who manage to see beyond a crisis. These local innovation practices draw heavily on the concept of community networks and indicate how "the place-making process is much richer than a simple set of physical modifications in urban spaces" (Salone et al., 2017, p. 2131). Self-governance and social cooperation therefore seem to provide promising pursuits for the transformation of institutions advancing the agenda of progressive urban resilience.

Resilience in cities therefore does not simply exist, it emerges and unfolds through multiple bounce-forward trajectories (Paidakaki & Moulaert, 2018) and often through neighbourhood-based, social innovation projects. The connection of social innovation with social resilience forges new pathways in research concerning the overlaps between neighbourhood-level, adaptive governance practices and planning theory.

Conclusion

Urban resilience has been framed through a social-justice framework and the analysis of the structural and institutional problems of urban growth. Continuing economic and environmental uncertainty and recently a global pandemic are framing urban policy discourse. Housing as a social good, places the aspect of housing in a central role in urban struggles involving not only the security of placing a roof over one's head, but also access to social, economic, spatial and environmental resources, extending the right to housing also to inhabited places that lie beyond buildings. Therefore, a restructuring of the housing market is being examined as an interrelated process that is necessarily both local, utilising neighbourhood-level social innovation initiatives, and national, involving many aspects of urban planning and housing policy that will support such practices. The right to housing involving social movements in a broad context and across many countries can therefore be understood as the right to urban life and a gateway to other human rights that are crucial for the very concept of community

resilience and of a sense of belonging implicating many progressive, locally-embedded practices of building resilience.

Through the theoretical framework of urban and social resilience, a plethora of conceptual tools have been applied to various examples of alternative on-the-ground practices in post-crisis southern Europe. An important path has been developed towards further research in order to investigate how to scale-up 'social resilience cells', reconceptualising neighbourhood resilience tied with political decisions that directly focus on justice. A comparative urbanism approach using examples of social innovation from Spain, Italy and Greece provided the context for analysing interconnected and complex processes that may lead to uneven vulnerabilities but also, more optimistically, to opportunities for change and transformation.

In the face of increasing urban uncertainty and complexity, but most importantly, in order to address unequal vulnerability, the authors propose that a progressive view of urban resilience can also shift urban planning discourses towards the support and empowerment of local governance, local community participation, self-organisation and strength-building processes for urban neighbourhoods. Further investigation of innovative and adaptive capacities of social groups that can initiate change at the local level can be a promising direction to follow.

References

Aalbers, M. B., & Gibb, K. (2014). Housing and the right to the city: introduction to the special issue. *International Journal of Housing Policy*, *14*(3), 207–213. https://doi.org/10.1080/14616718.2014.936179

Alexandri, G., & Janoschka, M. (2018). Who Loses and Who Wins in a Housing Crisis? Lessons From Spain and Greece for a Nuanced Understanding of Dispossession. *Housing Policy Debate*, *28*(1), 117–134. https://doi.org/10.1080/10511482.2017.1324891

Álvarez de Andrés, E., Cabrera, C., & Smith, H. (2019). Resistance as resilience: A comparative analysis of state-community conflicts around self-built housing in Spain, Senegal and Argentina. *Habitat International*, *86*(January), 116–125. https://doi.org/10.1016/j.habitatint.2019.03.003

Arampatzi, A. (2017). *The spatiality of counter-austerity politics in Athens , Greece : Emergent ' urban solidarity spaces .' 54*(9), 2155–2171. https://doi.org/10.1177/0042098016629311

Berkes, F. (2017). Environmental governance for the anthropocene? Social-ecological systems, resilience, and collaborative learning. *Sustainability (Switzerland)*, *9*(7). https://doi.org/10.3390/su9071232

Cabré, E., & Andrés, A. (2018). La Borda: a case study on the implementation of cooperative housing in Catalonia. *International Journal of Housing Policy*, *18*(3), 412–432. https://doi.org/10.1080/19491247.2017.1331591

Cohen, D. A. (2018). Climate justice and the right to the city. In *Penn: Current Research on Sustainble Urban Development*. University of Pennsylvania.

Davoudi, S. (2012). Resilience : A Bridging Concept or a Dead End ? *Planning Theory and Practice*, *13*(2), 299–333.

Davoudi, S., Brooks, E., & Mehmood, A. (2013). Evolutionary Resilience and Strategies for Climate Adaptation. *Planning Practice and Research*, *28*(3), 307–322. https://doi.org/10.1080/02697459.2013.787695

Faulkner, L., Brown, K., & Quinn, T. (2018). Analyzing community resilience as an emergent property of

dynamic social-ecological systems. *Ecology and Society*, *23*(1).

Fields, D. J., & Hodkinson, S. N. (2018). Housing Policy in Crisis : An International Perspective. *Housing Policy Debate*, *28*(1), 1–5. https://doi.org/10.1080/10511482.2018.1395988

Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., & Rockstrom., J. (2010). Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and Society*, *15*(4), 20.

Janoschka, M., & Mota, F. (2020). New municipalism in action or urban neoliberalisation reloaded? An analysis of governance change, stability and path dependence in Madrid (2015–2019). *Urban Studies*. https://doi.org/10.1177/0042098020925345

Kousis, M. (2017). Alternative forms of resilience confronting hard economic times: A South European perspective. *Partecipazione e Conflitto*, *10*(1), 119–135. https://doi.org/10.1285/i20356609v10i1p119

Leontidou, L. (2014). The crisis and its discourses: Quasi-Orientalist attacks on Mediterranean urban spontaneity, informality and joie de vivre. *City*, *18*(4–5), 551–562. https://doi.org/10.1080/13604813.2014.939477

Maclean, K., Cuthill, M., & Ross, H. (2014). Six attributes of social resilience. *Journal of Environmental Planning and Management*, *57*(1), 144–156. https://doi.org/10.1080/09640568.2013.763774

Maclean, K., Ross, H., Cuthill, M., Witt, B., Maclean, K., Ross, H., Cuthill, M., & Converging, B. W. (2017). Converging disciplinary understandings of social aspects of resilience. *Journal of Environmental Planning and Management*, *60*(3), 519–537. https://doi.org/10.1080/09640568.2016.1162706

Maloutas, T., Siatitsa, D., & Balampanidis, D. (2020). *Access to Housing and Social Inclusion in a Post-Crisis Era : Contextualizing Recent Trends in the City of Athens*. *8*(3), 5–15. https://doi.org/10.17645/si.v8i3.2778

Meerow, S., Newell, J. P., & Stults, M. (2016). Defining urban resilience: A review. *Landscape and Urban Planning*, *147*, 38–49. https://doi.org/10.1016/j.landurbplan.2015.11.011

Mehmood, A. (2016). Of resilient places: planning for urban resilience. *European Planning Studies*, *24*(2), 407–419. https://doi.org/10.1080/09654313.2015.1082980

Moulaert, F., Martinelli, F., Swyngedouw, E., & Gonzalez, S. (Eds.). (2010). *Can Neighbourhoods Save the City? Community Development and Social Innovation* (Vol. 9780203849). Routledge. https://doi.org/10.4324/9780203849132

Paidakaki, A., & Moulaert, F. (2017). Does the post-disaster resilient city really exist?: A critical analysis of the heterogeneous transformative capacities of housing reconstruction "resilience cells." *International Journal of Disaster Resilience in the Built Environment*, *8*(3), 275–291. https://doi.org/10.1108/IJDRBE-10-2015-0052

Paidakaki, A., & Moulaert, F. (2018). Disaster Resilience into Which Direction(s)? Competing Discursive and Material Practices in Post-Katrina New Orleans. *Housing, Theory and Society*, *35*(4), 432–454. https://doi.org/10.1080/14036096.2017.1308434

Piñeira Mantiñán, M. J., Lois González, R. C., & González Pérez, J. M. (2019). New models of urban governance in Spain during the post-crisis period: the fight against vulnerability on a local scale. *Territory, Politics, Governance*, *7*(3), 336–364. https://doi.org/10.1080/21622671.2018.1485595

Salone, C., Bonini Baraldi, S., & Pazzola, G. (2017). Cultural production in peripheral urban spaces: lessons from Barriera, Turin (Italy). *European Planning Studies*, *25*(12), 2117–2137. https://doi.org/10.1080/09654313.2017.1327033

Sapountzaki, K., & Chalkias, C. (2014). Urban geographies of vulnerability and resilience in the economic crisis era – the case of Athens. *ITU Journal of the Faculty of Architecture*, *11*(1), 59–75.

Shaw, K. (2012). Reframing" resilience: challenges for planning theory and practice. *Planning Theory and Practice*, *13*(2), 308–312.

Vale, L. (2014). The politics of resilient cities: Whose resilience and whose city? *Building Research and Information*, *42*(2), 191–201. https://doi.org/10.1080/09613218.2014.850602

Vale, L., Shamsuddin, S., Gray, A., & Bertumen, K. (2014). What Affordable Housing Should Afford: Housing for Resilient Cities. *Cityscape: A Journal of Policy Development and Research*, *16*(2), 21–50.

Evaluating Turkish Housing of 1923-1945 in the Context of Utopian Communal Housing Characteristics

Ufuk Küçükyazıcı

Istanbul Kültür University, Faculty of Architecture, Bakırköy 34158 İstanbul, Turkey
Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34 437 Istanbul, Turkey
e-mail: u.kucukyazici@iku.edu.tr

Yasemin Alkışer Bregger

Kırklareli University, Faculty of Architecture, Kayalı Campus Kırklareli, Turkey
e-mail: y.alkiserbregger@klu.edu.tr

Abstract

In the early decades of the Turkish Republic, the government played an important role in promoting affordable housing production. The housing examples of that period show that architects attempted to reduce the square meters of housing units to make them affordable, but on the other hand, designed common facilities and shared places for community life, which allows the emergence of semi-public and semi-private uses.

This report is developed into two parts to discuss the potential uses of the public and private space hierarchy in residential areas. The first part contains the discussion of utopian communal housing characteristics and the potentials of shared places in residential areas for affordable alternatives. In the second part, Turkish housing projects of 1923-1945 are spatially analyzed in three scales, unit-building-neighborhood, according to the communal housing characteristic and semi-public/semi-private uses.

Keywords: affordable housing, shared places, public-private
space hierarchy, residential development, utopian communal
housing

Introduction

The house is the most private place of the individual, however, it has also part of public life. Housing has dual meaning for individuals as being commodity and dwelling because the consumption behavior of housing is different from other consumption goods with the characteristics of long-term use, and personalization (Tekeli,2010). Regardless of the meaning people need a space to dwell and finding the proper dwelling becomes problematic in the dense urban structure according to economic, social and environmental concerns. On the other hand, while the cities are expanding rapidly, the increase in urban density, expensive land values, income inequalities, urban segregation creates more difficulties for solving the housing problem. The shared places of residential areas have potentials for developing affordable and socially sustainable housing. The housing typologies which contain shared place in different levels of the domestic-sphere uses, provides solutions to common dwelling requirements through the common spaces and develops solidarity, collective action, participation within the community. These types of housing have been categorized into different terminologies such as "cohousing" (Vestrbro, 2010), and collaborative housing (Czischke, 2018). Lang et al. (2018), uses the "collaborative housing" as an umbrella term for categorizing similar housing types which have individual and collective use opportunities in shared places for dealing with everyday life requirements through the common spaces for the inhabitants, common activities among the community, and participation of the inhabitants, landlords and households, on different stages of buildings lifecycle

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

during the design, production, and maintenance (Czischke, 2018). The shared places of collaborative housing and similar housing typologies provides common use for daily life routines in various spatial characteristics which also identify the semi-public and semi-private areas in-between private and public spaces. Thus, for the everyday life requirement the inhabitants have not only their own private areas but also the semi-private, semi-public and public areas which have the potentials for providing affordability because the users would have own less square meter while they could use more space in their residential areas.

The utopian communal settlements have indoor and outdoor shared places for their communities and the social facilities provided collaboration and interaction between the inhabitants (Hayden, 1977,pp.350). On the other hand, the early decades of Turkish republic, the authorities had a special interest in providing more housing in reasonable prices and community development, consequently there were innovative housing projects (Sağlam, 2020). The design approach of housing projects of this period depended on constructing the minimum area for domestic private space and accommodating some of the domestic life requirements on the social facilities. Therefore, in both housing projects, the public and private space boundaries have vague characteristics. According to discussion about the public and private sphere hierarchy in housing and the shared places in residential areas this paper is developed around these questions: What are the spatial characteristics of public and private sphere hierarchy in residential areas? How do shared places in residential areas changes in different culture, geography, or time? How do spatial characteristics of public and private sphere hierarchy in residential areas create more affordable and socially sustainable housing? What are the differences and similarities of shared places of residential areas in utopian communal housing examples and Turkish westernization housing examples?

The aim of the study is to discuss the relationship between spatial and social structure and public-private space use in residential areas in order to identify the potential uses of shared places in residential areas for affordability and community development, according to the ***comparative housing analysis*** between Early Turkish Republican housing and communal utopian settlements. This paper is developed for making a comparison between utopian communal housing and early Turkish housing examples in terms of shared places which show the similarities to the collaborative housing typologies and discussing potential uses of public-private hierarchy in residential areas for affordable housing alternatives and community development.

Methodology

This research has two main parts for providing the conceptual background and discussing the spatial characteristics of shared places of residential areas in the historical perspective. The first part contains the explanation of *utopian communal housing characteristics* and the potentials of *shared places* in residential areas for affordable and socially sustainable housing alternatives. Additionally, this part provides the conceptual background for identifying the housing characteristics which contain the public-private sphere hierarchy and the concepts related to the shared places of residential areas. In the second part, Turkish housing projects of the 1923-1945 are spatially analyzed in three scales, unit-building-neighborhood for identifying the spatial characteristics of public and private sphere hierarchy in terms of *everyday life practices*. In order to discuss potentials of shared places in residential areas, the relation between the three urban functions, living, working/education, recreation and *public-private sphere characteristics* is defined, in three built environment scale, unit, building, and neighborhood. The circulation function is acknowledged inherently in the other functions.

The comparison of different social, political, and spatial characteristics of different housing systems inherently requires theoretical inquiry in order to understand the housing phenomenon of different societies. Because housing has multiple layers which have reciprocal relationships among individual, society, policies, economic, daily life, and theoretical concepts. Culture, place, and temporality have an impact on housing systems of each country; therefore, the comparative housing studies reveal the similarities and differences of each countries housing systems operations, housing supply, household behaviors and everyday life practices (Ronald, 2011). Since, housing studies contain architectural, and

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

sociological context, and combining theoretical approaches to the housing studies helps the researchers to identify the different aspects of housing. (Kemeny 1992, pp 19-32) *The comparative housing studies* have the potentials to explore the relationships between inhabitants, housing associations, and housing policies in order to explain the critical interventions of politics, housing associations, the regulations and the daily life of the citizens (Bengtson, 2015).

The comparative housing studies contain two opposite approaches, as convergent and divergent. The *convergent approach* defines the housing systems according to the economic systems which assumes all the countries would experience the same process on certain economic and politic situation. The *divergent approach* determines all the countries would have a unique housing system due to their local organization in different fields and explains as all the countries would have unique characteristics in terms of housing. However, the third approach is defined as an *intermediary approach* which recognizes both the *similarities due to the global economic and political process* and *differences due to the local process of housing systems* (Kemeny & Lowe, 1988). The comparison of utopian communal settlements and Early Turkish Republican period housing projects show the characteristics of intermediary approach in terms of comparative housing studies. Because the motive of constructing these settlements and the built environment characteristics have similarities due to the economic concerns however, the social structure and the habit of everyday life requirements reveal differences due to both the temporal cultural difference.

Housing is the fundamental space which accommodates most of the daily activities. Even though the house is the most personal space, social structure and culture have effects on it due to the multidimensional meanings of private life, public life, and the influences of regulations, economy, politics, and culture (Thorns, 2002, pp.99). Even though, the modern architectural movement, defines urban environment into four different functions – living, working, recreation and transportation – separated from each other (CIAM,1946); the spatial characteristics of daily life activities identifies that these functions are intertwined to each other due to the reciprocal relationship among society, individual and space. Everyday life habits have social, temporal and spatial characteristics. Therefore, the production of space depends on not only abstract mathematical definitions but also the traces of everyday life which identify the position of the individual among society (Lefebvre, 2014, pp.99). The residential areas have the medium to explain the production of space in terms of social aspects (Lefebvre, 2014, pp.66) due to the public-private sphere use hierarchy.

The explanation of utopian communal housing characteristics is organized according to the thematic analysis of the utopian ideas Charles Fourier and Ladoux. The categories about the identification of ideal life in utopias are determined as *participation, collective action, collaboration,* and *commons.*

The comparative analysis between utopian communal housing characteristics and early republican period housing depends on identifying the concepts of shared places of residential areas. The examples for utopian communal housings contain the realized utopian settlements; the Fourierist *"Nort American Phalanx"* and *"Royal Saltworks"* designed by Ladoux. The archive of the Turkish architectural journal "Arkitekt" is analyzed for identifying housing projects of early republican period and the two workers' housing example is chosen for the analysis: *"Kayseri Cloth Factory Housing"* and *"Zonguldak Kozlu Mineworkers Housing"*, they were both part of the urban development plan of their cities and had spatial configuration for semi-public and semi-private uses.

The spatial analysis of the housing examples is categorized in terms of everyday life by identifying the urban use in the built environment – in the unit, building, and neighborhood scale. Figure 1 shows the urban use in the built environment according to the relationship between the public and private sphere use. Newman (1996) explains the locations of public, semi-public, semi-private and private as street, the outer part of the entrance, the inner corridors of the building and the inside of the house. This categorization is suitable especially for multiple user housing typologies, the communal utopian settlements and early Turkish republican housing examples can be considered within the scope of multiple user housing typologies.
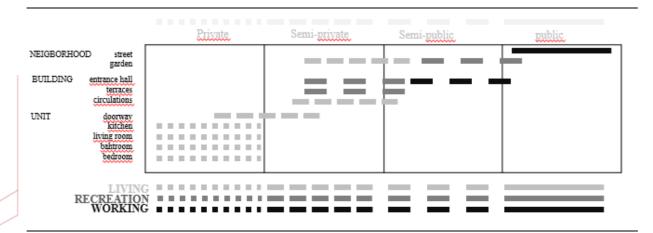
Figure 1. Spatial configuration of multiple-user housing – urban use

The characteristics of each housing example would be explained in terms of utopian communal housing characteristics: participation, collective action, collaboration, and commons. The spatial analysis of shared places in residential areas is evaluated in three categories: historical, socio-economic and spatial configurations according to the comparative analysis.

Utopias and Housing

Even though, Thomas More was the first author who had use the word "utopia" in his book's title in which he had explained the characteristics of an ideal community and city; Plato's "Republic" was first utopian explanation about the ideal community and governmental structure. Since the foundation of first settlements, the humankind is in search for finding the ideal ways of living environment, social life or public life; and there were utopian novels or projects in which the authors discuss the ideal organization of daily life, social life, public life, domestic life or civil order. The utopian examples have two different characteristics as social structure explanations for identifying the ideal civil order and spatial description for ideal built environment (Harvey 2007, pp.192-212).

Harvey (2007, pp.241), identifies the term dialectic utopia in order to make an emphasis on combining utopias of social structure and utopias of built environment. During the 19th century, under the influence of industrial revolution, daily life and civil order had changed dramatically, the metropolitan cities had various job opportunities for different segments of the society. The cities started expanding and the urban population increased due to the new economic structures. Therefore, while the urban structure was changing into metropolitan areas the social structure had changed accordingly affecting the daily life of the individual. The big cities accommodated different kinds of individuals with different lifestyle habits withing the different social and economic groups due to various job opportunities. The increase in the urban population provided opportunities for organizing the division of labor in the social life however, different the big cities became problematic for people for maintain their daily life requirements and duties of economic structure due to the various types of stimuluses caused by the crowd of the city (Simmel, 2020, pp. 317-329). In terms of housing the problem occurred when people tried to accommodate on the limited urban land The land prices were increasing, and people search ways to deal with their housing problems (Neuwirth, 2005, pp.297). The utopian examples of this period have this common idea for searching ways of finding equal opportunities for all the citizens for quality living. Many utopias define communal living options for both affordability and social sustainability (Hayden, 1977, pp.).

Despite, the problematic issues according to crowdedness of the cities; the utopias of 19th century had main focus on solving the daily life problems collectively in the society, under the influence of changing urban environment and social structure. Generally, the influence of socialism is significant in 19th century utopian examples. there are utopian examples in literature, such as Bellamy's book named "looking backwards" which explain the future life would be organized collectively in terms of

domestic requirements of daily life habits (Bellamy, 1960). On the other hand, the content of utopias had changed into including the built environment aspect together with the social structure for the ideal daily life explanations. The utopian examples of 19th century had potentials to investigate the relationship between the built environment and the social structure due to the experimental settlements which were constructed according to the utopian ideas. Since all the politic and economic decisions have impacts on environmental decisions, the experimental utopian settlements provide information about how to organize the physical and social structure together with the problematic issues and opportunities (Hayden, 1977, pp.349).

Communal Utopias and Housing

Ideal built environment descriptions within the scope of communal utopian examples show that, the urban functions of living, working, and recreational activities are considered in interaction with each other. In these examples of social utopia, it is aimed to increase the quality of life of the workers by producing collective solutions for the needs such as childcare, cooking and laundry, which are related to the domestic life requirements and provided in the shared places and in social facilities. Consequently, the spatial hierarchy between public and private space use have ambiguity in terms of communal utopia housing examples, therefore spatial configuration might provide information for designing shared place within the residential areas. In this part of the study, the ideas of Ladoux and Fourier is explained for identifying the characteristics of communal utopia housing and spatial analysis are based on the settlements of The SaltWorks (Ledoux's), and the North American Phalanx (Fourierist).

Ladoux's ideal city

Charles-Nicholas Ladoux was a French architect lived in the eighteenth century, who contributed to architecture by both developing theories and designing constructions. He was considered as one of the utopist architects since, he had theories about the ideal environment and experiments on how to construct the better living conditions for workers. He defines the ideal living conditions according to relation between domestic life and urban space. According to Ladoux, in the ideal community the individuals would be in harmony with their own community and the nature for dealing with the everyday life requirements in order to provide better quality living environments for workers with the collective arrangements (Architectuul, 2021). Ladoux describes the ideal urban order, via the explanations for City of Chaux in which he combines the functions of working and living, with the recreational functions and he explains the long hours of commuting would be harmful for the workers therefore he would design the ideal city together with the job opportunities. This city designed in elliptical order; the boundaries are consisted of green areas with trees. The center and the dominant axes would accommodate the public buildings and residential areas with the gardens would be in-between. There would not be the traffic within the boundaries of the settlement. in order to support the pedestrian use which also supports the social life via providing encountering areas for the inhabitants. Families' own private living space and garden had been designed with different privacy-level alternatives according to the hierarchy among the workers. However, domestic life the requirements such as cooking, childcare determined as the collective aspect of the community, for providing better quality living environment. Due to his approach for searching ways to provide opportunities for all segments of society to have better living environment, it is thought that Ladoux's city explanation have similarities with the modern architectural movement. (Rousenau, 2007, s. 102-107). Gruson (2008) states that Ladoux influenced the twentieth-century architects more than his contemporaries of eighteenth-century architects, there is a strong relation to Le Corbusier's city design and the design principles of Ladoux's ideal city. However, Ladoux's project emphasizing social life was a source of inspiration for Fourier. (Rousenau, 2007, s. 108)

Fourier's Phalansteries

Charles Fourier was among the thinkers who develop social utopias during the Industrial Revolution in France. He criticized the everyday life habits of 19th century, in which he lived, in terms of social

structure, morality, working life, educational system, ethical and religious values and defined the ideal social order according to his observations and critics. Fourier put an emphasis on equality between different gender roles while explaining his utopian ideas. (Jones & Patterson, 2006, s. XIV). He focused on daily life problems that were not common to discuss during his period, and he identified the quality of living environment, and the recreational opportunities have beneficial effects on work life. Therefore, Fourier's utopian ideas depend on the searching ways for the ideal domestic life and leisure time activities for the individual within the social structure, built environment and nature. He identifies his utopia within the communal living, similar to Ladoux, due to affordability of the collective solutions and opportunities for maintaining the community (Çıvgın, 2011, s. 20-24).

Fourier criticized the earlier communal living arrangements in utopias for underestimating the importance of family life, therefore he identified his ideal social order into smaller groups which would act collectively in terms of everyday life activities in order to support the domestic life requirements of the families (Çıvgın, 2011, s. 96). Fourier explained the improvement of family life and working conditions as the most important issues for the ideal social order and seeks solutions that can be developed together with the community, both in the working environment and in the domestic space requirements. Fourier defined the terms "phalanx" for explaining the living patterns of the communities within the certain settlements that include communal life, from the selection of the manager to the division of labor, social facilities and cultural activities are designed according to equality in order for the individual to participate freely. Fourier believed that the phalanx system can be applied all over the world and this would be the success of this collectively living environments (Jones & Patterson, 2006, s. 154-158). With the understanding of gastronomy shared in each phalanx, common kitchens serving the community are planned. The task of cooking is made collective, and the responsibility of the indoor space is shared with the community, and a quality nutrition opportunity is created for all individuals with common kitchen materials, food and beverage supply for the society in general. (Jones & Patterson, 2006, s. 163-164).

Fourier's innovative attitude with his approach about providing equality in gender roles and his emphasis on the importance of domestic life and leisure activities in the ideal social order, influenced many thinkers such as Robert Owen. Although there are similarities between Fourier's and Owen's ideal social order descriptions and realized utopia experiment; Fourier criticized Owen for putting financial concerns before the improvement of the social order, using religious values unnecessarily, and not to explain the details of the property system. (Çıvgın, 2011, s. 56-59). However, Owen's ideal living conditions descriptions have strong resemblance to Fourierist ideas. After seeing the harsh living conditions of the workers at the Lanark Factory where he worked, Robert Owen wrote a book in order to describe the ideal living conditions for the workers, according to his criticisms of the situation there. Since he saw that workers spend long periods of time for transportation between their homes and factories, he thought that designing the residential areas together with working areas would reduce the commuting times of the workers and thus enable people to spend more time for themselves, their families and leisure activities which also would be beneficial for more effective production in the working life. Owen also explains the ideal social order by providing collaboration within the community especially for domestic requirements such as cooking, and childcare are aimed to be met collectively in common spaces such as communal dining halls and shared care rooms. At the same time, he proposes children's education should be organized within the community which would create equal access for all the children to education opportunities. Since improving the quality of life of workers will be more expensive when planned for each family, he thinks that better services can be provided in a more economical way by creating the communal ways of living (Owen, 2000).

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

the concepts related to shared housing	general features	communal utopian housing explanations
participation	explains the participation level, according to design, production, management and life	production, management
collective action	explains how the community act together	to maintain better living conditions for domestic life requirements, education and leisure time activities
collaboration	explains for which activities the community support each other	
commons	explains which community act together	factory workers and employees

Table 1. Explanation about the utopian communal housing concepts; participation, collective action, collaboration and commons

Royal Saltworks

Ladoux's work on the ideal urban order began before explanations about the City of Chaux. He designed the Royal Saltwork settlement", which was built between 1775 and 1779 and is now on the UNESCO world heritage list. This settlement has a semi-circular layout, consisted of the salt processing factories, the residences of the workers from 1these factories, gardens, social facilities and public buildings (URL-2, 2021). In fact, the RoyalSalt works was designed before Ladoux's descriptions about the ideal City of Chaux, however, these settlements have resemblance such as been planned according to a central order, social facilities have on important axes in accordance with pedestrian access in order to create a balanced social life among the workers. Thus, at the same time, the control of social life is ensured by the fact that everyone is always visible, and with this feature, it is similar to Foucault's panopticon explanations. (Gruson, 2008).
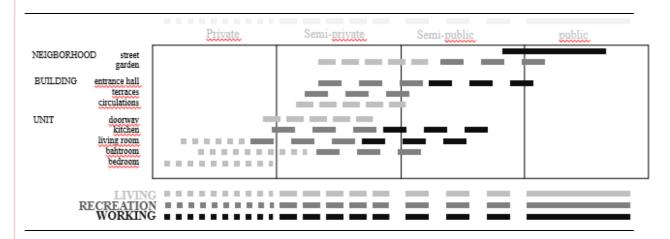

Figure 2. public-private space hierarchy in terms of urban functions in royal saltworks

North American Phalanx

The 19th century-utopians generally believed that the ideas they produced would be transferred to real life into the new constructions of the mixed-use settlements. After his death in 1837, Fourier's ideas influenced many employers and thinkers, in line with Fourierist views, more than thirty settlements were built in America and Europe (Beecher, 1996, s. 2), although not many Fourierist approaches were seen in Europe, the main interest was in America, and many settlements constructed as

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

"phalanxes", containing social life according to Fourier's views. (Hayden, 1977, s. 155).

The North American Phalanx was the largest and longest-lasting of the Fourierist societies, founded in New Jersey, functioned between 1843 and 1858. The residential areas were planned for approximately 1600 people together with industrial and agricultural opportunities; domestic life and public sphere uses are designed in harmony to each other with social facilities, shared spaces common corridors, common terraces which provide the meeting areas outside of the working life, additionally the large courtyards was created for leisure activities. Alternatives such as a single room (such as a dormitory room) in a shared building, a single house or a detached house in its own private area have been created for family life, however the inhabitants of the detached houses contributed to the communal life less than it was expected (Hayden, 1977, s. 45-46). On the other hand, although all members contributed to the construction phase while establishing this residential area, problems related to the management of the society and defining the rules related to the use of common areas and private areas between the employers and employees. The members of the community were uncomfortable due to direct decision of the managers instead of the participation of all members in the decision-making process on the matters related to the design of living spaces and landscaping. Therefore, the community dissolved (Hayden, 1977, s. 149-150).
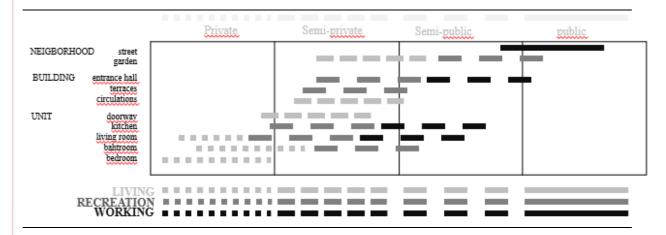

Figure 3. public-private space hierarchy in terms of urban functions in North American Phalanx

Early Turkish Republican Period and Housing

The house has always been regarded as the "sacred home" for the family in Turkish Culture, and this understanding has continued while the spatial configuration of the house was changing in the early decades of Turkish republic under the influence of westernization. Especially since the 30s, with the proliferation of families dealing with commerce and bureaucracy in Istanbul, the effect of westernization had increased which had impacts on the reorganization of spatial configuration of the houses in terms of domestic life requirements in everyday life practices. The modern lifestyle of western countries was being promoted by the architects and the authorities of this period, therefore the traditional Turkish housing configuration with flexible-use rooms, intertwined indoor and outdoor spaces had changed into flat typology houses with fixed-functioned rooms separated from each other with a corridor. In this time, the use of dining room became common, and the furniture preferences were changing into more fixed types for bed, couch, dining table etc (Bozdoğan, 1996, s. 314-316). Together with the cultural changes, with the increase in the urban population, transportation opportunities, had changed the individuals' behaviors about the place attachment. Due to the blurring of borders of neighborhoods and weakening of community relations in the crowded urban fabric, the new settlements were criticized that the traditional spatial configuration of the neighborhoods had disappeared with the social interaction between the neighbors in the daily life habits. (Arü, 1996).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Although, Turkey faced the industrialization process in the mid-20th century, later than European countries; similar problem occurred such as uncontrolled growth of urban structure, due to rapid increase in urban population. As the cities were expanding with the new job opportunities, the demand for affordable housing was increasing. During the early decades of the Turkish Republic, governmental foundations, started to lead the projects for low-income housing all over Turkey (Şenyapılı,2016). There was an emphasis on providing more housing with the affordability concerns, on the other hand the housing projects had a special importance for promoting the changing lifestyle of this period. Therefore, the housing projects contained the minimum private unit areas for affordability, and social facilities for improving the social structure. These characteristics of early republican housing examples have resemblance to utopian communal housing examples.

In the early Republican period, construction activities were provided with government incentives, a strong construction sector had not yet been formed, however there was the need for constructions of new public buildings for the newly established state and residential areas for providing accommodation for both governmental employees and workers. (Bozdoğan, 2015, s. 243). In this period, the state was promoting the housing constructions via the cooperatives; however, their focus was on providing high-quality housing for government employees at a more affordable price (Özüekren, 1996). In the early periods of the Republic, despite the on-going urban development plans of the big cities, the development of smaller Anatolian cities was also planned together with industrial development and residential areas for the estimated growing populations of these small cities. Also in this period, under the influence of statism, the government had an important role for raising professionals in different fields including architecture, and many young students were sent abroad to learn for their professions. Mainly those architects were assigned for designing the housing projects. At the same time, Turkish architects tried to develop a new architectural discourse, for interpreting the modern movement with national elements. (Bozdoğan, 2015, s. 193-199). Among the prominent features of the period, it is seen that qualified solutions were created by considering the needs of the low-income group in the restructuring of cities and housing production. (Alkışer & Yürekli, 2004). In this period, the government had statist role and had the agenda to provide developments in almost every field such as economy, rural/urban developments, education, health, welfare and so on. Housing projects for workers were part of industrial developments. The design of the workers's houses have influences of the western communal ways of living (Özeken, 1937).

The research about housing examples of this period depends on the archival search of the Turkish Journal called "Arkitekt". There are more than forty housing articles in between 1923-1945. It is remarkable for this period because it is the most amount of housing articles compared to the other periods of this journal. The variety of the housing examples and innovative solutions are striking for this period. On the other hand, the content of the housing articles includes the concerns about the demand/supply of affordable housing, housing problem in rural/urban environment, westernization of the country and changing domestic space (Sağlam, 2020). There are fourteen specific articles for affordable housing. For this research two workers' housing examples are analyzed in order to develop the comparative housing analysis between the communal utopian settlements and Early Republican period housing projects.

Sümerbank Kayseri Fabric Factory Workers' Housing

Sümerbank was founded in 1933 as one of the most significant state economic enterprises of Turkish Republic in order to support the developments of the country financially by providing management for all the industrial foundations, which includes the preparation of the urban scale investigation for the potential factories, preparation of the architectural drawings of the industrial area and the housing unit in relation to the factories, and construction of the site (Erdoğan & Kapcı, 2019). Therefore, special unit of architects called as Sümerbank Architectural Committee was developing the factory projects and the residential areas. As explained in the Arkitekt journal, the committee had designed the principles for housing which could be adjusted to the specific sites, therefore there were many similar Sümerbank Housing examples (Anonymous, 1944). The cloth factory of Kayseri and residential areas were part of 1933 "Çaylak Urban Plan", and it was one of the early urban planning attempts in the

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Anatolian cities. Even though the housing decisions were not on the focus of this urban plan, the location of Sümerbank hpusing area were acknowledged as the "new city". Accordingly, after the developments of Sümerbank, this area is known as "new city" since new buildings and new lifestyle was promoted there (Çabuk,2012). Kayseri cloth factory fabric factory was founded in 1933 by Sümerbank with the residential areas. It had five different housing alternatives for different worker groups according to their hierarchy (Sönmez, 2012 sf.89-92). The housing typologies were consisted of 24 two-storeyed flats for managerial supervisors, 64 smaller flats for factory workers supervisors were constructed. There was also single workers' dormitory building which consisted of private bedrooms with 350 beds and communal facilities as hair salon, laundry room, dining room, and resting areas. Additionally, in the settlement there were many facilities such as cinema, tennis courts not only for the workers and their families but also the citizen of Kayseri. These buildings are listed as industrial heritage (Asiliskender,2008 pp. 95-96).
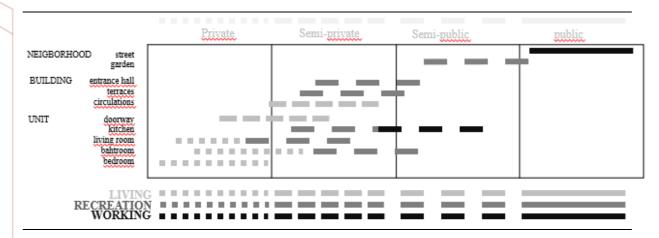

Figure 4. public-private space hierarchy in terms of urban functions in Zonguldak Kozlu Worker's Housing

Zonguldak Kozlu Coal Mine Workers' Housing

Zonguldak Workers' Housing for coal mine workers was constructed between 1933-1935 in the scope of coal mine developments of Zonguldak. Seyfi Arkan prepared the urban planning for Kozlu Zonguldak with the social facilities and residential areas for coal mine workers (Akay,2020). Seyfi Arkan was one of the most significant architects of early Turkish republican period. He was educated in academy of fine arts, and later he went to Berlin to study architecture on graduate level (Gürel & Yücel, 2007). Before the housing project of Arkan, the workers had poor living conditions in Zonguldak, however, after the construction of these new buildings the workers did not adapt easily to this new living style (Tulum, pp 206). On his research about the daily life of workers Kessler discusses that the workers had difficulties for using the common laundries and living conditions, on the other hand he criticizes that the workers did not pay attention for the importance of the leisure activities (Zadil, 2012). Arkan designed variety of residential units for different levels of workers and household types. There were row houses, single family houses and single workers' apartment building contains the single bedroom and common dining room, bathroom, kitchen, and laundry. Additionally, educational, cultural, recreational buildings were constructed for workers and their families (Arkan, 1935, Arkan, 1936).
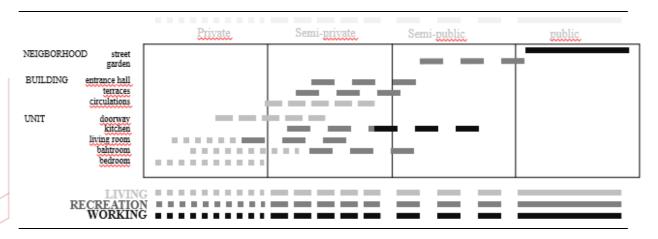
ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Figure 5. public-private space hierarchy in terms of urban functions in Zonguldak Kozlu Worker's Housing

settlements	collaboration		commons	participation	collective action
Royal Saltworks	facilities, gardens, shared indoor-outdoor spaces	for domestic life requirements, leisure time activities, children's education	workers and their families	while the lifecycle of the settlement	maintaining the community life
North American Phalanx	facilities, gardens, shared indoor-outdoor spaces	for domestic life requirements, leisure time activities for domestic life requirements, leisure time activities, children's education and childcare	workers and their families	during the production of the settlement and on the lifecycle of the settlement	maintaining the community life and social order, domestic life requirements
Sümerbank Kayseri Cloth Factory Workers' Housing	facilities, gardens, shared indoor-outdoor spaces	for domestic life requirements, leisure time activities for domestic life requirements, leisure time activities, children's education and childcare	workers and their families		maintaining the individual life
Zonguldak Kozlu Worker's Housing	facilities, gardens, shared indoor-outdoor spaces	for domestic life requirements, leisure time activities for domestic life requirements, leisure time activities, children's education and childcare	workers and their families		maintaining the individual life

Table 2. comparisons about the utopian communal housing concepts; participation, collective action, collaboration and commons in the examples

Comparative Analysis of Communal Utopia Housing and Early Turkish Republican Period Housing

In the twenty-year period after the establishment of the Republic of Turkey, it is seen that housing projects with the support of the state became widespread. In addition to the structures that can be considered within the social housing type such as lodging, there were studies for the production of cheap houses. In this period, it is seen that newly trained Turkish architects took part in housing projects and many alternatives were tried with these well-educated architects for the solving the housing problem. While the use of minimum space is preferred in housing projects in order to make more economic, it is seen that social facilities are planned for changing domestic life and supporting social life changes. Therefore, the buildings in this period include quite innovative approaches in terms of both ensuring affordability and the harmony of domestic life in changing living conditions and targeting social development. For this reason, it is planned to make a comparison between the houses of the early republican period and communal utopian settlements.

	historical	**socio-economic**	**spatial**
Royal Saltworks	the end of 18th century	working class	shared indoor and outdoor spaces and social facilities
North American Phalanx	the beginning of 19th century	working class	shared housing with different privacy options, shared indoor and outdoor spaces and social facilities
Sümerbank Kayseri Cloth Factory Workers' Housing	1944	working class	shared housing with different privacy options, shared indoor and outdoor spaces and social facilities
Zonguldak Kozlu Worker's Housing	1935	working class	shared housing with different privacy options, shared indoor and outdoor spaces and social facilities

Table 3. comparisons according to the categories; historical, socio-economic, spatial

Table 3 shows that, even though the housing projects were designed in different historical conditions, they have similar spatial and socio-economic situation due to the similar motives of making the constructions. In both utopian communal settlements and early republican housing projects the main attempt was to provide dwelling units for changing lifestyle of the communities under the influence of increase in job opportunities, additionally, there were experimental ideas about to create solutions collectively within the communities for common everyday life requirements and the use for shared places among the residential areas.

Conclusion

Under the influences of industrial, economic, political developments, the cities experienced increase in urban population and the rapid urbanization which caused problems about finding good condition dwelling opportunities in reasonable prices. The rapid urbanization and increase in the land values resulted more density in the cities, additionally brought problems on finding equal dwelling opportunities for all segments of society. The multiple storeyed residential buildings provide the dwelling options for multiple inhabitants with common shared places such as entrances, hallways, terraces, carparks, or basement floors which creates a new kind of interpretation to public and private space hierarchy in housing. As the cities are expanding, the multiple user residential buildings

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

increased due to economic concerns and urban density. This multiple user residential buildings can be identified and improved within the context of collaborative housing typologies which accommodates various spatial characteristics in-between public and private sphere uses.

However, under the influence of modernist movements, architects and planners consider housing as if it only part of private sphere realm. In terms of everyday life activities these type of housing, with multiple users, have accommodate different levels of shared places and variety of spatial characteristics between public-private sphere hierarchy. Therefore, in terms of everyday life practices domestic space requirements and public realm intertwined to each other. In the analyzed examples, the interaction of the physical environment and social structure is seen in terms of shared places of the residential areas which supports the social life and collective solutions among the community for domestic requirements of everyday life. Thus, the examples show the situations where the boundaries of public space and private space are blurred according to combination of domestic life requirement and leisure time activities in common space uses. The communal utopian settlements and early Turkish Republican housing examples have the spatial configuration which allows the uses in-between public and private sphere uses. Therefore, these housing examples provide the information for developing alternatives for housing problems with considering the built environment aspects in relation to social structure.

References

Akay, Z. (2020) "*Halk İçin Tasarlamak: Seyfi Arkan'ın Erken Dönem Ekonomik Konut Projeleri*" Retrieved from http://zaferakay.blogspot.com/2020/03/halk-icin-tasarlamak-seyfi-arkann-erken.html

Arkan, S. (1936) "Amele Evleri, İlkokul, Mutfak ve Çamaşırlık Binası", *Arkitekt*, 1935-09(57), pp:253-258.

Arkan, S. (1936) "Kömür – İşçi Uramı", *Arkitekt,* 1936-01(61), pp:9-10.

Alkışer , Y., & Yürekli, H. (2004). Türkiye'de "Devlet Konutu"nun dünü, bugünü, yarını. İtü Dergisi/a mimarlık, planlama, tasarım, 63-74

Anonymous, (1944) "SümerBank Amele Evleri ve Mahalleleri", *Arkitekt,* 1944-01-02 (145-146), pp:09-13.

Arü, K. A. (1996). Osmanlı -Türk Kentlerinin Genel Karakterisikleri Üzerine Görüşler. Y. Sey içinde, Tarihten Günümüze Anadolu'da Konut ve Yerleşme (s. 320-333). İstanbul: Tarih Vakfı Yayınları

Asiliskender, B. (2008). "Modernleşme ve Konut; Cumhuriyet'in Sanayi Yatırımları ile Kayseri'de Mekansal ve Toplumsal Değişim" PhD Thesis, İstanbul Teknik Üniversitesi, İstanbul.

Arcitectuul, (2021, August). retrieved from http://architectuul.com/architect/claude-nicolas-ledoux

Beecher, J. (1996). Charles Fourier: The Visionary and His World. Berkeley, Los Angeles, London: University of California Press

Bellamy, E. (1960). Looking Backward, New York, Signet Classics

Bengtsson, B. (2015) "Between Structure and Thatcher: Towards a Research Agenda for Theory-Informed Actor-Related Analysis of Housing Politics". *Housing Studies*, vol.30/5, pp. 677-693.

Bozdoğan, S. (1996). Modern Yaşamak: Erken Cumhuriyet Kültüründe Kübik Ev. Y. Sey içinde, Tarihten Günümüze Anadolu'da Konut ve Yerleşme (s. 313-328). İstanbul: Tarih Vakfı Yayınları

Bozdoğan, S. (2015). Modernizm ve Bir Ulusun İnşası Erken Cumhuriyet Türkiyesi'nde Mimari Kültür. İstanbul (4.baskı): Metis Yayınları

Clapham, D. (2018) "Housing Theory, Housing Research and Housing Policy". *Housing, Theory and Society*, vol.35 (2), pp. 163-177.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

CIAM, (1946) Athens Charter, Paris: The Library of The Graduate School of Design, Harvard University.

Czischke, D. (2018). Collaborative housing and housing providers: Towards an analytical framework of multi-stakeholder collaboration in housing coproduction. International Journal of Housing Policy, 18:1, 55-81

Çabuk, S. (2012) "Kayseri'nin Cumhuriyet Dönemindeki İlk Kent Düzenlemesi: 1933 Çaylak Plani", *METU Journal Of The Faculty Of Architecture* , 29(2), pp:63-87.

Çıvgın, H. (2011). "*Charles Fourier: Kuramı Ekolojik Kriz Ortamında Bir Eko-Filozof Olarak Okunabilme İmkanları*," Masters Thesis: Ankara Üniversitesi, Ankara.

Erdoğan, A., Kapcı, H. Z. (2018) "*Ii. Dünya Savaşi Sürecinde Sümerbank*", *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi,* 2018(2), pp:83-108

Gruson, L. (2008). Claude Nicolas Ledoux, Visionary Architecture and Social Utopia. International Conference of Territorial Intelligence, 299-307

Gürel, Y., Yücel, A. (2007) "Bir erken Cumhuriyet modernist mimarı: Seyfi Arkan", *İtü Dergisi/a Mimarlık, Planlama, Tasarım*, 6(2), pp:47-55.

Harvey, D. (2007), *Umut Mekanları,* Metis Yayınları, İstanbul.

Hayden, D. (1977). Seven American Utopias: Architecture of Communitarian Socialism, 1790-1975. Cambridge: MIT Press

Heynen, H. (2013). Space as Receptor, Instrument or Stage: Notes on the Interaction Between Spatial and Social Constellations. International Planning Studies, 18:3-4, 342-357

Kemeny, J. (1992) Housing and Social Theory, Routledge, pp. 85-105.

Kemeny, J., Lowe, S. (1988) "Schools of Comparative Housing Research: From Convergence to Divergence", *Housing Studies*, vol.13/2, pp. 161-176.

Lang, R., Carriou, C., & Cziscke, D. (2018). Collaborative Housing Research (1990-2017): A Systematic Review and Thematic Analysis of the Field. Housing, Theory and Society, 1-30.

Lefebvre, H., Mekanın Üretimi. (I. Ergüden, translator.) İstanbul: Sel Yayıncılık, 2014.

Newman, O. (1996) Creating Defensible Space, U.S. Department of Housing and Urban Development Office of Policy Development and Research, pp.14-15.

Neuwirth, R. (2005) *Shadow Cities: A Billion Squatters*, A New Urban World, New York: Routledge, pp. 297.

Owen, R. (2000). Yeni Toplum Görüşü ve Lanark Raporu. İstanbul: Kaynak Yayınlar

Özeken, A. A. (1937) "Türkiye Sanayiinde İşçiyi Barindirma Problemi", *Konjüktür*, 1(7), pp:102-130.

Özüekren, Ş. (1996). *Kooperatifler ve Konut Üretimi.* Y. Sey içinde, Tarihten Günümüze Anadolu'da Konut ve Yerleşme (pp: 355-365). İstanbul: Tarih Vakfı Yayınları

Ronald, R., Ethnography and Comparative Housing Research, *International Journal of Housing Policy*, vol. 11/4, 415-437, 2011

Rousenau, H. (2007). *The Ideal City*. Oxon: Routledge.

Sağlam, H. (2020) "*Türkiye Konut Kuramı Üzerine Kaynak Olarak Mimarlar Odası Dergisi: 1930-1939*", Journal of Near Architecture 3 (2), pp: 24-34.

Simmel, G. (2020) *Bireysellik ve Kültür,* Metis Yayınları, İstanbul.

Sönmez, F. (2012) "*Kayseri Barinma Kültüründe Değişim: 1930-1970*", PhD Thesis, Yıldız Teknik Üniversitesi, İstanbul.

Şenyapılı, T. (2016) *Barakadan Gecekonduya: Ankara'da Kentsel Mekanın Dönüşümü 1923-1960*, İstanbul

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

İletişim Yayınları, pp. 51-55.

Tekeli, İ. (2010) *Gündelik Yaşam, Yaşam Kalitesi ve Yerellik Yazıları*, Türk Tarih Vakfı Yurt Yayınları, pp. 19.

Thorns, D. C. (2002) *The Transformation of Cities*. New York: Palgrave Macmillan, pp. 99.

Tulum, H. (2012) "Seyfi Arkan Mimarliğinda Modernliğin Örtülü/Örtük İmgesi Olarak " Ev": "Yitik Yuva" Dan "Konut"A Geçiş (Genlik)Ler", Masters Thesis, Mimar Sinan Güzel Sanatlar Üniversitesi, İstanbul.

Vestbro, D. U. (2010). *Concepts and Terminologies*, Living Together - Cohousing Ideas and Realities Around the World (s. 21-29). Stockholm: Report

Yürekli, H., & Yürekli, F. (2007). *Türk Evi Gözlemler-Yorumlar*. İstanbul: Yem Yayın

Zadil, T . (2012). Zonguldak ve Karabük'teki Çalışma Şartları . Journal of Social Policy Conferences , 0 (2) , . Retrieved from https://dergipark.org.tr/tr/pub/iusskd/issue/925/10471

ENHR

Negotiating Space for Cooperative Housing in post-conflict Colombia

Daniela Sanjinés

ETH Zurich, Centre for Research on Architecture, Society and the Built Environment,
Wolfgang-Pauli-Strasse 27 CH-8093 Zurich, Switzerland
e-mail: sanjines@arch.ethz.ch

Jennifer Duyne Barenstein

ETH Zurich, Centre for Research on Architecture, Society and the Built Environment,
Wolfgang-Pauli-Strasse 27 CH-8093 Zurich, Switzerland
e-mail: duyne@arch.ethz.ch

Abstract

In a global context characterised by governmental withdrawal from the housing sector and inability of the private sector to cater to the needs of low-income people, housing cooperatives are being rediscovered as a third way in the provision of affordable housing. This paper presents ongoing endeavours of a community of former combatants to establish a mutual aid housing cooperative in Colombia following the peace agreement of 2016. It analyses their efforts to attain affordable and adequate housing in a context characterised by a fragile peace process and unfavourable housing policies. It focuses on the interlinkages between micro-level visions, aspirations and strategies of the communities involved in the establishment of housing cooperatives and macro-level political and institutional factors enabling or constraining their emergence in post-conflict Colombia. Finally, it pays attention to opportunities emerging in unstable contexts such as this one, to contest existing housing systems and advocate for other forms of housing.

Keywords: cooperative housing, mutual aid, post-conflict Colombia, peacebuilding

Introduction

Post-conflict reconstruction poses many challenges, but it is also an opportunity to build back better. Innovative housing strategies that are inclusive, sustainable, affordable, replicable, scalable, and that create livelihood opportunities are needed not only in Colombia for the victims of over fifty years of violent conflict, but also for the close to one billion people who currently lack access to adequate housing globally. In an international context characterised by governmental withdrawal from the housing sector and the inability of the private sector to cater to the needs of low-income people, housing cooperatives are globally being rediscovered as a potentially viable strategy to tackle the global housing challenges. Yet, their role in peacebuilding, reconciliation and post-conflict reconstruction, however, is yet to be explored. *Ciudadelas de Paz*, a cooperative housing initiative led by 350 ex-combatants following the signing of the peace agreement in 2016, provides a unique opportunity to study the dynamic process through which a divided society is seeking reconciliation and, in the process, innovating its housing sector. In this paper we examine the factors supporting or limiting current housing cooperative initiatives in Colombia and their ability to emerge and succeed in a post-conflict context. The preliminary findings presented in this paper are a product of an ongoing research conducted by the ETH Wohnforum and the Universidad Nacional de Colombia within the framework of a training and capacity building project titled "School for Architecture and Reconciliation" bringing together architecture students (from ETH, UNAL and ENSAV), local and international housing scholars, ex-combatants and representatives of victims. At the national level we reviewed the interlinkages between Colombia's peacebuilding, housing and cooperative policies

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

based on an analysis of primary and secondary sources, and on interviews with key informants. At a micro-level we conducted an in-depth case study of *Ciudadelas de Paz* through observations, individual and group interviews, and analysis of the proposed cooperative model, institutional organization, and architectural and settlement plans.

The paper first presents an overview on the global re-emergence of research and policy interest in housing cooperatives and their role in peacebuilding, reconstruction and reconciliation at a global scale highlighting the seemingly marginal role they have in post-conflict settings. Then by presenting the case of *Ciudadelas de Paz,* a cooperative housing project by ex-combatants in Colombia, it outlines housing cooperatives challenges and opportunities within the framework of the overall peacebuilding process, its institutional embeddedness, organisational and technical capacity, and space within the national housing system. The paper shows that the lack of policies and institutional structures that promote housing cooperatives and a constrictive housing system frame the uphill battle faced by *Ciudadelas de Paz* to start a housing cooperative. However, Colombia´s post-conflict scenario opens the door to promoting regulatory reforms and creating an institutional framework for housing cooperatives not only as a mechanism for addressing ex-combatants housing needs but as an alternative affordable housing solution for the poor.

The global re-emergence of research and policy interest in housing cooperatives and their role of housing cooperatives in peacebuilding, reconstruction and reconciliation

Housing may be considered one of the most daunting challenges globally. It is estimated that currently close to 1.8 billion people lack adequate housing (UNHR 2019). This is the result of decades of failed policies, the governmental withdrawal from the housing sector, the inability of the private sector to cater to the needs of low-income people, the financialization of housing, and the increasing gap between what millions of people can afford and the cost of formal housing (Rolnik 2013). The unaffordability of housing has severe consequences not only on people's wellbeing but on sustainable development in general (King et al 2017). Housing deficits are compounded by disasters and violent conflicts, which every year displace and render homeless millions of people. The dramatic consequences of the global housing crisis have recently led the UN Special Rapporteur on the Right to Housing to call for an urgent shift in the way housing is currently conceived, valued, produced and regulated and for the need for innovative housing solutions (UNHR 2019).

In this context housing cooperatives are globally being rediscovered as a third way in the provision of affordable housing (Duyne Barenstein et al., forthcoming, ILO 2018, COPAC 2018, UN Habitat 2015a, UN Habitat 2015b). Cooperatives have the capacity to provide housing at a cost significantly below the open market and are considered a useful instrument to limit speculation (ICA 2012, Balmer & Bernett 2015, Balmer & Gerber 2018, Lawson 2009). In several developing countries, where low-income groups have no access to formal credit, membership in cooperatives helps pool resources and may be a stepping stone towards community development (Duyne & Pfister 2019, Bredenoord 2017, Ganepati 2014). The democratic values of cooperatives lend themselves to mutual self-help approaches and for bringing together state subsidies and individual responsibility through equity participation, and may offer an innovative alternative to property rental (Lang & Roessl 2013). Housing cooperatives are further considered particularly appropriate to achieve additional social goals, such as reaching out to different categories of people with special needs, including the elderly, single parents, migrants and refugees (Lang et al 2018). They have the potential to foster social cohesion by engaging in community initiatives and projects and may contribute to enhance their members' personal skills and confidence through their active engagement in administrative issues, finances, building, and maintenance (Tummers 2016). Cooperative initiatives in the field of housing can trigger important social innovation which is found to be closely related to architectural innovation (Boudet 2017, Novy et al 2009). Through the creation of strong social bonds and shared place identity among their members, they can make a major contribution to communities' wellbeing (Czischke 2017). Further, cooperatives represent crucial intermediaries between citizens and the

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

government by providing opportunity structures for participation and for leveraging resources for the community (Lang & Novy 2014).

In Emmanuel and MacPherson seminal book on cooperatives and peacebuilding published in 2007 the authors explore how precisely these principles by which cooperatives put their values in practice are considered to be particularly well suited for the "vital, and sometimes daunting, task of being agents of peace" (Emmanuel and MacPherson 2007, 6). Several publications emphasize the role of cooperatives in peacebuilding and post-conflict reconstruction, reconciliation and political stabilization reminding us that in Europe they played a pivotal role in the creation of solid democratic institutions and housing reconstruction after the World Wars (Parnell 2001, Paz 2007, Emmanuel and MacPherson 2007). Even today millions of people continue to enjoy decent and affordable housing that cooperatives built in those years (Duyne & Sanjinés 2018, ICA 2012). With reference to examples from over twenty countries, a recent study underlines that cooperatives have an inherent capacity to mobilise people, provide services to local communities, foster a dialogue between different ethnic groups and to integrate both victims and former perpetrators (Cooperative Europe 2019). However, none of the presented case studies, nor any other recent publication on cooperative's role in peace building and reconciliation, refer to housing. This may be explained by the fact that most post-conflict projects built upon the existing cooperative infrastructure, which did not include housing, or on the lack of housing experience of their international partners (Muhammed 2007; Kiriwandeniya 2007a). This seems to be the case in Colombia, where cooperatives have a long history but housing cooperatives are scarce. Given the potential importance of cooperatives to address both the global housing crisis and to promote peace, a recently started housing cooperative in Colombia may be considered as particularly relevant nationally, regionally, and globally.

Housing challenges, peacebuilding and the role of cooperatives in Colombia

Colombia is a country with a highly multi-ethnic population of 48 million people of which over 77% live in urban areas (DANE 2018). Over the last decades the country has witnessed substantive economic growth reaching the status of an upper middle-income country (World Bank 2020). However, Colombia is also characterised by one of the world's highest degrees of inequality, third in Latin America only after Honduras and Brazil (World Bank 2018). Furthermore, Colombia has one of the lowest Human Development Indexes (HDI) of the Latin American sub-continent (UNDP 2019). About 27% of Colombia's inhabitants live in poverty, a figure that rises to 38% in rural areas. According to the latest census 18.2 million Colombians lack adequate housing. The country's housing deficit is estimated to be over 36% and reaches the staggering figure of 81% in rural areas (DANE 2018). From the 1990s onwards Colombia has embraced a neoliberal housing policy by relying on the private market to provide cheaper and diverse housing options for the poor (Gilbert, 2014). The country follows the renowned Chilean ABC housing policy model based on individual savings (*Ahorro*), mortgage loans (*Crédito*), and government subsidies (*Bono*) (Murray and Clapham 2015). This approach reflects Colombia's long-standing pursuit to expand homeownership through the construction of new homes, which is understood as a way to stimulate the economy and as a means to promote politically and civically engaged citizens (Gilbert 2014). Colombia also relies on the private market to provide cheaper housing options for the poor (Gilbert 2014). These however are often located in peripheral areas with no access to infrastructure, services, or public transportation, thus further marginalising the poor. Moreover, this approach has also failed to reach the poorest families who earn irregular incomes from the informal sector and are illegible for loans from the formal credit market (Acosta 2016; Maldonado 2008, 2016; Acosta Restrepo and Henao Padilla 2011; Hurtado-Tarazona et al. 2020). In light of a persistent failure to meet the demand for affordable housing there is an urgent call for a change in paradigm that explores housing alternatives that can cater to the lowest income groups through exploring different forms of tenure apart from ownership driven models, such as cooperatives (Adler et al. 2019, Blanco et al. 2016, Acosta, 2016).

In fact, the existing framework for solidarity economy organizations in Colombia is promising. In

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

2018, there were 24,095 solidarity economy organizations with active registration, of which 91 % were cooperatives (DNP 2018, 29). In 2017 cooperative financial entities reached assets of 8.49 trillion COP (XX Dollars) and have equity of 1.3 trillion COP (xx Dollars). These solidarity organizations generate 279,481 jobs and associate more than 6 million Colombians; they are present in all states and participate in the financial, commercial, agricultural, transportation, health, and social and community services sectors (DNP 2018, 29). However, in a context characterized by the withdrawal of the state from the housing sector and the lack of institutional support, it is not surprising that non-profit housing cooperatives have been unable to emerge as relevant actors in the housing market. In fact, although cooperatives have existed in Colombia since the 1930s (Jimenez 1990), almost all may be classified as credit and savings cooperatives, which in recent years have adopted a profile similar to that of a private financial institution (Pardo-Martinez and Huertas de Mora 2014). Furthermore, housing cooperative experiences have focused mainly on individual ownership models even though a legal framework for collectively-owned cooperative housing exists (Ley 79 de 1988, Art. 77; Rodriguez et al. 2006). The absence of collectively owned housing cooperatives is attributed by several authors to the lack of knowledge and communication of the law, the absence of a clearly defined national cooperative housing policy, lack of instruments that incentivise this type of housing but most importantly a national housing system focused on individual home-ownership (Paredes Revelo 1972; Rodriguez et al 2006; Pardo-Martinez and Huertas de Mora 2014). In fact, there is no government body specifically responsible for support housing cooperatives: The Solidarity Economy Superintendency, which is in charge of coordinating and supporting the country's cooperative organizations does not have a specific entity focused on housing, nor does the Ministry of Housing have a unit dedicated to the promotion of cooperative housing. Nevertheless, the existence of a legal framework that allows collective homeownership, the fact that currently the government of Colombia recognises its housing crisis and the increasing number of bottom-up collaborative housing initiatives, not only associated with ex-combatants but also with other societal segments, may be considered an opportunity for a new generation of housing cooperatives to emerge.

Ciudadelas de Paz: testing a housing cooperative initiative in post-conflict Colombia

After more than 50 years of armed conflict, in 2016, Colombia's government and the largest guerrilla group in the country –the Revolutionary Armed Forces of Colombia (FARC)– signed a peace agreement and initiated efforts to reintegrate over ten thousand ex-combatants into civil society. To this aim the peace agreement included the foundation of the cooperative umbrella organization ECOMUN with the specific objective to build peace, social justice and reconciliation, to support the reincorporation of ex-combatants, and to promote a social and solidarity economy in Colombia. ECOMUN's endeavour to support the reincorporation of ex-combatants so far has already led to the formation of 260 productive cooperatives engaged in activities such as agriculture, carpentry, fish farming, and the production of eco-friendly building materials. ECOMUN has gained significant international support, among others from UNDP, from the European Union. This reflects the international support to peace in Colombia and an understanding that without giving a chance to ex-combatants to reintegrate in society, this process is unlikely to succeed (DNP 2018, UN Verification Mission in Colombia 2019).

As part of the peace negotiation, it was agreed that the government of Colombia would provide to ex-combatants the option to reintegrate collectively as a means to maintain their identity and social cohesion. To meet this obligation the government set up across the country 24 temporary camps, referred to as "Territorial Spaces for Capacity Building and Reincorporation" (ETCR) where currently approximately 3000 ex-combatants and their families are living and attempting socioeconomic reincorporation (See Figure 1). The ETCRs were intended to be spaces of transition and lost their legal status in August 2020 marking an urgent need to find durable livelihood and housing solutions for the communities still living in camps. To support this process the government agreed to provide a one-time grant of approximately 2000 USD to each ex-combatant, which may be used either for individual or for collective productive or housing projects. In both cases the

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

projects have to be approved by the National Reincorporation Council (CNR), an institution that was created in the framework of the peace agreement and that is chaired by a Board including two representatives from each the government and the FARC. The financial support to approved projects is channelled through ECOMUN. The most innovative element of this peace agreement is perhaps the opportunity given to ex-combatant to reintegrate collectively and the formal recognition given to cooperatives in this process.

Figure 1*: ETCRs are made up of prefabricated temporary shelters where families are assigned a 6-meter x 4 meter sleeping quarter inside a cluster unit. After five years of the signing of the peace agreement, thousands of ex-combatants continue to live in ETCRs waiting for a permanent housing solution. Photo: Daniela Sanjinés

Housing is a crucial need for the reincorporation of ex-combatants. However, until recently it had been hardly addressed. Indeed, according to a study carried out by the National University of Colombia, 77% of the ex-combatants aspiring collective reincorporation and still residing in one of the country's ETCRs did not have access to adequate housing and considered this their most urgent need for starting a new life (UNAL 2017). Until recently the Colombian governments strategy to provide housing for ex-combatants was limited to offering access to existing housing programs. These however are considered by ex-combatants as inadequate because they neither recognise their specific situation, nor those of the housing and livelihood and needs of poor rural families in Colombia in general (Ospina 2019).

To address ex-combatants' aspiration of a durable collective reincorporation two community-based cooperatives associated to ECOMUN recently started *Ciudadelas de Paz*, a cooperative housing project involving 350 male and female ex-combatants and their families currently living in two ETCRs. ETCR Tierra Grata is located in the Department of Cesar and ETCR Pondores, is located in the Department of La Guajira, both in the north of Colombia, close to the border with Venezuela (See Figure 2).
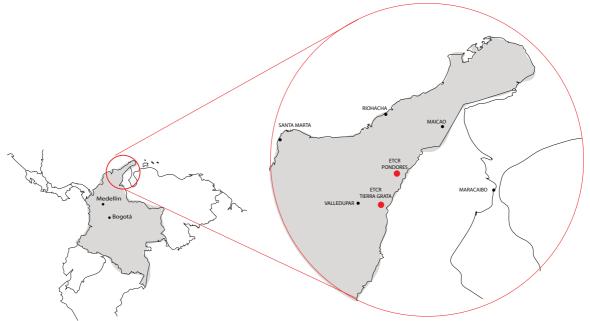
ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft Univerlsity of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Figure 2: *Ciudadelas de Paz* brings together two housing cooperatives comprised of ex-combatants from the ETCRs Pondores and Tierra Grata located on the north-east of Colombia close to the border with Venezuela.

The project is inspired by the Uruguayan housing cooperative model and started with a training provided by the Uruguayan Federation of Mutual Aid Housing Cooperatives (FUCVAM)[1]. The project pursues a self-help mutual aid approach and has developed four production cooperatives consisting of stabilized earth block production, carpentry, metal welding and transportation machinery, and a capacity building workshops in sustainable building techniques (Ospina Parra 2020) (See Figure 3). With the support of international cooperation funding, the production and housing cooperatives combine employment generation with the construction of a settlement that reflects their aspiration of a peaceful reincorporation and includes collective infrastructure and services. In addition, *Ciudadelas de Paz* has established partnerships with regional universities who have provided technical studies and assistance as well as support in the participatory design of architectural and settlement plans as well as construction skills. This provides an important reference to future cooperative models and the potential role of universities and technical institutes can play in their development. Finally, with a mutual aid approach, *Ciudadelas de Paz* is able to offer a house at a significantly lower cost than the average social housing provided by the state (See Figure 4).

Although the communities of ETCR Tierra Grata (150 ex-combatants) and Pondores (200 ex-combatants) have been working together in structuring the housing project, it is to be developed on two separate sites. In the case of Tierra Grata, ex-combatants have procured a plot of land adjacent to the ECTR where they currently live. In the case of Pondores, they are in the process of negotiating with the Colombian government the purchase of a plot of land, a few kilometres away from the existing ETCR, and closer to the nearby town of Conejo. However, the collective vision of the community has been met with challenges. Despite conceiving the housing project as a cooperative of collective ownership, the Colombian government has demanded individual land titles for ex-combatants to receive the 2000 USD financial support for their reincorporation. The inability of the government to recognise *Ciudadelas de Paz* as a cooperative of collective ownership, has created uncertainty amongst community members. In response, they are in the process of designing norms and regulations to ensure a collective control over the housing project. In interviews with ex-combatants, they mentioned strategies such as restrictions on selling of houses and vetting processes of future tenants. However, many fear that collective ownership restrictions jeopardize the long-term

---

[1] For over 15 years FUCVAM, with the support of Swedish NGO We Effect, has been directly involved in the transfer of their model in many Latin American countries, including Bolivia, Nicaragua, El Salvador, Guatemala, Honduras and Costa Rica and more recently Colombia.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

sustainability of their collective reincorporation project.

Figure 3*: Productive unit and hydraulic press to produce Compressed Earth Blocks in Tierra Grata. Photo: Daniela Sanjinés

Figure 4*: The community of Tierra Grata and Pondores have built two model houses where they have tested the productive units and different construction elements. Photo: Ramón Bermúdez

In summary, despite the promising role housing cooperatives could have in post-conflict Colombia and the support from international cooperation and other local actors, they are confronted with multiple challenges: first of all, this initiative takes place in a fragile context in which the peace agreement no longer enjoys the required political support and where the desire of ex-combatants to reintegrate collectively is viewed with suspicion; secondly while Colombia has a strong cooperative movement housing cooperatives and specially those of collective ownership are almost non-existent; and last but not least, housing cooperatives are absent in Colombia's national housing policy (Fique Pinto 2008). Nevertheless, with an increased pressure on the government to support the reincorporation of ex-combatants and emerging actions to address the poor living conditions of historically neglected communities, the context of post conflict could present an opportunity to bring housing cooperatives to the foreground.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

National housing and reincorporation strategies and the mismatch of micro-level visions and macro scale approaches

The rolling out of the Colombian government housing strategy to comply with the peace agreement and support the reincorporation process of ex-combatants has been slow and deficient. On the one hand, until recently the government response has been limited to providing access to existing government programmes that provide subsidies for individual home ownership. This not only undermines collective reincorporation processes but also disregards ex-combatants' precarious economic situation and individual limited saving capabilities. Furthermore, this strategy ignores the fact that 77% of FARC ex-combatants are of rural origin which requires housing solutions that cater to the specific needs of these communities including access to livelihood opportunities. However, these are not issues that are exclusive to former FARC members but highlights national social housing policies´ systematic failure to address the needs of marginalized communities especially in rural Colombia. It is precisely this point that is at the centre of the peace agreements as for the first time the territorial dimension of the protracted armed conflict in Colombia is addressed. Territorial peace recognises that peace will only be achieved with the transformation of the regions most affected by the conflict through strengthening institutions as well as practices and norms that regulate public life with the active participation of local communities (Jaramillo 2013).

Faced with the pressure to address the housing crisis of ex-combatants living in temporary shelters after five years since the signing of the peace agreement, Colombia is in the process of introducing legislature that allows for planning instruments, programmes and policies to address these issues marking an opportunity for a paradigm shift for affordable housing programmes in the country. Perhaps the most concrete action towards achieving territorial peace is the development of the Territorially Focused Development Programme (PDET), targeting municipalities most affected by the armed conflict. Through an unprecedented participatory process more than 200,000 people from rural communities prioritized 900 initiatives collected in regional Action Plans that take into account specific local characteristics and needs (ART 2021). These have included communities living in ETCRs which for the most part happen to be in territories subject to PDETs. Another important step towards addressing the rural-urban divide identified in the peace agreement include the design of the first rural social housing policy in Colombia aimed at improving the living conditions of people in rural areas and reducing the housing deficit (Decreto 1341 2020). Finally, recent legislature facilitates access to land for productive and housing projects for communities living in ETCRs marking an important step forward for housing initiatives delayed by government provision of land and licensing procedures. In summary, addressing territorial peace has opened concrete possibility to contest existing structures and to propose community led, culturally appropriate and context specific housing solutions for historically marginalized communities across the country. This includes housing cooperatives which so far have been absent in Colombia's adequate and affordable housing strategies, but could potentially play an important role in post conflict reconstruction.

Cooperative's participation in peacebuilding in Colombia

Colombia has a long history of peace agreements with armed groups since the 1980s. This has meant that there has been an advancement in the conceptual and institutional framing of demobilization processes evolving from short term assistance to long term strategies to support the socioeconomic reincorporation of ex-combatants. Significant innovations in the recent peace process with the FARC, include an emphasis on the collective reincorporation of ex-combatants. This demands a differentiated design of policies that supports and promotes community-led initiatives of ex-combatants currently living in ETCRs, which to date have been mainly driven by cooperatives. In fact, the national policy for the reincorporation of FARC ex-combatants identifies the crucial role cooperatives can play as collective alternatives for the generation of livelihood opportunities, and strengthening of social cohesion, participation, and collective action in communities and territories where they operate (DNP 2018, 29). The role of cooperatives in the peacebuilding process has been

strongly promoted by the Colombian cooperative movement and was officially recognised in the Peace Agreement (Cooperatives Europe 2019, 50). In 2016, the National Congress of Colombian Cooperatives focused on cooperative's contribution to peace and concluded with an official declaration expressing their commitment to work together to promote "socioeconomic development, reconciliation and reconstruction of the social fabric of the country" and "to continue cultivating a culture of solidarity and cooperation" (Cooperatives Europe 2019, 51). In its 2016 Annual Report the Confederation of Colombian Cooperatives (Confecoop) underlined the need to strengthen the role of cooperatives in rural areas as a mechanism to reach territorial peace. It is argued that "the signing of the peace agreements with the FARC represents, in economic terms, a great opportunity for cooperatives, not only because the model can serve for the organization of diverse population groups that will face multiple needs, but also because the existing cooperatives, due to their experience, can actively participate in processes of construction of the social fabric in the territories" (Confecoop 2017, 103)[2].

Following the peace agreements, approximately 70 cooperatives of former FARC-EP members have been formed within ECOMUN, however they have faced several challenges. Despite ECOMUNs efforts to strengthen their organization it continues struggling to provide adequate coordination between regional and local organizations. In addition, administrative and management weaknesses within cooperatives themselves has meant that many do not have the appropriate registration in the chamber of commerce. As the government has failed in providing timely financial assistance many cooperatives have struggled to access capital. For the most part, international cooperation has been financially supporting these initiatives, but even then, banks have in many instances, refused to open bank accounts for them to allow them to receive funds (Ospina 2020, DNP 2018, 30). Finally, one of the most crucial elements affecting the success of cooperative initiatives by ex-combatants is linked to perhaps the biggest flaw in the peace agreement as it did not expressly establish mechanisms for the provision of land in a preferential manner for former FARC members and their associations or organizations. Thus, the need for land for the development of productive and housing projects by cooperatives has become one of the biggest bottlenecks in the reincorporation process.

Discussion

While the re-discovery of housing cooperatives in Colombia and the international support for the development of a housing cooperative of mutual aid is encouraging, its establishment is also confronted with multiple challenges: first of all, although there is a clear legal framework that mandate the promotion not only of housing cooperatives, but housing cooperatives of collective ownership, the absence of policies, strategies programs and institutions as well as lack of information on the advantages of these type of initiatives is reflected in the scarcity of these types of experiences in Colombia. Second, the existing Colombian housing system disregards housing cooperatives and mutual aid approaches as well as collective ownership housing models. Third, although collective reincorporation is at the heart of the peace agreement and productive cooperatives have played an important role in the economic reincorporation of ex-combatants, cooperative housing alternatives have not been considered.

This is due in large part to two conflicting approaches related to housing and reincorporation strategies. On the one hand, the national governments approach has been limited to providing individual access to existing subsidies and savings and loans programs and contractor led development of housing projects, reproducing a conventional housing model that does not adjust to the conditions of the ex-combatants, nor the reality of rural communities for that matter. On the other hand, community led initiatives propose self-managed mutual aid housing projects leveraging ex-combatants experience in collective living, use of local materials, and regional actors' knowledge and ability to provide technical assistance.

---

[2] Translation from Spanish by the authors

In this manner they are proposing a change in paradigm with an alternative solidarity-based model at a notably lower cost. However, despite the many challenges the peace process in facing, Colombia is slowly entering a post conflict context that seems to present a unique opportunity to address the abysmal inequality between urban and rural areas and the national housing affordability crisis. Within this framework of territorial peace, new legislation is being enacted to enable planning instruments, policies and programs which allow for a reconceptualization of housing policies and therefore a chance to finally include effective mechanisms to promote housing cooperatives in Colombia.

Finally, Colombia´s current peace process innovative approach to territorial peace and collective reintegration presents not only a key contribution to future peace processes and post conflict strategies but could enable the role of housing cooperatives in post-conflict reconstruction in general.

References

Acosta Restrepo, P. 2016. "Learning from the Bottom Up". In Slum Upgrading and Housing in Latin America. Edited by Fernanda Magalhaes, 61-99. Washington D.C.: Inter-American Development Bank.

Acosta Restrepo, P. and M. J. Henao Padilla. 2011. "Ciudad Verde: los macroproyectos en acción." Alarife: Revista de Arquitectura 22(2): 26–45

Adler, V and F. Vera, eds. 2019. "Housing What's Next?: From Thinking The Unit to Building The City?". Interamerican Development Bank.

Agencia de Renovación del Territorio (ART). 2020. "Informe de Seguimiento a la Implementación de los PDET". Accessed August 2021. https://www.renovacionterritorio.gov.co/especiales/

Balmer, I and J-D. Gerber. 2018. "Why are housing cooperatives successful? Insights from Swiss affordable housing policy". Housing Studies 33:3: 361-385.

Balmer, I. and T. Bernet. 2015. "Housing as a common resource? Decommodification and self-organization in Housing. Examples from Germany and Switzerland". In Urban commons. Moving beyond state and market edited by M. Dellenbaugh, M. et al. Bauwelt Fundamente 154:178-195. Basel: Birkhäuser.

Blanco, A.,V. Fretes Cibils and A. F. Muñoz (eds). 2016. "Rental Housing Wanted Options for Expanding Housing Policy". Interamerican Development Bank.

Boudet, D. (ed). 2017. "Wohngenossenschaften in Zürich. Gartenstädte und neue Nachbarsschaften." Zürich: Park Books.

Bredenoord, Jan. 2017. "Self-Managed Cooperative Housing by Mutual-Assistance as Introduced in Central America between 2004 and 2016 the Attractiveness of the 'FUCVAM' Model of Uruguay." Journal of Architectural Engineering Technology. https://doi.org/10.4172/2168-9717.1000188.

Confecoop. 2017. 'Cooperativas: Empresas para la gestión social y económica, Desempeño de las Cooperativas 2016'. Confederación de Cooperativas de Colombia Primera edición.

Cooperatives Europe. 2019. "Cooperatives and Peace: Strengthening Democracy, Participation and Trust. A Case Study Approach,". https://www.ica.coop/sites/default/files/news-item-attachments/coopspeace-web-2083870492.pdf.

COPAC (Committee for the Promotion and Advancement of Cooperatives). 2018. Transforming our world: A cooperative 2030. Cooperative contribution to SDG 11. Accessed November 2020. https://www.ilo.org/global/topics/cooperatives/publications/WCMS_633652/lang--en/index.htm

Czischke, D. 2017. Collaborative housing and housing providers: towards an analytical framework of multi-stakeholder collaboration in housing co-production. International Journal of Housing Policy 18/1: 55-81.

Decreto 1341. 2020. "Politica Pública de Vivienda Rural". Presidencia de la República de Colombia.

Departamento Administrativo Nacional de Estadística (DANE)., 2018. Censo Nacional de Población y Vivienda –CNPV 2018. https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion/deficit-habitacional. Accessed 22.11. 2020.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Departamento Nacional de Planeación (DNP), 2018. "POLÍTICA NACIONAL PARA LA REINCORPORACIÓN SOCIAL Y ECONÓMICA DE EXINTEGRANTES DE LAS FARC-EP". Documento CONPES 3931. Bogota, Colombia.

Duyne Barenstein, J. and D. Sanjinés. 2018. "The Role of Cooperatives in the Provision of Affordable Housing: an introductory overview". Espazium. pag. 21 numero 1/2018 available online https://www.espazium.ch/it/attualita/role-cooperatives-provision-affordable-housing-introductory-overview .

Duyne Barenstein, J. and M. Pfister 2019. The professionalization of a social movement: housing cooperatives in Uruguay. Built Environment 45/3: 382-397.

Duyne Barenstein, J., P. Koch, C. Assandri, C. Matonte, D. Osorio, D. Sanjinés, G. Sarachu. Forthcoming. "Struggles for the decommodification of housing: The politics of housing cooperatives in Uruguay and Switzerland". Housing Studies.

Emmanuel, J., and I. MacPherson, eds. 2007. "Cooperatives and the Pursuit of Peace". Victoria: New Rochdale Press.

Fique Pinto, L. F. 2008. "La política pública de vivienda en Colombia Conflicto de objetivos". Bitacora 3, 2, 73–89.

Ganapati, S. 2014. "Housing cooperatives in the developing world", in J.Bradenoord, J. et al. (eds). Affordable housing in the urban global South. Seeking Sustainable Solutions, London: Earthscan.

Gilbert, A. G. 2014. "Free housing for the poor: An effective way to address poverty?" Habitat International, v. 41, Jan. 2014, 253-261.

Hurtado-Tarazona, A., Álvarez Rivadulla, M.J. and Fleischer, F. 2020. "The Normalization of Bogota Social Housing Residents: Class Tensions in Third World Urban Peripheries". City & Society. https://doi.org/10.1111/ciso.12338

ICA (International Cooperative Alliance). 2012. Profiles of a Movement: Co-operative Housing Around the World. Av. online.

ILO (International Labour Organisation). 2018. Cooperatives and the Sustainable Development Goals. A contribution to the post-2015 development debate. Geneva: International Labour Office.

Jaramillo, S. 2013. "La paz territorial", Oficina del Alto Comisionado para la Paz, Bogotá. Accessed June 2021 https://interaktive-demokratie.org/files/downloads/La-Paz-Territorial.pdf

Jímenez, F. 1990. "El Movimiento Cooperativo Colombiano e Iberoamericano. Memorias de Francisco Luis Jiménez Arcila". Dancoop. Bogotá.

King, R., M. Orloff, T. Virsilas and T. Pande. 2017. "Confronting the urban housing crisis in the global South: adequate, secure and affordable housing". World Resources Institute. Accessed November 2020 https://www.wri.org/wri-citiesforall/publication/confronting-urban-housing-crisis

Kiriwandeniya, P.A. 2007a. "Co-operatives & the Rebuilding of Sri Lanka after the Tsunami". In Cooperatives and the Pursuit of Peace edited by Joy Emmanuel and Ian MacPherson, 257-262. Victoria: New Rochdale Press.

Lang, R. and A. Novy. 2014. "Cooperative housing and social cohesion: the role of linking social capital". European Planning Studies, 22/8: 1744-1764.

Lang, R. and D. Roessl. 2013. The governance of co-operative housing: current challenges and future perspectives. International Journal of Co-operative management, 6/2: 1-11.

Lang, R., C. Carriou, and D. Czischke. 2018. Collaborative housing research (1990-2017): A systematic review and thematic analysis of the field. Housing, Theory and Society, DOI: 10.1080/14036096.2018.1536077 (publ. online 15.11.2018)

Lawson, J. 2009. "The transformation of social housing provision in Switzerland mediated by federalism, direct democracy and the urban/rural divide". European Journal of Housing Policy 9:1: 45-67.

Ley 79 de 1988, Art.77. "Por la cual se actualiza la Legislación Cooperativa". El Congreso de Colombia, Diciembre 23, 1988.

Maldonado, M.M. 2008. "La ley 388 de 1997 en Colombia: algunos puntos de tensión en el proceso de su implementación". ACE, Barcelona, III(7), 43–66.

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Maldonado, M.M. 2016. "Evolución de la Política de Vivienda Social en Colombia y en Bogotá". (mimeo)

Muhammad, S. 2007. "Rebuilding Aceh after the Tsunami and the Peace Accord". In Cooperatives and the Pursuit of Peace edited by Joy Emmanuel and Ian MacPherson, 251-256. Victoria: New Rochdale Press.

Murray C. & D. Clapham. 2015. "Housing policies in Latin America: overview of the four largest economies", International Journal of Housing Policy, DOI: 10.1080/14616718.2015.1055090

Novy, A, E. Hammer and B. Leubolt. 2009. "Social innovation and governance of scale in Austria". In Social innovation and territorial development edited by D. MacCallum et al., 131-144.Surrey: Ashgate.

Ospina Parra, A. 2020. Personal communication by representative of ECOMUN on development of Ciudadelas de Paz in an Interview with J. Duyne Barenstein and D. Sanjinés. 20 September, 2020.

Pardo-Martínez, L. P., & M. V. Huertas de Mora. 2014. "La historia del cooperativismo en Colombia: hitos y periodos". Cooperativismo & Desarrollo, 104(22).

Paredes Revelo, A. 1972. "Defensa de la vivienda cooperativa: teoría jurídica y legal para una nueva estructura de vivienda cooperativa en Colombia". Editorial Herrera Hermanos. Bogotá.

Parnell, E. 2001. "The Role of Co-operatives and other Self-Help Organizations in Crisis Resolution and Socio-Economic Recovery" Geneva: International Labour Organization.

Paz, Ye. 2015. "The Contemporary Situation". In Concern for Community: The Relevance of Cooperatives to Peace by I. Macpherson and Y. Paz, 147-168. Victoria: Turning Times Research and Consulting.

Rodriguez A, J., J. C. Martinez, J. and F. Nieto. 2006. "Modelos de cooperativismo de Vivienda: Una revision documental." Insituto de Economía Social y Cooperativismo. Universidad Cooperativa de Colombia. Bogotá.

Rolink, R. 2013. Late Neoliberalism: The Financialization of Homeownership and Housing Rights. International Journal for urban and Regional Development.

Tummers, L. 2016. "The Re-Emergence of Self-Managed Co-Housing in Europe: A Critical Review of Co-Housing Research." Urban Studies 53 (10): 2023–40. https://doi.org/10.1177/0042098015586696.

UN Habitat. 2015a. "Housing at the Centre of the New Urban Agenda". Nairobi: UN Habitat. pp 18.

UN Habitat. 2015b. "Habitat III Issue Paper 20. Housing". New York: United Nations. pp.8

UNDP. 2019. "Human Development Report 2019". Accessed November 2020. http://hdr.undp.org/sites/default/files/hdr2019.pdf

UNHR (United Nations Human Rights). 2019. "Guidelines for the implementation of the right to adequate housing".

United Nations Verification Mission in Colombia. 2019. "Report presented to the UN Security Council. UN Doc. S/2019/780 Para. 38. 1 October 2019". Report of the Secretary-General. Accessed May 2020. https://undocs.org/en/S/2019/780.

Universidad Nacional de Colombia (UNAL). 2017. "Caracterización comunidad FARC EP. Resultados generales - Censo socio-económico UN-CNR 2017". http://pensamiento.unal.edu.co/fileadmin/recursos/focos/piensa-paz/docs/presentacion_censo_farc.pdf Consultado Noviembre 2020.

World Bank. 2020. "Middle Income Countries". Accessed November 2020. https://www.worldbank.org/en/country/mic/overview

World Bank, 2018. "Gini index (World Bank Estimate)". Accessed November 2020. https://data.worldbank.org/indicator/SI.POV.GINI?locations=CO-ZJ-BR-MX

Scaling collaborative housing policies. Barcelona's pathway to a Community Land Trust.

Eduardo González de Molina Soler

Pompeu Fabra University, Faculty of Political Science, C. Ramon Trias Fargas, 25, Barcelona, Spain
e-mail: eduardo.gonzalez@upf.edu

Eduard Cabré Romans

Barcelona City Council, Housing Department, Carrer del Doctor Aiguader, 24, Barcelona
e-mail: ecabrer@ext.bcn.cat

Javier Burón Cuadrado

Barcelona City Council, Housing Department, Carrer del Doctor Aiguader, 24, Barcelona
e-mail: jburon@bcn.cat

Abstract

Across the World cities and communities are developing alternative tools for the affordable housing provision to tackle the affordability crisis. In the last decade, among European cities, Community Land Trusts (CLTs) have emerged as an innovative solution to provide permanent community-led affordable housing for low- and middle-income households. In the case of Barcelona, the City has developed its own strategy based on public-community partnerships, the ESAL agreement. This article assesses to what extent Barcelona's ESAL Agreement meets CLT criteria and develops the model's potential to address some of the unresolved dysfunctionalities of real estate markets. Likewise it explains the main similarities and differences between the traditional CLT model and Barcelona model as a new way of building a CLT, based on a partnership between the City and social housing providers. We conclude the ESAL Agreement is not yet a proper CLT but contains the elements to become a Southern European model.

Keywords: collaborative housing, community land trust, international comparison, affordable housing, public-private partnership

Introduction

Cities and communities around the World are looking for alternative solutions to tackle the housing affordability crisis. Collaborative Housing (CH) in general and Community Land Trusts (CLTs) in particular have emerged as a new way to provide affordable housing (Czischke et al., 2020a). Housing unaffordability has become one of the biggest challenges faced by cities across the world. While salaries have barely increased in most OECD countries for the past decade (OECD, 2020), housing prices have fully recovered from the burst of the real estate bubble and the 2008 financial crisis and are reaching maximum highs even during the COVID-19 pandemic. Indeed, housing unaffordability seems to have become the new normal.

Policymakers are implementing all sorts of housing policies and programs to try to overcome the affordability crisis. Among these policies, public-private partnerships (PPPs) have awaken the interests of policymakers and private investors alike, as a win-win solution to increase the affordable housing stock while allowing corporate groups to earn a stable return on their investment and comply with their Corporate Social Responsibility commitments(Jones et al., 2006).

However, public-private partnerships are not limited to private investors and real estate companies. In fact, especially since the 2008 global financial crisis, new forms of public-private collaborations have re-emerged, particularly involving community groups, social movements, non-profit organizations and foundations (Czischke et al., 2020b). Within what has been identified as the collaborative housing sector (Czischke, 2018), most initiatives are adopting the cooperative model, as a means to include direct resident engagement in the design, implementation and management of the projects.

Another housing model within collaborative housing is that of Community Land Trusts (CLT). While housing cooperatives do not necessarily rely on any type of collaboration with the public sector (although they do in many instances), the CLT model specifically includes the public sector as one of the three key stakeholders that take part in its governance structure, together with community organizations and residents (Davis, 2007). This model emerged in the United States during the 60s, only beginning to be implemented in urban areas in the 80s, and developed in the United Kingdom during the early 2000s. In the late 2000s it set foot in continental Europe through Brussels, and it has been expanding ever since (SHICC, 2020). In the case of Barcelona, the City has developed its own strategy as a result of a series of policies based on public-community partnerships, the ESAL agreement, based on a key partnership between the City Council, social housing providers and non-profit organizations, namely housing cooperatives and foundations. The ESAL agreement pretends to be a CLT model for providing permanent community-led affordable housing for low- and middle- income households.

However, is the ESAL agreement a form of Community Land Trust? This paper assesses to what extent Barcelona's ESAL Agreement Framework meets CLT criteria and develops the model's potential to address some of the unresolved dysfunctionalities of real estate markets in Barcelona, including an overview of policies and programs to help CLTs develop, scale up and replicate. It also identifies the public benefits that justify the public sector's involvement in the development of a City-driven CLT, and discusses its contribution to solving the overall housing affordability crisis.

To better answer the research question, this paper relies on an exploratory research approach as the goal is to find new insights that can shed light on a new and potential growing phenomenon. As (Czischke et al., 2020b) suggest, collaborative housing research is still in the early stages of research. Therefore, the use of exploratory research is not to extrapolate and generalize the findings but to improve our integral understanding of a new and unexplored phenomenon. Exploratory research usually involves qualitative methods (Creswell, 2014), which will be our method of choice as well. To develop this methodology, we use an in-depth case study approach (Siggelkow, 2007; Yin, 2014) as our methodology strategy.

This paper extracts valuable knowledge from a real process. The case study of ESAL agreement, a unique case for its location (the second biggest city in Spain) and its magnitude (the promotion of 1,000 affordable dwellings) sheds light on how to design an attractive Community Land Trust within a global

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
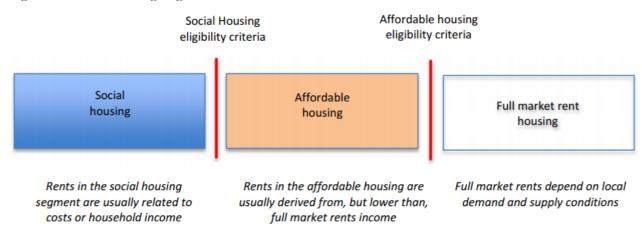Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

city. It is also the first-ever CLT project in Spain of this magnitude and the first research on this case. It also brings up to date the current literature as it is still in its early stages.

Theoretical Framework

Affordable Housing Policy

The concept of "affordable housing" has been increasingly used in European countries and literature in the last decade (Rosenfeld, 2017b). However, there is neither common consensus on the definition nor is there an official definition shared among European states. Affordable housing is also sometimes used as synonymous with social housing (Caturianas et al., 2020). According to Caturianas et al. "Housing affordability is usually operationalised by policymakers based on an assumption that households should not spend more than 30–40% of their income on housing expenditures" (Caturianas et al., 2020, p. 9). Furthermore, housing affordability is more generally defined as "rental housing that is below-market rent and open to a broader range of household incomes than social housing" (Czischke & van Bortel, 2018, p. 3). In the following figure the definition of affordable housing as the gap between market rent housing and social housing can be drawn.

Figure 1: Rental Housing Segments

Source: Czischke & van Bortel (2018, p. 4)

This way to define affordable housing is key for this research, because social housing is usually provided by the public sector or third sector, and market housing is provided by the private sector (Rosenfeld, 2017a) which begs the question, who provides affordable housing?

This distinction between social and affordable housing is essential to understand the ESAL agreement. Broadly speaking, there are two types of non-market housing provision in the ESAL agreement based on the type of housing provider (Czischke, 2018). The first, social rental housing, is provided by third sector companies representing 60% of the non-market housing units within the ESAL agreement. The second, zero equity cooperatives (known as cession-of-use cooperatives or cohousing), is provided by housing cooperatives representing the remaining 40%. The former provides social housing, the latter affordable housing.

Last but not least, the ESAL agreement should be understood as a strategic component of Barcelona Affordable Housing Policy to abate affordable housing shortage. Furthermore, there are three additional key concepts that should be highlighted to fully understand the ESAL agreement. Firstly is *public-private partnership* (PPP). Secondly is *collaborative housing*. Lastly is *Community Land Trust* (CLT).

Public-private partnerships

Public-Private Partnerships (PPP) as a policy tool started in the United Kingdom at the beginning of 1990s (Cui et al., 2018). PPP was globally expanded at the end of 1990s when several international institutions promoted the idea. The New Public Management (NPM) covered and framed PPP as part of its core policies in order to modernize the public sector (Hodge & Greve, 2005). Regarding the definition, there is no accepted and shared definition, neither in academia nor in public institutions, on how to conceptualize PPP. Reviewing the most widely used definitions at the international level, we find that PPP are

> durable complex cooperation between public and private sectors aiming to supply infrastructure and public service. During the cooperation period, both public and private sectors should share their risks and benefits to achieve their mutual goals (Cui et al., 2018, p. 302).

Regarding PPP for affordable housing, PPP is being used by the public sector to acquire expertise and financing to achieve a public goal. In addition, affordable housing is considered by some authors as infrastructure (Lawson et al., 2018). Therefore PPP in affordable housing can be understood with the PPP BOT model (Build-Operate-Transfer) (Delmon, 2010) where the public sector assigns a plot of land under long-term extendible lease, both public and private partners finance the development of affordable housing and afterwards the private developer builds the houses, operates the rental affordable housing and after the lease is up, the land and the houses return to public ownership.

However, PPP is a concept that fits better when the public sector is partnering with the for-profit private sector. What about when the public sector is partnering with non-profit housing providers? There are more actors who can be involved to provide affordable housing, such as non-profit organizations (social providers), limited-profit organizations (housing associations) or community-led housing (cooperative housing) according to Czischke et al. (2012). The collaboration between public and cooperative to successfully increase affordable housing has received increased attention both academically and in terms of public policy (Lang et al., 2020; Tummers, 2016). Going to our case, the ESAL agreement cannot be purely defined as PPP, but it can be defined as public-community partnership as long as it involves a long-term partnership between public and social housing providers.

Collaborative Housing

While the phenomenon of participatory, cooperative and common ownership forms of housing provision, such as cohousing, cooperative housing, and community land trust, is not new, the academic interest to research on this topic is more recent. Therefore, "this research field is still in its infancy and remains disciplinary fragmented" (Lang et al., 2020, p. 11). That is why it has been a key step for consolidating the research field to produce a unified label of this phenomenon. That label is collaborative housing which

> can be understood as an umbrella term that encompasses a variety of housing forms with different degrees of collective self-organization. Central to this type of housing is the presence of a significant level of collaboration amongst (future) residents, and between them and external actors and/or stakeholders, with a view to realizing the housing project. (...) Collaborative housing forms can vary in terms of tenure, legal and organizational characteristics. Common attributes include a high degree of social contact between the residents and the presence, to different extents, of shared goals and motives in relation to the housing project, such as ecological sustainability and social inclusion. In many cases, these values also extend to the project's external environment. (Czischke et al., 2020a, pp. 6–7)

Clearly, our case study fits under this research concept for many reasons. As we discuss in more detail in the following sections, the ESAL agreement compromises different dimensions that have been found in the literature (Lang et al., 2020). In the table 1 below, we can observe that in every thematic area the ESAL agreement converges with the literature in several first-order themes as long as ESAL agreement

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

has been designed collaboratively with social and cooperative housing providers in a bottom-up process from the beginning. Likewise the output of this policy is to provide permanent community-led affordable housing for low- and middle-income households, while the mid-term outcome is to build a Community Land Trust as an innovative way to guarantee the right to housing to the extent that it ensures maintenance of public land ownership, permanent affordability, security of tenure, and democratic self-management of the building by the residents.

Table 1: Collaborative Housing Dimensions of ESAL agreement

Thematic area	Research question	First-order theme in literature	ESAL Agreement
Socio-demographic	Who lives and engages in CH?	Middle class, Working-class, Low-income households, Gender, Seniors, Youngsters and families, Intergenerational	Middle- and low- income households; Seniors; People with disabilities
Collaboration	How does collaboration play out in CH?	Citizen participation, Collaboration with external stakeholders, Grassroots, Top-down governance, Municipalities, Residentes' self-organization, Collective agency, Personal autonomy, Sense of community, Sharing Solidarity, Socializing; Feeling at home	Collaboration with external stakeholders; Grassroots; Top-down governance; Municipalities; Personal autonomy; Sense of community
Motivations	Why do people get engaged in CH?	Political expression, Alternative lifestyle, Radical living, Environmental Awareness, Post-Capitalism, Utopia, Degrowth, Postmodernism, Nostalgia	Political expression; Radical Living; Environmental Awareness;
Effects	What are the potential effects assigned to CH?	Learning, Affordability, Economic risks, Sustainability, Exclusivity, Social inclusion, Commons, (De)commodification, Architectural design, social innovation	Learning; Affordability; Sustainability; Social inclusion; Commons; (De)commodification; Architectural design; Social innovation
Contexts	What are the various contexts in which CH is embedded?	Socio-economic crises, Autonomous spaces, post-Fordist city, Neighbourhood, Rural, Urban, Social housing, Housing policies and sector, Informal housing, Private market housing, Homeownership, Third sector, Urban development, Architecture, Health and ageing, Social work Planning and land use	Socio-economic crises; Autonomous spaces; Social housing; Housing policies and sector; Third sector; Architecture; Health and ageing; Planning and land use

Source: own elaboration based on (Lang et al., 2020).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Community Land Trust

CLTs have been praised as a solution to provide inclusive, permanent affordable housing that is rooted in the communities it is located. By using land leaseholds and a tripartite governance scheme, the model responds to some of the challenges posed by the housing affordability crisis: it ensures long term affordability, security of tenure, and resident involvement in terms of self-finance and self-management, and the engagement with the surrounding community.

As a concrete model under the broader umbrella of Collaborative Housing, Community Land Trusts (CLTs) focus on local collective ownership of land as a means to provide affordable self-managed housing (Czischke & van Bortel, 2018). As defined by one of its founding fathers "(t)he community land trust is a legal entity, a quasi-public body, chartered to hold land in stewardship for all mankind present and future while protecting the legitimate use-rights of its residents" (Swann et al., 1972, p. 10). The three pillars to a CLT as initially conceptualized in the United States are (Davis, 2010):

- *Dual ownership structure*
  The CLT keeps the ownership of the land and leases it to the final user (homeownership model), a housing cooperative or a rental agency. The CLT ensures resale prices are limited and remain affordable overtime, and provides support and services to the residents.

- *Tripartite organizational structure*
  Residents, community organizations and public authorities take part in the CLT's Board.

- *Operational structure*
  A balanced resale formula and allocation criteria ensure long-term affordability and adequate housing maintenance.

CLTs in the United States

Community landholding initiatives have taken place in most countries and regions of the world throughout history. However, the concrete articulation of the CLT model is generally traced back to New Communities, Inc. in southwest Georgia, created in 1969, which is considered to be the purest example of a community land trust prototype in the United States (Swann et al., 1972). The model was inspired by different legal and governance case studies from across the world with the original purpose to promote land reform and economic self-sufficiency for African Americans living in the rural south.

CLTs original focus on marginalized and vulnerable communities made them appealing to policy makers and community activists in urban areas that were unable to successfully respond to the Federal Government's retreat from housing policy making in the 1980s. Their charitable nature allowed CLTs to access financial resources from public agencies and private foundations, bringing in new resources and social groups (Davis, 2010).

Most CLTs from the 1990s emerged or were active during neighborhood redevelopment processes and promoted a place-based approach to urban regeneration (Davis, 2010). Since the aftermath of the Global Financial Crisis, CLTs have reemerged as a potential solution to housing financialization in metropolitan cities like New York City. One of the City's first experiences around the CLT model is Cooper Square CLT, created in 1991 after more than 30 years of community organizing in the Lower East Side (Angotti, 2007). Cooper Square CLT has served as an example for emerging CLTs, which are now beginning to receive funding and support from the City authorities[1]

---

[1] https://nyccli.org/

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

CLTs in the United Kingdom and continental Europe

Beginning in the 2000s, the CLT movement in the United States influenced academics and housing practitioners in Europe and particularly in the United Kingdom, where in 2006-2008 a National CLT Demonstration program was launched by Community Finance Solutions and funded by charitable bodies to support several pilot projects (Moore & McKee, 2012). More than 20 CLTs and some 150 homes were supported in rural areas under the program (Aird, 2009).

CLTs in the United Kingdom grew on the precedent of the garden city, cooperative housing and development trusts. They were legally defined for the first time in the Housing & Regeneration Act of 2008, when a CLT Fund was also created to provide start-up finance, legal and technical assistance, and business planning for emerging CLTs. Land acquisition and housing development was funded by public, private and charitable grants and loans (Moore & McKee, 2012). Just like in the United States, CLTs did not develop in urban areas until recently. St Clement's was the first housing development to include CLT homes in London in 2017. The mixed development was built by Linden Homes in partnership with the Greater London Authority and Peabody, and it includes 252 new homes, 35% of which are affordable: 58 units for social rent and 23 CLT homes (London Community Land Trust).

In continental Europe, the CLT model was first piloted in Brussels. The history of Community Land Trust Brussels (CLTB) can be traced back to the creation of collective saving groups (*groupes d'epargne collective et solidaire*) and the *Espoir* affordable homeownership housing project initiated in 2005. In 2010 a platform was created by 15 local associations to support the creation of a CLT, and the Brussels Region launched a feasibility study to assess the potential of the model. In 2012 a non-profit association and a foundation of public utility were created to allow for the implementation of the CLT model in the Belgian legal context. In 2015 the first project was made available to 9 households through a homeownership scheme. Thanks to an agreement with the Brussels regional government, CLTB has been allocated an annual budget of 2M€ to develop 30 housing units/year[2].

Soon after Belgium, France launched its own CLT model under a singular legal institution called *Organismes de Foncier Solidaire* (OFS). Introduced by law in 2014 (loi ALUR), OFS would be the French equivalent to the Trust, which makes use of the *Bail Réel Solidaire* (BRS), a long-term lease (19-99 years, renewable), to provide affordable homeownership opportunities. In 2018 a legislative change was introduced (loi ELAN) to allow housing associations (HLMs) to perform as OFS, resulting in most OFS being pioneered by municipalities, affordable housing developers and public land agencies (SHICC, 2020). 52 OFS have been created so far, which are expected to develop more than 9,200 units before 2024 (Simonnet & Liquet, 2021). CLT projects have also recently emerged in Ireland, Scotland, Germany, the Netherlands, Switzerland, Italy and Spain, although they have not become fully operational to date (SHICC, 2020).

City-driven CLTs

Over the last couple of decades, local governments have increasingly supported the creation of CLTs. Municipal support has adopted different forms, ranging from administrative support, tax incentives or the provision of public land, to financial support, grants or low-interest loans (Davis et al., 2008). The role of local governments has evolved from supporters to promoters, becoming part of the governance schemes and in some instances being the driving force behind the creation of the CLT.

City-led CLTs need to protect the public interest when investing in affordable housing, while favoring investment in vulnerable neighborhoods and communities (Davis et al., 2008). In this sense, and building upon preexisting bottom-up processes driven by grassroots movements and housing cooperatives, the ESAL agreement can be characterized as a city-driven CLT given Barcelona City Council's role as instigator, governor and supporter.

---

[2] cltb.be

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Barcelona case study

Barcelona's housing policy context

Barcelona has a dual housing system (Kemeny, 2001) in which social and affordable housing are exclusively provided for low-income households and cannot influence housing prices in the private market due to their limited scope (less than 2% of the housing stock) (Pareja-Eastaway & Sánchez-Martínez, 2017). This is also the case for the rest of the country, which has not developed universalistic housing policies as a key pillar of its welfare state model, labeled as rudimentary and theorised as a familistic welfare state regime, which has favoured access to homeownership (Powell et al., 2020; Trifiletti, 1999).

Social and affordable housing in Spain is defined under the category "Vivienda de Protección Oficial" (VPO). Created after the Spanish Civil War (1936-1939), this type of subsidized housing expanded after the creation of the Housing Ministry in 1956. During the modernization and enlargement of the Spanish economy, the production of VPOs was crucial, not only in terms of housing provision (between 30% and 50% of the construction activity from 50s to mid-70s were VPOs), but also through its impact in employment and GDP. Public loans and grants to this type of dwellings ment as much as 13% of the State budget (peak in the 60s). More than 6 million units were produced up to present times, which amounts to no less than 25% of the currently existing stock[3].

One of the particularities of VPO is that it mainly adopted the homeownership model, under which resale or rental price remained affordable for a certain period which usually lasted between 10 and 30 years. As a result, nowadays Spain has no more than 450.000 social and affordable rental units (around 2% of the existing stock, nowadays approaching the 25.5 million units) managed mainly by public administrations and to a lesser extent by NGOs[4].

Housing cooperatives have traditionally also relied on a homeownership scheme. They worked as a vehicle for housing development and were terminated once its members were given property titles over the housing units. Zero-equity cooperatives, also known as cession-of-use cooperatives, which grant cooperative members a right of use over their housing unit, only began to be implemented beginning in the 2000s (Cabré & Andrés, 2018).

Housing policies in Catalonia made a shift since the introduction of Law 18/2007 on the right to housing[5]. One of its main contributions was the definition of Social Providers as housing development and management entities with whom the public sector could cooperate in order to achieve public goals. The Law also introduced housing cooperatives as a tenure to be promoted and supported by the public sector. The key promotion measure is the possibility of handing free public land to cooperatives and foundations.

Looking to overcome this historical trend, and building on the possibilities introduced in the Catalan legislation, Barcelona City Council launched its 2016-2025 Housing Plan based on the principles of promoting a rental model and withholding the public ownership of land, in a major shift from national tradition. The Plan was structured on three pillars to enlarge the public and non-profit stock of social and affordable rental housing, namely: new development, public purchasing of private housing, and temporary mobilization of existing private vacant stock towards social and affordable rent[6].

Additionally, Barcelona Housing Plan 2016-2025 fosters a wide range of public-private partnerships, being its objective to produce more VPO for rent but also to diversify the types and scope of housing

---

[3] https://observatoriosociallacaixa.org/-/sistema-de-vivienda-y-estado-del-bienestar-el-caso-espanol-en-el-marco-europeo
[4] https://apps.fomento.gob.es/CVP/handlers/pdfhandler.ashx?idpub=BAW072
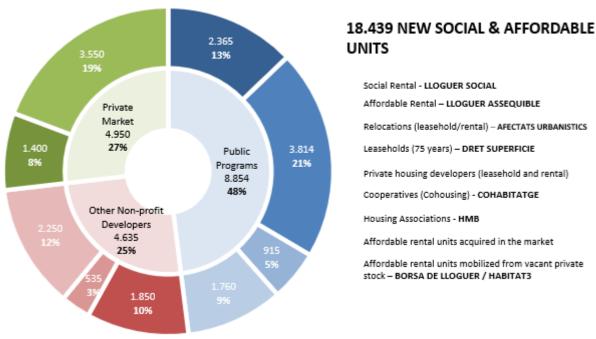[5] https://www.boe.es/buscar/doc.php?id=BOE-A-2008-3657
[6] https://media-edg.barcelona.cat/wp-content/uploads/2016/10/pla_habitatge_resum_executiu.pdf

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

providers. The combination of both approaches produces the following mix in the objectives nowadays being carried out by IMHAB (the municipal housing company): 80% of the new units produced by IMHAB are for rental and 20% are handed to the users on the right of surface (leasehold) for 75 years. Housing cooperatives and foundations develop on municipal land, 54% in cohousing and 46% in social rental. Furthemore, Barcelona has launched a PPP company (NiC Rental, a joint venture of Neinor and Cevasa alongside Barcelona City and the Metropolitan Area of Barcelona) called HMB[7]. HMB will build and rent 4.500 housing units over the next 10 years.

Finally, the Barcelona Right to Housing Plan envisioned the development of 535 cohousing units on public land until 2025. This collaborative housing policy has evolved overtime to currently encompass 21 projects under different stages: 53 units are currently in use in 3 different cooperatives, 190 under construction or design phase, and 373 units are to be built or renovated in projects currently undergoing land allocation as part of the ESAL agreement, which envisions up to 1,000 units over the next 10 years[8]

Figure 2: 2016-2025 Barcelona Right to Housing Plan goals.

Source: Ajuntament de Barcelona[9]

The pilot phase: La Borda and Princesa

Between 2014 and 2015, Barcelona City Council allocated the right of surface of one site and one building owned by the City to the cooperatives La Borda SCCL and Sostre Cívic SCCL to promote the first cooperative housing developments on municipal land (Cabré & Andrés, 2018). The direct allocation was justified by the urgency of promoting affordable housing in the city, the need to develop new forms of housing provision and the central role of the two entities in the introduction of the zero-equity cooperative model in Catalonia.

---

[7] https://www.amb.cat/web/habitatge/habitatge/hmb
[8] https://ajbcn-decidim-barcelona-organizations.s3.amazonaws.com/decidim-bcn-organizations/uploads/decidim/attachment/file/3988/conveni_per_la_provisio_dhabitatges_destinats_a_lloguer_asequible_i_cesso_del_dret_dus.pdf
[9] https://media-edg.barcelona.cat/wp-content/uploads/2016/10/pla_habitatge_resum_executiu.pdf

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

The first two pilot projects under the cohousing model were the result of community organizing efforts on the part of neighborhood-based organizations and citizen platforms. In the case of La Borda, the cohousing project was one of the demands of a neighborhood movement working to recover the Can Batlló former industrial site, which had been awaiting redevelopment since the 2008 housing crisis (Cabré & Andrés, 2018). In these cases, the surface right has a duration of 75 years, extendable to 90 years. The awarded cooperatives must pay a symbolic fee to the City Council in exchange for the use of the land and must abide by the restrictions on access and price of affordable housing (VPO). Both cooperatives are currently in use.

Scaling collaborative housing policy

Having successfully completed the pilot project phase, with the aim of guaranteeing equal opportunities and project excellence, and in view of the appearance of new groups and entities interested in the co-housing model, the second land allocation round of 7 municipal plots for zero-equity cooperatives took place in 2016 through a call for tenders. 16 proposals were presented, of which 5 were awarded (of the other 2 plots, one did not receive a proposal and the other was excluded because it did not meet the minimum requirement). Currently 3 of the developments are under construction. One of the first proposals (La Balma) has already completed the construction phase and residents moved to their new homes in July 2021.

Subsequently, in 2019, a second tender for 3 additional plots was launched, in which 15 bids were submitted, resulting in 3 successful allocations. This tender included various demands from the housing cooperative sector expressed after the first tender, such as the division of the tender into two phases, financial compensation for the teams that entered the second phase (3 per plot) and were not awarded the contract, and the adaptation of some of the evaluation criteria. In both cases the surface right has a duration of 75 years, extendable to 90.

Table 2: Cohousing projects on City land in Barcelona (2021)

Name of project	Land allocation year (direct allocation or public tender)	Address	Number of units	Stage	Tenancy
Princesa (Sostre Cívic SCCL)	2014	Carrer Princesa 49, Ciutat Vella	5	In use	Cooperative housing
La Borda SCCL	2015	Carrer Constitució 85, Sants-Montjuïc	28	In use	Cooperative housing
La Balma (Sostre Civic SCCL)	2016	Carrer Espronceda 131, Sant Martí	20	In use	Cooperative housing
La Xarxaire SCCL	2016	Passeig Joan de Borbó 11, Ciutat Vella	8	Under construction	Cooperative housing
La Chalmeta (Llar Jove SCCL)	2016	Carrer Ulldecona 26-28, Sants-Montjuïc	32	Under construction	Cooperative housing
Cirerers (Sostre Cívic SCCL)	2016	Carrer Pla dels Cirerers 2, Nou Barris	32	Under construction	Cooperative housing

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Cohabitatge Sarrià (Torrent Viu)	2016	Carrer General Vives 4-6, Sarrià-Sant Gervasi	16	Under construction	Cooperative housing
Cohabitem Sant Andreu	2019	Carrer Aiguablava, 74-76, Nou Barris	27	Design phase	Cooperative housing
Sotrac	2019	Constitució 43, Sants-Montjuïc	45	Design phase	Cooperative housing
Cohousing Barcelona, SCCL	2019	Passeig de Torras i Bages 130-134, Sant Andreu	30	Allocation phase	Cooperative housing
Empriu Habitatges Cooperatius SCCL	2021	Carrer Mossèn Amadeu Oller 17-21, Sants-Montjuïc	40	Allocation phase	Cooperative housing
La Domèstika de la Farga SCCL	2021	Carrer Rossend Arús 36-38, Sants-Montjuïc	7	Allocation phase	Cooperative housing
Sostre Cívic SCCL	2021	Via Augusta, 375-381 and 383-387, Sarrià-Sant Gervasi	15 and 17 (seniors)	Allocation phase	Cooperative housing
Vida Cooperativa SCCL	2021	Via Augusta, 389-393, Sarrià-Sant Gervasi	17 (people with intellectual disability)	Allocation phase	Cooperative housing
Ruderal SCCL	2021	Carrer Gustavo Bécquer 11X, Gràcia	25	Allocation phase	Cooperative housing
Abril Poblenou SCCL	2021	Carrer Pere IV 115, Sant Martí	23	Allocation phase	Cooperative housing
Salas and Nou Lloc foundations	2021	Carrer Sant Martí 12-16, Ciutat Vella	43	Allocation phase	Rental housing
Hàbitat 3 Foundation	2021	Passeig Joan de Borbó 44-45, Ciutat Vella	18	Allocation phase	Rental housing
FIBS and Iniciativa Social foundations	2021	Carrer Ulldecona 11X, Sants-Montjuïc	84	Allocation phase	Rental housing
Salas and Nou Lloc foundations	2021	Avinguda Vallcarca 110X, Gràcia	37	Allocation phase	Rental housing
Fem Ciutat SCCL	2021	Carrer Binèfar 26, Sant Martí	47	Allocation phase	Rental cooperative housing
21 projects			616 units		

Source: own elaboration based on Barcelona Housing Department data.

Towards a Community Land Trust

Barcelona's CLT model is being developed based on a Framework Agreement ("Conveni Entitats Sense Ànim de Lucre") between Barcelona City Council, the Catalan Association of Social Housing Managers (GHS), the Federation of Cooperative Housing (FCHC), the Social and Solidarity Economy Network (XES), as well as the Social Housing Foundations Coordinator (Cohabitac)[10].

In view of the difficulties in relation to the terms, costs and competitive dynamics associated with public tenders, given the need to speed up the production of affordable housing in the city and aspiring to lay the foundations of a future CLT or similar framework, following authorization by the plenary in October, on 27 November 2020 a framework agreement was signed between Barcelona City Council, the organizations that bring together the city's social and cooperative developers (Cohabitac, FCHC and XES) and GHS as a non-partisan association for the promotion of 1,000 housing units in 10 years (in addition to the more than 250 homes developed through the pilot projects and the previous tenders). In this way, the City Council undertakes to provide public land and buildings for their construction or refurbishment, while the developers assume the promotion and management of housing under a social rental (60%) or a cooperative (40%) model. In the first phase (February 2021), the City Council has made available 12 plots of land and 3 buildings.

The allocation of the surface right, in this case for 99 years, will be carried out after a competition among the cooperatives and foundations carried out by their own federations and organizations and not by the municipal administration, as foreseen by the Law on the Right to Housing of Catalonia, and will prioritize in all cases the following criteria: speed and industrialization in the construction or rehabilitation, technical and economic standing, affordability, energy efficiency, and the non-concentration of projects by a few providers. Subsequently, the City Council and the GHS will review and validate (or not) the proposals made by the providers.

The ESAL agreement is also an opportunity to jointly access financing, with the support and guarantee of City Council, whether it be public (ICF, ICO, EIB) or private (ethical banking and conventional banks); and to generate economies of scale among the providers, which will have incentives to work together and share resources and costs. In addition, the housing providers will benefit from public subsidies: 7% of the cost of the project contributed by the City Council -returnable subsidy, a loan at 0% interest rate- and 16% by the Ministry MITMA -funding subsidy, a grant. Cooperatives and foundations commit to dedicate 50% of their profits to a revolving fund once their credits have been fully repaid, and to work towards creating a joint entity inspired in the Community Land Trust model.

Discussion

Similarities and differences from the theoretical CLT model

The conventional American CLT model is based on three core principles (Davis, 2010): A dual ownership structure where residents do not have the full ownership of the land, but rather a lease on it in order to ensure that resale prices are limited and remain affordable overtime; an organizational structure governed by a tripartite board made up of representatives of residents, community organizations and the public sector; and an operational structure that ensures long-term affordability through resale restrictions and allocation rules, among other measures.

Meanwhile, all CLT initiatives in Europe adopt a dual ownership structure and long-term affordability principles, although not all of them implement a tripartite governance model. National legal contexts have influenced the institutional arrangements sustaining the CLT. While it has been possible to

---

[10] https://ajbcn-decidim-barcelona-organizations.s3.amazonaws.com/decidim-bcn-organizations/uploads/decidim/attachment/file/3988/conveni_per_la_provisio_dhabitatges_destinats_a_lloguer_aseq uible_i_cesso_del_dret_dus.pdf

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

implement the model without major adaptations in the United Kingdom, in the case of Brussels it has used a bicephalous structure consisting of a non-profit association and a public utility foundation. The association is charged with the daily management of the CLT, while the foundation holds ownership of the land. Nevertheless, both entities are governed by boards of directors that respect the tripartite principle: ⅓ public authorities from the Brussels Region, ⅓ civil society, ⅓ residents[11]. In the case of France, the model is built around a single entity (OFS) but its governance model does not always involve civil society or resident representatives.

In terms of the tenancy for residents, the theoretical American CLT model is usually understood as a vehicle for accessing homeownership. However, in the United States, CLTs also develop housing cooperatives and rental housing, especially in multifamily developments in urban areas (Angotti, 2007). Brussels and France are generally adopting the homeownership model, whereas other European initiatives are also considering rental housing (Community Land Scotland; CLT H-Buurt in the Netherlands) or cooperative housing (Stadtbodenstiftung in Germany, IRLT in Ireland) (SHICC, 2020).

In the case of Barcelona, the current initiative fulfills the dual ownership structure criteria, as it uses long-term leaseholds to ensure both public property and stewardship of the land. It also creates a balanced operational structure with specific allocation criteria and monthly rents and quotas targeted towards middle- and low-income households. However, it does not adopt the traditional CLT governance model as the ownership of the land remains 100% public and it engages social entities and organizations through a framework agreement and not by developing a joint entity, at least for now. In terms of tenancy regimes for the residents, the Barcelona model encompasses housing cooperatives and rental projects, and it does not include homeownership.

Table 3: Comparison between CLT in USA - EU and Barcelona

	United States	United Kingdom	Belgium	France	Spain (Barcelona)
Start	1960s	1990s	Late 2000s	Late 2000s	2015-onwards
Legal recognition	1992 (Housing and Community Development Act)	2008 (Housing Regeneration and Act)	2013 (Brussels Housing Code, Brussels Capital Region only)	2014 (ALUR) - 2018 (ELAN)	2007 (The Right to Housing Law) - 2015 (Cooperative Law) - 2020 (ESAL agreement)
Primary issue faced	Empowerment of disadvantaged communities	Access to affordable housing	Access to affordable housing	Access to affordable housing	Access to affordable housing
Primary objective pursued	**Non-profit sector**: Social and economic justice	**Public-sector**: diversify housing supply through collaborative housing **Non-profit sector**:	**Public-sector**: support home ownership **Non-profit sector**: Support and empower their population	**Public-sector**: Develop a regulated form of social home ownership involving a greater number of stakeholders	**Public-sector**: diversify housing supply through collaborative housing **Non-profit sector**:

---

[11] cltb.be

		promote housing affordability and community involvement	target		promote housing affordability and community involvement
Project initiators	Diverse (Citizens, municipalities, etc.)	Citizen initiatives, supported by local hubs	Non-profit sector and growing interest municipalities	Institutions (municipalities, developers, land banks)	The municipality together with Third sector entities.
Population target	Racialized communities, 30-50% of AMI	Lower quartile or median-income population	From lowest incomes to home ownership income ceiling	First-time buyers, social housing tenant (PSLA income ceiling)	Low- and middle-income population below VPO income ceiling.
Status	Not-for-profit	Not-for-profit	Not-for-profit	Not-for-profit	Not-for-profit
Governance	Tripartite	Not necc. tripartite, but residents have a role	Mostly tripartite	Left to the discretion of the organizations	Currently bipartite (Municipality and Social providers). In the future Tripartite.
Citizen involvement	- / +++	+ / +++	+++	- / +	- / ++
Activities	Diverse (housing, transportation, culture, etc.)	Diverse (housing, transportation, culture, etc.)	Housing, development of other activities whenever possible	Housing only (possible legislative changes)	Housing only
Scope	Project scale > municipality	Project scale > municipality	Municipal	Municipal > Regional	Municipal
Origin of the land	n.a.	Mixture of private and public	Mostly public	Mostly public	Public
Primary access mode to land	n.a.	Diverse: transfer at peppercorn rent, discount, sale	Discount on land, emphyteutic lease	Subsidy from local government and/ or long term land loans from CDC public bank	The right to surface (99 years, renewable).

Development process	n.a.	Developed by the CLT (in partnership with social landlord or private developer) or buy-at completion	Often: buy-at-completion (from social landlord), also self-development	Buy-at-completion (from social landlord or private developers)	Developed by social providers (social entities for social rental housing; housing cooperatives for cohousing)
Access to home	Diverse	Diverse: buy, rent, shared equity, etc.	Individual home ownership (diversifying)	Individual home ownership	Social rent for renters; shared equity and loan for cooperativists.
Exit price	n.a.	Varies depending on local needs	25-50% of the open market	15-50% of the open market	40% below the open market.
Lease (Anti Speculative mechanism)	n.a.	Leases: varies on depending disposal method	50-year surface right leasehold including novation clause. Ground lease: varies but mostly symbolic	BRS, 18-99 years. Ground lease: between €1 and €/m3	99-year surface right (leasehold) including novation clause. Ground lease: mostly symbolic
Resale formula (Anti Speculative mechanism)	n.a.	Diverse: eg. based on the area's median or lower-quartile income	Diverse: linked to market, indexed or share of capital gains	Indexed to Indice de Revision des Loyers (IRL) ou du Cout de la Construction (ICC)	VPO regularly updated price and by-law of cooperatives

Source: own elaboration based on (SHICC, 2020) and ESAL agreement.

Is the ESAL agreement a form of Community Land Trust?

Based on the three core principles of a CLT, this is how Barcelona's ESAL agreement fits in each of them:

- Ownership structure
A dual ownership structure is implemented through a 99-year lease (surface right) between the City and the social housing providers. The ownership of the land remains 100% public, while social housing providers encompassing both rental housing and cooperative housing take on the development of the units and their long-term management. The lease can be reconstituted once it expires.

- Organizational structure

The City and the social housing providers relate with one another through the ESAL agreement and not by being part of a newly created entity. A Central Committee made up by the City Manager for Housing and Renovation, a representative of the City Councilor's Office for Housing and Renovation, seven members of the public housing authority (IMHAB), three representatives from GHS, two representatives from foundations and two representatives from cooperatives overlook the correct implementation of the ESAL Agreement.

The ESAL agreement envisions 3 housing tenure models: cohousing cooperatives, rental cooperatives and rental. In the cooperative housing model, residents will take part in the management of the cooperative as full members. In rental cooperatives, residents will also engage as full members although their initial selection will be based on Barcelona's Housing Consortium (City & Regional Administration) waiting list for social housing rather than on a separate waiting list based on their membership, as it is the case with cohousing cooperatives. In rental housing developments, to be developed by foundations, renters, in principle, will not be granted a role in the overall governance of the project.

- Operational structure

The ESAL agreement ensures long-term affordability by applying social housing rules on all projects. This translates into legal limits on rents and quotas (in cohousing cooperatives), as well as strict criteria for the allocation and reallocation of the housing units. The maintenance of public ownership of land is also a guarantee that these measures will be implemented throughout the life of the ESAL agreement. In the case of cohousing cooperatives, the housing units will be allocated to the cooperative members through a right of use, while in the rental cooperatives and rentals the standard social housing rental legal frameworks will apply.

Figure 3: Theorical CLT scheme vs Barcelona ESAL Agreement

Source: own elaboration.

Conclusion.

A new way of developing city-driven CLT.

Despite its bottom-up approach, CLTs rely on the support and direct involvement of public authorities, contrary to other collaborative housing models in which public authorities are not always present. CLTs generally involve several housing projects and their scope can vary from neighborhood to city or even regional level. In the case of Barcelona, the City's involvement has favored a city-wide approach.

The scarcity of land in Barcelona and the City's availability of it, together with City Council's strategic decision to foster collaborative housing initiatives, have set the conditions for the City's involvement.

The City's role in facilitating access to financing has also brought together the sector around the city-wide policy.

Finally, because the land will always remain public, the long-term stewardship of the housing projects will remain centralized. This will also facilitate the development of support tools and economies of scale in housing management and further development.

The limits and potentials to generalize the model

One of the major challenges to the implementation of the CLT model in Barcelona is the belief that fully public or fully private projects will solve the housing crisis. Some stakeholders, both public officials and administrators as well as private interests, continue to believe that private developers should build large amounts of market housing while the public sector builds 100% social and affordable housing estates. The new State Housing Plan 2022-2025 appears to overcome such dichotomy, but implementation might prove to be challenging. The scalability of collaborative housing projects will also greatly depend on further legal, administrative and financial support from other levels of government. In Barcelona, greater involvement of the Metropolitan Area (AMB) is needed in order to develop truly metropolitan policies.

Reaching deeper levels of affordability has also proven to be an issue in regards to the projects' economic feasibility. Current projects tend to include middle-income households. Therefore, new policy tools are needed in order to achieve a more diversified income mix. Finally, the existing tensions between the sub-models included within the ESAL agreement (cooperative, rental, and rental cooperative) might slow down the decision-making process instead of building synergies and finding common ground for the development of a fully-fledged CLT.

The main strength of the model is its widespread support by the different political parties and the grassroots movements, which favor at least one or several of the sub-models under the ESAL agreement. This should foster the expansion of the model and the allocation of resources to support it. The ESAL agreement also sets the framework for further professionalization of the involved housing developers and managers, which will benefit from economies of scale as they take on a bigger set of projects.

The new State Housing Plan 2022 - 2025 (in July 2021 still a draft in the consultation process and pending Cabinet approval) for the first time in history designs a specific line of support for cohousing projects along with temporary social accommodations and intergenerational housing facilities. Together with Next Generation EU funds (at least 1 B€ devoted to social and affordable housing in Spain), they will support the replicability of the model.

Additionally, and as a consequence of the above, ICO and ICF (the Spanish and Catalan public banking institutions) are developing new financing tools for rental and cooperative affordable housing projects. In fact, in the preliminary conversations between the ESAL agreement signatories and ICO and ICF, they both agreed to facilitate a credit line for the 1,000 units in a joint effort by the two lender entities.

Finally, the City and the other ESAL agreement signatories can extend their collaboration to include the acquisition of private housing units through the City's right of first refusal. This tool has the potential to compensate for the limited access to land in the city and enables the possibility to reach a critical mass that consolidates the model and the collaborative housing sector.

In conclusion, although the ESAL agreement is not yet a proper CLT, it contains the elements to become a new sub-model as the ones seen in the rest of Europe. Taking into account all the limitations stated above, ESAL agreement can be understood as a way to scale up collaborative housing at the city-level, while bringing together different social housing providers under an innovative PPP scheme.

References

Aird, J. (2009). *Lessons from the first 150 Homes. Evaluation of the National Community Land Trust Demonstration Programme 2006-2008*.

Angotti, T. (2007). Community Land Trusts and Low-Income Multifamily Rental Housing: The Case of Cooper Square, New York City. *Lincoln Institute of Land Policy*, *Working Pa*. https://www.lincolninst.edu/publications/working-papers/community-land-trusts-low-income-multifamily-rental-housing

Cabré, E., & Andrés, A. (2018). La Borda: a case study on the implementation of cooperative housing in Catalonia. *International Journal of Housing Policy*, *18*(3), 412–432. https://doi.org/10.1080/19491247.2017.1331591

Caturianas, D., Lewandowski, P., Sokolowski, J., Kowalik, Z., & Barcevicius, E. (2020). *Policies to ensure access to affordable housing*. Publication for the committee on Employment and Social Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament. files/529/Policies to ensure access to affordable housing.pdf

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Sage.

Cui, C., Liu, Y., Hope, A., & Wang, J. (2018). Review of studies on the public–private partnerships (PPP) for infrastructure projects. *International Journal of Project Management*, *36*. https://doi.org/10.1016/j.ijproman.2018.03.004

Czischke, D. (2018). Collaborative housing and housing providers: towards an analytical framework of multi-stakeholder collaboration in housing co-production. *International Journal of Housing Policy*, *18*(1), 55–81. https://doi.org/10.1080/19491247.2017.1331593

Czischke, D., Carriou, C., & Lang, R. (2020a). Collaborative Housing in Europe: Conceptualizing the Field. In *Housing, Theory and Society* (Vol. 37, Issue 1, pp. 1–9). Routledge. https://doi.org/10.1080/14036096.2020.1703611

Czischke, D., Carriou, C., & Lang, R. (2020b). Collaborative Housing in Europe: Conceptualizing the Field. *Housing, Theory and Society*, *37*(1). https://doi.org/10.1080/14036096.2020.1703611

Czischke, D., Gruis, V., & Mullins, D. (2012). Conceptualising Social Enterprise in Housing Organisations. *Housing Studies*, *27*(4), 418–437. https://doi.org/10.1080/02673037.2012.677017

Czischke, D., & van Bortel, G. (2018). An exploration of concepts and polices on 'affordable housing' in England, Italy, Poland and The Netherlands. *Journal of Housing and the Built Environment*. https://doi.org/10.1007/s10901-018-9598-1

Davis, J. E. (2007). *Starting a Community Land Trust*. www.burlingtonassociates.com

Davis, J. E. (2010). Origins and Evolution of the Community Land Trust in the United States. *The Community Land Trust Reader*, 3–47. https://www.lincolninst.edu/sites/default/files/pubfiles/the-community-land-trust-reader-chp.pdf

Davis, J. E., Jacobus, R., & Lincoln Institute of Land Policy. (2008). *The city-CLT partnership : municipal support for community land trusts*. Lincoln Institute of Land Policy.

Delmon, J. (2010). *Public–private partnership projects in infrastructure: An essential guide for policy makers.*

Hodge, G., & Greve, C. (2005). *The Challenge of Public-Private Partnerships: Learning from International Experience*. Edward Elgar Publishing. https://research.cbs.dk/en/publications/the-challenge-of-public-private-partnerships-learning-from-intern

Jones, P., Comfort, D., & Hillier, D. (2006). Corporate social responsibility and the UK construction industry. *Journal of Corporate Real Estate*, *8*(3). https://doi.org/10.1108/14630010610711757

Kemeny, J. (2001). Comparative housing and welfare: Theorising the relationship. In *Source: Journal of Housing and the Built Environment* (Vol. 16, Issue 1). https://about.jstor.org/terms

Lang, R., Carriou, C., & Czischke, D. (2020). Collaborative Housing Research (1990–2017): A Systematic Review and Thematic Analysis of the Field. *Housing, Theory and Society*, *37*(1), 10–39. https://doi.org/10.1080/14036096.2018.1536077

Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R., & Hamilton, C. (2018). Social housing as infrastructure: an investment pathway. *AHURI Final Report*, *306*. https://doi.org/10.18408/ahuri-5314301

Moore, T., & McKee, K. (2012). Empowering Local Communities? An International Review of Community Land Trusts. *Housing Studies*, *27*(2). https://doi.org/10.1080/02673037.2012.647306

OECD. (2020). *OECD Labour Force Statistics 2020*. OECD. https://doi.org/10.1787/5842cc7f-en

Pareja-Eastaway, M., & Sánchez-Martínez, T. (2017). Social housing in Spain: what role does the private rented market play? *Journal of Housing and the Built Environment*, *32*(2), 377–395. https://doi.org/10.1007/s10901-016-9513-6

Powell, M., Yörük, E., & Bargu, A. (2020). Thirty years of the Three Worlds of Welfare Capitalism: A review of reviews. *Social Policy and Administration*, *54*(1), 60–87. https://doi.org/10.1111/spol.12510

Rosenfeld, D. O. (2017a). *Analysis of interpretations of the term affordable housing in the EU Urban Agenda Partnership for Housing, a briefing note prepared for DG REGIO and the EU Urban Agenda Partnership for Housing*. DG regio, European Comission. files/533/Rosenfeld - 2017 - Interpreting the term 'affordable housing' in the .pdf

Rosenfeld, D. O. (2017b). *Interpreting the term 'affordable housing' in the Housing Partnership*. 40. files/531/Rosenfeld - 2017 - Interpreting the term 'affordable housing' in the .pdf

SHICC. (2020). *Urban Community Land Trust in Europe*.

Siggelkow, N. (2007). Persuasion With Case Studies. *Academy of Management Journal*, *50*, 20–24. https://doi.org/10.5465/AMJ.2007.24160882

Simonnet, V., & Liquet, V. (2021). OFS/BRS : l'accession par la solidarité. *Actualités Habitat Nº1139*, 14–15. https://www.union-habitat.org/actualites/ofs/brs-l-accession-par-la-solidarite#content

Swann, R., Gottschalk, S., Hansch, E., & Webster, E. (1972). *The Community Land Trust. A Guide to a New Model for Land Tenure in America* (2007 reprint). Center for Community Economic Development. https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/book-swann-et-al.pdf

Trifiletti, R. (1999). SOUTHERN EUROPEAN WELFARE REGIMES AND THE WORSENINGPOSITION OF WOMEN. *Journal of European Social Policy*, *9*(1), 49–64.

Tummers, L. (2016). The re-emergence of self-managed co-housing in Europe: A critical review of co-housing research. *Urban Studies*, *53*(10), 2023–2040. https://doi.org/10.1177/0042098015586696

Yin, R. K. (2014). *Case study research: design and methods*.

A Socio-spatial Approach to Hallenwohnen:
A Case Study of Zollhaus Project in Zurich, Switzerland

Maryam Khatibi

PhD Candidate, Politecnico di Milano, Department of Architecture and Urban Studies, DAStU,
Piazza Leonardo da Vinci 26, Building 29, 20133 Milano, Italy.
e-mail: maryam.khatibi@polimi.it

Abstract

The study explores Hallenwohnen (hall dwelling) as a part of the Zollhaus settlement, which is the follow-up project by Kalkbreite housing cooperative and has been in function from January 2021 in Zurich, Switzerland. Hallenwohnen, however, has been previously tested in the former semi-legal projects on the Labitzke site and hohlzke in Zurich. Hallenwohnen is a large open hall with a basic structure and mobile residential towers (roll spaces) as the core concept, which offers an affordable, self-managed/self-build, collective co-living and co-working arrangement. The objective of the study has been to investigate this pioneer hall cohousing project through available literature, site visits, spatial analysis and semi-structured interviews with some residents, in order to contribute to the research field of collaborative housing. The results show that Hallenwohnen has created not only an urban setting with potentials for the social innovation in housing, but an urban laboratory for spatial, social and cultural cohabitation.

Keywords: Cooperative housing, Hall cohousing, Collaborative housing, Self-build space, Social innovation.

Introduction

Historically, the question of communal habitation has been influential in shaping the cooperative vision. Cooperation, however, as a driving force of life has been present from the ancient times in being and living, before getting introduced as a movement in housing. In the midst of such collective practices, creative communal solutions have shaped different housing models with a different sense of citizenship for the urban dwellers. In this manner, less-known forms of collective living are transforming the process of contemporary housing production and urban planning, in which citizens themselves are the community and dwelling designers. In fact, Henri Lefebvre in *Le Droit à la ville* (1968) proposed the concept; the right to the city, by which citizens and organizations are called to "reclaim the city as a co-created space" (Salama 2019, p. 128). This article discusses such forms of collective housing, in which individual and communal needs are negotiated together, alternative spatial arrangement is rethought, and communal cohabitation is being practiced in an urban context. Hallenwohen in Zurich, Switzerland as a community-led cooperative housing setting is central to this essay; while, the first part of the discussion looks into the origins of the cooperative movement, the second part focuses on housing cooperative movement in Switzerland. Organized chronologically, the reconsideration of the Swiss cooperative history serves as a discussion of the works that have proven to stand beyond its time. Thereupon, Hallenwohnen in Zollhaus project is investigated through a socio-spatial lens by interviews with some residents and spatial analysis. The face to face semi-structured interviews are carried out during the second lockdown of Covid-19 pandemic in March 2021 in Switzerland, hence, restrictions limited the number of interviewees. On the other hand, the researcher as a free floater rented out a working desk in Hallenwohnen and observed the socio-spatial dynamics of the studied case. Finally, the argumentations of the study provide seeds for further research and the concluding remarks.

An Overview of Origins of Cooperative Movement

The concept of cooperation is not new and is traced back to the beginning of the nineteenth century in the towns of the industrial age with the housing and communal facilities in Europe. Cooperatives, therefore, are organizations that are created to empower people to cooperate in some stages of their lives. Cooperative movement emerged in the early 1800s in Britain and Europe with the goal to eliminate poverty in response to the extreme hardships of the people, who were facing the wealth accumulated in hands of industrialists and aristocracy (Craig, 1993). In this manner, cooperatives emerged in European countries not only as a response to housing challenges of the rough years of industrialization (LaFond and Tsvetkova, 2017), but as "a reaction to the economic and social problems confronting urban workers and small farmers" (Hawley 2019, p. 101).The early nineteenth century British models known as the "Owenites and the Rochdale Pioneers" actually have inspired the co-op movement worldwide (Ibid, p. 98). In the first stage of development from 1817 to 1840, the cooperative vision was seen as "the gateway to the millennium", when an industrialist, Robert Owen in Great Britain gave a "Report on the Poor", which made the history of cooperatives (Craig 1993, pp. 24-6). Owen proposed a collective condition that people could work and live together as an opportunity for "self-rehabilitation" and "self-support", in which children were to attend school and not to work (Ibid). The Industrial Village of Robert Owen in New Lanark, Scotland (1818), which is still functioning today, is considered as the origin of a cooperative community (Kienbaum 2015, p. 81; Droste and Knorr-Siedow, 2012). Robert Owen's model of cooperative living with a design known as "New Harmony" (Craig 1993, p. 26; Schmid et al. 2019, p. 47) envisioned dense housing structures with additional facilities for communal use in order to improve and support living conditions of the families of the workers (Figure 1). It is discussed that these early models were mainly based on the humanitarian intentions of an individual such as Robert Owen as one of the fathers of cooperation (Hawley 2019, p. 104), rather than on the self-organization of the users (Droste and Knorr-Siedow, 2012). While, the cooperative village of Owen was not run by the residents and workers, it was a way to control the workers (Hawley 2019, pp. 104-6): "His planned milling societies would essentially act as workhouses, where the poor would live in an environment that would allow them to become 'useful', 'industrious', 'rational', self-disciplined, and temperate". Owen was assisted by "numerous, mostly middle-class leaders motivated by religious convictions, general reform sympathies, and fear of more radical movements" (Macpherson 1979, p.3).

Fig. 1: A view of New Lanark with two school buildings and five buildings of cotton operations, ca. 1819
(Source: courtesy of curator of the Robert Owen Museum, Newtown, Wales)[1]

---

[1] Available at: https://faculty.evansville.edu/ck6/bstud/nlanark.html [Accessed: 10.06.21].

Sharing Owenites characteristics, Charles Fourier as another father of cooperation, known for his feminism ideas envisioned the Phalanstère concept as a highly communal space ensuring equality between men and women. However, it would be realized "from some wealthy philanthropist who might be persuaded to adopt and propagate his system", rather than the poor by revolutionary ways, which would "disturb the established order" (Hawley 2019, pp. 106-7; Fourier 1971, p. 66; Lichtheim 1969, p. 34). Although Owen and Fourier are viewed as the fathers of modern cooperation and their visions inspired many, the successful implementation of communities were not realized (Craig, 1993). Hawley (2019) argues, then, that the Owen and Fourier's humanitarian experiments could not be viewed responsible "for associating socialism with philanthropy" (Lichtheim 1969, p. 36), however, "their retreat from politics" made them utopian (Kasmir 1996, p. 20–21). Moreover, in this phase of cooperative movement, Owen's and Fourier's comprehensive[2] cooperation were followed by Dr. William King in Brighton, England and Michel Derrion of Lyon in France by establishing segmental (service)[3] cooperation (Craig, 1993).

In the second stage of cooperative movement from 1844 to World war I, the Rochdale Society of Equitable Pioneers with ten guiding rules appeared (Ibid). Influenced by Owen and King, Rochdale's Pioneers sat up a cooperative store in Rochdale, which became a model throughout the world. In 1859, Familistère de Guise by Jean-Baptiste André Godin got inspired from Fourier's design, in which hygienic housing was provided near his factory for his workers (Kries et al., 2017). Godin transferred Familistère and its factory to his workers by a cooperative in 1880. Soon later, however, the cooperative dissolved and the factory got privatized (Schmid et al., 2019). In 1895 the International Cooperative Alliance (ICA) was established in order to coordinate the activities of affiliated cooperatives worldwide. Craig (1993) argues that in this stage consumer cooperatives were dominant compared to worker and housing cooperatives and class analysis was not seemed to be relevant to the cooperative theorists. Recent research, on the other hand, has recognized that two other Owenites; William Thompson; an Irish social reformer, and Anna Wheeler; an Irish born British radical feminist, considered a more "class-oriented use-value of co-ops", which might have motivated the co-op movement (Kelly, 2015; Ranis, 2016; Hawley 2019, p. 108).

In the third stage of cooperative movement from World War I to the 1950s, comprehensive cooperatives with a different impact from the segmental cooperatives appeared (Craig, 1993). This appeared in the Kibbutz (Kvutza) cooperation, first established in Dagania Aleph in 1911, Israel (Ibid, pp. 34-6). In Dagania Aleph the new ways of working and living together were experienced and the nursery, the laundry, the kitchen and dining space became communal. In this way, the Dagania Aleph's community grew from their practical experience and not from a model developed by a social planner (Ibid) (Figure 2). Craig (1993, p. 113) discusses that the 230 kibbutzim in Israel with 90,000 members have achieved the Rochdale Pioneers' goals. "The *kibbutzim* combine co-operative ownership of the property (except personal belongings), purchasing, production, marketing, consumption (including housing), rearing and education of children, and cultural, recreational and other services" (Ibid, p. 113). In the fourth stage from the 1950s to the 1970s, cooperatives became popular and were supported by governments, the United Nations agencies, church missionaries, and volunteers, which in turn resulted in the growth of cooperatives in general. The current era of cooperative movement, starting from the 1980s, has been developed by "the use of participatory action research and community development techniques", which puts emphasis on community involvement (Ibid, p. 39).

---

[2] Comprehensive cooperation involves people cooperating with each other on a day to day basis, by which members participate in common decisions and from this process a sense of community emerges (Craig 1993, p. 107).
[3] Service cooperatives are a form of segmental cooperation, in which members cooperate only in one area, such as in procurement of food (Craig 1993, p. 28).

Fig. 2: School building, Dagania Aleph, 1930
(Source: http://www.gelsenzentrum.de/joseph_baratz_dagania_1931.htm, [Accessed: 11.06.21])

By exploring the cooperative movement from its emergence in 1800s (Figure 3) and by acknowledging that both the failure and success of the approach have provided the spark for the further development, this essay focuses on the cooperative development in Switzerland and housing cooperatives in Zurich.
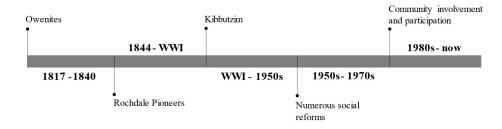

Fig. 3: Historical Timeline of Cooperative Movement (Source: Author, based on Craig, 1993 and Hawley, 2019)

Cooperative Development in Switzerland

At the outset, the cooperative spirit, which is deeply rooted in Swiss culture, has been a means to deal with collective challenges such as the difficult agrarian conditions of mountains and the economic instability of the industrial revolution (Hofer, 2019). Basically, the agrarian cooperative model has established to accommodate the basic needs of an urbanizing society in Switzerland after the foundation of Swiss modern nation state in 1848 and the rapid industrialization in the second half of the nineteenth century. Self-help organizations were involved in distribution of food in both rural and urban areas in Switzerland in the mid nineteenth century (Degen, 2017). For example, in 1839 in Schwanden in the rural area of Glarus canton, a teacher started an Aktienbäckerei (a joint-stock bakery) to supply healthy and affordable bread (Ibid). The European cooperative movement became stablished by 1880 among the farm population and soon developed in Austria, Switzerland, and Italy (Craig, 1993). Consequently during the 1880s, agricultural and economic crises led to the development of agricultural cooperatives in Switzerland, Denmark, Iceland and Ireland. In Switzerland, cooperatives initiated to combine the purchase of artificial fertilizers, seeds, feed and implements (Jaggi, 1974). The Union of Agricultural Cooperatives of East Switzerland was formed in 1886 as the first central organization, which was followed by the organizations for milk and livestock producers and the rural credit cooperatives (Craig, 1993). Accordingly, Hofer (2019, p. 024) puts forward that:

"The official name of Switzerland, Schweizerische Eidgenossenschaft', contains the word 'cooperative' in combination with 'oath'. This emphasizes the self-conception that the nation is founded on the free will of its citizens (then only men) to bridge cultural and language differences. The territory has no geographic logic, no kings, no ethnic homogeneity. These somehow mythical and historically euphemistic roots found very pragmatic organizational forms in an alpine rural society. Agrarian cooperation was a means to survive harsh conditions, arrange transhumance, and distribute meat and cheese in autumn".

In 1863, Schwanden's Arbeiterverein (Workers' Association) was founded for food business based on Rochdale's model, which was supported by a textile industrialist Jean Jenny-Ryffel, who had seen England's cooperative system on the business trips (Degen, 2017). Later, this sat a standard by which the cooperative movement in Switzerland adopted widely (Figure 4). Today, cooperatives play an important role in Switzerland's retail market, especially the food sector, Coop and Migros operate as cooperatives and together they hold over a third of the market value (Ibid).

Fig. 4: Shop of the Allgemeiner Consumverein (communal consumer association) in Basel, c. 1890, Archives of Coop Switzerland (Source: Degen 2017, p. 629)

Housing Cooperatives in Zurich, Switzerland

Recently, housing cooperatives have received a strong support in Zurich, Switzerland, and a quarter of rented housing units in the city is now administrated by not-for-profit housing providers, a proportion that is set to rise to a third by 2050 (Table 1). Most housing cooperatives in Zurich support resident/citizen-led projects that aim to decommodify housing from market forces and practice the collective, community management and ownership, while removing those who extract profits.

Table 1. Housing of Cooperatives in Zurich City (Source: BWO[4], 2017)

Cooperatives	125
Co-op flats	43,800
Total flats in Zurich	223.000
Market share	19.6 %

---

[4] https://www.bwo.admin.ch/ [Accessed: 20.06.21].

In 1907, a law required the city to insure social housing and by placing the cooperatives at the lead of housing policy, Zurich cooperatives were born (Hofer, 2019). While at first cooperative model consisted of occupational cooperatives such as railway workers and civil servants, in 1916 the general housing cooperative (Allgemeine Baugenossenschaft Zürich, ABZ) as the largest housing cooperative in Switzerland was established. Meantime, the city of Zurich realized that assisting the cooperatives by facilitating their organization can be more efficient than investing directly in the construction of social housing (Kurz, 2017a). This realization has fostered the specific relation between the city and cooperatives up to the current time (Ibid). To this aim, the city of Zurich helps the cooperatives to have access to bank loans from its pension funds and when a municipal property is sold, it is first presented to the cooperatives. Subsequently, in 1934, the second incorporation of poor villages around the city of Zurich, provided the land for the advancement of the cooperative housing stock in major garden-city estates (Hofer, 2019). According to these provisions, housing cooperatives produced housing complexes from 1920s to 1960s. This housing production, which was based on Fordist model, advocated by modernism and disconnected housing from work (Ibid). Accordingly, women were staying home to raise kids in low-density developments that were built among greenery and men were working in factories in other parts of the town (Figure 5).

Fig. 5: Schörliweg neighborhood in the 1950s, Zurich
(Source: Baugeschichtliches Archiv Zürich, Kunst + Architektur in der Schweiz[5], 2016, p. 57)

However, the standardized housing for all, in that period, "engendered social homogeneity and no functional mix in cities", which was developed in Zurich and around Europe (Hofer 2019, p. 026). Although, housing demands were met by this cooperative practice and a green belt was created around Zurich, this model ceased to produce housing from the late 1960s (Ibid). After the 1970s, cooperatives built almost nothing for twenty years, since it was marked as a time of renovation rather than construction, which in turn provoked the housing crisis of the late 1990s in Zurich (Boudet, 2017). Deindustrialization and mass mobilization made a high percentage of the urban population to move to the outskirts of the urban area. Similar to many Western cities, the upper middle class moved to rural areas. In this manner, the city of Zurich lost almost 20% of its inhabitants (Hofer, 2019). As the result, a large-scale housing sprawl due to the new initiatives in rural areas generated in Switzerland (Ibid). Zurich city in the 1990s turned to be a hotspot for social problems (Kurz, 2015); while, young families were leaving Zurich, an aging population and social problems were dominating the city, converting the city to an "A-Stadt": "Stadt der Alten, Armen, Arbeitslosen, Asylbewerber" (the city of the old, poor, unemployed and asylum seekers) (Kurz 2017b, p. 15).

---

[5] https://www.e-periodica.ch/cntmng?pid=kas-002:2016:67::393 [Accessed: 18.06.21].

At the same time that conservative and institutionalized action called for a critical reconstruction of the urban area, major initiatives developed for the preservation of urbanity (Hofer, 2019). Thereupon, the Kreuzberg district in Berlin, where empty buildings were squatted by members of an alternative scene, became the symbol of revitalizing the entire neighborhood. In Zurich, large-scale squatting, for example, in the Wohlgroth quarter and in the Bäcki have been viewed as "non-hierarchical spaces", where "collective forms of living and working were tested" (Kurz 2017b, p. 17) (Figure 6). In Zurich, however, the similar movement of the rebellions to promote new forms of urban life was shattered in the early 1980s. On the other hand, in 1986 when a progressive administration replaced the conservative one, call for a better quality of life in Zurich by better planning the former industrial zones was announced (Hofer, 2019). Meanwhile, abandoned industrial districts became the focus of concern about the future of the city. The question of what had to replace the large terrains left behind the industry, needed to be addressed (Boudet, 2017).

Fig. 6: Wohlgroth, Zurich (Source: Tages-Anzeiger[6], 2018)

This condition engaged the participation of the leading rebellious youth who had called for free space and alternative urban projects in the previous decade. They began to consider the housing cooperatives as an instrument to achieve their utopian vision (Davidovici, 2017). The principles of housing cooperatives were reactivated with the aim to offer a suitable housing legal form to reassure creating quality housing (Hofer, 2019). For those citizens, who were engaged in the analysis of the modern society, the cooperatives concept turned out to become a solution to the post-industrial society. In this manner, in the 1980s, several new cooperatives were founded such as Wogeno (a cooperative for self-managed houses), PWG foundation (a foundation for preserving affordable residential and business spaces), and Karthago (a cooperative that was formed after a squatting incident), in order to find new strategies to deal with the post-modern society (Hofer, 2019). Taking into account that between 1962 and 1990, the population of Zurich dropped from 440,000 to 360,000 inhabitants, in the late 1990s, a new center-left majority initiated a ten-year program of 10'000 flats with the goal of bringing back the families to the city (Boudet, 2017). As the result of lively competitions, a whole series of architecturally valuable housing got initiated in Zurich. In September 2000, the weekly magazine of the Tages-Anzeiger's headline was published as: "Run of the mill: Zurich's architectural misery" (Wirz and Wieser 2017, p. 13).

After years of discussion and crisis, concerning the real estate sector and its stagnation in Zurich, new opportunities for housing cooperatives launched. A corporation with a weapons and a real estate division, Oerlikon Bührle, which had dealt with a squatter problem on the Wohlgroth site in Zurich, offered the young Kraftwerk1 cooperative a property on an industrial wasteland (Hofer, 2019). In 2001, the housing cooperative Kraftwerk1, developed four detached buildings in Hardturm quarter in

---

[6] Available at: https://blog.tagesanzeiger.ch/zoom/index.php/109097/nicht-alles-wurde-gut/ [Accessed: 10.03.21].

Zurich-West; an area that is close to the historic industrial zone being home to textile and machinery producers since 1805. Residential and work concepts, ecological construction methods, and leasing and financing models were developed for the project (Ibid). By all accounts, although housing cooperatives experienced a decline in the 1960s, after the turn of the millennium, replacement construction with densely packed buildings in order to improve the social housing status was launched by the Zurich city and the younger generation of housing cooperatives (Figure 7).
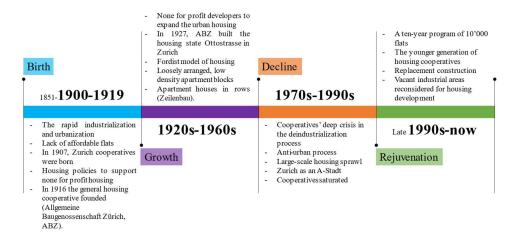
Fig. 7: Timeline infographic of housing cooperatives of Zurich, highlighting major phases (Source: Author, based on Boudet, 2017 and Hofer, 2019)

In his book *bolo'bolo* (1983), the author p.m. (Hans Widmer) envisioned a social utopia in which communal forms of living and working would be possible even on a large scale (Kurz, 2015). Today, housing cooperative projects must have a certain size to change the urban area and district, and must provide an interior spatial organization to enable various provisions such as gardens, infrastructures, both residential and working spaces, must offer living spaces for the neediest by reserving housing for the socially disadvantaged and also the middle class, and must be in accordance with the vision of the 2000-watt-society[7] of Zurich. The creative use of ground floor spaces, for instance, is of particular importance. Due to the multiplication of the projects, every new project of housing cooperatives has been an opportunity to analyze a new principle, trying to respond to the complex challenges of the society by different residential concepts. By 2050 in Zurich, the share of housing of cooperative housing will be raised to 33% from 20%, which makes the quantitative and, nonetheless, qualitative growth of a post-industrial society and more sustainable forms of urban living, possible (Hofer, 2019). These have been reviewed, the collective living practice in Kraftwerk1 shall, therefore, be considered as the inspiration for more novel ambitious cooperative developments such as Kraftwerk2 from 2012, Kalkbreite from 2014, Mehr als wohnen from 2015 and Zollhaus from 2021.

Zollhaus Complex, Zurich

The plot of land of the Zollhaus complex is centrally located in Kreis (district) 5 of Zurich, which belonged to SBB[8] and is sandwiched between the train track and Zollstrasee at the Langstrasse underpass. Zurich city has twelve urban districts, which are called Stadtkreise and district 5 is known

---

[7] the vision of a 2000-watt society targets reducing the current 6000 watt per capita energy consumption in Switzerland by two-thirds by 2050 (Hugentobler, 2017).
[8] Schweizerische Bundesbahnen (Swiss Federal Railways)

as Industriequartier (industrial quarter), located between the Limmat river and the train tracks (Figure 8).
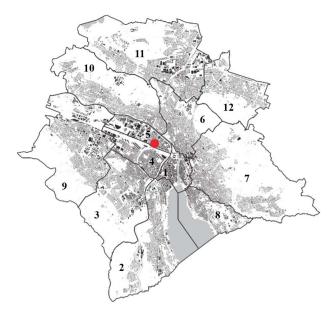

Fig. 8: Location of the Zollhaus complex and twelve districts of Zurich (Map available at Rodriguez et al., 2015, p.10; modified by Author)

Fig. 9: Zollhaus Complex, Zurich (Source: Author)

In October 2012, the plot of land got available for sale among housing cooperatives of Zurich and Kalkbreite cooperative could purchase it in 2013 (Kalkbreite website)[9]. In 2013, thereupon, the innovative concepts have been discussed with working groups and the future users, upon which the criteria for the architectural competition based on *housing*, *community*, *commerce*, *culture*, *outdoor space and neighborhood* and *sustainability* were developed (Ibid). The winning project in 2015 was *Esperanto* by the Zurich-based architectural office Enzmann Fischer Partner AG; which followed by the pre-project processes in 2016 and the building permit was obtained in 2017, led the path to construction from 2018 to October 2020 (Ibid). The Zollhaus complex (Figure 9) as a project with a very high degree diversity of use, which accommodates 175 residents and many jobs, has three main

---

[9] Das Zollhaus, Kalkbreite Cooperative, Available at: https://www.kalkbreite.net/zollhaus/ [Accessed from 01.04.21-23.06.21]

buildings (Table 2). Building (A), Z 121; the building of culture (Küpfer 2017, p.9) with a core forum as a diverse usable space, serves as the main entrance at the corner of Zoll-/Langstrasse, which consists of a cultural restaurant and café, a theatre, a guesthouse, Flex rooms and boxes, reception, an inner courtyard with the hall dwellings, residential flats, and the roof terrace with urban gardening areas. Building (B), Z 115/117, as a mixed-use building (Küpfer, 2017) also benefits from spaces such as shops, offices, Flex rooms, a common kitchen and a communal office, a common washing room, residential flats, and the roof terrace. Building (C), Z 111, as a future-oriented building (Ibid) is located at the corner of the plot and is planned for a kindergarten and offices with a roof garden for the kids.

Table 2. The Zollhaus Complex, Zurich (Source: Author, based on online data at Kalkbreite website)

Year of completion:	2020
Site area:	5,000 m^2
Floor area:	15,470 m^2
Functions and spaces:	4,864 m^2 – of flexibly useable dwelling and hall dwelling, 46 flats: 11 x 1.5-room flats; 9 x 2.5-room flats; 2 x 3.5-room flats; 7 x 4.5-room flats; 7 x 5.5-room flats; 6 x 6.5-room flats; 2 x 7.5-room flats; 1 x 8.5-room flats; 1 x 9.5-room flats 4 hall-concept apartment accommodations 6 joker rooms 400 m^2 – of communal facilities 3,240 m^2 – of communal roof terraces 3,470 m^2 – of commercial and cultural spaces
Uses:	Mixed-use housing, commercial and cultural development
Construction period:	3 years
Environmental requirement:	2000-Watt-society, Minergie-P-ECO-Standard[10]

Hallenwohnen (hall dwelling) in Zollhaus Complex, Zurich

Kalkbreite cooperative engages in innovative forms of living and working in housing. In the Zollhaus project, the follow-up project of Kalkbreite cooperative, Hallenwohnen as a new hall-concept apartment has been developed. For Hallenwohnen, which has been in function from January 2021, a basic structure (sanitary cells as well as basic kitchen installations) is provided in almost 600 m^2 (the big hall and 3 smaller halls) on the third floor, with the rest to be built by the future inhabitants. Other communal residential spaces have been also realized in Zollhaus complex such as three communal housing spaces for elderly[11]; one shared apartment for seven persons and two apartments each for three persons in the third phase of their lives, however, the focus of this part of essay is the communal space of the large hall dwelling. Hallenwohnen accommodates 27 residents (20 adults and 7 kids), while the other floors in Zollhaus project are dedicated to various communal, housing, cultural and commercial functions. In Hallenwohnen, a large hall with 275 m^2 for at least eleven persons and three smaller halls with 327 m^2 for seven, five, and two persons have been developed (Kalkbreite website).

---

[10] See https://www.minergie.ch/de/zertifizieren/eco/
[11] See https://www.age-stiftung.ch/foerderprojekt/gemeinschaftliches-wohnen-im-alter-im-zollhaus-zuerich/ [Accessed: 10.06.21].

There are standard apartments of various layouts and roof-top extensions, flexible rooms (Flex), boxes[12], and joker[13] rooms combined in the Zollhaus project. Hallenwohnen, however, is a self-build residential/working communal space, which is complemented by spaces like a central courtyard, a workshop, communal laundry and a community storage. Hallenwohnen with a ceiling height of 4.15 m has, then, provided a communal living, working, and cultural space (Figure 10).

Spatial Features

Hallenwohnen is the first legal hall cohousing project in Switzerland, which is legalized by Kalkbreite housing cooperative. The large dwelling hall as the core of Hallenwohnen with mobile residential towers (roll spaces) provide a space of 275 m^2, of which 120 m^2 is allocated to private use and 155 m^2 for the collective spaces (Personal contact)[14]. The large hall is connected to an inner courtyard and the other smaller halls and spaces. As the population and housing demands have a growing trend in Zurich, the solution as an strategic approach has been the "inward densification", meaning that Zurich can only grow inwards (Gmür 2017, p. 27). In Hallenwohnen, therefore, a reduction per capita floor space in living area per resident has been considered, which is an endeavor to the intensification strategy and to reach the goal of the 2000-watt-society. An average of 9 square meters per person as "Wohnturm-Äquivalenten/WTÄ" (Residential tower equivalents) for the reduction of the consumption of private surface area, compared to Swiss average of 45 square meters is allocated in Hallenwohen (Personal contact, see: Table 3; Figs. 11-17).

Fig. 10: Site plan, section of building A and Hallenwohnen's plan, Zollhaus complex in Zurich (Source: Author based on https://www.enzmannfischer.ch/ [Accessed: 01.06.21])

---

[12] Boxes are unallocated rooms, which are available throughout the building and their usage is determined by the inhabitants.
[13] The joker rooms are assigned to housing units for a limited period of time.
[14] Personal contact with Zurwollke Association: Zurwollke - HallenWohnKultur – zollhaus (2020). *Nutzungskonzept/Betriebsreglement,* (unpublished document).

Because of the modularity and mobility of the residential roll spaces, the towers can be used flexibly depending on the occupancy needs or event organizations. Further, the private space is saved to develop communal spaces in Zollhaus project. Collective infrastructures such as the inner adjacent courtyard (100 m^2), one workshop's space (40 m^2), four communal storage spaces (26 m^2), the collective kitchen, foyer, laundromat, box rooms, and roof terraces can be used for free by users of the hall dwelling. Moreover, a guestroom, joker rooms, bicycle parking spaces, and flex rooms can be rented by residents.

Fig. 11: Entrance door to the inner courtyard; Fig 12: Interior space of the large hall; Figs. 13 and 17: Shared kitchen; Figs. 14 and 15: Two of self-build towers; Fig. 16: A working space for free floaters (Source: Author)

Table 3. The self-build facilities in the large hall-concept dwelling, Hallenwohnen in Zollhaus project, Zurich (Source: Author, based on personal contact)

Type	Floor space	Users' number	WTÄ
Residential tower (mobile)	9 m^2 (two story: 18 m^2)	7	1
Living studio (fixed)	9 m^2 (one story: 9 m^2)	2	1/2
Open atelier	4.5 m^2 (shared 9-18 m^2)	4	1/4
Free floating	Available free spaces	6	1/6

Social Features

To respond to the various contemporary ways of life, new collective forms of living that accommodate multiple and changing lifestyles and households have been developed by younger generations of housing cooperatives in Zurich. Hallenwohnen is characterized by collective, self-determined living and working spaces, while diversity and solidarity among residents is an enrichment. An association named zurwollke, which is the further development of the hall dwelling on the Labitzke[15] site, forms the self-governed community of the large hall in Hallenwohnen (Personal contact, 2021; Küpfer, 2017). From 2014 to 2018, the hall dwelling continued in Hohlzke[16] project in Zurich, where the concept of roll spaces, communal living and working were further tested. In this manner, zurwollke association in Hallenwohnen has created the space for jointly organized life, artistic and cultural work as well as for occasional public events.

Each WTÄ usually consists of individual residents, families with different life models, artists and infrastructure users, whose members are jointly responsible for the common good and contribute to the administration, expansion and maintenance of the premises and the community. Based on communication and weekly meetings, challenges and issues are discussed collectively among the residents of Hallenwohnen (Interview with a resident[17], 2021):

> "I like that Kalkbreite started the process of getting the people involved and the people who are living here get to meet each other and get to decide things together I enjoy being in contact with others and have opportunities. It is like a culture of discussion".

In Hallenwohnen, the household appliances and tools are shared among the residents and the sharing of space and resources add a sustainable value to the communal life practice (Fig. 18) (Interview with a resident, 2021):

> "We share food and stuff. We think here that you live in a house, but you are at work all day and then your house is empty, then you go back to your house and then your work place is empty. So, to actually get the two together is a really great idea and sustainable. Also, working material that one uses like expensive construction materials for windows and doors, we apply used materials [in making roll spaces]. We have great experiences of finding used material and things for cheap and free".

Fig. 18: Shared kitchen utensils in Hallenwohnen, Zurich (Source: Author)

---

[15] The former Labitzke paint factory in Altstetten, Zurich was a social laboratory for new forms of living together from 1990s until its eviction in summer 2014 (Bärmann, 2020).
[16] https://hohlzke.org/
[17] Face-to-face recorded interviews with several residents of the large hall at Hallenwohnen were carried out during March 2021.

Hallenwohnen in Zollhaus project has provided a new form of cohabitation with new living and working arrangements, where the approach is self-build and self-determined and is supported by the community members. One of the interviewees puts forward that (Interview with a resident, 2021):

> "In our case, here, the concept is very strong. The people have lived with this concept for a while and developed it. It took them a long journey. This concept of hallenwohnen is so strong that it has adapted to the space here. The concept is stronger than the whole space of the hall. The concept is so strong that the architecture is secondary. The approach is to really self-build. Community is more important than the architecture. We really create space here and it is in addition to our community, which is an extra value".

Self-build and self-managed dwelling towers are fostered by participation and collective discussion among the hall-dwelling members, which in turn is the goal of housing cooperatives in Switzerland. In this regard, Hofer (2019, p. 034) points out that the new housing cooperatives are based on the principle of participation in Zurich:

> "Their motto is 'do, develop, participate, share', in order to create a rich and self-managed life. Group dynamics are essential, since 'when we dream alone it is only a dream, but when many dream together it is the beginning of a new reality'".

Discussions and Conclusion

It is highlighted that the biggest contribution of housing cooperatives in Zurich is in terms of the social aspect (Interview with Dr. Hugentobler[18]). In Zurich, where the housing market has been tight for many years, the most important contribution of housing cooperatives has been to offer affordable housing and even beyond that experimenting with new forms of housing such as Hallenwohnen, which is the newest one in the cohousing culture (Ibid). On the other hand, Thörn et al. (2020, pp. 210-212) debate on the "middle-class phenomenon" and struggles and difficulties for making cohousing inclusive in the European context for current sustainable urban development discourse, where the practice "can even contribute to processes of gentrification, as groups that are relatively strong in economic and cultural capital displace weaker groups". Accordingly, LaFond and Tsvetkova (2017, p. 12) discuss that:

> A main question to be investigated today is to what extent community-based housing can be accessible to diverse social groups, and not only to well-educated, middle-class families.

Nüssli and Schmid (2016, p. 686), argue that in the past decade the inner-city of Zurich has encountered an extreme shortage of affordable housing for low- and middle-income people, due to its extreme gentrification and commodification. The strategic approach as the "urban intensification", however, has created another change in the social combination of some areas of Zurich as "exclusion" (Schmid 2018, pp. 108-110; Nüssli and Schmid 2016, p. 697). For instance, While housing prices of Zurich North are lower than the inner-city areas, which make them appropriate for middle-class housing, they stay high for low-income groups, who are displaced gradually in more peripheral places (Ibid). Housing cooperative projects, though, as the new urban pieces of Zurich, proclaim a dual focus of affordable social housing and a blueprint of the sustainable urban planning. Accordingly, Hugentobler explains that (Interview, 2021):

---

[18] Personal online interview on 17.03.2021 with Dr. Margrit Hugentobler.

"I think one of the problems that politically the cooperatives are accused of, is that they are providing housing for the middle class. In a way, that is true but it is also true that they provide housing for young couples or individuals, which is affordable. These people would have much bigger problems without housing cooperatives to find descent housing. One aspect is that it is difficult to find housing for migrants who come from other cultures or who are not highly qualified or not relatively well-off, like refugees. (There is also discrimination in a way going on in general. I am not talking about housing cooperatives here but normal homeowners). There is a foundation that I am a president for many years, this foundation has existed for 25 years: domicil[19]. We play an intermediate role between households that are living in overcrowded housing or do not find any apartment or have to move out to a very old house […] and every year, we are able to find about 150 apartments for this population groups. […] For example, from the beginning in Mehr als wohnen [cooperative project], they said we reserve 8 apartments for your families and in Kalkbreite [cooperative project] maybe 4 to 6 apartments, so we were able to send families.

However, if you are relatively well-off and maybe you have moved to a cooperative housing, 20 years ago, when you had a very little money, and 20 years later maybe you will be middle class people. Some politicians in Zurich say housing cooperatives provide housing for middle class people, but you cannot obviously tell residents to leave that house because now you have more money".

Furthermore, the alternative way of consuming resources by the principle of sharing, as a sustainable approach, is practiced in Hallenwohnen. As the result, hall cohousing has created a platform of change in social relations among its residents; while, they co-create and co-administrate their dwelling space, sharing of resources leads to the possibilities for social innovation in housing. Accordingly, Thörn points out that (Interview with Prof. Thörn[20], 2021):

"Considering the climate crisis and the growing social inequalities, there is no other way I think for the future than sharing things and distribute things more equally and then cohousing as an experiment has a lot to offer. […] While, it is very important […] to emphasize that we need to think about solutions to make it an affordable alternative. […] Otherwise, it only will be another gated dimension of the housing market for well-off middle class that can afford this. […] The ideal situation is where you can form not only a cohousing group but also a self-build group to build your own house".

Habraken (1972, pp. 17 and 75), furthermore, has indicated that "the dwelling should enable us to perform certain actions ourselves" in order to become empowered towards "new social relations, new dwelling forms, [and] new cities". From the beginning of the hall cohousing in Hallenwohnen, the intentions of the residents have been: a collective shared dwelling practice, connection to cultural events, support for the kids' growth in the community for parents, sustainable use of resources, communication and dialogue in the community, affordable living space in the center of city, the culture of living and working together, alternative housing spaces as the self-build and self-determined spaces, access to generous communal spaces of the whole building (Figure 19), and social cohesion in time of a crisis like a pandemic (Interviews with residents). At the moment, however, there are open questions posed particularly in the long term, as the residents might change and how the concept of hall cohousing would be experienced further in future.

---

[19] https://domicilwohnen.ch/
[20] Personal Interview on 22.03.2021 with Prof. Håkan Thörn.

Fig. 19: Communal roof terrace of building A, Zollhaus complex, Zurich (Source: Author)

Fromm and de Jong (2021, p. 182), moreover, argue on the "social renovation" aspect of community-oriented housing as; "the glue of community needs renewal" over time, since new people move out or enter. Fromm highlights that (Interview with Fromm[21], 2021):

> "In collaborative housing, we need to understand that community is not an amenity. The process of community-oriented housing has to be kept fueled in those housing projects, which is about the continuous commitment".

Returning to the origin of cooperatives, although Owen's elaborate concept inspired further communities, it failed a successful implementation (Craig, 1993). It has been argued that the community is an existence that cannot be manufactured but needs to be nurtured; yet, Owen's concentration was on securing a place and physical buildings, rather than giving the priority to the community's requirements (Ibid, p. 27). Beyond the genealogy of the cooperative movement, prewar Europe has seen "Tolstoyan colonies" such as the cooperative community of men and women in Monte Verità in canton Ticino, Switzerland (Kuiper 2013, p. 1). The colony that settled on the hill of Monte Verità in November 1900 was inspired by "Lebensreform"[22] (the Life Reform movement), initiated by seven people including Henri Oedenkoven (a son of an Antwerp industrialist) and Ida Hofmann (a gifted pianist from Germany), who practiced a mutual cooperation during the "Belle Époque[23]" (Ibid, p. 3). By the end of 1901, the colony named itself "Individualistic Cooperativa Monte Verità", while in 1904 its multi-functional Community House opened with a vegetarian restaurant, a library, a music room, a sun terrace, and a game room, and then from 1906, its bakery, Reform health-food store, Reform dressmakers and Reform school were in function. (Ibid, p. 4-10; Figure 20).

---

[21] Personal zoom interview with Dorit Fromm on 14.04.2021.
[22] "The Garden City movement, land reform, colony life and teetotalling, all have been perceived as undercurrents found in [Lebensreform], while vegetarianism, natural medicine, nudism, Reform food, Reform stores, and Reform dressing were at its core" (Kuiper 2010, p. 630).
[23] The Beautiful Era are decades before the Great War in Europe: between 1890-1914 (Kuiper, 2013).

Fig. 20: Cooperative community of Monte Verità in canton Ticino, Switzerland (Image by Author in museum complex of Monte Verità[24])

While the spatial, social, and other dimensions of collaborative housing practice have the innovative potentials for further research and focus (Czischke, et al., 2020), the social and spatial innovative aspect of a communal space can be achieved as the outcome of a successful cooperation among the dynamic social entities. This essay, then, with a point of departure from the early cooperative projects as novel social entities, arrived at Hallenwohnen; a contemporary participatory communal setting, which is located not far from the former cultural squatted quarter, Wohlgroth, in Zurich. Clearly, there is a need for further research on the hall cohousing practice in Hallenwohnen, in order to bring insights from different stakeholders and to analyze the intensive usage of its space in detail. Altogether, it can be concluded that communities, which help themselves in a collaborative manner, learn skills and achieve goals on the long term that they could not be achieved individually but cooperatively.

---

[24] Bianconi P. (1979). *Ticino com'era*. Locarno, A. Dadò. Book available in museum complex of Monte Verità: https://www.monteverita.org/en/museum-complex/museum-complex

References:

Bärmann D. (2020) *Labitzke Farben: Archäologische Untersuchung einer Stadtutopie*. Zürich, Edition Hochparterre.

Boudet D. (ed) (2017) *New Housing in Zurich: Typologies for a Changing Society*. Zurich, Park Books.

Craig J. G. (1993) *The Nature of Cooperation*. Montreal, Black Rose Books.

Czischke D. Carriou C. and Lang R. (2020) Collaborative Housing in Europe: Conceptualizing the Field, *Housing, Theory and Society*, 37 (1): 1-9, DOI: https://doi.org/10.1080/14036096.2020.1703611

Davidovici I. (2017) "Ideology and Collective Life: Zurich's New Cooperatives", in D Boudet (ed) *New Housing in Zurich, Typologies for a Changing Society*. Zurich, Park Books, pp 203-207.

Degen B. (2017) "Consumer Societies in Switzerland: From Local Self-help Organizations to a Single National Co-operative", in M Hilson, S Neunsinger, G Patmore (eds) *A Global History of Consumer Co-operation since 1850: Movements and Businesses*. Boston, Brill, pp 614-641.

Droste Ch. and Knorr-Siedow Th. (2012) "Politics and Cultures of Community-oriented, Self-organized Housing in Europe – Typologies, Orientation and Motivation", in: Id22: Institute for Creative Sustainability: Experiment City (ed) *CoHousing Cultures: Handbuch für selbstorganisiertes, gemeinschaftliches und nachhaltiges Wohnen*. Berlin, Jovis Verlag.

Fourier Ch. (1971) *Design for Utopia: Selected Writings of Charles Fourier. Vol. 10. Studies in the Libertarian and Utopian Tradition*. New York, Schocken Books.

Fromm D. and de Jong E. (2021) *Cluster Cohousing Revisited.* Berkeley and Rotterdam, Bert Holtkamp Social + Design Press.

Gmür P. (2017) "Housing has and will Always be Needed", in H. Wirz and Ch. Wieser (eds) *Zürcher Wohnungsbau: 1995-2015; Zurich Housing Development: 1995-2015*. Luzern, Quart Verlag, pp. 25-29.

Habraken N. J. (1972) *Supports: an Alternative to Mass Housing*. London, Architectural Press.

Hawley J. (2019) "Housing Co-ops: Citizen Control or Social Service", in J Hawley and D Roussopoulos (eds) *Villages in Cities: Community Land Ownership, Cooperative Housing, and the Milton Parc Story*. Montreal, Black Rose Books, pp. 98-117.

Hofer A. (2019) "Utopian Pragmatism: Grass-roots Urban Movements Rejuvenating the Swiss Housing Cooperative Tradition", in G Ledent, Ch Salembier, D Vanneste, (eds) *Sustainable Dwelling: Between Spatial Polyvalence and Residents' Empowerment*. Brussels-Belgium, Drifosett Printing SA., pp. 023-047.

Hugentobler M. (2017) "Switzerland", in M Pareja-Eastaway and N Winston (eds) *Sustainable Communities and Urban Housing: a Comparative European Perspective*. London, Routledge, Taylor & Francis Group, pp. 203-224.

Jaggi E. (1974) *Agricultural Co-operatives and Associations in Switzerland.* Oxford, The Plunkett Foundation for Co-operative Studies.

Kasmir Sh. (1996) *The Myth of Mondragón: Cooperatives, Politics, and Working-class Life in a Basque Town*. Albany, State university of New York Press.

Kelly L. R. (2015) *William Thompson and Anna Wheeler: Equality and Utilitarianism in the 19th Century*. PhD Thesis, Kingston, ON, Queen's University.

Kienbaum L. (2015) "The Concept of Sharing on the History of Community-oriented Housing", in A Becker, L Kienbaum, K Ring, P Cachola Schmal (eds) *Bauen und Wohnen in Gemeinschaft: Ideen, Prozesse, Architektur: Building and Living in Communities: Ideas, Processes, Architecture*, Basel, Birkhäuser Verlag.

Kries M. Müller M. Niggli D. Ruby A. and Ruby I. (2017) *Together!: the New Architecture of the Collective*. Weil am Rhein, Germany, Berlin, Germany, Vitra Design Museum Ruby Press.

Kuiper Y. B. (2010) "On Monte Verità: Myth And Modernity In The Lebensreform Movement", in J Dijkstra, J Kroesen and Y Kuiper (eds) *Myths, Martyrs, and Modernity: Studies in the History of Religions in Honour of Jan N. Bremmer*. Leiden, Brill, pp. 629–650, DOI: https://doi.org/10.1163/ej.9789004180895.i-704.141

Kuiper Y. B. (2013) "Tolstoyans on a Mountain: From New Practices of Asceticism to the Deconstruction of the Myths of Monte Verità", *Journal of Religion in Europe*, 6 (4): 464–48, DOI: https://doi.org/10.1163/18748929-00604007

Küpfer E. M. (2017) *Kulturgenossenschaft Zollhaus: Ein Genossenschaftlich Getragenes, Partizipatives Gesamt-Kulturkonzept für das Zollhaus (Businessplan)*. Abschlussarbeit Kulturmanagement Praxis, Hochschule Luzern.

Kurz D. (2015) "Import Barcelona", in N. Regusci and X. Bustos (eds) *Import Zurich: Cooperative Housing, New Ways of Inhabiting*. Barcelona, DPR-Barcelona.

Kurz D. (2017a) "City and Cooperatives, a Housing-Policy Symbiosis", in D. Boudet (ed) *New Housing in Zurich, Typologies for a Changing Society*. Zurich, Park Books, pp. 31-41.

Kurz D. (2017b) "Von der Krise zur Blüte: Hintergründe zum besonderen Aufschwung des Zürcher Wohnungsbaus um 2000 = From Crisis to Revival, Background to the Housing Boom in Zurich around 2000", in H. Wirz and Ch. Wieser (eds) *Zürcher Wohnungsbau: 1995-2015; Zurich Housing Development: 1995-2015*. Luzern, Quart Verlag, pp. 14-23.

LaFond M. and Tsvetkova L. (2017) *Cohousing Inclusive: Selbstorganisiertes, Gemeinschaftliches Wohnen für Alle: Self-organized, Community-led Housing for All*. Berlin, Jovis.

Lefebvre H. (1968) *Le Droit à la ville*. Paris, Ed. Anthropos.

Lichtheim G. (1969) *The Origins of Socialism*. London, Weidenfeld and Nicolson.

Macpherson I. (1979) *Each for All: A History of the Cooperative Movement in English Canada: 1900-1945*. Toronto, Macmillan.

Nüssli R. Schmid Ch. (2016) Beyond the Urban–Suburban Divide: Urbanization and the Production of the Urban in Zurich North, *International Journal of Urban and Regional Research*, 40 (3): 679-701. DOI: https://doi.org/10.1111/1468-2427.12390.

P. M. (1983) *Bolo'bolo*. Zürich, Verlag Paranoia City.

Ranis P. (2016) *Cooperatives Confront Capitalism: Challenging the Neo-Liberal Economy*. London, Zed Books.

Rodriguez F. Tschirren U. and Walti B. (2015) *Neubau Wohn- und Gewerbeüberbauung Zollhaus, Zürich-Industrie: Projektwettbewerb im offenen Verfahren, Bericht des Preisgerichts*. Zürich, Amt für Hochbauten.

Salama I. (2019) "Social Production of Habitat: The Emergence of a Paradigm Shift in the Making of Cities", in J Hawley and D Roussopoulos (eds), *Villages in Cities: Community Land Ownership, Cooperative Housing, and the Milton Parc Story*. Montreal, Black Rose Books, pp. 122-129.

Schmid Ch. (2018) "Planetary Urbanization in Zurich: A Territorial Approach for Urban Analysis", in R Harris and U Lehrer (eds) *The Suburban Land Question: A Global Survey*. Toronto, University of Toronto Press, pp. 90-121.

Schmid S. Eberle D. and Hugentobler M. (2019) *A History of Collective Living: Models of Shared Living*. Basel, Birkhäuser.

Thörn H. Larsen H. G. Hagbert P. and Wasshede C. (2020) "Co-housing, Sustainable Urban Development and Governance", in P. Hagbert H.G. Larsen H. Thörn and C. Wasshede (eds) *Contemporary Co-Housing in Europe, Towards Sustainable Cities?*, Milton Park, Abingdon, Oxon, New York, NY, Routledge.

Wirz H. and Wieser Ch. (eds) (2017) *Zürcher Wohnungsbau: 1995-2015; Zurich Housing Development: 1995-2015*. Luzern, Quart Verlag.

European Network for Housing Research

Rent-to-own, a narrow pathway towards home ownership
Analyses of 15 "Rent-to-own" schemes in 11 countries

Jean-Pierre Schaefer
Square de Verdun 92310 Sèvres France ,
jeanpierreschaefer@laposte.net

Christian Tutin
Lab'URBA UPEM Université Paris-Est, boulevard Newton 77454 Marne la Vallée France
ck.tutin@wanadoo.fr

Abstract

Can rent-to-own schemes represent an interesting form of affordable home ownership in countries where the supply of affordable housing, is low and where mortgages loans are not available households without credit scoring? A comparative study of fifteen   schemes has been conducted in 2020 over eleven countries at the request of the French Agency for Development AFD. The survey analyses the cost of public aid and the various institutional set-up, highlighting the great differences that may be found under the same name. The economic challenge is to find an attractive set-up for developers and households, the financial challenge consists in preventing-indebtedness for households or structural deficit for developers. The social challenge is to target households excluded from other housing schemes. The urban challenge is to develop these products in the existing urban fabric. All these schemes, with very uneven achievements, show that rent-to-own may be a complementary product in the housing supply, as part of a comprehensive housing policy toolkit.

Key words: affordable housing, Rent to own

Introduction

The Agence Française de Développement (AFD) is studying a rent-to-own scheme for the government of the Republic of Ecuador within the general framework of social housing policy. A preliminary study comparing past and current schemes around the world was conducted from November 2019 to June 2020 by a team gathering Marie Defay, Ch. Tutin and J-P Schaefer.

Rent-to-own might be an interesting form of social home ownership in countries where social renting is weak or non-existent, and where mortgage loans are not easily accessible to households with low-income or irregular income, particularly in the informal economy.

- In Europe, the French, Belgian (2 schemes), British (2 schemes), Spanish and Irish cases;
- In Latin America, Brazil, Chile, Colombia (2 schemes) and Mexico (2 schemes)
- In Africa, Algeria and Kenya.

A more in-depth study of four countries was carried out with contributions from A. Campoy Diaz and H. Leite Jr for Brazil, J. Riquelme Bravo from the Chilean Ministry of Housing, N. Cuervo and A. Guerrero for Colombia and A. Morales for Mexico

The schemes has rather long history in Algeria, Brazil (1999), France (2004), Ireland (1995), Mexico (2006) and in the UK (2005).

In several countries, particularly in Latin America, new schemes were launched in 2014.

These schemes are targeted at households with no down payment, low incomes, or working in the informal sector of the economy. Their variable incomes make them ineligible for a mortgage because they have no history of savings or regular payment history (no "credit scoring").

Two large-scale schemes have been developed with a lot of public support.

In Brazil, the PAR produced 260,000 dwellings from 1999 to 2009. The budgetary cost was R$4 billion (1999-2005) for 177,150 dwellings, i.e. R$23,600 per dwelling. This programme has been replaced by a new scheme, "Minha Casa Minha Vida", which is mainly oriented towards home ownership. In Algeria, AADL housing is sold at 30% of the market price and therefore seems to consume a high level of public aid.

Other medium-sized programmes were supported by social institutions:

In France, there are no public subsidies but a reduced VAT and various tax exemptions, and for buying PTZ (zero interest loan) which the basic loan for helping first-time buyer.

In Colombia, homebuyers benefit from the "Mi casa ya" homebuyer support programme

In Kenya the scheme is managed by a national housing company and in Ireland through social housing companies

No or little involvement of public bodies:

- Mexico, Belgium, UK, Spain
- Rent-to-own for middle or upper middle class : Chile, UK, Belgium
- Scheme stopped after bankruptcy of private developer   Alternative Urbi in Mexico
- Very little development: in Mexico public scheme Arrendavit

Rent-to-own has to face four challenges.
Economic challenge

Finding private financiers, bankers or investment funds and developers

Funds are tied up over a long period of time with a low return (negative IRR for the Brazilian RAP)

It is necessary to provide for the risk of payment default with an ad-hoc fund

It is necessary to ensure the sustainability of administrative and technical monitoring to manage the asset management function, a function that is often non-existent in financial institutions

Recourse to public, semi-public or general interest institutions has often been used: Caixa and local authorities in Brazil, HLM cooperatives in France, public pension funds in Colombia

Social challenge: targeting low-income groups with no personal contribution and no banking history

Financial balance challenge: avoiding over-indebtedness and guarantee the risk of potential insolvency, covering private operators against the risks of the lender and the risks of the builder

Urban challenge: ensuring the architectural quality of the buildings and the attractiveness of the locations

Which category of households are the beneficiaries of the schemes ?

- In some countries, rent-to-own is aimed at the middle classes (deciles 4 to 6), notably in Chile
- In most cases the programmes target those excluded from mortgage credit but with regular income and a bank account; the informal sector is rare.
o Colombia targets vulnerable households: initially a conventional scheme targeted low but stable income (less than 4 minimum salaries). Since 2017, it has been extended to very low-income groups (less than 2 minimum salaries) and informal workers thanks to the involvement of a public institution with significant financial resources.
o The Chilean experience targets upper middle class. In the UK, prices 20% below market are suited for middle class home ownership
o In Mexico, the public agency Infonavit has not invested much in a project that has remained marginal.
o In Mexico, Urbi, a private promoter, set up more than 30,000 housing units, a scheme that was stopped after 2007 due to a lack of financial liquidity in the context of the great financial crisis

Which role plays the household as a tenant a future owner ?
This intermediate tenure status varies from one country to another one.
- The duration of the rental status and the moment when the beneficiary becomes an owner;
- The dominant principle is that the household only becomes the owner at the time of purchase.
o In Spain, ownership status is foreseen from the beginning of the operation.
o The owner (usually the institution that has supported the project) is responsible for the building shell and the payment of local property taxes.
- A very short duration, without public subsidies, is close to a traditional sale arrangement
  o For the operators, it limits the duration of their commitment and therefore reduces the immobilisation of their capital
- A long duration (15 years) makes the project drag on and dilutes the part saved in a long consumption phase
- It is difficult in most schemes to discern the respective share of consumption and savings in the household's payments before the purchase option is exercised.

- The amount to be paid at then of the rental period might rather small or much larger if real management cost are taken into account.
- The selling price might be fixed at the start of the rental contract, but the price can be revised in line with inflation especially in countries with a high inflation rate (South America)

What kind of public support and how much?
- Rental subsidies: these are sometimes offered for the duration of the rental phase for low income tenants.
- Purchase subsidies: Where they exist, rent-to-own households should be able to benefit from them.
    o In Colombia, beneficiaries of the programme are eligible for the "Mi casa ya" programme.
- Construction subsidies
    o Promoters-builders are reluctant to accept insufficient profitability and a long capital tie-up.
    o In France, a specific loan to the developer (the PSLA) has removed this obstacle; construction is not subsidised, unlike in Algeria and Brazil. But the reduced VAT offers a 15% advantage over the market. The PSLA loan paid to the developer will be transferred to the household at the moment of the purchase.

Risks and security for the developers and for the households

There is a risk of insolvency of low-income households, but they are the very target of rent-to-own

o a sufficient rental phase (at least 5 years) tests the household's ability to save
o an average duration (5 to 10 years) ensures that the developer's funds are not tied up for too long

How organizing an efficient long term   property management ?

Property management during the rental phase is not part of the culture of financial companies or developers. It must therefore be subcontracted.

Quality of programmes: the technical, architectural and urban quality of the projects must be guaranteed.

Economies of scale with overly large and poorly placed developments risk being illusory as in Mexico and perhaps Algeria.

Medium-sized buildings well integrated into the existing urban fabric might become valuable asset both for the investor and for the prospective buyers (case of Brazil, France)

A complementary or niche product in the housing policy toolkit

The international overview concludes that rent-to-own   offers interesting prospects to explore in order to make home ownership more affordable for households that would otherwise be excluded from ordinary mortgage credit circuits. It represents a supplementary product targeting narrow fringes of the population. It requires robust financing and security mechanisms, with public or semi-public financial organizations to encourage private and/or social developers to integrate it in their range of housing products.

References

Schaefer J-P, Tutin Ch, Defay M (2020) : *Panorama des dispositifs internationaux de location accession*. AFD   with the help of A Campoy Diaz & H. Leite Jr (Brazil), J. Riquelme Bravo (Ministerio de la Vivienda de Chile), N. Cuervo, A. Guerrero (Colombia), A. Morales (Mexico), J. Juan de Mateo (Procivis France), C. Gueffier-Pertin (USH France)

Peppercorn I, Taffin, C. (2013) **"*Rental Housing: Lessons from International Experience and Policies for Emerging Markets"*. Washington, DC: World Bank. World Bank

Blanco A. G, Fretes Cibils V, Muñoz A. F (2014) **"*Rental housing wanted: policy options for Latin America and the Caribbean"*, Inter-American Development Bank

Clarke A (2017) "*Shared ownership -learning from the UK*". Housing Finance International summer 2017

Bonates M. F(2008) "*O programma de arrendamento residencial PAR acesso diferenciado a moradia e à cidade"* RiSCO Revista de pesquisa em arquitetura e urbanismo

Moreo H. S & alii (2017) "*Shared ownership and temporal ownership in Catalan law*" Universitat Rovira I Virgili, *Working paper* n°3-201

Housing finance beyond individual mortgages – how to finance housing cooperatives in Eastern Europe?

Zsuzsanna Pósfai

GEOFIN Research, Department of Geography, Trinity College Dublin, Ireland
Periféria Policy and Research Center, Budapest, Hungary
e-mail: psfaiz@tcd.ie

Abstract

Crisis periods shed light on the vulnerability of conventional forms of housing finance; especially in (semi)peripheral economies such as Hungary and Eastern Europe more generally. The 2008 crisis led to dramatic housing instability in the region, especially through mortgages denominated in foreign currencies. The housing market effects of the current, Covid-19 induced economic crisis are yet to unfold, but it will surely bring a reorganization in the field of housing finance. As the pool of individuals eligible for a mortgage decreases due to income uncertainties, financial institutions may become more interested in experimenting with new forms of financing organizations engaged in the development of sustainable and affordable housing.

In my paper I will explore the potential of cooperative and collaborative housing to even out the volatility and risk of conventional forms of housing finance, and thus become a way of responding to uncertainty and displacement in urban housing markets. In the meantime, cooperative housing also allows new social groups – previously excluded from homeownership – to access stable, long-term housing through limited capital contributions. Beyond social aspects, the financial strengthening of new housing organizations will also facilitate the environmental sustainability of residential buildings.

The establishment of such forms of housing requires pioneering financial actors. I will explore under what conditions these innovative forms of housing finance can develop, and what is needed for them to scale up beyond a few pilot projects. Beyond academic evidence, I will base my discussion on experience I have gained in negotiating such innovative financial mechanisms for housing cooperatives in Hungary, as well as on the work done in MOBA Housing Network, which aspires to become a financial intermediary for new cooperative housing initiatives in the Eastern and South-Eastern European region.

Keywords: housing cooperatives, Eastern and South-Eastern Europe, social and sustainable finance

Introduction

This paper aims to be both an analysis of the limitations of the current housing finance system, and of the possibilities for the development of new forms of housing finance in the Eastern European region, and specifically in Hungary. In terms of new forms of housing I will focus on housing cooperatives, but the main arguments can be broadened to other forms of institutionally owned rental housing as well. In Eastern Europe, there is a sore lack of such organizations, which is closely linked to how the rental housing market is regulated and financed.

In the current, Covid19-pandemic induced unstable economic situation, many households will not have access to mortgages despite an ongoing credit boom in many Eastern European countries. The instability of employment and increasing risk aversion of lenders means that the pool of households eligible for a mortgage will likely narrow down, while – also as an instrument of contemporary crisis management – liquidity is abundant on financial markets. The main question I seek to answer is whether this abundant capital can be channeled into new forms of housing finance, developing affordable cooperative and rental housing.

Limits to an individual mortgage-based housing finance system

2015 was a turning point in terms of European housing finance. Until then, the effects of the 2008 crisis could be strongly felt, especially in various countries on the peripheries of Europe. As a consequence of pre-crisis lending, many families defaulted on their mortgage payments, many were evicted or went through severe financial hardships (Mikus and Rodik 2021). However, from 2015 onwards banks were called on to clean their portfolios in order to prepare the rollout of a new wave of mortgages (ECB 2015, Bródy and Pósfai 2020). This new wave of lending is stronger in some places than others. In Hungary, it is exceptionally strong, boosted by a series of government measures. These measures include a non-refundable subsidy for home purchase based on the number of children a family has, subsidized mortgages and also a free-purpose, large-sum consumer loan linked to childbirth, which in practice is used by many for housing purposes.

However, partially due to stricter post-crisis market regulations concerning household loans and partially due to the specific social targeting of the Hungarian government (higher status childbearing married couples), this new wave of mortgage lending is much narrower in terms of who it reaches. My hypothesis is that this rather narrow social targeting was further narrowed by the economic crisis following the pandemic, since the employment situation of many became more precarious. This narrower and safer targeting of mortgages is a good development, since it can potentially avoid the financial overinclusion of the pre-crisis period.

However, in the meantime, new forms of housing provision are not being developed, which would target those who fall out of the individual mortgage-based homeownership regime. Thus, other forms of – more risky – indebtedness develop, and there is also a very large unmet housing need of all those who cannot access individual ownership (Florea, Gagyi and Jacobsson 2018). I argue that this is to a large extent a question of housing finance. Adequate housing finance instruments could help overcome the lack of different housing tenures and housing institutions in Eastern Europe.

New housing organizations: the need and the response through finance

In Eastern Europe, there is a nearly complete lack of institutionally owned rental housing. That is, housing associations or "social landlords" practically do not exist; there is a very small stock of social housing most often directly in the hands of municipalities, and beyond that, the rental market is dominated by small individual landlords. This lack of institutional actors has historical roots: the drastic privatization of previously state-owned housing at the beginning of the 1990s resulted in an entirely fragmented housing stock. However, the fact that the sector of organizations owning and managing

housing did not develop until today is more a question of political and legislative choice and of financial possibilities.

On the one hand, an exclusively individual mortgage-based housing finance system does not provide any incentive for financial institutions to provide loans that would be suitable for developing rental housing. Put in very practical terms, long-term corporate (non-individual) loans do not exist in the region (Pósfai 2018). Thus, corporations on the real estate market can only be financed for building new housing for immediate re-sell to individual buyers. Long-term loans only exist for individuals, and individual savings are often also channeled into real estate, thus both tendencies further strengthen the presence of small landlords on the rental housing market.

This strong financial bias towards homeownership is extremely difficult to break because of the fundamental risk adversity of mainstream financial actors. However, from the perspective of organizations which are striving to develop new forms of housing tenure in Eastern Europe – such as the members of MOBA Housing Network – this financial bottleneck is key. Since the aim is to target social groups who are not able to access homeownership on the market, new tenure forms that need to be developed are clearly rental and rental-based cooperative forms. For this, however, organizations need to be able to access finance with which a slow return on affordable rents is possible. Of course, on the other hand, financial institutions see a lack of experience, a lack of a comparable market, and thus "non-financeable" actors. This situation of catch-22 can only be overcome if there is a purposeful push either by the state or by market actors – or both, in a concerted way. The forms this "push" or support could take are elaborated on in the last section.

The current historical situation could present a new opportunity for a shift on Eastern European housing markets for various reasons. On the one hand, the narrower pool of potential mortgage debtors (previously described) means that at some point financial institutions can potentially become interested in new forms of lending in order to overcome market saturation. Government subsidies promoting homeownership continuously try to broaden the pool of mortgage debtors, but this possibility of entering untapped markets through new instruments can potentially be interesting from a merely financial perspective. On the other hand, in the EU, contemporary public financial instruments are increasingly loan-based, with a general aim of achieving developmental goals through targeted and regulated lending and investment. At the same time, the absorption of these financial instruments is not straightforward. The expectations and capacities of lenders and end users have to be brought closer to each other in order to achieve the developmental (social and environmental) goals set out. Housing can be an important avenue for such, socially and environmentally focused investment because of its very high impact in both areas.

Steps for overcoming the bottlenecks

In order to be able to develop this new potential in housing finance, some important bottlenecks need to be overcome. Steps are needed from the side of government, market actors, and from the small, emerging non-profit housing sector.

Shifts in policy are important because as long as regulation is very vague concerning rental housing, corporate actors will be more reluctant to shift their practices in this direction. Cooperative housing is even more a grey zone than pure rental housing, since this tenure is in between the more conventional forms of both ownership and rental. In order to reassure different actors and to shift the risk off individuals or smaller housing organizations, the regulatory framework and legal guarantees of both rental and cooperative housing need to be clarified. Additionally, the focus of government subsidies on mortgage-backed homeownership is also counter-productive to the development of any other form of housing tenure. Thus, a fundamental shift in these housing subsidies would also be needed in many Eastern European countries.

From the side of the market (especially financial institutions), different methods of risk assessment

would need to be developed in order to be able to "measure" other forms of housing than individual homeownership. Furthermore, resources need to be allocated to new product development – without which cooperative or institutionally owned rental housing can surely not be established. Attitudes of partnership and communication need to established with housing organizations and public entities.

The third party that has an important role to play in this process are housing organizations that need to be built up and strengthened in a way to be able to respond to concrete housing needs. Many such organizations exist in Eastern European countries, but are almost always relatively small and lack capacities or experience in managing larger stocks of housing. For this to change, they need support in systematic capacity building, and also a long-term perspective of room for maneuver beyond the paradigm of individual ownership. This is the experience both of MOBA Housing Network, which is a regional network of pioneering housing cooperative initiatives, and of various local housing organizations in Hungary.

A more long-termist approach would generally be direly needed on Eastern European housing markets, which are fundamentally characterized by volatility. The expectation of short-term returns in itself has an effect of increasing house prices and reducing the stability of housing perspectives for individuals. If financial instruments of patient finance and institutions of rental and cooperative housing could develop, then fundamental shifts could begin on these housing markets.

Acknowledgements

References

Bródy, L.S. and Pósfai, Zs. (2020) *Household debt on the peripheries of Europe: New constellations since 2008*. Periféria Working Papers nr 3.

European Central Bank (2015) *Financial Stability Review*. European Central Bank. Available at: https://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201511.en.pdf

Florea, I., Gagyi, Á. and Jacobsson, K. (2018) A field of contention: Evidence from housing struggles in Bucharest and Budapest, *Voluntas*, 29(4), pp. 712–724

Mikuš, M. and Rodik, P. (ed.s) (2021) *Households and Financialization in Europe: Mapping Variegated Patterns in Semi-Peripheries*. Taylor & Francis

Pósfai, Zs. (2018) *Reproducing uneven development on the Hungarian housing market*. PhD dissertation, University of Szeged.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

sssssssd

Changing Determinants of Tenure Choice of Poles

Anna Matel[1]

University in Białystok, Faculty of Economics and Finance, Warszawska Street 63, 15-062 Bialystok, Poland
e-mail: a.matel@uwb.edu.pl

Krzysztof Olszewski

SGH Warsaw School of Economics, Collegium of Business Administration, Al. Niepodległości 162, 02-554 Warszawa, Poland
e-mail: krzysztof.olszewski.k7@gmail.com

Abstract

Housing tenure decisions depend on individual preferences and the surrounding economic conditions, and change along economic changes and the development of the housing market. Poland is a post-socialist economy that has observed significant improvements in the housing market. The emergence of housing developers that increase the housing stock rather fast, a housing finance system and the still slow emergence of a private rental market allowed many people to make free tenure choices and to become independent. We analyse tenure choice determinants of Poles for the years 2006, 2010, 2014 and 2018 on EU-SILC data, distinguishing between co-residence with the parents, renting at market rates and owning a house. The average marginal effects obtained from multinomial logistic regressions allows us to conclude that ownership is strongly connected to the family status, but this relationship weakens over time. Unmarried people without children but with better incomes become increasingly more likely to be homeowners. Thus, ownership is not anymore a main domain of conventional families. Moreover, renting becomes an option to become independent for those who cannot afford to buy a house. But it is rather a temporary solution, because renting is more costly than buying a house with a mortgage. We also find evidence of the gender gap in homeownership, as women are more likely to be owners, and less likely to co-reside with their parents than men. Along the evolution of the housing finance system, growing wages make ownership more likely. We observe that the choices are more free in densely populated regions, where the rental market develops.

We consider our research as a step towards an international cooperation to analyse this phenomenon across European countries. Hopefully other researchers at the ENHR would like to join us, in a similar fashion as the book "Milestones in European Housing Finance" was created.

Keywords: tenure choice, living arrangement, marital mtatus, rental market

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Introduction

Housing choices are a frequent as well as an important area of research conducted by scientists focusing on the housing market. Analysis of particular housing choices of households allows the identification of sources of inequality in access to ownership among social groups and should be utilized in shaping housing policy. Understanding who within a given country chooses to rent or own also permits the adaptation of offers provided by various housing market entities to suit the needs of customers.

Studies into housing choices have been conducted in many countries. Among those, states with a well-developed rental market are analyzed most often. In our opinion factors determining housing choices change along with those occurring within the market. Poland, therefore, seems, to be an interesting example that permits insight into how factors differentiating owners and tenants altered during the period of market transformation. Within recent decades the country's housing market has undergone significant changes. Housing choices of a considerable portion of Polish people are contingent on history and are the result of the engagement of the state in the fulfillment of citizens' housing needs during socialism (before 1989) and t later processes of privatization. Thus that which has been recognized as housing status in Poland, in reality, does not reflect a choice. Around the year 2000 the situation improved along with the advancement of market-based property development companies (Łaszek *et al.,* 2018) which started to build housing more efficiently. Additionally, after the easing of strict tenant protection regulations in 2015, the unsubstantial rental market finally started to pick up (Łaszek *et al.,* 2021). Polish people were finally given a true choice about housing although we still believe that it is limited especially in relation to access to a professional rental market and geographic inequalities in its development (it is concentrated in only a few of the nation's largest cities). Given the dynamic changes within the housing market whose start can be traced back to the accession of Poland into the European Union (2004), the analysis of differences in factors determining the living arrangement of Poles within this period seems very interesting. Intriguing is also the fact that along with the transformation of the housing market in Poland the withdrawal of the state from the financing of that market has also caused a significant decrease in access to social housing. This may, therefore, provoke the question of which groups have benefited due to these changes and which have been adversely affected. Additionally, we are interested in the altering sources of inequality in access to homeownership as well as in the general need for independent living which may be fulfilled equally well by the rental market.

Our study aims to recognize changes determining housing changes of Poles between the years 2006 and 2018. This period encompasses both significant changes within the Polish housing market as well as one full economic cycle from the housing boom (2006) through an economic recession (2010), a period of steady growth (2014) to yet another boom (2018).

Through the research, we search not only for sources of inequality in access to homeownership, a dominant issue within these types of analyses, but also discuss steps that are essential for furthering the independence of Polish people. Statistics show that more and more young people in Poland decide to continue living with their parents. These people move out later on in life which can generally be connected with changes within the family life cycle (getting married at a higher age, results in a greater percentage of single people and having children at a later age). This raises the question of whether starting a family later postpones independence or do young Poles put off starting a family when they do not have access to their own housing. From our perspective, this could be a significant problem. Poland is a country with an aging population and a declining birth rate. To counteract this the government has introduced programs encouraging people to have kids such as 500+ (every month each child is given 500 PLN), 300+ (all school-aged children are given an extra 300 PLN before the start of the new school year), or the so-called unconditional income. In our opinion, however, housing issues are also a problem. Being familiar with the problems of the Polish housing market – the relation of rental prices to costs of ownership or strong social norms concerning homeownership, young people may think that the only right setting for raising children is a house or flat that they own. For this reason, our study does not solely focus on differences between those who rent and those who own but also on the stage of co-residing with one's parents. This, in turn, forces us to take a slightly different approach, and in our

models, housing status is not assigned to a household but, rather, to each individual allowing us to analyze not only the situation of people who have decided to become independent but also those who, for varying reasons (whether financial or preferential), live with their parents and do not form new households.

The structure of the rest of the article is as follows. The second section presents a detailed literature overview, while the third provides a brief introduction into the housing system in Poland and its history. Subsequently, in section 4 data and methods are discussed and in section 5 the empirical results are presented. Section 6 provides a discussion of our findings in relation to the literature and also our conclusions.

1. Factors conditioning housing choices – review of literature

Factors that impact the housing status of households have been the subject of numerous studies and reviews of subject-related literature do exist (such as those done by Blaauber, 2010 or Bayrakdar *et al*., 2018). Table 1 presents variables utilized in modeling housing choices by various authors within the last several years. This classification is, obviously, by no means complete but in our opinion, it does contain the most important publications within this field. To facilitate analysis the considered factors have been divided into four groups: those illustrating socio-demographic situation, economic situation, family background (mainly concerning parents' characteristics), and regional differences. It should be noted that some factors appear in most of the studies, while others only in few.

Table 1. Sets of factors conditioning housing choices in previous research

Author (rok)	Kraj, lata badania, kategorie tenure status, specyfika badanej próby	Factors			
		Socio-demographic	Economic	Family background	Regional differences
W. A. V. Clark and C. H. Mulder (2000)	US, 1969-1992, owning a home, owning a trailer, or renting first housing situation of nest leavers (young adults)	age, household situation (a combination of gender and partnership status), nonwhite	education, income	parents' tenure, parents' house value	city size, region, the median house value at the time of nest leaving
M. Blaauboer (2010)	the Netherlands, 2002-2004, homeownership comparing men and women with and without partner	age, household context (a combination of marital status and having children), foreign born	level of education, income, employment (in case of couples separately for man and women)	parent homeownership, fathers international socio-economic index, father self-employed, parental divorce, number of siblings	urbanization (very strongly urbanized, other), % owner-occupied dwellings and average housing value in municipality
K. Kim and J. S. Jeon (2012)	South Korea, 2008 homeownership, renting, renting while owning another home	age, marital status , household size, having school children	education level, household's average monthly: income, property tax (a proxy variable for household wealth), debt, housing costs		living in capital city
V. E. Barrios *et al.* (2013)	Spain, 2003, Homeownership (paper also included the model of imputed rent as a proxy for housing demand)	age, gender, family type (single, couple with and without children, other)	education, permanent income, transitory income		town size, the average housing price. in the region
G. Xhignesse *et al.* (2014)	Belgia, 2010, homeownership	age partnership status (in couple, single) number of dependent children	monthly after-tax income		urbanization (urban, suburban, rural area)
D. Špalková & I. Špalek (2014)	Czech Republic homeownership	age, gender, marital status household size	education, employment situation (fully unemployed household -at		living in capital city, region, total

	(paper also included a model of the share of housing expenditure in total household expenditure)	having any child, having any child under two years	least one retiree household head works in public sector) number of economically active persons number of self-employed household disposable income		floor area per person
M. J. Thomas and C. H. Mulder (2016)	Germany (2010/2011), the Netherlands (2010/2011), the United Kingdom (2011/2012) homeownership	age, gender, a combination of marital status and partnership, having any child	socio-economic status (educational attainment and occupational class) dual-earner		urbanization (urban, rural area)
K. Mundra and R. Uwaifo Oyelere (2019)	US, 2000-2013 homeownership all population and separately: married, never married and divorced or widowed ones	age, gender, marital status, number of children, ethnic/racial group, citizenship status,	years of education, employment status real total income, real interest income, relocation in recession period		
S. Bayrakdar et al. (2018)	Germany and Great Britain, 1991-2016, first time homeownership, samples restricted to relocating ones	age, gender, having any child, numer of years before/after childbirth, foreign born	education level, income	tenure status, single parent, stepparent, number of siblings	urbanization (urban, rural area)
M. Maroto and M. Severson (2020)	Kanada, 2001-2011, owning, renting, or living with parents only young adults: 18- to 35-year-old	age cohorts, gender, marital status, having any children, immigrant status,	education level	lived with both parents until age 15, parent education	region
F. Fiori et al. (2019)	Scotland, 1991,2001, 2011 transition from co-residence to homeownership young adults stratified by gender and partnership status	age, having any child, health status	educational level, combination of variables: employment status and social class, dual earner (only for couples)	parents' tenure living in a single parent household	mean house prices in the local authority of residence

Source: own elaboration

Socio-demographic variables reflect the life cycle of a household, mainly expressed by age, marital status, having children, divorce or death of a spouse. These changes lead to changes in preferences and the possibility of achieving a specific tenure status. (e.g. Barrios *et al.,* 2013, Gyourno and Linneman 1997, Andersen 2011) and played a crucial role in housing choices (Kim and Jeon, 2012, Barrios *et al.,* 2013, Xhignesse *et al.,* 2014, Špalková and Špalek, 2014, Thomas and Mulder, 2016, Mundra and Uwaifo Oyelere, 2019, Maroto and Severson, 2020), both among men and women (Blaauber, 2010).. Studies conducted by Clark and Mulder, 2000, Bayrakdar *et al.,* 2018 and Fiori *et al.* (2019) indicate that they are of fundamental importance in the transition of young people into homeownership and general independent living.

Age is usually analyzed as a quantitative variable, although Maroto and Severson (2020) for example, utilized age cohorts in his studies. In economies characterized by a decrease in the likelihood of homeownership in older age groups – which may result from lower housing needs, high maintenance costs, and the desire to live closer to children (Disney *et al.,.* 1995) - age squared is also considered (Blaauber, 2010, Kim and Jeon, 2012). In this manner, for example, Blaauber (2010) estimated a fall in the probability of homeownership for women over 70 and men over 60. However, declarative research in Poland shows, that this is not a popular solution in Poland, because seniors want to stay in their homes as long as possible, which is consistent with the concept of aging in place (Strączkowski and Boruta, 2018).

Generally, an increase in the probability of homeownership that rises with age can be observed in literature (m. in. Clark and Mulder, 2000, Barrios *et al.,* 2013, Xhignesse *et al.,* 2014, Bayrakdar *et al.,* 2018, Maroto and Severson, 2020, also: Gyourno and Linneman 1997, Arrondel *et al.,* 2010), however, Xhignesse *et al.* (2014) has shown that this effect only occurs up to a certain age and then declines which, in some way, justifies the usage of age cohorts. Mundra and Uwaifo Oyelere (2019) confirmed this for married and divorced people in the US but not for those that had never been married (indeed, they observed a significant though small negative correlation between age and homeownership in this group). In Poland, a positive influence of age on the probability of homeownership in all marital status groups has been observed (both never married, married and divorced people, Matel and Olszewski, 2021). A positive relation has also been confirmed in the research of Bayrakdar *et al.,* (2018) showing that this influence was stronger in the UK than in Germany. In the studies of Maroto and Severson (2020), who looked at not only renting and ownership but also cohabitation with parents, it turned out that with age rose not only the probability of homeownership but also of renting – at the expense of the reduced share of cohabitation. It must be stated, however, that the analysis of differences between ownership and renting is a more popular approach in research.

Another fundamental socio-demographic variable that is considered in studies into tenure status is sex. In our opinion, it is a problematic variable when the subject of study is the household rather than the individual (which is the dominant approach with examples being, among others, Barrios *et al.,* 2013, Xhignesse *et al.,* 2014, or Špalková and Špalek, 2014). In those cases, the sex of the head of the household is considered which may cause the appearance of a false gender homeownership gap. However, when it comes to households of couples, both sexes are usually represented and the definition of the concept of the head of household may vary (as, for example, the person who has higher earnings, the person responsible for the home, and in declarative studies the respondents indicate their head of household themselves). Assuming that married couples who live in a home that belongs to at least one (or both) of them are homeowners makes the introduction of this variable problematic. Blaauber (2010) in his study of couples, for example, abandoned the analysis of sex. Barrios *et al.* (2013) and Špalková and Špalek (2014) found it insignificant, while Bayrakdar *et al.* (2018) found it insignificant in Germany but significant (with greater probability of homeownership among women) in UK. Interesting research results in this regard were obtained by Mundra and Uwaifo Oyelere (2019), which for the whole population did not find evidence of a gender homeownership gap, but after breaking down the sample into groups by marital status, they found that women were more likely than men to own a home when were married and less likely when were single. There were no gender gap in homeownership among

divorcees. Clark and Mulder (2000) did not see differences in the level of ownership between young American men and women. This confirms that consideration of sex is only significant in the analysis of single people especially when it comes to singles who have never been married (Mundra and Uwaifo Oyelere, 2019, Fiori *et al.*, 2019).

The indicated above methodological problem does not occur when the study considers individuals rather than households. This approach (used by, for example, Matel and Olszewski, 2021, Lennartz *et al.*, 2016, Maroto and Severson, 2020, or Bayrakdar *et al.*, 2018) is utilized much less often and mainly in the context of young people who become independent through homeownership or renting. The identified in this manner gender homeownership gap is connected to various models of becoming independent for women and men within a given country. Research (Chiuri and Boca, 2010; Gillespie, 2020; Maroto and Severson, 2020) showed that women usually leave home earlier than men, and more often relocate for family reasons whereas men later leave their parents' homes and more often to live on their own. As a result, there is a greater chance of coresidence and rental among young male adults (Maroto and Severson, 2020).

The family life cycle of studies also reflects having a partner or children. There are two basic methods for analyzing partnership: through a person's official status (Blaauber, 2010, Kim and Jeon, 2012, Špalková and Špalek, 2014, Mundra and Uwaifo Oyelere, 2019, Maroto and Severson, 2020) or through , regardless of whether the partnership has been formalized or not, having a partner (Clark and Mulder, 2000, Barrios *et al.,* 2013, Xhignesse *et al.,* 2014). These two variables are highly correlated and the authors of studies must make a decision on which variable they will use. Some studies had utilized a combination of these two factors. For example, Thomas and Mulder (2016) singled out individuals: without partner, with partner but living apart together, unmarried cohabiting with partner and married with partner, indicating that both in Germany, Netherlands and UK married couples are the most likely to own their home followed, less likely were cohabiting couples and the least likely were single ones, what proved that formalized marriage usually strengthens the feeling of security in respect to investing money together (Feijten and Mulder, 2005).Generally, research shows that renting, as a more temporary and flexible arrangement, is an especially interesting option for people with an inconstant occupational and partnership situation (Fiori *et al.*, 2019; Thomas and Mulder, 2016, Bayrakdar *et al.*, 2018), who expect changes in their housing needs related to their place of residence, home size, or preferences related to location (such as proximity to school or work). In effect, renting becomes a more attractive option for singles who put off buying a home until they settle down (Coulson & Fisher, 2009).

Yet another variable within the life cycle is having children. In some economies this factor is highly correlated with marital status. Hence, to avoid the problem of multicollinearity authors often forgo one of them (Clark and Mulder, 2000, Bayrakdar *et al.*, 2018) or introduce a combination of the two (Blaauber, 2010, Barrios *et al.,* 2013). Thanks to that Blaauber (2010) for example, have shown that having children increases the probability of homeownership both among couples (regardless of their marital status) as well as among single parents – seeing a stronger connection among single fathers than single mothers. These relations are seen clearly when the housing choices of people of varying marital status are considered (among others, Fiori *et al.*, 2019; Matel and Olszewski, 2021) and then the correlation is almost desired. Having children can also be analyzed in several ways. The most popular approach is whether there are any children within a given household (Blaauber, 2010, Barrios *et al.,* 2013, Špalková and Špalek, 2014, Thomas and Mulder, 2016, Bayrakdar *et al.*, 2018, Maroto and Severson, 2020, Fiori *et al.*, 2019).. Some authors analyze the influence of the number of children (Mundra and Uwaifo Oyelere, 2019, Xhignesse *et al.,* 2014) or household size (Kim and Jeon, 2012) which is, in reality, strongly connected to the number of kids. Sometimes the age of the children is also considered. Kim and Jeon (2012) looked at whether the household included school-aged children which in a particular economy (South Korea) was a predictor of the decision to rent despite having accommodations. Špalková and Špalek (2014) studied small children (under two years old) within a household while Bayrakdar *et al.* (2018), who driven by studies conducted by Clark *et al.* (1997) that indicated that the probability of homeownership grows considerably more after the birth of the first child than any subsequent one, modeling within his research transitions into ownership, time (years) before or after having the first child.

7

In general, children increase the probability of homeownership, however, although research completed by Thomas and Mulder (2016) confirmed this correlation in Germany and the Netherlands, this was not the fact concerning Great Britain. There the effect was reversed which was quite atypical. Mundra and Uwaifo Oyelere (2019), on the other hand, has shown that in the US the probability of homeownership increased along with the rise in the number of children but only among married and divorced people while in the never-married group fell, a fact that is most likely connected to costs of maintaining that home. Maroto and Severson (2020), on the other hand, had noticed that having children in Canada increased the probability of homeownership and that this occurred through a fall in co-residence with one's parents. No influence on renting had been observed. This, in turn, provides strong arguments for studying co-residence together with ownership and renting. In Poland, we also observed a significant difference between the level of homeownership among young people not living with parents who had or did not have kids (Matel, 2021). This may indicate a lack of preferences among young people who did not settle down yet so that they could, for example, maintain professional and life mobility, as well as a lack of social pressure to buy a home and less need for a sense of stability. This relation can be seen in most countries of Europe, both those in the west as well as those classified as CEEs (Augustyniak, *et al.,* 2013). In Poland strong preference to be a homeowner are also enhanced by the belief that homeownership is the only way to provide a safe place for the family and to really 'feel at home' (Rubaszek, 2019). As a result, couples often try to enter homeownership before childbirth and thus potentially delay childbearing when homeownership is relatively less affordable (Mckee *et al.,* 2017).

In some studies, apart from the standard set of socio-demographic variables including age, sex, partnership status, and having children, issues connected to nationality are also considered as ethnical/racial group (Clark and Mulder, 2000, Mundra and Uwaifo Oyelere, 2019) or citizeship (Blaauber, 2010, Bayrakdar *et al*., 2018, Maroto and Severson, 2020, Mundra and Uwaifo Oyelere, 2019). This is justified in those economies which have experienced a wave of immigration. In situations when migrants constitute an unknown percentage of the population, this variable is not usually taken into account. These differences may also be related to, apart from reduced professional stability and lower average earnings, a lack of motivation to invest associated with the planned return to their country of origin. As previous research shows, immigrants are less likely to be homeowners (Andrews and Sánchez, 2011; Hilber, 2007) event when controlling of income level and sociodemographic factors (Skaburskis, 1996). Research of Painter carried out in the United States indicated that people classified as national minorities (from Latin America or Asia) were homeowners less frequently which the authors explained as the result of discrimination within the labor market and the process of granting home loans (Painter *et al.,* 2001). Similar results were seen in Canada where Maroto and Severson (2020) noticed that people with immigrant status had a lower probability of homeownership while A. Skaburskis (1996) showed differences in the level of homeownership between the African and Caribbean minorities and whites in Toronto. Blaauber (2010) on the other hand, noted that being foreign-born lowered the probability of homeownership among couples but did not affect singles. It must also be noted that this effect was not seen in some studies. Clark and Mulder (2000) for example, did not detect any impact of being non-white on owning a home. Similarly, Bayrakdar *et al*. (2018) did not observe that foreign-born people had a lower likelihood of being homeowners both in Germany as well as the UK.

Fiori *et al.* (2019) also studied the impact of the state of health on the transitions from co-residence to homeownership. In our opinion, this variable is quite problematic. We cannot see a different mechanism of the impact of an individual's state of health on a person's housing situation other than through their financial, economic, or occupational situation.

Economic factors

When it comes to economic factors impacting the probability of homeownership they most often concern the level of education, earnings, and employment situation and less frequently the level of a person's assets, debts, or the number of earners within a household.

The level of education is considered in various ways. Some authors divide individuals into those who have and those who do not have a high level of education (Kim and Jeon, 2012, Špalková and Špalek,

2014, or Thomas and Mulder, 2016) while others utilize ordinal variables creating a broader scale of this factor (m .in. Clark and Mulder, 2000, Blaauber, 2010, Barrios *et al.,* 2013, Bayrakdar *et al.*, 2018, Maroto and Severson, 2020, Fiori *et al.*, 2019). In her research, however, Mundra and Uwaifo Oyelere (2019) used the variable of years of education. Usually having a high level of education favors homeownership and lowers both the likelihood of renting as well as co-residence with one's parents (Maroto and Severson, 2020), however, this correlation was not noted for Germany by, among others, Clark and Mulder, 2000and Bayrakdar *et al.* (2018). First, graduation may result in greater earning opportunities and more stable income (Eichholtz and Lindenthal, 2014), what may be a signal to the bank that a person is a less risky client. What is more Bayrakdar *et al.* (2018) indicated some kind of social influence – a person with higher education may become socialized into more prosperous peers group what boost their aspirations to be a homeowner. The research of Blaauber (2010) has shown that the education level of men rather than women is more significant to the housing situation of both couples as well as singles.

The financial situation of a household is analyzed through the prism of current income (Blaauber, 2010, Kim and Jeon, 2012, Xhignesse *et al.,* 2014, Mundra and Uwaifo Oyelere, 2019, Bayrakdar *et al.*, 2018) or disposable income (Špalková and Špalek, 2014). Generally people with higher income and more secure job are more likely to live independently and be homeowners (Bayrakdar *et al.*, 2018). Higher income is usually negatively associated with coresidence (Maroto and Severson, 2020; Christophers and O'Sullivan, 2018; Mulder, 2013) with studies showing a greater impact of the man's level of income than that of the woman (Blaauboer, 2010). A study conducted by Špalková and Špalek (2014) indicates that in the Czech Republic between 2005 and 2011 the significance of this factor grew. In turn, studies of Xhignesse *et al.* (2014) have shown that this influence is linear and is observed only up to a certain income level. Blaauber (2010), thanks to treating the income of men, women, and couples separately, has demonstrated interesting correlations showing that within a relationship the income of the man has a greater impact on the housing status of the couple than that of the woman. Some research also points out differences between current income and permanent income. Barrios *et al.* (2013) in their research counted permanent income as a volume of income respondents can earn in the future on the basis of their human and nonhuman capitals and proved its positive impact on homeownership. Comparing income is difficult for international studies. Bayrakdar *et al.* (2018) treated this variable as relative - dividing households into those with low, middle, and high income, with the cut points set to the 25th and 75th percentiles for that country-year.

Another variable that shapes the housing choices of people, other than income, is the household's level of wealth. Jones (1990) compared the impact of these two categories of variables and has shown the superiority of the second characteristic. At the same time, it must also be stressed that wealth is made up of various elements including real estate, movable property as well as financial assets. In general, this variable is difficult to assess in survey research. In his study, Kim and Jeon (2012) introduced property tax as a proxy variable for **household wealth** while Mundra and Uwaifo Oyelere (2019) used real interest income. Interestingly these two proxies analyze completely different elements of property and are, in a way, opposite to one another. Kim and Jeon (2012) analyzed the proxy for property possessed while Mundra and Uwaifo Oyelere (2019) – the proxy for savings. Generally, however, the level of wealth positively affects the probability of homeownership (Kim and Jeon, 2012, Mundra and Uwaifo Oyelere, 2019, Arrondel *et al.,* 2010).

Some authors consider not only the level of income but also the number of people within a household who generate income. In this respect, Thomas and Mulder (2016) identified a dual-earner household and Špalková and Špalek (2014) studies the number of economically active persons in a household. Thomas and Mulder (2016) showed that among young adults (aged 25-40) from Germany, the Netherlands and the UK couples with two incomes were more likely to achieve homeownership than other couples and single people (similar: Clark *et al.*, 1997, also Hendershot, 2009, Carter, 2011). Špalková and Špalek (2014) had noticed a rise in the likelihood of homeownership along with an increase in the number of economically active people within a household but this impact has diminished considerably between 2005 and 2011.

The occupational status of a household or the individual is usually highly correlated with the level of their current income and is, therefore, a variable that is often omitted or considered to be insignificant (with the level of income as control. Some authors, on the other hand, forego analyses concerning income using occupational status instead (this may be the result of their own decision as well as the inaccessibility of income-related data). For example, Thomas and Mulder (2016) did not use income but uses a combination of education and occupational class. Likewise, Fiori *et al.* (2019) did not use income but a combination of employment status and social class. The occupational situation may be analyzed by categorizing people as professionally active and inactive or by the utilization of broader classification criteria. Mundra and Uwaifo Oyelere (2019), for example, divides people into four categories: employed, not in the labor force because of disability or other reason and unemployed. Špalková and Špalek (2014) made use of several binary variables reflecting the occupational status of a family: fully unemployed household, at least one retiree, household head works in public sector. It is worth noting the proposal of Lersh and Dewilde (2015) who analysed 'employment security' expressed by variables: having a permanent work contract, working at least 20 hours a week, being continuously employed during the observation period and working in high-skilled occupations as a manager, professional, or technician.

An interesting variable, at least in our opinion, is the inclusion of the business cycle in the analysis of housing choices. Mundra and Uwaifo Oyelere (2019), on account of the specific character of her assumed research goals, analyzed whether a person made a housing choice during a period of an economic recession identified as the period lasting from 2007 to 2013. It is interesting because generally research (Mundra and Uwaifo Oyelere, 2019, Lennartz *et al.*, 2016, Arundel and Ronald, 2016, Dunne, 2012; Aassve, *et al.* 2013 Lennartz *et al.*, 2016; Maroto and Severson, 2020) showed that the GFC significantly undermined existing residential patterns of younger generations due to rising unemployment, declining income levels, year-to-year house price change, and falling availability of mortgages undermined the transition of younger people into independent living.The direction of these changes has varied from country to country, but for the most part it has been about impeding access to property (but according to Lennartz *et al.* 2016 Germany, France or Belgium the homeownership rate was relative stable) and generally independent living (rising co-residence rate e.g. in Sweden, Italy, Denmark, Greece, Portugal, The Netherlands).

Parental background

In some studies, authors also take into account parental background as a predictor of homeownership. These variables were analysed by Clark and Mulder, 2000, Blaauber, 2010, Bayrakdar *et al.*, 2018, Maroto and Severson (2020) i Fiori *et al.* (2019). It is especially important in the analysis of the housing choices of young adults. Several mechanisms of influence become apparent here. The first is direct financial support. Parents can help their children to overcome the financial barriers of entering homeownership (Lux, Sunega, & Kážmér, 2018, Lee *et al.,* 2020). Within research the ability to provide financial support may be reflected by parents' house value (Clark and Mulder, 2000), parents' social class (Blaauber, 2010, as well as Filandri and Bertolini (2016), or parents' education (Maroto and Severson, 2020). In their study, Filandri and Bertolini (2016), for example, confirmed the influence of parents' membership in a particular social class on homeownership in European countries. According to their findings, having middle-class parents increases the odds of acquiring homeownership, while belonging to either the lowest or the highest social classes increases the probability of co-residance (due to different reasons). Usually, the dissolution of a family makes supporting children more difficult and some authors analyze the impact of parents' divorce on this factor (Blaauber, 2010, Bayrakdar *et al.* (2018) solely for the UK, Maroto and Severson, 2020, Fiori *et al.*, 2019) but in the research of Bayrakdar *et al.* (2018) this correlation did not occur, Blaauber's (2010) results, in our opinion, were quite unclear (on the boundary of significance) while Maroto and Severson (2020) saw a decrease in the probability of both homeownership as co-residence and an increase in the likelihood of renting for young people whose parents have gotten divorced. Possibilities of supporting children in gaining access to a home may also depend on how many of them, referring to the number of siblings, need to be thus supported. Bayrakdar *et al.* (2018) however, did not find evidence for such influence in both the UK and Germany while Blaauber (2010) noted that in the Netherlands having siblings decreased the likelihood of

homeownership for males and females who were in a relationship but did not affect the housing choices of singles.

Another possible mechanism for parents to influence their children's housing situation is some kind of socialization of tenure preference (Coulter, 2018; Mulder, 2013; Lersch and Luijkx, 2015). People often tend to live near their parents in similar type of housing. This impact is examined by the tenure status of parents (Clark and Mulder, 2000, Blaauber, 2010; Bayrakdar *et al*., 2018, Fiori *et al.*, 2019), pointing out that Blaauber (2010) indicated that this effect in Germany did not depend on the form of tenancy, while in the UK it was visible only when parents were social renters, whereas for private renters the relationship was insignificant.

Regional differences

Another group of factors that shapes the housing choices of people concerns the local real estate market. In this respect, two variables seem to be key: the size of the place of residence (village, town, or city) and the level of local market prices. Within research, the size of the place of residence is sometimes considered directly through the size of the city or town (Clark and Mulder, 2000, Barrios *et al.,* 2013) but more often it is examined using the level of its urbanization (Blaauber, 2010, Xhignesse *et al.*, 2014, Thomas and Mulder, 2016, Bayrakdar *et al*., 2018). In general, in most countries, there is a difference in the level of rental market development in poorly urbanized and highly urbanized areas. This is strikingly visible in Poland (Matel and Olszewski, 2021). Furthermore, in countries that have a high internal migration, young people who relocate to cities lose the option to live with their parents and must choose between homeownership or renting. In turn, for those who live in small towns often the only way to gain independence is to buy a home. In his studies, Blaauber (2010) utilized the percentage of the region's privately-owned homes permitting the introduction of control in situations where renting is not an available form of accommodation. Some studies also take under consideration differences between a country's regions (Clark and Mulder, 2000, Maroto and Severson, 2020). Kim and Jeon (2012) and Špalková and Špalek (2014) also looked at whether a given person lived in the country's capital. Regional variation is also analyzed through the prism of a region's accessibility to housing with the level of local housing market prices becoming a factor (Blaauber, 2010; Barrios *et al.,* 2013, Fiori *et al.*, 2019) or by looking at different ages at which young people become independent (Clark and Mulder, 2000).

Comparison of variable sets

In the opinion of the authors, the described above sets of variables differ with respect to three key factors: the specific character of local markets, the particular subject of study, and data accessibility.

The scope of utilized variables is primarily impacted by the character of local housing markets. This can be seen in the research of Kim and Jeon (2012) conducted under completely different institutional conditions of market development, well explained within the publication. In effect, his set of variables varies considerably from all others (having school children, level, household's average monthly debt and housing costs). It is also possible to see that within their studies some authors consider the regional diversity of housing markets and Blaauber (2010) for example, has strongly emphasized the characteristics of the housing market of a municipality.

The second reason, in our opinion, is the particular subject of study which determines requirements with respect to independent variables. It can be seen, for example, that since Bayrakdar *et al*. (2018) modeled the moment of transitioning to homeownership rather than a person's current homeownership status they analyzed numerous parental background factors as well as age before and after having a first child. This seemingly small difference has a significant impact on the study's methodology and formulation of conclusions. Fiori *et al.* (2019) also looked at changes in a person's housing status which impacted the scope of variables used. It may also be noted that sets of variables differ slightly when the subject of research concerns the general population and times when a specific age group, most often young adults, is considered.

Yet another premise in the creation of a set of variables is the accessibility of data. Studies are not dedicated to a particular subject and are carried out on large amounts of, often longitudinal, data. The author, therefore, makes his selection from information that has been gathered through particular surveys. This, however, requires the utilization of a proxy for variables or the omission of some factors. This problem can be well-illustrated on the example of parental background. In reality, there is no doubt that the scale of parents' financial support in the purchase of a home as, for example, a percentage of the value of a property financed as a form of support would be the best variable but this data is just not available causing the use of several different proxies. This also applies to wealth whose level is difficult to estimate compelling authors to utilize replacement variables.

It is also necessary to mention statistical premises. Depending on the applied research methodology, with logit/probit models for binary variables or multinomial logistic regressions being most often used, certain conditions for the inclusion of variables into the model must be fulfilled. Within our experience, the greatest problem is multicollinearity caused by correlations between independent variables forcing authors to decide whether they will omit a particular variable or combine some variables together. For example, the problem of correlations of variables: being in partnership and having children was solved by Barrios *et al.* (2013) by using family type variable (single couple with and without children, other). Similarly, Thomas and Mulder (2016) used a combination of marital and partnership status (no partner, never married no partner, previously married partner, but living apart together unmarried cohabiting with partner).

In the end, we would like to underline that sometimes a set of variables reflects a new idea for analyzing factors determining housing choices. This can be seen in the research of Blaauber (2010) who differentiated between the income of women and men and were thus able to gain interesting results in the context of the housing status of couples.

3. Historical background and the current housing situation in Poland

Housing choices require the existence of available options, which have to be both present and affordable. We present the housing system of Poland as compared to housing systems in developed countries, to explain how it determines the choices of households. The housing system in developed countries has evolved over decades, and, in some cases, even over centuries. Those countries have observed many social problems as well as boom-bust cycles and in consequence, each country has developed a triad of housing space supply: owner-occupied housing, privately and sometimes professionally rented housing, and finally social housing. Each country has applied individual housing policies and housing regimes which allow them to relatively smoothly adjust the housing policy to current problems. Furthermore, housing systems are strongly connected to the tax system, the pension system, and so forth with mutual connections between those systems meant to provide a holistic social network for citizens. In contrast, the many housing problems of transition economies had to be solved during the short phase of transition with most never really being solved. The most important moves were the privatization of previously semi-state owned flats, which was an economic shock absorber. The socialist economy was focused on heavy industry, so many flats could be found around the large state owned factories, and the second branch was agriculture, so a lot of people lived in the rural region in houses that were always their own. The transition of the political system required also a transformation of the whole economy, to a services oriented one. New working places were mainly created within the largest of cities causing waves of migration additionally augmented by young people who moved for education purposes. Along with the evolution of the financial system and increased availability of mortgages many more people could afford to buy a home causing housing prices to rise. Interestingly, Ireland, which was during the 1990s a transition economy among the developed ones, has observed a similar rapid change in the housing market as post-socialist economies. Murphy (2000) states that Ireland was a peasant economy and the integration with the EU allowed for a strong and sustainable economic growth. When Ireland joined the EU people could take mortgages at the relatively low euro interest rates and in consequence, a housing boom was observed (Rae and van den Noord, 2006). Much more information about housing systems

and social housing in transition economies can be found in a book edited by Hegedüs *et al.* (2013), while the evolution of the private rental market in those countries is explained in a different book edited by the same publishers (2017).

The current housing situation in Poland is the result of a housing system that evolved during socialist times, or between 1945 and 1989. During this period social housing was strongly promoted, however, state resources were insufficient to fully respond to demand. Contrary to many other socialist economies not everything was state-owned with detached houses being in most cases private, but the right of ownership was limited. There was a short period following the end of World War II when all flats in large cities were nationalized but from the end of 1945 to 1956, although homeowners were not dispossessed, the state could, at its discretion, assign total strangers to live along with the owners. The situation in Warsaw was even more dramatic. First of all, practically the entire city lying west of the river was destroyed and, based on Bierut's decree (Wozniak, 2018) all land property in Warsaw was confiscated from its owners. Until the transformation, these remained under the ownership of the state and the process of returning them to their prior owners continues still having a very negative effect on urban planning. Since the legal status of many well-situated and well-communicated parcels was uncertain developers built housing on the outskirts of the city since the ownership status of these properties was unambiguous. This, in turn, caused the city to sprawl and, what is worth mentioning, for a long time new housing was cheaper than the old. Although after 2013 prices have evened out this varies greatly with the situation in other provincial capitals where new flats are, on average, more expensive than old housing (NBPa, 2020). According to Muzioł-Węcławowicz (2013), after 1956 the housing situation in Poland evolved first through the formation of housing cooperatives which caused a rise in the number of flats whose tenants gained the right of ownership. The year 1972 saw the beginning of the process of privatizing state-owned multifamily housing where current occupants could buy out the flat and become its owner at very favorable prices. Profits from these sales were, in theory, to be allocated for the construction of new public rental stock but in practice, the public construction of housing units was completely abandoned in 1976. This was caused by strong economic and social tensions that finally lead to mass demonstrations and the proclamation of martial law on December 13th of 1981which lasted for around 2 years and lead to the slow breakdown of the socialist economy. Although small economic improvements were introduced the construction of housing was very slow. After 1989 and system transformation there was an intensification in the privatization of public housing resources at very attractive prices (in some cases purchasers needed to pay only 5% of the property's market value).

Due to the privatization process around 90% of people in Poland are homeowners, but this figure does not take into account the localization and quality of the housing stock. A large proportion of flats is located in smaller towns, while the housing demand is concentrated in the largest cities. Moreover, a significant share of flats that date back to the socialistic times are of poor technical quality and usually are very small. During the transition period Poland had huge obligations to its international debtors, the economy was weak and in consequence the state practically stopped to invest in social housing (see NBP, 2020b). In 1990 attempts to reactivate the construction of public housing realized as private-social housing cooperatives (TBS) were initiated but these efforts were once more inefficient (see Bogdał, 2001). Rents were below market levels and were intended to cover the mortgage the TBS took to build the flats. Although tenants could live there forever they could never become owners.

The transition led to a shift of the economy from an semi-agricultural to a high-skilled one and required a lot of new housing for skilled employees in the largest cities. Also the number of students increased and those who could not find a place in a student's accommodation searched for cheap rental housing. The economic transition has caused also changes in the legal and financial system. Kucharska-Stasiak and Matysiak (2004) point out that that the proper protection of property rights made a significant inflow of capital possible, that was much needed to accelerate the construction of new housing, but also commercial property. The housing developers in Poland operate under pre-sale contracts, which means that they need only capital to buy the construction land and to start the construction process. The remaining 70-80% of the investment are delivered by the construction companies and the buyers. Each time a significant step of the construction process is realized, the developer asks the buyer to pay for it

and then he pays the contractor. This system seems to be risky, but bankruptcies have been very rare since around 2004 and such a flexible system allows developers to start many projects without the need to obtain a lot of capital. However, the buyer needs a lot of capital, therefore house purchases are usually financed with a mortgage. Because the domestic capital market was very thin, the interest rates on mortgages in PLN were during 2004 – 2007 around two times higher than those in foreign currency, such as denominated in CHF and EUR[2]. A dominant share of banks in Poland was owned by foreign banks and those decided to offer seemingly cheaper mortgages that were denominated first in CHF, and after the outbreak of the GFC for a short period in EUR. During 2004 – 2008 mortgages were taken by house buyers mainly in foreign currency (NBP, 2020a, figure 2.18). Banks made profits not only through the interest payments and the margin on exchanging the currency, but also through the interest rate swaps on the international capital markets. The mortgage takers could obtain seemingly cheaper mortgages, which turned out to be quite costly when the exchange rate vis-a-vis the CHF deteriorated by around 50% in mid-2019. While the monthly payment remained nearly unchanged, because the Swiss National Bank decreases the interest rates to zero, the value of the mortgage expressed in PLN rose sharply and remains despite monthly payments at a higher level (for more information on this issue we refer to Łaszek *et al.,* 2016). Despite later problems, the introduction of such loans allowed many people to buy a new flat and a the housing construction sector evolved, including developer and construction firms and also firms that produce and deliver high quality building materials.

Unlike in mature markets that have a sufficiently large housing stock, in Poland there is much demand for newly constructed housing. According to NBP (2020a) data over the period 2006 – 2019 around 40% of house transactions in the largest 16 cities were concluded on the primary market, and according to Statistics Poland data that start in 2016, similar proportions hold for the entire country. As explained earlier, those transactions take the form of pre-sale contracts, such that a large part of the tenure changes that we observe in 2010 are the results of pre-sale contract purchases that were conducted before the global financial crisis hit Poland in 2009. The housing developer sells the pre-sale contract at a very early stage of construction and needs around 2 years to deliver the flat. Then the buyers needed to finish the outfit, which means that people wait at least around 2 years until they move in (see Augustyniak et al., 2018).

The year 2006 saw the beginning of a housing boom in Poland. This lasted for two years and was cut short by the outbreak of the GFC. Fortunately, the effects of this event were not felt in Poland until the middle of 2019. Unlike most other countries, this boom did not end in a bust but rather a smooth slowdown of demand that, nevertheless, continued at a high rate. House prices fell a little but started to grow again in 2013. The reason for this is the fact that Poland was not hit as hard by the GFC as many other countries. The country's registered unemployment rate[3] (Statistics Poland, 2021a) that in mid-2008 was at 9.4% rose to 13.2% in mid-2013 and from that point on the economic situation improved and the unemployment rate declined to reach an all-time low of 5.8% in 2018. Today it remains around that level. A similar situation can be observed with respect to the consumer confidence indicator (Statistics Poland, 2021b), a balance of positive and negative opinions collected by the Central Statistical Office of Poland, that in 2008 was at -8%, in 2012 it deteriorated to -29.5% after which it started to improve again reaching -17% in 2014 and +5.7% in 2018. We presume that people were even more inclined to buy owner-occupied housing treating it as a haven for their savings since the value of this stock mainly experiences not only steady growth often through their continued improvement with people investing a lot of resources for their efficient modernization.

The rental market in Poland, however, remains underdeveloped. Similar to other post-transformation countries, state investment into social housing is diminishing and subsidies are directed mainly at owner-purchased housing. Over the last several years the development of the new construction market and

---

[2] People received the mortgage in PLN, but it was indexed to the CHF, such that at the cost and risk of exchange rate fluctuations people got a lower interest rate than in local currency.

[3] One possible explanation is the fact that the Polish economy is still a closed economy, that is domestic demand has a lion's share in GDP. The depreciation of the currency allowed Polish exporters sell their products at lower prices in EUR and make bigger profits in PLN than before the GFC. On the other hand imports decreased and

growing profits within this field resulted in a rise in interest in privately-owned properties. Additionally, the outbreak of the GFC has slowed down rental market growth that, for a long time, was within the gray zone of the economy creating risks for tenants who, not having a legal agreement, could not be certain as to what they would be charged in the future. On the other hand, overly-protective rights afforded to tenants[4] making eviction of renters who did not pay difficult discouraged individual investors from buying new properties for rent. Only since 2015, low-interest rates, relaxing of tenant protection laws (Augustyniak et al., 2021) as well as filtration processes releasing some assets making them rentable (Brzezicka *et al.,* 2019), slowly stimulated the rental market. Nevertheless, in the long run renting remains a rather costly form of accommodation. Between 2006 and 2014, for example, renting a flat in Warsaw was as expensive as buying one with a mortgage and since 2015, due to a fall in interest rates, its costs may even exceed homeownership (see NBPa, 2020, figure 4.15). In this way, those who rent out such housing pay back their mortgages and become wealthy, while tenants have no financial gains from renting in comparison to owning. Hence, only those people who treat renting as something transitional, those who want to remain mobile, or those who are forced to become independent and cannot overcome barriers preventing them from becoming homeowners decide to rent[5]. This makes renting most common among people who have never been married and divorcees (approximately 9% in both of those groups).

Within the period spanning from 2006 to 2018, the developments described above have led to a change in the tenure status of the entire population. Since people do not often change their place of living and this is not a rapid process, the effects of these changes have been slow. They are, however, economically important and illustrate a trend. Diagram 1 presents the structure of the housing status of Poles (aged over 25), based on studies completed by Matel and Olszewski (2021), during the period specified above. It must be noted that this concerns individuals rather than households (as presented on aggregated Eurostat data), allowing the identification of the stage of co-residing with parents. Between 2006 and 2010 ownership rate has increased and has remained at a high level in the years following. One explanation is that access to state-constructed social housing was reduced and some people were forced to find other forms of accommodation. Another is connected to the significant increase in housing stock which occurred, despite the outbreak of the GFC, between 2006 and 2010 and which may have been caused by two factors: Poland was not hit very hard by the GFC, and demand for housing remained at a high level. Additionally, some of that growth in 2010 was the result of pre-sale housing contracts signed during the 2006-2007 housing boom. The recession has, however impacted the housing market in some way, which can be seen in the increased share of people living with their parents. The low share of renters nearly doubled between 2006 and 2014 and remained at the level of around 4.5%. The share of people that live for free in private houses did not change over the analysed period. In the next sections we investigate the determinants of the observed changes in housing tenure.

---

[4] The strong tenant protection right was introduced in Poland before the II Warld War to protect the poorer and elder people from a unjust eviction or increase in rents. But after the transition it put only the landlord in an unfavorable position, such that many landlords decided to function on the grey market, without paying taxes and without proper rental agreements which could give the tenant some safety.

[5] Usually the first house is financed with a mortgage, which requires a significant down payment, which amounts to 20 to 30% of the house value. The literature calls it the housing ladder, and the most difficult step is to jump on the ladder. Later on one sells one house, adds more money and buys another one.

Figure 1. Living arrangement of Poles aged over 25 in 2006-2018 (percentage distribution)

Source: Matel and Olszewski (2021) on EU-SILC data.

4. Data and methods

Conducted research aims to identify changes in factors determining the tenure status of Poles between 2006 and 2018. To fulfill those goals a study based on microdata provided by the *European Union Statistics on Income and Living Conditions* (*EU-SILC*) has been conducted. Due to the low dynamics of changes in the structure of tenure status in the economy, the research was conducted at four-year intervals for the years 2006, 2010, 2014 and 2018.

The dependent variable in our model is categorial, where y = 1 indicates that the respondent owns (either outright or with a mortgage) the home they are currently living in, y = 2 indicates that the respondent rents the dwelling (all paying the market and reduced price for renting or subletting a flat), y = 3 indicates that the respondent lives with parents. On the example of the methodology proposed by Lennartz *et al.* (2016) our study includes a living with parents category. The only difference is that we have excluded the free accommodation category which Lennartz (2016) connected to the living with parents category. In Poland free accommodation is strongly conditioned historically, generally concerns older people and, in our opinion, in most cases does not reflect choice. Free accommodation includes both social (flats belonging to the state or the municipality) as well as privately-owned housing. Concerning the former, it is, therefore, connected to a person whose financial situation is difficult due to varying causes. This person may be living in a home that has been purchased by their parents but one that has not been legally transferred to them (their status is closer to ownership) or one that is the property of other relatives without any chance to inherit (making their status closer to that of a tenant). In consequence, this group is very heterogeneous (this problem has been identified by Matel, 2020). On account of the state's withdrawal from financing the social-housing market the number of people who live rent-free in such accommodations is falling – these flats are either sold to private owners or fall into disuse on account of their poor conditions. The authors have, therefore, decided to present free accommodation in social housing and free accommodation in apartments belonging to private owners as a category of tenure but without any analyses of its determinants.

Based on an analysis of literature, analysis of a relationship with a dependent variable, and analysis of a relationship between independent variables, as well as a diagnosis of collinearity we have identified a set of eight independent variables. Four of these were nominal, two were ordinal and two quantitative. Additionally, since their housing status did not vary, we have decided to exclude widowed people from

the analysis. (1,7% tenants 1,6% - living with parents w 2018 r.). We have decided to combine workers and retirees since the current housing status of the latter is to a large degree a consequence of their past professional situation.

Table 2. Explanatory variables - coding

Variable	Definition	in:
Marital status	1 – married (base) 2 – never married 3 – divorced	**1-3**
Gender	1 if female	**0-1**
Age	age of the respondent	**Years**
Child/Children	1 if there is at least one child in a household	**0-1**
Tertiary education	1 if a person has any kind of tertiary education	**0-1**
Working/Retire	1 if a person is currently working or retired	**0-1**
Income per person	total disposable income of the household per one member of a household (in 2018 prices)	**thou € per year**
Degree of urbanization	- densely-populated area - areas with population density of no less than 1500 people per km^2, and town population of no less than 50,000 - intermediate area - areas with population density of no less than 30 people per square kilometre, and town population of no less than 5,000. - thinly-populated area - all other areas (base).	**Ordinal**

Source: own elaboration: Methodological guidelines and description of EU-SILC target variables, European Commission, Eurostat 2006, 2010, 2014, 2018.

In our analyses, we made use of multinomial logistic regressions. Four models illustrating the current tenure status of individuals (for 2006, 2010, 2014, and 2018) were constructed. The model can be expressed as follows (Agresti, 2013):

$$\pi_i = \frac{\exp(\alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + +\beta_p X_{pi})}{1 + \exp(\alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + +\beta_p X_{pi}} \tag{1}$$

where π_i is the probability of living with parents/owning/renting for the individual i and X_i (X_{1i}, X_{2i}, $X_{3i}...$) is the vector of individual level covariates.

The regression results are presented in two stages. The first stage are tables with the usual regression coefficients, while the second stage is table with the average marginal effects (AMEs). We focus especially on the latter, which allows for a *ceteris paribus* analysis of the change of the probability of the dependent variable, when the remaining control variables are held constant (Williams, 2012). The AMEs can be directly compared across groups and between models (Fiori *et al.,* 2019).

Table 3. Descriptive statistics

Variable	Homeowners				Corresidents				Tenants			
	2006	2010	2014	2018	2006	2010	2014	2018	2006	2010	2014	2018
Marital status:												
%never married	3.2	6.4	7.1	7.6	59.8	61.5	59.7	56.0	8.0	25.8	26.5	32.5
%Married	93.8	89.1	87.5	87.1	33.3	33.2	34.5	38.6	83.5	61.6	61.7	55.9
%Divorced/Separated	3.0	4.5	5.4	5.3	6.9	5.3	5.8	5.4	8.5	12.6	11.8	11.6
% female	55.3	55.2	55.1	55.1	41.9	41.7	41.2	41.9	56.7	52.1	52.6	52.8
Age, mean	54.1	53.4	54.1	55.1	36.0	34.7	36.0	37.1	45.7	40.8	43.5	41.3
% having any child	67.0	63.4	62.0	61.1	33.3	28.7	31.6	32.7	73.0	58.2	53.9	50.6
% with tertiary education	12.9	19.3	23.3	24.9	16.5	23.8	26.1	26.9	12.4	26.5	29.6	34.4
% working/retired	73.6	77.2	77.1	72.7	60.6	59.8	58.5	49.1	65.3	72.9	74.0	68.3
Income per person	3.1	4.2	4.6	4.7	2.8	3.5	3.7	3.9	2.7	4.2	4.5	4.9
Urbanisation level:												
Densely-populated	27.7	39.0	33.2	34.3	24.4	29.4	22.7	22.8	50.0	65.4	58.6	64.7
Intermediate area	17.5	15.4	25.2	25.0	18.9	18.7	24.1	24.8	7.7	7.5	22.4	20.7
Thinly-populated	54.8	45.6	41.7	40.7	56.7	51.9	53.2	52.4	42.3	27.1	19.0	14.6

Source: EU-SILC databases 2006, 2010, 2014, 2018.
Note: Estimates include sample survey weights

During the period covered by analysis the percentage of homeowners made up of people who had never been married and divorcees increased. In general, the percentage of single people who lived with their parents fell although in 2010 it had experienced a resurgence. This, in our opinion, was connected with the country's period of economic recession. On the one hand, during a time of an economic depression, people who have never been married have a more difficult time in overcoming income barriers to become homeowners while on the other continuing to live with their parents becomes more acceptable. During the considered time the structure of tenants changed, a fact that was mainly connected with the overall rise in the population of never-married and divorced people between 2006 and 2010. The percentage of women is greater among homeowners and tenants than among people co-residing with their parents, a result of the fact that women generally become independent earlier. In considering age it can be seen that renting is a transitional form of accommodation between living with one's parents and homeownership. Interestingly, in Poland, the difference between the income of a tenant and a homeowner is dwindling. This is connected to the fact that renting in Poland is as costly or more expensive than owning a home. There are also considerable differences in the tenure status of people that are caused by variations in the level of urban development. Rental properties exist mainly in large cities while smaller municipalities are characterized by a dominance of single-family housing which creates greater opportunity for living with one's parents.

5. Empirical results

Multilogit regression results have been presented in Table 4 while average marginal effects obtained from a multinomial logistic regression that shows how a percentage change of a given variable affects the probability of a tenure choice are shown in table 5. Our research indicates that housing choices in Poland are in some way typical for particular age cohorts. Poles first live with their parents and then seek independence most often aiming at homeownership. Some go through the transitional stage of renting. In Poland, this cycle has not significantly shifted over time and is consistent with the concept of the housing ladder according to which the first step, that of purchasing one's first, small flat, is the most difficult. After that, it is only necessary to add a marginal but still very important amount to the money obtained from the sale of the first flat to get a better or bigger one. At the same time, it is possible to see some differences within this process between women and men. In Poland women, on average, leave the home of their parents and get married, an event that in Poland is strongly connected with the decision to purchase a home, earlier than men. This results in a higher probability for women to become homeowners and a smaller likelihood of their co-residing with parents with the first difference persisting

over time while the second grows. For men, on the other hand, the probability that they will continue living with their parents longer increases. Generally in Poland, an increase in the share of young adults aged 25-34 living with their parents has been observed (in 2006 it was 37.8% while in 2018 it reached 45.1%, Eurostat) and concerns men more than it does women (in 2018 it was 52.6% for men in comparison to 37.3% for women). At the same time, no differences with respect to renting have been seen (see Maroto and Severson, 2020) which, in turn, means that women move out faster but only to their own home while renting is equally popular among women as it is among men (see Matel and Olszewski, 2021).

Table 4. Multinomial logistic regression results predicting homeownership, coresidence with parents or renting among Poles (aged over 25) in 2006, 2010, 2014 and 2018 (coef.)

Variable:	2006		2010		2014		2018	
	Owning vs coresidance	Owning vs renting	Owning vs coresidance	Owning vs renting	Owning vs coresidance	Owning vs renting	Owning vs coresidance	Owning vs renting
Marital status								
Married (base)								
Never married	2.973***	.602*	2.342***	1.059***	2.302***	1.094***	2.046***	1.094***
Divorced/separated	2.056***	1.040***	1.533***	1.518***	1.485***	1.233***	1.129***	1.268***
Female	-0.266***	-.112	-.221***	-0.173	-.224**	-.064	-.231***	-.048
Age	-.101***	-.054***	-.097***	-0.081***	-.087***	-.056***	-.078***	-.068***
Child/children	-.974***	-.177	-.844***	-0.260	-.735***	-.203	-.715***	-.335**
Tertiary education	-.477***	-.317	-.456***	-0.430**	-.313***	-.369**	-.255**	-.453***
Working/Retire	-.046	-.276*	-.090	-0.162	-.121	-.110	-.109	-.127
Income per person	.020	-.078	-.098***	-0.128**	-.175***	-.099**	-.141***	-.082**
Urbanisation level:								
Thinly-populated area (ref.)								
Intermediate area	-.042	-.396*	.080	-0.093	-.325***	.801***	-.332***	.949***
Densely-populated area	-.457***	1.069***	-.543***	1.073***	-.815***	1.463***	-.948***	1.609***
Constant	3.085***	-.440	3.266***	0.562	3.358***	-.412	3.049***	-.011
N	19,184		17,570		18,069		19,029	
pseudo-R²	.3780		.3555		.3072		.2843	
AIC	6761826		1.42e+07		1.80e+07		1.60e+07	
BIC	6761999		1.42e+07		1.80e+07		1.60e+07	

Source: EU-SILC Poland, 2006, 2010, 2014, 2018

Notes: *p<.05, **p<.01, ***<.001, estimates weighted using respondents weight from the survey.

Table 5. Average marginal effects obtained from multinomial logistic regression results predicting homeownership, coresidence with parents or renting among Poles (aged over 25) in 2006, 2010, 2014 and 2018 (coef.)

Variable:	Owning				Corresidence				Renting			
	2006	2010	2014	2018	2006	2010	2014	2018	2006	2010	2014	2018
Marital status												
Married (base)												
Never married	-.412***	-.320***	-.330***	-.297***	.423***	.313***	.308***	.272***	-.011	.008	.022*	.026**
Divorced/separated	-.271***	-.216***	-.220**	-.178***	.251***	.164***	.164***	.114***	.021*	.052***	.057***	.064***
Female	.021***	.021***	.021***	.021***	-.019***	-.018**	-.020**	-.022***	-.002	-.003	.000	.001
Age	.008***	.009***	.009***	.009***	-.007***	-.008***	-.007***	-.007***	-.001***	-.002***	-.002***	-.002***
Child/children	.072***	.072***	.067***	.072***	-.072***	-.071***	-.067***	-.065***	.000	.000	.000	.006
Tertiary education	.041***	.045***	.039***	.037***	-.037***	-.034***	-.036***	-.025***	-.007	-.009	-.014	-.018***
Working/Retire	.010	.011	.014	.013	-.002	-.006	-.010	-.009	-.008*	-.004	-.004	-.004
Income per person	.001	.010***	.018***	.015***	.002	-.007***	-.015***	-.013***	-.002	-.003*	-.003	-.002
Urbanisation level:												
Thinly-populated area (ref.)												
Intermediate area	.009	-.006	.011	.013	-.002	.008	-.040***	-.044***	-.007*	-.002	.030***	.032***
Densely-populated area	-.005	.015*	.012	.024**	-.040***	-.057***	-.094***	-.111***	.045***	.042***	.082***	.086***

Source: EU-SILC Poland, 2006, 2010, 2014, 2018

Notes: *p<.05, **p<.01, ***<.001, estimates weighted using respondents weight from the survey.

A key role in the shaping of housing choices in Poland is played by a household's life cycle. It can be seen that marital status has a significant (outright dominant) influence on determining the living arrangement of Poles (similar for Scots, Fiori *et al.*, 2019, for the Dutch -Feijten, 2005; and the British – Thomas and Mulder, 2016), but, at the same time, a decrease of its importance over time can also be observed. People who have never been married and divorced people, in 2018 exhibited nearly 30% and 18%, respectively, smaller probability of homeownership than married people (this is similar to the Dutch, see Blaauboer, 2010), while in 2006 this difference exceeded 41% in the never-married group and 27% in the divorced group. Singles, meanwhile, demonstrated a greater likelihood of living with their parents, and the differences were larger for never-married than divorced people and fell over time for both groups (similar results were obtained by Mundra and Uwaifo-Oyelere, 2016). The present study confirms that the rental market to a greater degree fulfills the needs of single people and with its development, the probability of living in rented housing rises for divorcees as well as, although to a lesser degree, those who had never been married. Generally, however, it is possible to observe that differences between never-married and married people are smaller than those between divorced and married people but the trajectory is the same. Housing models of divorcees resemble more those of people who had never been married than married people since a divorce fundamentally changes the living arrangements of both partners. The connection between housing choices and the life cycle is also reflected in the importance of having children. People who have kids display a higher probability of homeownership and live with their parents less often. This, however, has no impact on renting. The influence of having children on living with one's parents falls over time. Generally, it is possible to see that in Poland the decision to become independent is less and less relevant with respect to starting a family.

Within the last several years the significance of higher education with respect to homeownership is also falling in Poland, although those who had such, in 2018 displayed a 4% higher likelihood of living in their own home and a 2.5% less probability of living with their parents. Since 2018 education became a new source of inequality in the tenant group. People possessing higher education presented a 2% smaller probability of living in rented housing. This could result from the greater occupational stability of people working in professions requiring a university degree which translates to better access to home loans. Generally, however, it can be noted that this variable loses its significance concerning the overall household income. Along with a rise of income expressed in 1,000 Euro per person per month within a household, the probability of homeownership grows and this influence intensifies over time. Furthermore, in 2006 it was not the level of income but factors connected to family dynamics that decided about ownership. In our opinion, this was the result of the overall shortage of housing as well as the fact that homeownership was often the only alternative to become independent for people who started a family or ones who experienced greater pressure, both external and internal, to gain independence. After 2006 the substantial rise in home prices, increased demand, and intensified promotion of loans caused income-related disproportions in access to homeownership. In effect, in 2006 a decision to become independent was not connected to one's level of income. However, in 2010 it was possible to observe a growing influence of income on independence but only in relation to ownership. In Poland renting is, in reality, as costly as homeownership. So, living in rented housing is, to a great extent, a question of lifestyle and usually, this is a transitional stage between living with one's parents and homeownership. However, people who can afford to rent most often can also afford to buy a home, the reason no income inequality can be seen between homeowners and tenants. In Poland, therefore, people who rent are not those who earn too little but rather those who are at a particular stage in their life during which renting is preferred over ownership.

When it comes to Poland, the variable that is key in understanding the decision to rent is urban development. The rental market has only started expanding recently and that growth has not been balanced. It has been concentrated in large cities which is connected both to housing demand as well as supply. In large urban centers, especially university towns, landlords have additional prospective tenants – university students, a large group of consumers within the rental market. In effect, the likelihood of renting is significantly higher in densely populated than in thinly populated areas and these differences grow with time along with the development of the renting market. Within the last several years these differences (although smaller) have also been observed between intermediate and thinly populated regions. In reality, therefore, for people who live in large cities, especially those who have migrated from less urbanized areas, housing choices are limited. Since they had migrated to a new place they cannot live with their parents which leaves them with

the choices of renting or buying a home. In turn, people who inhabit smaller towns also encounter the problem of diminished choices and must choose between living with their parents or ownership.

5. Discussion and conclusions

Poland is a country that is dominated by homeownership and a sluggishly developing renting market whose expansion has been significantly slowed by the economic recession caused by the global financial crisis. Like other post-transformation countries, the state's engagement in social housing is diminishing while housing subsidies are aimed mainly at those who want to become homeowners. For the last several years the development of the new construction market and a rise in incomes have resulted in increased interest in privately-owned housing. On the other hand, low interest, relaxation of tenant protection (Łaszek *et al.,* 2021) as well as filtration processes releasing some assets making them available for rent (Brzezicka *et al.,* 2019) have slowly stimulated the development of the renting market even though the costs of renting are still higher than those of buying a home with a mortgage loan. In effect, only people who treat renting as something transitional, those who want to remain mobile or those who are forced to become independent and cannot overcome barriers preventing them from becoming homeowners decide to become tenants (Rubaszek and Czerniak, 2017).

Our research indicates that the housing choices of Polish people during the period of intense market change are altering but this transition is very slow. This is accompanied by a change in both the scope as well as the importance of factors that shape them. Interestingly, in the years 2006-2018, the direction of changes in the impact of most of them is the same, regardless of the phase of the business cycle. This, in turn, indicates that the changes in the housing choices of Poles are strongly related to housing system transformation and its development and only to a small degree on the business cycle. In our opinion, this is the result of several mechanisms. First, as has been mentioned in part 3 of the present article, the effects of the recession following the GFC were not as severe as those experienced by numerous other countries and wages continued to grow. Second, changes seen in the structure of the housing status of Poles during the recession (2010) are, in reality, the materialization of pre-sale contracts signed between 2006 and 2008. The impact of institutional changes on the housing status of Polish people can be seen allowing the explanation for the strong growth of the rental market even though it remains quite insignificant (4.5%). Another important cause for observed changes concerns alterations in the life cycle of Polish families with independence and the moment of starting a family coming later and later.

Generally our studies confirm that housing choices are strongly connected with the life cycle (similarly to, among others, Clark and Mulder, 2000, Blaauber, 2010; Barrios *et al.,* 2013, Xhignesse *et al.,* 2014, Špalková and Špalek, 2014, Fiori *et al.*, 2019, Mundra and Uwaifo Oyelere, 2019, Maroto and Severson, 2020). Entering into and the dissolution of marriage have the greatest impact on the housing choices of Poles during the entire duration of the considered period although this does diminish over time. In our opinion, this is related to the additional option of becoming independent, that of renting. This decrease in influence also means that homeownership is no longer reserved only for married couples. The market is observing the formation of a group of consumers who have never been married and who are interested in buying a home before formalizing their relationship. We believe that this is a new, important group of consumers that may have different housing needs. Furthermore, study results have shown that unmarried people not only buy homes more often but more often move to rented housing which means that, generally, their decision is to become independent. This, in turn, signifies that Poles who co-resided with their parents more and more frequently move out to live on their own before they get married and start a family. This is connected to growing incomes, accessibility of home loans for people not within formal relationships as well as socio-cultural changes with young Poles generally getting married later and postponing having children. Moreover, greater availability of housing, growing competition on the new housing market, and intensive housing construction allows the delivery of homes fulfilling not only the needs of families. This especially concerns accommodations that are smaller, less expensive, or located in places near many amenities such as schools and workplaces. Our studies have also shown that the developing renting sector is an especially attractive alternative for divorcees for whom moving back in with their parents means the necessity of

coming back to their family home which may be more difficult than for single people who simply have not yet become independent.

Our research has confirmed that in Poland there is a certain gender homeownership gap which turned out not to concern differences between renting and homeownership but rather those between ownership and co-residence (similar conclusions were reached for Canada by Maroto and Severson, 2020). In Poland, like in Canada, women leave their family home as well as get married sooner than men and, in effect, more often become homeowners. In reality, at current prices in Poland renting is an alternative for people who want to become independent but for reasons of their own do not want to buy a home (need to retain their occupational mobility, imprecise preferences concerning a home, expect changes in their family situation) or who are at the stage of gathering funds to fulfill this goal (which justifies a lack of differences in the levels of income of homeowners and tenants in Poland).

An interesting observation is a fall in the significance of having a higher level of education in gaining access to homeownership in favor of income level. This concerns social changes with the higher level of education of the general population causing shortages of skilled technical workers and growth of average wages of support professionals not requiring a university degree[6]. In Poland, it is possible to observe income inequalities between people who co-reside with their parents and homeowners which seems to be intuitive. No inequalities exist, however, between tenants and homeowners. In Poland renting is an attractive option not on account of the current price of maintenance but rather other characteristics, primarily flexibility and mobility, and is an attractive alternative for people who have not settled down yet both concerning the family as well as professionally, especially for those whose occupational situation lacks stability and those encountering barriers in access to home loans. Another differentiating characteristic is that there is no need to cover initial costs. Buying a home is connected with the necessity to cover the down payment and often the costs of finishing or renovation as well as administrative procedures. In this respect, the other group who may be interested in renting will consist of people who are at the stage of gathering funds to fulfill this aim. Nevertheless it can be ascertained that tenants are usually individuals who can afford to buy their own house. In this sense renting does not fill the gap in satisfying the housing needs of people having varying incomes. This situation constitutes a significant challenge for housing policy which should start supporting the renting of private property at lower, subsidized rents. It must also be mentioned that unlike in many countries of the European Union, there is no cadastral tax in Poland. Tax burdens connected to housing are very low. In reality, therefore, citizens pay much less attention to the current maintenance costs of housing when considering buying a home.

In terms of urbanization in Poland, the unbalanced development of the rental market, as well as increased migration from rural to urban areas (both for university education as well as later settlement), mean that housing choices are rather limited with renting not being available to people living in rural and less urbanized areas while those who migrate to cities lose the option to live with their parents.

Our studies identify several practical implications concerning the shaping of social policy, housing policy as well as the development of new construction market offers. First, we believe that housing issues in Poland are not being solved and there are no solutions dedicated to people with lower incomes. Under current market conditions renting is not only less accessible to such people but also greatly increases the wealth gap between more affluent homeowners (since property prices in Poland have been growing significantly for many years despite amortization) and less wealthy tenants. In effect it is neither attractive nor does it bring any positive effects. This, in turn, inclines people with lower incomes to make risky decisions such as getting home loans that are at the border of their credit capabilities just to gain homeownership. In reality, the current system does not offer this group of people any solutions. There is also no efficient system for the monitoring of differences in the financial state, material situation, and the well-being of this group of loan takers which we perceive as a research gap and would like to pursue this direction in our analyses in the future. These types

---

[6] Some people consider the rise of the University population as an inflation of education levels, which do not generate gains overall, especially as during the education boom a lot of poor quality universities emerged that have granted Bachelor diplomas and are defunct by now.

of risky borrowing decisions may result in a certain type of advancement in one's social and economic status since individuals do become homeowners, avoid the wealth gap, and are strongly motivated to remain active within the labor market. However, loss of financial liquidity caused by negative life events such as, for example, loss of work or the deterioration of one's health may have tragic consequences. In our opinion, there is a need to develop housing solutions for people in Poland who earn less which would protect them from such risks.

From the perspective of social policy, we would like to stress that, in our assumption, for as long as housing issues in Poland are not solved they will constitute a significant barrier to the reversal of the negative population growth seen in the country today. The implementation of programs meant to encourage Poles to have children should be supplemented with appropriate access to housing for groups of people with varying incomes.

When it comes to the investors' point of view within the market being considered it is necessary to point out that the housing needs of Poles are changing. The group of single people who would like to become independent by living on their own is growing. In our opinion demand for small flats that are well communicated with city centers and provide good access to employment will grow. It is also necessary for banks to prepare, both concerning risk calculation and administrative procedure, to attend to a growing group of loan takers who are either single or in informal relationships.

The question that emerges as a result of our analysis is whether the above changes can be compared to those that occurred in other post-transformation countries and those experienced by states of highly-developed Europe? Keeping in mind research presented in literature which shows that within two different countries and at varying times the occurrence of factors that may look similar but which are partially quite different is possible, we treat our article as an opportunity to invite researchers from other countries interested in this subject to join us in establishing international cooperation to address this. Considering that every country has unique economic and housing policy conditions, interpretation of results requires not only expert knowledge concerning econometrics and economics but, foremost, specialized knowledge of people who are very familiar with a given country.

.

References

Aassve A., Arpino B. and Billari F. (2013) "Age norms on leaving home: multilevel evidence from the European Social Survey", *Environment and Planning A,* 45(2), pp: 383–401.

Andersen H.S. (2011) "Motives for Tenure Choice during the Life Cycle: The Importance of Non-Economic Factors and Other Housing Preferences", *Housing, Theory and Society*, 28(2), pp: 183–207.

Andrews D. and Sánchez A.C. (2011) "Drivers of Homeownership Rates in Selected OECD Countries"*, OECD Economics Department Working Papers*, 849, pp: 1-44.

Arrondel L., Badenes N. and Spadaro A. (2010) "Consumption and Investment Motives in Housing Wealth Accumulation of Spanish Households", *Social Science Research Network Working Paper*, pp. 1-21, doi:10.2139/ssrn.1597126

Arundel R. and Ronald R. (2016) "Parental co-residence, shared living and emerging adulthood in Europe: semi-dependent housing across welfare regime and housing system contexts", *Journal of Youth Studies*, 19(7), pp: 885-05.

Augustyniak H., Łaszek J., Olszewski K. and Waszczuk, J. (2013) "To Rent or to Buy – Analysis of Housing Tenure Choice Determined by Housing Policy", *Ekonomia*, 33, pp: 31-54.

Barrios V.E., Colom M.C. and Molés M.C. (2013) "Life cycle and housing decisions: a comparison by age cohorts", *Applied Economics*, 45 (32), pp: 4556–4568.

Bayrakdar S., Coulter R., Lersch Ph. and Vidal S. (2018) "Family formation, parental background and young adults' first entry into homeownership in Britain and Germany", *Housing Studies*, 34(6), pp: 974-996.

Blaauboer M. (2010) "Family background, individual resources and the homeownership of couples and singles", *Housing Studies*, 25(4), pp: 441–461.

Bogdał P. (2017) "Housing economy in Poland based on an example of Housing Association [TBS]", *World Scientific News*, (72), pp: 657-669.

Brzezicka J., Łaszek J., Olszewski K. and Waszczuk J. (2019) "Analysis of the filtering process and the ripple effect on the primary and secondary housing market in Warsaw, Poland", *Land Use Policy*, 88, pp: 1-16.

Carter S. (2011) "Housing tenure choice and the dual income household*". Journal of Housing Economics*, 20(3), pp: 159-170.

Christophers B. and O'Sullivan D. (2018) "Intersections of inequality in homeownership in Sweden", *Housing Studies*, 34(6), pp: 897-924

Clark W.A.V. and Mulder C.H. (2000) "Leaving home and entering the housing market", *Environment and Planning A,* 32, pp: 1657-1671.

Clark W.A.V., Deurloo M.C. & Dieleman F.M. (1997) "Entry to Home-ownership in Germany: Some Comparisons with the United States", *Urban Studies*, 34(1), pp: 7-19.

Coulter R. (2018) "Parental background and housing outcomes in young adulthood", *Housing Studies,* 33(2), pp: 201–223.

Disney R., Henley A. and Gallagher T. (1995) "Housing assets and savings behavior among the elderly in Great Britain", *Institute for Fiscal Studies Working Paper,* 22, pp: 353-404.

Dunne T. (2012) "Household formation and the great recession" *Federal Reserve Bank of Cleveland Working Paper Series*, 23.

Eichholtz P. and Lindenthal Th. (2014) "Demographics, Human Capital, and the Demand for Housing", *Journal of Housing Economics,* 26, pp: 19-32.

Feijten P. (2005) "Union dissolution, unemployment and moving out of homeownership", *European Sociological Review*, 21(1), pp: 59–71.

Feijten P. and Mulder C. (2005) "Life-course Experience and Housing Quality", *Housing Studies*, 20(4), pp: 571-587.

Filandri M. and Bertolini S. (2016) "Young people and home ownership in Europe", *International Journal of Housing Policy*, 16(2), pp: 144–164.

Fiori F., Graham E. and Feng Z. (2019) "Inequalities in the transition to homeownership among young people in Scotland", *Housing Studies*, 35(3), pp: 506-536.

Gillespie B.J. (2020) "Adolescent Intergenerational Relationship Dynamics and Leaving and Returning to the Parental Home", *Journal of marriage and family*, 82, pp: 997-1014.

Gyourko J., Linneman P. (1997) "The changing influences of education, income, family structure, and race on homeownership by age over time", *Journal of Housing Research,* 8, pp: 1–25.

Hegedüs J., Lux M and Teller N. (eds) (2013) *Social Housing in Transition Countries*, New York, London: Routledge.

Hegedüs J., Lux M., & Horváth V. (eds.). (2017) *Private Rental Housing in Transition Countries: An Alternative to Owner Occupation?*. Springer.

Hegedűs J. (2020) "Understanding housing development in new European member states-a housing regime approach" *Critical Housing Analysis*, *7*(1), 49-62.

Hendershott P.C., Ong R., Wood G.A. and Flatau P. (2009, "Marital history and home ownership: evidence from Australia", *Journal of Housing Economics*, 18(1), pp: 13-24.

Hilber Ch. (2007) "Why are homeownership rates so different across Europe?", *14th ERES Annual Conference Papers Series*.

Jones L.D. (1990) "Current wealth constrains on the housing demand of young owners", *The review of Economics and Statistics*, 76, pp: 424-432.

Kim K. and Joen J.S. (2012) "Why do households rent while owning houses? Housing sub-tenure choice in South Korea", *Habitat International*, 36, pp: 101-107.

Kucharska-Stasiak, E., and Matysiak, G. A. (2004). The transition of the Polish real estate market within a Central and Eastern European context. Working paper.

Ladányi J. (2001) "Residential segregation among social and ethnic groups in Budapest during the post-communist transition", in P Marcuse, R van Kempen (eds) *Of States and Cities: The Partitioning of Urban Space* .Oxford University Press, Oxford, pp 170-182

Lee H., Myers D., Painter G., Thunell J. and Zissimopoulos, J. (2020) "The role of parental financial assistance in the transition to homeownership by young adults", *Journal of Housing Economics*, 47, doi: 10.1016/j.jhe.2018.08.002.

Lennartz, C., Arundel, R. & Ronald, R. (2016) "Younger adults and homeownership in Europe through the Global Financial Crisis", *Population, Space and Place*, 22(8), pp: 823–835.

Lersch P.M. and Dewilde C., (2015) "Employment insecurity and first time home-ownership: evidence from twenty-two European countries", *Environment and Planning A,* 47, pp: 607–624.

Lersch P. M. and Luijkx R. (2015) "Intergenerational transmission of homeownership in Europe: Revisiting the socialization hypothesis", *Social Science Research*, 49, 327–342.

Lux M., Sunega P. and Kážmér L. (2018) "Intergenerational financial transfers and indirect reciprocity: determinants of the reproduction of homeownership in the post-socialist Czech Republic", *Housing Studies*. doi: 10.1080/02673037.2018.1541441

Łaszek, J., Augustyniak, H., & Olszewski, K. (2016, August). FX mortgages, housing boom and financial stability–a case study for Poland (2005-2015). In *The Narodowy Bank Polski Workshop: Recent trends in the real estate market and its analysis–2015 edition*.

Łaszek J., Olszewski K. and Augustyniak H. (2018) "A simple model of the housing market and the detection of cycles", in J. Łaszek, K. Olszewski and R. Sobiecki (eds.) *Recent trends in the real estate market and its analysis*, SGH Warsaw School of Economics. Warsaw, pp. 87 – 102.

Łaszek J., Augustyniak H. and Olszewski K. (2021) "The Development of the Rental Market in Poland" in R. Sobiecki, J. Łaszek and K. Olszewski (eds.), *Real Estate at Exposure. New Challenges, Old Problems*. SGH Warsaw School of Economics. Warsaw, pp. 263 – 274.

Marcuse P. and Van Kempen R. (eds) (2000) *Globalising Cities: A New Spatial Order?* Oxford: Blackwell

Matel A. and Olszewski K. (2021) "Housing trajectories before, during and after marriage – patterns and changing inequalities in a post-transformation country". Unpublished.

Matel A. (2021) "Tenure status in life cycle cohorts in Poland", *Real Estate Management and Valuation*, 29 (3), (forthcoming).

Matel A. (2020) *Właściciele i najemcy. Status mieszkaniowy gospodarstw domowych w Polsce*, Bialystok: University of Bialystok Press.

McKee K., Moore T., Soaita A. and Crawford J. (2017) *"*Generation Rent and the fallacy of choice*", International Journal of Urban and Regional Research*, 41(2), pp. 318–333.

Mundra K. and Uwaifo-Oyelere R (2019) "Homeownership trends among the never married", *Housing Studies*, 34(1), pp: 162-187.

Mundra K. and Uwaifo-Oyelere R. (2016) "Single and Investing: Homeownership trends among the never married", *IZA Discussion Paper,* no. 5.

Mulder C. H. (2013) "Family dynamics and housing: Conceptual issues and empirical findings", *Demographic Research,* 29, pp: 355–378.

Murphy, A. E. (2000) "The 'Celtic Tiger' – An Analysis of Ireland's Economic Growth Performance." Working Paper No. 2000/16. Florence: European University Institute.

Muzioł-Węcławowicz, A. (2013). Old Problems and New Dilemmas. *Social housing in transition countries*, *10*, 195. In: Hegedüs J., Lux M and Teller N. (eds) (2013) *Social Housing in Transition Countries*, New York, London: Routledge.

NBP (2020a) Report on the situation in the housing and commercial real estate market in Poland in 2019. (Warsaw: Narodowy Bank Polski)

NBP (2020b) Situation in local residential real estate markets in Poland in 2019. (Warsaw: Narodowy Bank Polski)

Özüekren A.S. and Karahan-Ergöz E. (2010) ''Housing Experiences of Turkish (Im)migrants in Berlin and Istanbul: Internal Differentiation and Segregation'', *Journal of Ethnic and Migration Studies*, 36 (2), pp: 355 - 372

Painter G., Gabriel S.A. and Myers D. (2001) "Race, imigrant status and housing tenure choice"*, Journal of Urban Economics*, 49(1), pp: 150-167.

Phillips, D. (2006a) Moving towards integration: the housing of asylum seekers and refugees in Britain, *Housing Studies,* 21 (4): 539-553.

Rae, D. and P. van den Noord (2006), "Ireland's Housing Boom: What has Driven it and Have Prices Overshot?", *OECD Economics Department Working Papers*, No. 492, OECD Publishing, ParisRubaszek M. (2019) "Private rental housing market underdevelopment: life cycle model simulations for Poland", *Baltic Journal of Economics*, 9(12), pp. 334-358.

Rubaszek M. and Czerniak A. (2017) „Preferencje Polaków dotyczące struktury własnościowej mieszkań: Opis wyników ankiety", *Bank i Kredyt*, 48(2), pp. 197–234.

Skaburskis A. (1996) "Race and tenure in Toronto", *Urban Studies*, 33 (2), 1996, pp: 223-252.

Statistics Poland (2021a) Registered unemployment, https://stat.gov.pl/en/topics/labour-market/registered-unemployment/ accessed on 1.03.2021

Statistics Poland (2021b) Consumer tendency, https://stat.gov.pl/en/topics/business-tendency/business-tendency/consumer-tendency-march-2020,3,3.html accessed on 1.03.2021

Strączkowski Ł. and Boruta M. (2018) „Warunki i decyzje mieszkaniowe seniorów na lokalnym rynku nieruchomości", *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie*, 3(975), pp: 69-81.

Thomas M.J. and Mulder C. H. (2016) "Partnership patterns and homeownership: a cross-country comparison of Germany, the Netherlands and the United Kingdom", *Housing Studie*s, 31(8), pp. 935–963.

Williams R. (2012) "Using the margins command to estimate and interpret adjusted predictions and marginal

effects", *Stata Journal*, 12(2), pp. 308–331.

Wozniak G. E. (2017) "Facts and Myths on Restitution of Property in Poland" *Loyola of Los Angeles International and Comparative Law Review (ILR)*, 41, 331.

Unsettled Settlements in Island Cities: Büyükada, Istanbul

Mahsa Safaei

Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34437 Istanbul, Turkey
e-mail: safaei@itu.edu.tr

Prof. Dr. Yurdanur Dülgeroğlu Yüksel

Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34437 Istanbul, Turkey
e-mail: yukselyu@itu.edu.tr

Abstract

The formation of the city configuration requires a set of activities and relationships among its buildings and environments. In this vein, a worthy and appropriate transportation system is essential for social variables, internal and external communication, and especially the formation of a network. In islands, the conditions are a bit different facing more difficulties. To some extent, the lack of network transportation and integration system has bothered the islanders is the point that needs special consideration. Thus, the investigation of their achievements and failures in developing their own transportation system in different contexts can contribute to future design decisions. Accordingly, the paper aims to study some examples in order to get touch upon some of the points that keep the islands' local inhabitants comfortable or the lack of issues that have disrupted it. It specifically focuses on the transportation concerns that Büyükada Island and its local people had faced during history.

Keywords: Büyükada, Island, Settlement, Transportation.

Introduction

Transportation network design has always been a matter of concern for inhabitants' comfortability. This anxiety is much evident in islands where there is much restriction to the lands. However, throughout history, islands have behaved differently to solve transportation problems due to their specific conditions. How islands have dealt with this issue to intensify a network of transportation and connection between different places has created a different image of each island. In other words, transportation has a very crucial role in defining the city's configuration and behavior. In this regard, their daily dynamic and population flow can designate their efficiency in keeping their local inhabitants. To illustrate this claim, the paper considers Büyükada Island located in Istanbul, Turkey. Its transport problems and opportunities responses which the site offered in the past and today are mentioned in this research. The natural threatens and restrictions are debated to find solutions to improve the condition. As the transportation issue gets progresses, more cultural, social, tourist, economic, and quality of life opportunities will grow. The study attempts to figure out the survival strategies of the islanders and also accentuate their present problems and threatens. The consequences of the study can contribute to offering and developing future city configuration for a healthy settlement design in various cases. This research holds the historical documentation and primary data as a methodology to measure the conditions.

Example Islands

As mentioned, transportation defines the shape of the city that subsequently impresses the social interactions and settlement infrastructure. In this regard, three islands are reexamined to have a better understanding of transportation effects on the inhabitants. Venice and New York are the islands that have generated new ways of transportations for the settlement difficulties. Venice is an island that has been separated with canals and connected with numerous bridges. Therefore, one can walk or use water to get to the destination. Since the soil is not proper for construction, the buildings are structures that are supported with wooden pillars inserted into the mud. New York consists of four important islands and also smaller islands. Therefore, it naturally possesses plenty of harbours. Previously, the travel among these islands was only possible using personal boats and private ferries. After Brooklyn Bridge in 1883 and other bridges construction, all these harbours were connected together for more development of the New York city. Afterwards, the opening of the subway system almost all the city was integrated together (Hamilton & Hoyle, 1999). As Hood (Hood, 1993) mentions 'The subway integrated New York, overcoming river barriers, joining the boroughs, and shaping neighbourhoods. It kept New York compact and socially diverse'. The two examples indicate the problem of the context's integrity and the transportation system importance in developing this network. Besides, the land's connectivity boosts population growth and the quality of life.

Büyükada Island

The Prince Islands are located in the northeast of the Marmara Sea and in the southeast of Istanbul. The Prince Islands consist of four large, five smaller islands, and two rocks between Anatolia and the coast. Büyükada, which means 'big island' in Turkish, is the historical and tourist center of the Prince Islands of Istanbul. The surface area of the island is 538.63 hectares. Büyükada has a distance of 2.2 km to Maltepe and Kartal and 4 km to the Anatolian side. The topography of the islands rises gradually towards the southeast of the Kocaeli Peninsula. The islands consist of hills of various heights. Büyükada with four tops of Yüce (Aya Yorgi - Ayios Yeorios): 202 m, Christ (Hristos): 163 m, Tepekoy (Nevruz): 150 m, Avcı: 145 m. Büyükada is the largest inhabited island located in the Prince Islands district. The distance of the islands to Istanbul city, the climate, and landscape characteristics all have created a special situation with considerable privileges for the islands. They are inseparable parts of the city and at the same time owing to these features, they can act and develop arbitrarily and independently. Figure 1 shows the location of Büyükada Island in Istanbul in left and in right the figure magnifies its relationship with the surrounding islands.
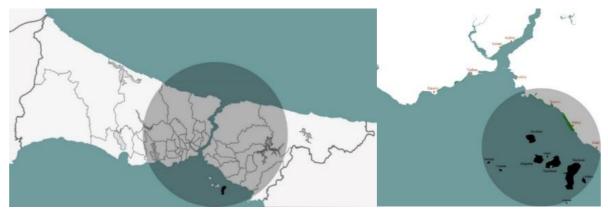

Figure 1: Istanbul Prince Islands Location, (sketched by the author).

Büyükada Island Settlement History

The primitive settlement in the Prince Islands goes back to the Byzantine period. The islands' vernacular settlement was known as a place for exiles, refugees, or monks in that period (Kritovoulos, 1970). In the 6th century, with the occupation of Büyükada by Emperor Justinian II, the primary construction of the Byzantine Period was commenced (Güvenç, 2011). For seven centuries in the

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Byzantine time, Büyükada just like other islands renowned for its countless tragic exile, prison, and tortures stories of princes, islanders, nobles, patriarchs, and emperors occurred in the giant monasteries of the islands (Schlumberger, 2006).

The first serious settlement formed in the early 13th century. It was a village in the eastern shore of the island, in Maden district, which used to be a fisherman's village. The village contained a few farms, three castles, a citadel, and a seaport (Olivier, 1977; Tuğlacı, 1995). In the 16th century, as bubonic plague wiped out Istanbul, some privileged upper-class families moved to the island as a place of sanctuary to be safe (Mamboury, 1943). As Evliya Çelebi expresses that in 1641, Greek anglers inhabited the island (Kurşun, Kahraman, & Dağlı, 1996). After the Turks coming, the islands had the chance to have peace and tranquility. Indigenous peoples started fishing and agriculture (Güvenç, 2011).

Büyükada Island Transportation

Another issue, which played an important and initial role in the development of the islands, was the regular ferryboat expeditions between Kadıköy, Istanbul, and the islands since 1846. As the result of this development, one of the first three municipalities established in Istanbul was devoted to the Municipality of the Islands, which is called the Seventh Unit in 1861 during the period of Sultan Abdülaziz (Zaman, 2012). In the 18th century, Büyükada was considered a part of Istanbul being effectively influenced by the activities going on in the city. By the beginning of the 19th century, as transportation increased, Büyükada considerably integrated with Istanbul. As the result, the population increased that needed new buildings to accommodate. In the first half of the 19th century, Büyükada's population was considered to be between 200-3000 (Garipağaoğlu, 1998).

In the Late Ottoman Period (the 1840s-1920s), Turks started settling on the island especially in 1846 when small ships started to serve the transportation need. In 1875, regular voyages were passed with the arrival of larger ships. As the result, the population in Büyükada has increased rapidly. In addition to the rich Turks, affluent foreigners tended to live in Büyükada. Respectively, pavilions, mansions, houses, buildings, churches, and mosques that reflect the architectural styles of the period were built. As the port and dock were built for transportation, hotels and restaurants were constructed nearby the port to service the passengers (Güvenç, 2011). Figure 2 indicates the very first boats coming to the island and figure 3 highlights the primitive port constructed on the island.

Figure 2: 1930's, the boats (Gülersoy, 1997).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl
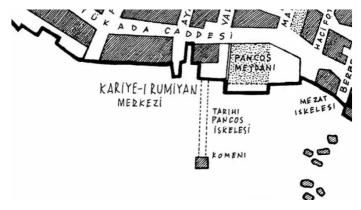
Figure 3: The ancient pier of the island (Millas, 2014).

New Transportation means suggested for Büyükada

In this part of the study, the paper offers several other transportation vehicles to promote relationships among the lands and Büyükada. In recent years, in order to increase connectivity, there are some other steamboats and ferryboats added to the transportation system network via different companies other than municipality ferryboats. They mainly connect the islands especially Büyükada to the mainland. However, these vehicles are insufficient and cannot serve people all day long. Therefore, new personal boats, water taxis, shuttles, and the construction of new marinas and harbors can contribute to developing the link among the lands and new formation of the relationships. In this regard, the context can guarantee and sustain more inhabitants who want to have a convenient and permanent life on the island.

Conclusion and Results

As mentioned in the context, in addition to the essential role of transportation vehicles in linking the places, merging the relationships, and developing an integrated network, they have other different effects. This impression is various in different islands considering Büyükada, Venice, or New York. However, their original effect is a new shape and image of a city. They can also define new levels of income, increase population density, and promote the inhabitants' quality of life. Therefore, it would be possible to learn from the experience of each of the cities in network creation and transport patterns. Conducted patterns present new strategies and encourage new ideas in facing different conditions. In Büyükada Island example, in order to keep the island as a permanent summer resort with adequate infrastructure, new considerations have been ordered. In this regard, new transportation vehicles like new ferries between the island and the mainland, new marinas that can serve personal boats and yachts, and four-season new shuttles among the Prince Islands can develop new island configurations. In this new context, local settlements and tourists would have the least concern to stay long. As the movement and transportation make the island, it can also intensify sustainability of the settlements and their quality of life.

References

Garipağaoğlu, N. (1998). "İstanbul Adalarinda Korunmasi Gereken Tarihî Doku: Büyükada Örneği". *Marmara Coğrafya Dergisi*. Retrieved from http://dspace.marmara.edu.tr/handle/11424/2402?show=full

Güvenç, M. (2011). "Near the City, Yet away from City Life". In H. Kuruyazıcı (Ed.), *Princes' Islands buildings architects* (pp. 12–29). Istanbul: Adalı yayınları.

Hamilton, K., & Hoyle, S. (1999). "Moving cities: transport connections". In J. Allen, D. Massey, & M. Pryke (Eds.), *Unsettling Cities: Movement/Settlement*. New York: Routledge.

Hood, C. (1993). *722 Miles. The Building of the Subways and How They Transformed New York*. New York: Simon and Schuster.

Kritovoulos. (1970). *History of Mehmed the Conqueror*. Westport,CT, USA: Greenwood Press.

Kurşun, Z., Kahraman, S. A., & Dağlı, Y. (1996). *Evliya Çelebi Seyahatnamesi (Book of Travels of Evliya Çelebi)*. Istanbul: Yapı Kredi Press.

Mamboury, E. (1943). *Les Iles Des Princes*. Istanbul: Maarif Press.

Schlumberger, G. (2006). *İstanbul Adaları*. Kesit Yayınları.

Tuğlacı, P. (1995). Tarih Boyunca İstanbul Adaları. *Say Yayınları*, *1*.

Zaman, S. (2012). Adalarin Genel Tarihi ve Mimarisi. Retrieved from http://buyukadakatmanlari.blogspot.com/2012/06/adalarin-genel-tarihi-ve-mimarisi.html?m=1

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Unsettling and Uncertainty Issues in the Housing Environment of Syrian Refugees

Merve Kılıçbay

Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34 437 Istanbul, Turkey
e-mail: kilicbaym@itu.edu.tr

Yurdanur Dülgeroğlu Yüksel

Istanbul Technical University, Faculty of Architecture, Taskisla, Taksim, 34 437 Istanbul, Turkey
e-mail: yukselyu@itu.edu.tr

Abstract

Throughout history, human mobility has triggered many spatial, cultural, economic, and political changes and transformations. Stephan Castles and Mark J. Miller describe the current era as " the age of migrations". Increasing unforeseen displacements that cannot be stereotyped also give " the age of migrations" the characteristic of uncertainty and openness. After the refugee crisis, 98% of the refugees in Turkey are living live in cities. Istanbul is the largest host of Syrian refugees of all of Turkey's cities. The places most affected by physical and social displacement and uncertainty are undoubtedly urban spaces and settlements. Examining the diversity of new settlements developed informally and formally, the spatial strategies and potentials created is considered important in terms of revealing the effect of migration on urban spaces and residential settlements.

This study aims to compare the spatial characteristics and strategies of designed (formal) settlements and self-generated (informal) settlements after the refugee crisis in İstanbul/ Turkey . The design of settlements will be discussed and presented with the help of social and physical themes

Keywords: Urban Refugees, cultural adaptation, re-production of home settlement

Introduction

According to the current data of the United Nations, the number of international immigrants has increased by almost 50% (from 173 million to 272 million) since 2000. Migration is simply the long-term relocation of individuals or groups from one geography to another. This displacement takes place as a whole temporally, perceptually and spatially. In the age of globalization we are in, both the dimensions of migration have increased and become complex. International migration is a dynamic, complex and multidimensional phenomenon and is in constant motion. It takes different shapes in different contexts and develops in different ways. Migration can also play a central role in the construction of a country and city (Öner, 2016)

Castles (2008) defines the 21st Century as the age of communication and migration. Human mobility is increasing and the concept of migration, which is one of the oldest concepts in human history, is evolving into different axes. Transit migration refers to the fact that it is in one of the intermediate stops in the transition and migration journey, that the destination point has not yet been reached and that there is incompleteness. Forced or forced migrations are migrations that occur as a result of war, disease, and disaster situations. Forced migration includes refugees, asylum seekers and displaced persons.

The forced migration movements experienced as a result of natural disasters such as wars, crises and

earthquakes have increased significantly, especially numerically, in the 20th century. It is seen that it is important to look at forced migration from different perspectives and to reconsider existing concepts and theories. (Öner, 2016)

According to UN data, almost half of the increasing amount of migration in the last 10 years has occurred in developing countries. In 2021, Turkey hosted 3.6 million refugees, making it the most refugee holding country in the world (according to UN data). It is thought that Turkey will be increasingly affected by mass migration flows due to the EU adaptation process and the fact that it is a border (crossing) state with Europe. As of March 2011, Turkey has been hosting the largest population fleeing the Syrian war. According to 2021 data, there are currently 3.6 million Syrian refugees in Turkey. Turkey, which followed the "open door" policy in the Syrian crisis, does not accept the Syrian population as a refugee and accepts it under the heading of temporary protection. With the Syrian crisis, Turkey has become a country that both emigrates and receives immigration from the country of emigration. This new situation has brought along some spatial requirements.

According to the data of the Turkish Ministry of Foreign Affairs, there are 7 refugee camps (Temporary Accommodation Centers) in 5 provinces providing shelter, education and health basic needs in various provinces, especially in border regions. In the first years when Syrian refugees started to take shelter, there were 26 camps and 10% of the refugee population lived in these camps. With the uncertainty continuing over the past years, refugees have left the camps and turned to cities. Today, only 1.5% of Syrian refugees live in these temporary accommodation centers. 98.5% of Syrian refugees live in cities (Figure 1). Urban centers have been the final destination, temporary or permanent settlement of not only refugees but also a large part of migrants. Forced migration brings along various human rights violations. One of the biggest rights violations of "urban refugees" is the "right to housing". Cities provide informal work and shelter opportunities for refugees with uncertain conditions.

IN REFUGEE CAMPS   53.666

IN CITIES   3.645.722

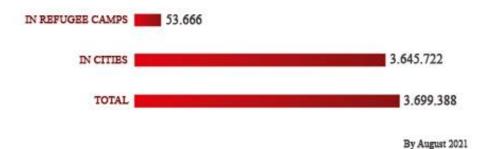TOTAL   3.699.388

By August 2021

Figure 1: Syrians living inside and outside Temporary Accommodation Centers.
(Source: Republic of Turkey Ministry of Interior Directorate General of Migration Management)..

The time and spatial change of refugees brings with it uncertainty and disorder. With this study, it was aimed to understand the formal and informal urban housing solutions of refugees and to discuss the relationship between forced migration and housing on various scales and contexts.

Urban Refugees and Housing Forms

According to the Geneva Convention signed in 1951, the definition of refugee is as follows: *"It shall be applied to any person who is outside the country of which he/she is a citizen because he/she is afraid that he/she will be persecuted due to his/her race, religion, nationality, membership of a certain social group or political thoughts, and who cannot benefit from the protection of this country or who does not want to benefit from the protection of this country due to the fear in question, or who does not have a nationality and who is outside the country of residence where he/she lived before as a result of such events, who cannot return there or does not want to return due to the fear in question".* By imposing geographical limitations on the Geneva Convention, Turkey grants refugee status only to immigrants fleeing from Europe. For this reason, it has granted temporary protection status to people whose status is not clear due to the increasing mass migration from Syria with the "Temporary Protection Regulation" numbered 6458

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

(Erdoğan & Kaya 2015, Körükmez & Südaş, 2015, Öner & Öner, 2016). The position of refugees remains uncertain despite the emphasis on temporariness with the definition of "temporary protection status" and "Syrian guests" given to refugees.

According to the reports of 2021, more than 3.6 million refugees live in Turkey. The Syrian population constitutes 3.699.388 of this number. In order to shelter the Syrian refugee population, 26 camps were established in regions close to Turkey's Syrian border. Due to the "temporary protection" status of Syrian refugees, these refugee camps are called "temporary shelter centers".

In these camps, shelter, basic health and education services are provided. Temporary Housing Centers have been created as a temporary solution by using fast-produced, tent and prefabricated products. Infrastructure facilities such as electricity, road and water have been provided in the settlements. However, due to reasons such as temporary emphasis and uncertainty in living conditions, only 1.5% of the refugee population lives in these camps. The remaining 98.5% live as "urban refugees" by being distributed in 81 provinces of Turkey (URL 1).

The concept of urban refugee was first used in the "Comprehensive Policy on Urban Refugees" report of the United Nations High Commissioner for Refugees (UNHCR) in 1997. The scope of this definition, which covers refugees who live in cities in the country they come from and prefer to live in cities instead of refugee camps in the country they come from, has expanded over time. Urban refugees are refugees who live in urban spaces with their own facilities and connections instead of refugee camps in the country where they take refuge. Refugees living in cities have started to establish their own spatial life patterns informally. They have been involved in the transformation of urban parts with their economic, cultural and spatial effects.

Figure 2. The distribution of Syrians under temporary protection status according to the top 10 cities (Source: Republic of Turkey Ministry of Interior Directorate General of Migration Management).

The variable and dynamic structure of the city of Istanbul can establish faster spatial, economic and relational networks for refugees than other cities and they can be less visible due to the crowded and cosmopolitan structure of the city. Although it is believed that forced migration will end with the improvement of the living conditions in the country, it is thought that the war and uncertainties that have been going on for more than 9 years will turn into a permanent situation for the economic reasons and the future of the growing generation in the countries of refuge.

Istanbul has hosted many internal and external migrations from the past to the present. Istanbul has been the most preferred city of immigrants, especially refugees, due to its geographical and economic opportunities and communication networks. Approximately 14.3% of refugees living in cities in Turkey live in Istanbul. It has been revealed by the studies that a small number of Syrians with good economic status live in the districts that stand out with conservative lifestyles such as Fatih and Başakşehir and in

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

the neighborhoods of other districts that are residential settlements. It is understood that most of the Syrians live in distant and surrounding districts where Istanbul is later structured, the rents are low and the business lines requiring cheap labor are concentrated (Kaya, 2017, Istanbul Institute of Political Research, 2021). According to the data of the Istanbul Metropolitan Planning Directorate, there is an inverse relationship between the districts preferred by immigrants and the service of the district. Refugees are mostly seen to be living in regions where poverty rate is high, conservative and religiosity is prominent, social solidarity networks are more and cheap despite lack of service. Higher refugee populations live in disadvantaged districts in terms of quality of life. A similar result has emerged regarding refugee camps in the researches that were conducted. No relationship was found between the technical facilities and physical satisfaction of the camp and the satisfaction with camp life. The solidarity codes that refugees establish with the society have come to the fore rather than physical opportunities (Erdoğan, 2017). It is seen that refugees strategically prefer their living environments and design their life fictions in this direction, which can facilitate sociocultural and economic adaptation and maintain their lifestyles without differentiation in society.

The places and quality of the refugees in the city have also changed over time. When the research reports conducted in 2017 were examined, it was determined that the majority of the refugees living in the city lived in apartments, slums and abandoned buildings that were considered as ruins, and some still lived under poor conditions in tents or temporary shelters in the city. According to the reports of 2019, it was determined that the number of people living in apartments and detached houses where the living conditions of the refugees improved increased (AFAD, 2017, Erdoğan, 2017, Erdoğan 2019).

Despite the many informal opportunities Istanbul offers to refugees, the gradual increase in rental prices in line with increasing demands brings some economic obstacles to refugees. The size, location and building quality of the living space are the factors that affect the quality of life. Syrians are experiencing problems due to their family size, economic difficulties and building quality in poor regions. Due to the low rental prices, there has been an increase in rental rates due to demand in the neighborhoods they go to (AFAD, 2017, Erdoğan, 2017, Erdoğan 2017, Erdoğan 2019). In addition, according to the report prepared by Istanbul, it has been determined that Syrians have settled in distant districts with low rental and job opportunities in the last two years and their mobility continues in the city. While the Syrian population has increased in Esenyurt, Bağcılar, Esenler and Sultangazi districts, the Syrian population has decreased in Şişli, Fatih, Bayrampaşa, Zeytinburnu, Büyükçekmece and Beylikdüzü districts where the rents are higher than the neighboring districts (Istanpol, 2021).

It is seen that refugees strategically prefer their living environments and design their life fictions in this direction, which can facilitate sociocultural and economic adaptation and maintain their lifestyles without differentiation in society. It is understood that the search for countries in the first years of the war turned into intercity mobility and finally into urban mobility due to various economic and sociocultural reasons and covered different forms of migration.

Migration and Housing in Istanbul

Istanbul, which is a world city, has hosted communities of many different races, languages and nations throughout history and is a mosaic of languages and religions where communities live together. According to Çağlar Keyder, Istanbul is a city divided both geographically and demographically, where traditions can exist without mixing with each other (Keyder, 2013). Mechanization in agriculture since the 1950s has caused migrations from the rural to the city center. Urbanization, which took place in a short period of 20-30 years compared to developed countries, caused a serious population increase and accompanied by spatial needs. Newcomers to the city have created unauthorized, unplanned and low-standard settlements to meet their housing needs on public lands close to industrial zones. (Tekeli, 1982). These settlements, called slums, consist of structures that meet the basic shelter need built by the users themselves. In these settlements, kinship and solidarity relations with citizenship networks were maintained. Over time, the slums started to spread to the city walls and the slums started to be rented to other users. With the increase in urbanization, the slums around the city started to be condominiumized

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

with the help of amnesties. Informal residential areas have been replaced by regular residential areas with infrastructure systems over time. TOKI (Housing Development Administration), which was established to meet the qualified housing needs of middle and low-income people, has been an important implementer of the transformation of slum areas (Tekeli, 2011;Tekeli, 2012; Gür and Yüksel, 2019.). Istanbul hosts planned and unplanned housing settlements with a population of more than 15 million and multicultural, constantly differentiating housing forms (gated communities, multi-storey mass housing, apartments, apartment blocks, detached houses, etc.) and differentiating lifestyles.

The residential areas, which offer an important spatial network and solidarity networks for low-income individuals to survive in the city, have been similar tools for refugees. Thanks to their ethnic, economic and solidarity networks, the new refugees who came to Istanbul settled in these regions following the footsteps of the pioneers. According to network theory and ethnic economy theory, immigrants act in social networks in the new countries they settle in. In order to support each other and protect their languages and cultures, immigrants concentrate on certain settlements by using citizenship and kinship relations and open various small businesses to meet their unique needs (Castles and Miller, 2008). These regions, which are settled in the adaptation process to the city and the newly arrived society, are of critical importance. Ager and Strong (2008) drew a conceptual framework with some basic areas for adaptation in refugees in their article "Understanding Integration: A Conceptual Framework". Accordingly, working and work, housing, education and health constitute the tools that determine the harmony in the first step (Figure 3). In this context, the region, housing diversity and facilities, distance to work sites and ease of access to public services such as education and health are the primary factors affecting the adaptation of newcomers to the city.
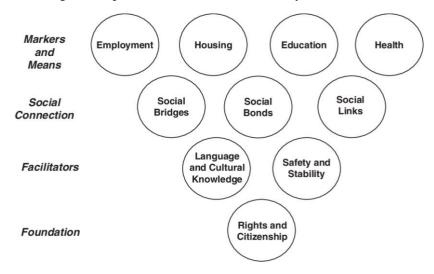

Figure 3. Conceptual framework of integration and its core areas (Ager and Strong, 2008)

While investigating the shelter and settlement solutions of Syrian refugees, it has been observed that they vary as formal and informal settlements. Among these settlements, 4 districts with a population of more than 6% of Syrian refugees, which will create diversity such as old city center settlement, new mass housing settlement, slum settlement and old slum settlement, were selected. The housing areas preferred by the Syrians in Fatih, Esenyurt, and Başakşehir districts will be evaluated and the housing strategies and spatial relations that can be learned from these settlements will be examined.

Table 1. The main features of the districts where the Syrians settled.

DISTRICT	POPULATION		TRANSPORTATION	STRATEGIES
Fatih	Syrian population 29.558	District Population 436.539	o Tram o Metro o Bus o Ferry o Marmaray o Car	o City center o Ethnic economy o Informal business opportunities o Access to public services o Arab population o Conservative lifestyle o Refugee NGOs
Esenyurt	Syrian population 59.163	District Population 891.120	o Bus o Car	o Ethnic economy o Industrial area o Low rent o Ethnic networks
Başakşehir	Syrian population 26.491 21.480	District Population 427.835 327.798	o Metro o Bus o Car	o Better living conditions o diverse rental opportunities o Arab population o Conservative lifestyle o Close to Industrial and business area

Table 2. Types of housing preferred by Syrians in Fatih (photo credit: Google Maps)

	Apartments	**Urban renewal**	**Old Town Abandoned Houses**
Fatih	 Akşemsettin	 Sulukule	 Süleymaniye

Table 3. Types of housing preferred by Syrians in Esenyurt (photo credit: Google Maps)

	Mass Housing	**Apartments**	**Gecekondu (squatter settlement)**
Esenyurt			

Table 4. Types of housing preferred by Syrians in Başakşehir (photo credit: Google Maps).

	Gated Communities (luxury mass housing)	Mass Housing by TOKİ	Former Gecekondu Settlement
Başakşehir			

New arrivals differ among themselves, although they are addressed collectively under the title of refugee. The length of stay in the city causes differences in economic and social capital accumulation, working conditions and new forms of housing.

Differentiation of spatial preferences, potentials and strategies may also cause differentiation of housing forms. Thanks to its flexible structure shaped by the history of migration, the city of Istanbul offers various forms of housing and settlement opportunities to immigrants, as seen in the examples examined. When the migration process, which consists of factors affecting and reproducing each other, is managed in a planned and pluralistic way, it can enrich the settlements and housing production forms by adding positive values.

Conclusion

HABITAT III "New Urban Agenda" which was held in the capital of Equator in 2016, emphasizes cultural diversity, pluralism, dialogue and interaction in cities (URL 2). Article 28 of the Kito implementation plan states as follows: *"Regardless of their status, we are committed to ensuring that the human rights of refugees, displaced persons and migrants are fully respected and to supporting them in the spirit of international solidarity, taking into account the host cities, their national conditions and the fact that large population movements towards towns and cities can bring important social, economic and cultural contributions to urban life despite the various difficulties."* In this context, thanks to the spatial and demographic diversity of Istanbul, it has always been an immigration city and cultural mosaic where newcomers can find shelter and work and where they can be contacted or contactless.

With the effects of globalization, the housing status of refugees can be conceptualized economically, culturally and socio-spatially. The uncertain and irregular population mobility that occurs carries the risk of turning into a problem of belonging. It is necessary to discuss and redefine these transit lives and housing context, and to develop new strategies by using their potential.

The risks and potential for refugee housing problems are as follows:

Risks,

- o Unhealthy, unhealthy housing conditions

- o Uncertainty of continuous number of people and length of stay

- o The disintegration of the city and the damage of these parts to the city identity

- o Local people leaving the area and moving away over time

- o Risk of becoming a closed society after a while in the face of increasing intensity

- o Not being able to be a part of the society that has arrived

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

- o Spaces that are only intended to meet the needs of their community

- o Unbalanced increase in regional rental value, economic interest problems

- o Danger of ghettoization in the first place and gentrification in the second

Potentials of the space,

- o A multicultural/ transnational potential for spatial production and use

- o Thanks to the continuation of daily life practices, the potential to establish relationships with the place and the city, to be public, to create spatial belonging

- o Increased demand for cultural diversity and plurality

- o Possibility of resettlement thanks to the origin-based economy and network

- o New job opportunities, better working conditions and pay

- o Expansion of social networks, opportunity to establish a relationship with the local

- o Encountering with the other and reproducing the space together

It is possible to gain learning from these settlements by revisiting the formal and informal settlements that occur in housing and settlement solutions. In the context of settlement strategies used by Syrian refugees and the sustainability of residential areas, the network system can be used as instruments enriching the urban fabric. Thus, these cultural diversity potentials and tactics can be used as animations in the streets where initiatives and demand are low. In this way, mental barriers and uneasiness within the urban whole can be opened.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

References

AFAD, (2017) Türkiye'deki Suriyelilerin Demografik Görünümü, Yaşam Koşulları ve Gelecek Beklentilerine Yönelik Saha Araştırması, Başbakanlık Afet ve Acil Durum Yönetimi Başkanlığı, Ankara

Ager I., Strang A. , (2008) Journal of Refugee Studies, Volume 21, Issue 2, June 2008, Pages 166–191, https://doi.org/10.1093/jrs/fen016

Castles S. and Miller M., (2008) Göçler Çağı Modern Dünyada Uluslararası Göç Hareketleri, İstanbul Bilgi Üniversitesi Yayınları, İstanbul.

Keyder Ç. (2013) İstanbul Küresel ile Yerel Arasında Metis Yayıncılık, İstanbul.

Erdoğan M. and Kaya, A. (2015) Türkiye'nin Göç Tarihi (der. Erdoğan, M & Kaya, A.), İstanbul Üniversitesi, Bilgi Üniversitesi Yayınları, İstanbul. Erdoğan M., 2017 "Kopuş'tan "Uyum"'a Kent Mültecileri Suriyeli Mülteciler ve Belediyelerin Süreç Yönetimi: İstanbul Örneği, Marmara Belediyeler Birliği Kültür Yayınları, İstanbul.

Erdoğan M. (2019) Suriyeliler Barometresi 2019 Suriyelilerle Uyum İçinde Yaşamin Çerçevesi, Orion Kitabevi, Ankara.

Gür E. and Yüksel Y. (2019) Analytical Investigation Of Urban Housing Typologies In Twentieth Century Istanbul, Archnet-IJAR: International Journal of Architectural Research Vol. 13 No. 1, 2019 pp. 93-111

IstanPol, (2021) İstanbul'da Suriyeli Sığınmacılara Yönelik Tutumlar, İstanbul Politik Araştırmalar Enstitüsü, İstanbul.

Körükmez, L. & Südaş, İ. (2016) Göçler Ülkesi, Ayrıntı Yayınları, İstanbul.

Öner, A. (2016) Göç Çalışmalarında Temel Kavramlar, Küreselleşme Çağında Göç - Kavramlar, Tartışmalar (der. Öner G., Öner A), İletişim Yayınları, İstanbul.

Tekeli, İ.(1982) Türkiye'de Kentleşme Yazıları, Ekonomik ve Sosyal Araştırmalar: 3, Turhan Kitapevi Yayınları, Ankara,.

Tekeli, İ. (2011) Göç ve Ötesi, Tarih Vakfı Yurt Yayınları, İstanbul.

Tekeli, İ.(2012) Türkiye'de Yaşamda ve Yazında Konutun Öyküsü (1923-1980), Tarih Vakfı Yayınları, İstanbul.

URL1.https://www.goc.gov.tr/gecici-koruma5638, (accessed August 8, 2021).

URL2.http://habitat3.org/the-new-urban-agenda, (accessed May 24, 2021).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Tools to Tame Financialization of Housing

Julie Lawson

Centre for Urban Research, RMIT University, Australia

e-mail: julie.lawson@rmit.edu.au

Michelle Norris

Geary Centre for Public Policy, University College Dublin, Ireland

e-mail: Michelle.norris@ucd.ie

DRAFT paper - comments welcome

Abstract

Beyond the established body of research on the variety of financialization mechanisms affecting investment in housing and its acceleration by government and finance industry regulations (Fernandez & Aalbers 2017), a growing number of studies also provide evidence of its harmful impact on housing outcomes, such as increased housing costs for low to moderate income households, weakened tenure security for existing and prospective tenants and the displacement or hollowing out of existing established communities (García-Lamarca & Kaika 2016; Waldron & Redmond 2017; Adelino, Schoar & Severino 2018; Adkins, Cooper & Konings 2021; Wijburg & Waldron 2020). Some research has also raised socio-economic concerns relating to financializations impact on urban competitiveness, intergenerational equality and social cohesion, as well as the sustainability of public finances. These concerns have catalysed several researchers to propose measures aiming to diminish the impact of financialization: reshaping investment flows to deliver more socially and economically beneficial investment outcomes, often motivated by United Nations Sustainable Development Goal 11 and advice from the UN Rapporteur on the Right to Adequate Housing (Wetzein, 2020, Ryan-Collins n.d.; (Wijburg 2020, Wijburg & Waldron 2020; Nethercote 2020.; 'OHCHR | Financialization of housing' n.d.). Their suggestions include reintroducing credit guidance, moderating volume of securitised funds, re-balancing taxation treatment of real estate investment, including trusts and off-shore structures, as well as measures to prevent risky lending and over indebtedness, regulating of rent and service costs, and overall shifting the burden of taxation from sustainable and stable economic activity to discourage unproductive and extractive forms of real estate investment. These recommendations, while important, remain fragmented and undeveloped and require further elaboration for wider discussion and investigation towards their practical and feasible application. This paper outlines a proposal to foster research and policy interaction, building on the authors' previous involvement with the UN's Housing2030 initiative, to inform international policy progress.

Keywords:

Adequate housing

Affordability

Public policy

Circuits of investment

Financialization

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

"Given that adequate housing is a basic economic need, affordable housing and sustainable house prices will always be in the front line of economic policy importance. The Reserve Bank must have a clear understanding of the impacts its policy decisions have on the housing market both directly and indirectly – that is both our monetary and financial stability policies."

Adrian Orr, Governor of New Zealand's Reserve Bank, 4 March 2021

"One of the biggest contemporary concerns, especially in the Dutch economy, is the housing crisis. Young people and middle-class families are forced to participate in a rat race, overpaying in an overheated housing market. Where have we heard that before? This is one of the consequences of your generous money-creation and low-interest policies to keep weaker eurozone countries afloat. Prices of assets such as stocks and real estate are skyrocketing. So also houses for the people are becoming unaffordable."

Michiel Hoogedoorn, Ja21 (Conservative right populist) Member of European Parliament

Introduction

The statements above by the New Zealand's central bank governor and an EU parliamentarian, reflect the interwoven and contested role finance plays in housing systems. Financial relationships of differing scale, focus, type and cost mediate the actions of real estate owners, house builders, building workers, financial institutions of varying mandates, exchange professionals, as well as owner occupiers and tenants (Lawson, 2013:64). For the purpose of realising the right to adequate housing, this paper examines these differing dimensions of circuits of investment and the role of the state in shaping them to influence housing provision,. It is a theoretically informed but also very practical paper, analysing and illustrating the design of policy tools – mindful of the power relations which affect their application and outcomes.

As the dawn of global corporate landlords arises, and the dreams of first home owners fade, we have seen considerable outpouring of academic research on the concept of financialization, particularly from scholars working the fields of urban political economy, critical geography and sociology. In these academic writings, financialization is defined very broadly as the growing social, economic and political influence of finance and the finance industry across the globe and the structural transformation of economies, societies and households which this has precipitated (Aalbers, 2017). The implications of financialization for housing is a central theme in this literature. This is because housing is the main absorber of the so called 'wall of money' generated by savings accumulated and re-circulated by the finance industry. Furthermore, housing is often the main collateral used to raise debt and thereby a crucial facilitator of financialization (Fernandez and Aalbers, 2016). Yet this is not merely a tale of private bankers, hedge funds and asset managers. Less visible on this global stage are the policy makers at the regional, national and local level, the treasury and public banking officials, as well as financial regulators, for they are the rule makers shaping finance and real estate markets and indeed enabling their very existence.[1]

Since the global financial crisis (GFC), and the guarantee and even bail out of many private financial institutions by governments, some of these policy makers have also begun to flag concerns about the role of finance in the volatility of housing markets, its impact on housing affordability and consequences accessing any form of adequate housing – for ownership or rental. These concerns have been raised by municipal and national governments and more recently their central bankers, as well as international organisations such as UN Habitat, the OECD and the European Central Bank[2]. The recent statement by New Zealand's Reserve Bank Governor Adrian Orr quoted above, stresses the link between adequate

---

[1] By going into deficit following the GFC, governments were also able to 'save the world' (Kelton, 2015:33).

[2] See the discussion at with Christine Lagarde, Committee On Economic And Monetary Affairs, ECB Monetary Dialogue With Christine Lagarde, President Of The European Central Bank https://www.ecb.europa.eu/press/key/date/2021/html/ecb.sp210621_transcript~abd161d292.en.pdf?e03b9 eb744fe66515b1dc4eb7b709c5f

housing and economic policy and the integral relationship between monetary policy and financial market regulation in the achievement of the basic human right to adequate housing (Orr, 2021). These concerns are in sync with statements by the UN Special Rapporteur on the Right to Adequate Housing, who had recently visited New Zealand and later published detailed of guidelines to assist this government in realising the right to adequate housing in 2019[3] (Special Rapporteur on Adequate Housing, 2020). These emphasise the importance of devising housing strategies for this purpose in which taxation and finance should be central considerations.

Earlier, in 2015 the United Nations Environment Program conducted an extensive inquiry which examined how the financial system could contribute to achieving the UN Sustainable Development Goals, including goal 11 which addresses affordable housing. The report on the findings of the inquiry - *The Financial System We Need* – includes numerous proposals for policy reforms which would direct more market finance to achieving key social and economic priorities including provision of affordable housing, more strategic use of public investment in housing, reform of systems for governing financial markets and thereby transformation of investment cultures (United Nations Environment Programme, 2015). Furthermore, in 2020 the European Commission's Joint Research Centre published exploratory research on the financialization of housing in EU cities (Van Heerden, Ribeiro Barranco and Lavalle, 2020) .

However, what is also striking about the enormous international effort and volume of research on financialization, as well as lively popular debate, is that it has so far translated into relatively little action. Perhaps this reflects governance, practical and structural constraints on the possible responses. Although municipal governments in London, Barcelona, Copenhagen among other cities have recently made attempts to respond to the housing affordability problems generated by financialization, many of most effective responses are outside the remit of this level government (Fields and Uffer, 2014; Beswick *et al.*, 2016; Edwards, 2016; Van Heerden, Ribeiro Barranco and Lavalle, 2020). The Irish central bank has introduced strict regulation of mortgage lending but its impact on housing market volatility has been limited by a flood of investment by international funds and Real Estate Investment Trusts (REITS) (Byrne, 2016; Waldron, 2018). The variegated nature of financialization and the complexity of the ways in which this global process is mediated through national financial systems and local housing markets to generate different impacts on the \ the challenge of devising effective policy responses (Fernandez and Aalbers, 2016). The challenge of taming financialization is primarily one for governments. After all financialised markets are in large part of creation of government regulation (Lapavitsas, 2013). REITs and mortgage securitisation arrangements would not exist without enabling legislation for instance (Waldron, 2018). Government debt is core to the operational international capital markets and government guarantees of deposits play a vital role in underpinning the banking system in many countries.

However, the limited policy action on financialization could also reflect a disconnect and often disagreement between research and policy makers, which makes it difficult for governments to confidently design and implement appropriate and effective responses. This is evidenced by the fact that very little research on the policy responses to financialization which have been implemented to date or are possible has been conducted – although this has recently started to change, and this paper draws on some of the emerging research on this issue (Ryan-Collins, 2019; Nethercote, 2020; Wijburg and Waldron, 2020; Wetzstein, 2021). Research on financialization has also until recently been strongly focused on English-speaking countries, particularly the UK and USA, and on home-ownership and mortgage markets and therefore is of limited relevance to other high income countries and housing tenures (but this is also changing, see: Engelen, Konings and Fernandez, 2010; Aalbers, Van Loon and Fernandez, 2017; Wijburg and Aalbers, 2017; Wijburg, Aalbers and Heeg, 2018, among others). Christophers (2015) also criticises

---

[3] See End of Mission Statement Visit of the Special Rapporteur on the right to adequate housing to New Zealand *"If the Government is to address the financialization of housing, it must disrupt the current speculative system by implementing a Capital Gains Tax, regulating mortgage markets to limit the debt to income ratio, and introducing a progressive refinancing scheme for primary homes to limit the effects of negative equity that could result from changes to taxation and mortgage lending. Moreover, the Government must redirect efforts to provide alternative housing schemes for low-income and vulnerable groups. This must also must also include targeted funding, finance and capacity building for iwi and Māori housing providers."* https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25574&LangID=E

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

the tendency of writers on financialisation to focus on the details of the latest developments in financial products and markets while failing to assess the actual impact of these developments on housing markets, societies and governments and identify how this influence is operationalised (ie. the 'transmission mechanisms' which link financialisation to its supposed socio-economic impact). To address these shortcommings in the research on policy responses to financialisation Wijburg (2020) calls for more research on the 'de-financialisation of housing' and particularly on three key elements of this task: (i) financial market reforms aimed at dismantling finance-led housing accumulation; (ii) policy focused on strengthening the public and affordable housing sector; and (iii) changing modes of urban governance and 'anti-political' social movements which can contest housing financialization in different localities.

This paper is a response to Wijburg's (2020) call for research on de-financialisation, albeit a partial one because it focuses primarily on policy responses and strengthening the social housing sector, rather than on social movements and therefore only addresses the first two priority research areas he identifies. The analysis presented here also draws on research conducted for the *Housing2030* project conducted by the authors for the United Nations Economic Commission for Europe (UNECE), UN Habitat and Housing Europe (which represents social landlords in the European Union). This multi-faceted study aims to show how policy makers can shape markets to improve affordable housing outcomes. It involved a variety of consultative processes including podcasts, webinars, surveys and the resulting major report will be adopted by the United Nations in October 2021 (see: www.Housing2030.org).

The research for Housing2030 examined policies to promote housing affordability in the 56 countries which are UNECE members. These policies were identified via a call for examples of relevant good practices to these countries' representatives on the UNECE, to the social landlords which are Housing Europe members, members of specialist UNECE and UN Habitat committees on housing and the over 1,000 attendees at the four Housing2030 project webinars. All existing published information and research on relevant policies were examined, data on implementation and outcomes collated and gaps in information filled in via follow up interviews with policy makers and interviews and written requests for information. On this basis, policies for which there was no robust evidence of effectiveness were excluded and effective policy responses to housing affordability and accessibility problems were identified.

In searching for a suitable frame to make sense of these policy responses we build on the well established concept of circuits of investment affecting its production, consumption and distribution in geo-historically embedded systems of housing provision (Lawson, 2013: 60, Harvey, 1978). In order to idenitfy the transmission mechanisms which link financialisation to is socio-economic impact, we see these circuits, as a product of regulation, which generate tendencies or causal chains which, when enabled, influence forms of housing provision and consumption. These causal chains are not isolated from social structures, rather they are embedded in them, for example in existing property relations, and also operate in open increasingly global systems. For this reason, Housing2030 approach stressed the importance of reflective policy adaptation and application.

Halbert and Attuyer (2016: 1374) conceptualise circuits of finance as 'sociotechnical systems that channel investments in the forms of equity and debt into urban production'. However, Sokol (2017) has also proposed a similar concept called 'financial chains' and both of these concepts echo the older theory of monetary circuits which was formulated in the 1960s and is widely used in post-Keynesian economics (Lavoie, 2014). This concept has also been employed in the emerging literature on de-financialization (eg: Ryan-Collins, 2019). Building on Lawson (chapter 5, 2013) we argue that circuits of investment may be stable and coherent for periods of time, as well as crises prone and disruptive, leading to uneven flows of investment and disinvestment, sporadic development, and even destruction.

Despite promoting more widespread and systematic use of the concept of financial circuits and highlighting the valuable insights generated when this has been done, neither Halbert and Attuyer (2016) nor Sokol (2017) conceptualise how these circuits perform and might better operate. To make this concrete, the next section reviews the literature on the extent of financialisaton's contribution to housing unaffordability and how this relationship materialises. We develop a useful categorisation of different circuits of housing finance which influence housing affordability. The main body of the article then examines the efforts to 'tame' each of these circuits which have been employed by policy makers in

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

UNECE members countries and reflects on their effectiveness in disrupting the relationship between financialization and declining housing affordability.

Financialization, regulatory failure and housing dystopia

Financialization is not a term typically mentioned in the board rooms and offices of hedge funds, insurance companies and mortgage banks which academic researchers argue are central to its operation. In their recent book *Risking All: How finance is dominating everyday life in Australia*, Bryan and Rafferty (2018) consider financialization as an implicit, insidious way of thinking and behaving that pervades not only public discourse and media commentary, but also seeps in to the private and domestic realm, permeating judgements about the role of housing investment, as a strategy to fulfil our most basic social and economic aspirations welfare and security. Amongst academics, the study of financialization has emerged most strongly in critical geography and urban political economy, where shifting flows of capital, the growth of housing-based financial markets, the commodification of housing and asset-based welfare have been examined (Aalbers & Christophers 2014; Ronald, Lennartz & Kadi 2017). Their critique has also focussed attention on the influence of global financial flows on the right to housing (Rolnik, 2013) amidst a reassessment of the 'false promise of home ownership' as home ownership rates rapidly decline among new households (Arundel and Doling, 2017; Arundel and Ronald, 2021). Indeed, blunt monetary policies focusing firmly on inflation and promoting low interest rates, reliance on rising house prices to as economic strategy, light regulation of lenders and promotion of securitisation markets have been prime suspects in both the overinvestment in existing real estate and declining access to affordable housing (Brenner, 2006).

Beyond the established body of research on the variety of financialization mechanisms affecting investment in housing and its acceleration by government and finance industry regulations (Fernandez and Aalbers, 2017), a growing research literature also provides evidence of the harmful impact of financialization on housing outcomes. For instance, there is overwhelming evidence that expanding availability of mortgage credit is a strong driver of house prices (Andrews and Caldera Sánchez, 2011; Ryan-Collins, 2019). The negative knock on impacts of this aspect of financialization include: increased housing costs for low to moderate income households and the displacement or hollowing out of existing established communities (Adelino, Schoar and Severino, 2018; Adkins, Cooper and Konings, 2021; García-Lamarca and Kaika, 2016; Waldron and Redmond, 2014; .Wijburg and Waldron, 2020). Some scholars have pointed out that the growth of mortgage credit and financial services generally has occurred alongside a decline in the share of total bank lending to the non-real estate related sectors (Bezemer *et al.*, 2018). Research has also raised socio-economic concerns relating to financialisaton's impact on urban competitiveness, intergenerational equality and social cohesion, as well as the erosion of public finances (Guironnet, Attuyer and Halbert, 2014; García-Lamarca and Kaika, 2016; Wood, 2017). While others have noted the growing income gap in recent decades in most Western economies between asset owners and others (Piketty, 2015; Stiglitz, 2015).

Financial Circuits and Financialization of Housing

This literature identifies several ways in which financial circuits link financialization to the socio-economic outcomes outlined above. Among these, the factors which has received most attention from researchers is the s*cale of financial circuits:* As mentioned in the introduction to this article financialization is associated with a marked increase in the total volume of finance and the proportion of this which flows to housing markets. There are varying views on the most appropriate scale for examining financialization tendencies. While 'mortgage rationing' was widespread in the mid-20th Century as banks had to accumulate sufficient deposits to fund new lending, bank deregulation in the 1970s and 1980s broke the link between deposits and lending. The removal of credit guidance which required banks to allocate a proportion of lending to different sectors of the economy, the more widespread use of mechanisms such as securitisation and the controls on the movement of money across borders all increased financial flows to housing (Brenner, 2006). Also associated with the increasing volume of finance was the opening of new markets in former communist Central and Eastern European countries and also Southern European countries were borrowing for housing was traditionally low (Lunde and Whitehead, 2016). Loosening of lending standards occurred as part of the bank deregulation process. This enabled the transmission of the

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

spatially unbounded 'wall of money' generated by this opening phase of financialization into the housing market via mortgage lending. Consequently, a credit driven house price boom across most of the developed world took place in the late 1990s and early 2000s, which in turn precipitated rising unaffordability, an enormous rise in household indebtedness and falling home ownership particularly in English speaking countries (Leyshon and French, 2009; Forrest and Hirayama, 2015).

Lunde and Whitehead's (2016) excellent and useful review of milestones in European housing finance documents how the expansion in the volume of finance was accompanied by marked expansion in the *number of financial* circuits used to distribute it, but also by the loss of other circuits. In some (but by no means all) countries non-market finance for homeowner housing largely disappeared as governments withdrew from mortgage lending, as did non-profit lenders such as building societies (in the UK, Ireland and Australia) and savings and loans banks (in the USA). Concurrently, re-mortgaging and equity withdrawal has become more commonplace, the number of bank lenders in countries has increased, non-bank lenders have begun to offer mortgages and investment funds have become increasingly active as sources of debt and equity funding for residential development as well as purchasers on completion (Fields and Uffer, 2014; Waldron, 2018). The advent of online accommodation platforms such as Airbnb has also provided additional financial circuits for extracting maximising revenue from dwellings and reduced the accommodation available to long term residents in some cities, thereby further driving the housing affordability and accessibility crisis (Hoffman and Schimitter Heisler, 2021).

A third key feature of financialization is that, as the volume of housing finance has expanded, the *focus of financial circuits* has shifted repeatedly so that it is more easily (and cheaply) available to some housing market actors, while others are excluded. While the early phase of financialization was associated with a growth in bank lending to households for homeowner and buy-to-let mortgages, later phases have seen the expansion of non-bank lending and equity investment by REITS, student housing providers and built to rent institutional landlords. The latter has enabled new patterns of financialised consumption which have squeezed the former, driven house price inflation and helped to decouple house prices from incomes in some cities, such as London and New York, and thereby contributed to severe housing affordability and accessibility problems for average earners (Fernandez, Hofman and Aalbers, 2016; Hunter, 2016).

Cutting across the aforementioned developments in the scale, number and focus of financial circuits are complex, socio-economically and spatially differentiated and constantly shifting changes in the *cost of financial circuits*. These changes in the cost of finance have had uneven impacts on housing affordability and access for different income groups and generations. Financial circuits are not 'tenure neutral' and the uneven public assistance and tax treatment of housing often unfairly penalises tenants and favours owners – and increasingly very large scale owners. While financialization has been accompanied by falling or stagnating interest rates on mortgages for existing home-owners, the house price boom this precipitated has created access problems for aspirant home owners. Furthermore, the decline in borrowing costs has not been universal as 'sub-prime' borrowers who have insecure incomes and/or poor credit ratings have been charge a premium by the specialist lenders which have emerged to cater for this market (Aalbers, 2008). Finance costs for institutional investors are much lower than for households (for equity investors there are no costs) and the tax treatment of institutions is generally far more preferential and their market power greater. Only in recent times have these advantages been marginally clawed back in some countries. These variations in the costs of financial circuits explain why the latest phase of financialization has seen households squeezed out of housing markets where institutional investors are most active (Fields and Uffer, 2014; Beswick *et al.*, 2016).

Tools to Tame the Financialization of Housing

Tools to manage the scale of financial circuits

The credit crunch of 2007, the global financial crisis which followed in 2008 and the widespread housing booms which preceded them has prompted governments and central banks in many UNECE member countries to take more concerted action to regulate the scale of financial circuits than has been seen for a generation.

In most countries this action has focused primarily on macroprudential regulation of banks (ie. regulation aimed at ensuring the stability of the financial system as a whole). These regulations have been widely

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

revised to force banks to keep certain levels of reserve capital on hand and thereby reduce their leverage ratios which has in turn reduced the level of credit flowing into some economies. Across the UNECE region this has been achieved as part of the latest round of the internationally agreed measures devised by the Basel Committee on Banking Supervision (2017). These 'Basel III' reforms were finalised in 2017 and will be implemented from 2022. Additional rules on banks' reserve capital requirements have been introduced in some EU countries as part of the establishment of a single supervisory mechanism for banks in the Eurozone (Nocera and Roma, 2017).

As part of this revision of these macroprudential rules, in many countries (including Australia, Canada, Finland, Ireland, New Zealand, Norway, Sweden, UK) regulation of mortgage lending for homeowners and buy to let landlords has been reformed to limit credit availability since the GFC. Several Asian countries (e.g. Hong Kong, Korea, Singapore) took similar action earlier - in the 1990s and early 2000s (Grace, Hallissey and Woods, 2015). This regulation has generally involved imposing and/or changing the mortgage loan to value ratio (LTV) and debt service to income ratio (DSTI) rules to which mortgage applicants must adhere. Access to interest only mortgages has also been limited or banned in some cases and amortisation of debt required. These tools determine how much credit can be provided to borrowers and in turn influence house prices, affordability, indebtedness, and housing access.

There is significant research evidence that tightening of mortgage lending rules are effective in addressing household over indebtedness and to a lesser extent in dampening house price rises (Kuttner and Shim, 2016). However, these measures also have implications for the distribution of housing and can privilege existing homeowners over aspirant entrants. Mortgage market regulations exclude some households from home purchase because they create a 'down payment barrier' and a 'credit access barrier' which some aspirant home buyers will not be able to overcome (Andrews and Caldera Sánchez, 2011). Thus, to promote equity in housing access, stricter regulation of mortgage lending needs to be accompanied by countervailing measures to enable excluded householders' access affordable housing such as targeted grants, savings schemes and deposit ratio reductions and the reduction of incentives to competing investors, such as mortgage interest tax deductions for investors or second home buyers (OECD, 2021).

As explained in Table 1 below which summarises the full scope of the credit guidance policy tools which are typically employed in banking regulation, the mortgage market regulations influence the demand for credit and rules on banks' capital requirements influence the demand for credit. However, as currently applied, *these measures are unlikely to effect a significant contraction of housing finance circuits or even impede their further expansion*. This is because, in the vast majority of countries, the credit re-regulation measures implemented since the GFC, remain far more modest in scale than the arrangements which

Table 1: Credit Guidance Policy Tools

Tools affecting demand for credit	Tools affecting supply of credit
Loan-to-value ratios	Credit ceilings and quotas
Debt-to-income ratios	Interest rate ceilings
Loan-to-income ratios	Reserve requirements leverage ratio (exemptions)
Margin requirements	Capital (risk-weight) requirements
Loan maturities	Portfolio restrictions
Affordability test scenarios	Supervisory pressure and moral suasion
Subsidies for home purchase and mortgage guarantee	Loan-to-deposit ratios
	Collateral requirements
	Funding for lending and targeted longer-term refinancing operations (TLTRO)

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

	Proportional lending ratios
	Central bank asset purchase programmes
	State investment banks and specialised public credit intermediaries

Source: Bezemer *et al.* (2018)

were in place prior to the widespread deregulation of banking in the 1970s and 1980s (Brenner, 2006). No country has reintroduced the full range of credit guidance policy tools set out in Table 1 for instance. Furthermore, the iterations of these tools currently employed, in terms of design, scope and application, often severely limits their ability to constrain credit growth.

Some governments have attempted to reign in their mortgage finance systems. For example, after the GFC the Dutch government promoted a bankers code of conduct, capped mortgage loan to value ratios at 100 per cent (which means that down payments are not required) and limited over generous MITR provisions. Relatively high maximum mortgage loan to income ratios of 4.5 were introduced in the UK (Grace, Hallissey and Woods, 2015). For a brief period in 2020 the Australian prudential authority APRA reigned in home lending, but quickly withdrew when effective in dampening prices and later reminded the government that financial stability and *not cooling house prices* was its role.[4] This followed an Australian election was partly lost on the basis of unpopular reforms proposed to reign in favourable taxation arrangements on rental investors and home owners[5].

Countervailing policies are another factor which is likely to blunt the impact of these credit policy tools on housing finance circuits. For instance, as is discussed later in this paper, taxation is one of the strongest determinants of the rate of credit expansion. Kuttner and Shim's (2016) research on 57 countries indicates that measures such as mortgage interest tax relief and the non-taxation of capital gains on housing play a significant role in maintaining the expansion of housing finance circuits and house price growth.

However, since the GFC macroeconomic policy has become a more significant countervailing factor. Recent research from the International Monetary Fund demonstrates that macroeconomic policies have become ineffective in managing boom-bust cycles in housing markets in Europe (Arena *et al.*, 2020). Indeed, it has been claimed by many economists that the current ultra-low-interest rates, following quantitative easing by central banks, has magnified a real estate booms (Ryan-Collins, 2019) – in part this is also a point made by the MEP quoted at the beginning of this . These concerns have inspired much debate among policy makers and increasingly central bankers such as New Zealand's Adrian Orr. They were also mentioned in the United Nations Environment Programme (2015) report on the *Financial System We Need* recommends that housing market stability and climate change risks should be integrated into central banks' financial stability reviews. The EUs financial stability reports include mention of housing market developments, but offer no guidance on policy measures, as housing policy still remains an area of national competence.

However, to date, New Zealand is alone among high income countries in taking policy action in response. In March 2021 the New Zealand government issued a direction to its central bank's monetary policy

---

[4] "The prudential regulator has reminded Parliament that its primary responsibility is financial stability, not soaring house prices, and it is not seeing activity right now that would compel it to intervene." Amidst 21% house price increases during the COVID 19 pandemic. Frost, D (2021) Australian Financial Review 29 March https://www.afr.com/companies/financial-services/hot-house-prices-not-our-job-apra-20210329-p57et9

[5] See reporting on national broadcaster ABC regarding negative gearing nd capital gains tax reforms during the 2019 election https://www.abc.net.au/news/2019-05-15/federal-election-2019-alp-capital-gains-tax-negative-gearing/11108734?nw=0

committee which requires it to take into account 'the Government's objective to support more sustainable house prices, including by dampening investor demand for existing housing stock to help improve affordability for first-home buyers' in 'carrying out its financial policy functions (Orr, 2021: 13). This direction has attracted some criticism (eg. Wolf, 2021) and at the time of writing no concrete examples of its impact on the New Zealand central bank's monetary and financial policy functions had emerged. However, if successful, this reform may act as an exemplar which will spur action by other central banks.

The impact of traditional central bank interventions such as bank regulation and interest rate setting has also weakened during the most recent phase of financialization because bank, and other traditional mortgage lenders such as building societies and Sparkasse are no longer the primary providers of private finance for housing. Non-bank finance, from private equity investors, pension funds, real estate investment trusts (REITs) and other private investment vehicles, have become an increasingly important source of private finance for housing in recent decades. In view of these fundamental changes in housing finance markets, there is a risk that governments and central banks' focus on regulating bank lending for housing is a case of 'fighting the last war', while not preparing adequately for the next likely attack on housing market stability and addressing the most significant drivers of house price inflation.

The first step in addressing risks is, of course, recognising their existence and in the aftermath of the GFC and widespread taxpayer 'bail out' of insolvent banks, the growth in non-bank finance was not generally recognised as a risk by many orthodox economists and central bankers. Rather it was welcomed as a way of diversifying real estate finance away from domestic sources, particularly lending by domestic banks (Daly, Moloney and Myers, 2021). In Australia, their entry into the finance system was considered so valuable to growing the economy, that the protected circuit of savings and lending, which had supported home ownership in Australia for six decades, was broken and state banks privatized (Lawson, 2013). However, the recent strong growth in non-bank financing of real estate has promoted increasing debate on the associated market stability risks as well as about the impact on house price inflation, affordability and accessibility flagged earlier in this article (Gupta, Lv and Wong, 2019).

It response to the former a recent report by the Central Bank of Ireland into investment funds activities in the office and retail property markets highlights the limited sets of tools currently available to regulators to manage this activity and mentions that 'this Central Bank has identified the development of 'a comprehensive macroprudential framework' for non-bank property finance as one of its priorities (Daly, Moloney and Myers, 2021). However, apart from similar proposals for action, the review of policies action among UNECE member states which was conducted by the authors identified very few which were actually operationalised or widely applicable (Lawson, Norris and Wallberg, 2021). One instance of policy non-implementation is significant from the perspective of the discussion at hand though. When REITs were legalised in Germany in 2007, policy makers decided not to allow them to invest in residential property and confirmed their activities to commercial property investment. This decision reflected fears that REITs might 'have unwelcome effects for tenants and interfere with public-sector social and sustainable housing' and 'that rents might rise, based on the assumption that REITs' main concern would be to maximize profits' (Fritsch, Prebble and Prebble, 2013: 369-370).

All in all, governments have not settled the conflict concerning how best to influence the scale and volume of financial circuits in promote access to adequate and affordable housing. Policy strategies are in a state of flux and conflict, as demonstrated by discussions between central bankers and housing analysts. There are lessons from past practice, which can strengthen partial temporary and incoherent responses. These include re-creation of public purpose circuits and re-balancing the costs of investment on social and affordable housing, which are in part considered below.

Tools to manage the focus of financial circuits

Prior to the reregulation of banking in the 1970s and 1980s governments of high-income countries played an activist role in directing the focus of financial circuits towards priority activities and sectors of the economy (Brenner, 2006). Among the credit guidance to banks and non-profit lenders such as building societies, savings and loans institutions and Sparkasse listed in Table 1 were directions to allocate specific proportions of their lending to agriculture, industry, housing etc, in many countries banks were effectively prohibited from engaging in mortgage lending and provision of this form of credit was confined to non-profit lenders (Lapavitsas, 2013). The removal of this form of credit guidance as part of banking

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

deregulation was formally justified by economists' concerns about the inability of government to direct the allocation of capital efficiently and the role of the guidance in reducing productive and undermining competition between banks (Goodhart, 1989; Alexander, Enoch and Balino, 1995). Although the decline of opportunities for lending and profit making, as industry was replaced with services in Western economies, was no doubt influential too (Brenner, 2006).

In retrospect, of course, these concerns about misallocation of capital appear specious, to put it mildly. In the aftermath of the removal of credit guidance, research reveals that this had played a key role in the enormous 'debt shift' evident from the early 1980s, whereby *lending to finance, insurance and real estate increased dramatically as did the shares of the economy associated with those industries while lending to industry and the productive sectors of the economy declined* (Bezemer *et al,* 2018). This contributed to credit bubbles in the housing market and ultimately to the global financial crisis.as well as to wider economic imbalances and social problems associated with financialization (Bezemer and Zhang, 2019).

Crucially, from the perspective of the discussion at hand, Bezemer *et al's* (2018) analysis of the macro-prudential regulations introduced in response to the GFC and earlier credit bubbles have had a minimal impact on changing this overwhelming focus of bank lending on real estate between 2000 and 2013. However, some elements of the reforms to banking regulation introduced since the GFC are intended to address this issue and refocus lending away from housing. These measures include:

- Reporting on financial stability which incorporates monitoring of the housing market

- Higher risk-weights for mortgages and lower risk-weights for lending to SMEs and infrastructure projects under the Basle III rules (Basel Committee on Banking Supervision, 2017).

- The European Central Bank's (ECB) funding targeted longer-term refinancing operations (TLTRO) programme which has provided Eurozone banks with four years of subsidised refinancing for loans made to non-financial corporations and households for consumption (but notably not for house purchase).

- The ECB, the Bank of England, and the Bank of Japan have also engaged in major corporate bond purchase programmes as part of quantitative easing programmes which favoured the non-financial sector over the financial sector. But as mentioned earlier, these very initiatives have propelled a wave of cheap finance for investment in real estate.

Parallel to these efforts to rebalance the macro level focus of debt finance to promote greater investment in productive sectors of the economy and less investment in housing, in recent years policy makers have also begun to pay increased attention to refocussing lending for housing and other forms of housing finance. There is increasing concern about house price inflation. As mentioned in the introduction to this article, in 2015, the United Nations Environment Programme (UNEP) inquiry into how the financial system can contribute to achieving sustainable development goals includes some recommendations relevant to refocussing circuits of housing finance. As is explained in Table 2, these are intended to refocus some commercial finance towards affordable and sustainable housing, but they also address the focus of public spending on housing and procurement processes and highlight the need to ensure that these promote more sustainable, inclusive and outcomes. These proposals clearly echo the ideas on 'purposeful public investment' proposed by the economist Mariana Mazzucato (2013) in her 2013 book *The Entrepreneurial State*.

They also complement proposals made by the United Nations Special Rapporteur on Adequate Housing (2020) in a series of guidelines to assist governments in realising the right to adequate housing. Not surprisingly, in view of the key role which housing finance plays in enabling and also influencing housing affordability and access, finance is a central theme in these guidelines. For instance, Guideline Number 12 recommends regulating commercial investment in housing to prevent any negative impacts on the right to housing,

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

Table 2. United Nations Environment Programme's Tools for a More Sustainable and Inclusive Finance System

Financial sector reforms	Application to circuits of housing finance
Enhancing market practice: disclosure, analysis, risk management	Establish reporting frameworks on affordable and sustainable housing for investors in special purpose bonds which can be used to finance this type of housing Adaption of criteria for assessing social, sustainable, and affordable housing providers and investment vehicles by credit agencies Integrating housing market stability and climate change risks into central banks' financial stability reviews and similar reports, e.g. Improving granularity of mortgage data in relation macroprudential targets and credible environmental monitoring of investments to avoid 'greenwashing'
Harnessing the public balance sheet: fiscal incentives, public financial institutions, and central banks	Ensure that government funding and subsidies for housing and housing procurement processes promote more sustainable and inclusive outcomes.
Directing finance through policy: requirements and prohibitions, enhanced liability	Ensure public procurement are designed to deliver sustainable and inclusive outcomes and improve societal well-being, economic development, and environmental sustainability Establish priority lending programmes to increase financial access for first time home buyers, not for profit social housing providers and co-operatives. Introduce rules prohibiting speculative investment in affordable housing.
Cultural transformation: capacity building, behaviour, market structure	Devise national compacts and road maps to reform finance for housing Support the development of values-based finance institutions and social impact investing. Establish systems of certification and labelling for socially and environmentally responsible real estate companies.

Source: Lawson, Norris and Wallberg (2021)

preventing the privatisation of social housing for the same reason and taxing on residential real estate and land speculation to curb the short-term resale of properties and on residential real estate left vacant.

These proposals *for refocusing investment in housing* have been implemented in several countries which have taken action to discourage short term speculative housing investment and other types of investment which drives up rents and disadvantages home buyers. However, this policy action is generally too recent to enable any robust conclusions to be drawn on its effectiveness in practice. For instance, in 2021 the New Zealand government introduced new measures to discourage short term speculation in housing (popularly known as 'flipping'). To qualify for exemption from capital gains tax on resale profits, the period for which residential property investors must hold onto dwellings has been increased from five to ten years in the case of second-hand dwellings. In order to maintain new housing supply, these measures

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

do not apply to new housing (AHURI, 2021). Also in 2021, the Irish government introduced extra taxes on investors who bulk buy houses (but not apartments) in new developments, in an effort to prevent investors from pushing first time buyers out of the housing market (Horgan-Jones, 2021). Denmark introduced legislation in 2020 to limit the opportunities for property investors to claim an exemption from the strict rent control provisions which apply in this country by renovating older dwellings. Previously older dwellings which had undergone extensive renovation were exempt from rent control and policy makers were concerned that abuse of this provision was driving up rents (Bonde-Hansen, 2021). Similarly in British Columbia, Canada the municipal government amended local legislation in 2021 to discourage 'renovictions' (the eviction of private renting tenants on the grounds of the renovation of the dwelling). These measures end landlords' automatic right to terminate a tenancy on the grounds of renovation and instead requires them to enter a dispute resolution procedure as part of which an arbitrator will decide whether ending the tenancy is the only way to complete this work (British Columbia, 2021). Circuits which have a long-term investment approach to renovation can promote both certainty of expenditure and revenue and also stability for tenants. Viennese 'soft renewal' efforts and cost rent limited profit housing are noteworthy for such approaches to renovation processes, long term maintenance and revolving funds for renovation, which have avoided the need for significant community disruption or major rent hikes.

There is growing potential to reorientate capital flows towards a more sustainable and green economy. As part of these discussions European Commission has published an Action Plan on Financing Sustainable Growth and associated taxonomy of sustainable activities. Some of the measures proposed in this Action Plan, such as creating an EU green bond standard and fostering investment in sustainable projects, have the potential to be customised to channel finance towards social and affordable within the host country.

A practical application of this is the NWB Bank (Nederlandse Waterschapsbank N.V) Affordable Housing Bond, in the Netherlands. NWB Bank is a large well-established Dutch public investment bank (est. 1954). NWB created affordable housing bonds in 2017, to attract long term investors to provide funds for affordable housing provision. The bonds fund loans for the provision, renovation and retrofitting of income targeted social housing in the Netherland, managed by not-for-profit organisations. This product won the best social bond award in 2018 and 2019 by the Environmental Finance investment analysis service . These bonds are priced according to demand and strategically marketed to a small pool of investors interested in social and green housing and have been significantly oversubscribed.[6]

These types of tools demonstrate how the focus of investment can be shifted towards improved social and affordable adequate housing. They require policy frameworks that shape finance industry actions. The absence of these frameworks and tools in some countries is clearly part of the problem. This brings us to the next section on the variety of financial circuits.

Tools to manage the number of financial circuits

There are many circuits of investment mediating forms of housing production, consumption and exchange, some have recently flourished, others have shrunk, and many have been dismantled. Once again it is important to recognise that these processes involve large degree of agency on the part of policy makers and can be supported politically and become institutionalised as relatively coherent stable regulatory practices and rules (Lawson, 2013, Matznetter, 2020).

This section concerns the revival, support and creation of circuits of finance that serve the right to adequate to housing and inhibit or prevent processes of value extraction. There are many examples of tools to manage circuits for more adequate housing, which are reviewed in the Housing 2030 project including

---

[6] Social bond investors demand transparency which requires high standards of reporting. Ongoing work is required to define the affordable and social benchmarks which are used in investor report, as these can change over time. In addition, NWB co-operates with AEDES which is the representative body for social housing providers in the Netherlands to produce key performance indicator data on the impact of the bonds on social housing provision. The two organisations also organise regular site visits to the social housing developments funded by the bonds investors so they can see the proceeds of their investments and the impact for themselves.

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

well established German contractual savings and loans schemes, the revolving Danish tenants National Building Fund and efficient Swiss not for profit builders Bond Issuing Cooperative. Examples in Central Europe, from Slovenia, Slovakia and Austria are also reviewed. Many of these circuits are called revolving funds and are used to funding housing programs, pay for the provision and upgrading of social housing and also to finance mortgages and house improvement loans for low-income households. They can provide a self-replenishing source of funding, from which loans are made and when these loans are repaid this funding is lent out again and thereby 'revolved'.

In some countries, providers of mortgage credit had traditionally involved various forms of mutual circuits of savings and loans such as building societies, credit unions and savings banks, operating according to strict rules moderating the volume and cost of mortgage finance. Some of these circuits remain very large and influential, such as the French CDC, while others are of a much smaller scale. In many home ownership oriented countries, these institutions connected savers to lenders, and supported fairly strategic lending practices and at times led to credit rationing with supply of deposits outstripping supply. This system became discredited in some countries during the 1980s and 1990s, when widespread home ownership was pushed by many governments (Stephens 2007) and securitisation as well as widening participation of financial players (shadow banks) seemed to offer a solution. State banks, owned by governments were also a vehicle through which mortgages were provided often under strict credit guidance policies and according to important urban development strategies. For example, Australia's state banks, employing a protected circuit of savings and loans, and applying a government guarantee and mortgage insurance, broadened home ownership until the 1980s (chapter 6, Lawson, 2013). Today, Germany's state owned bank KfW continues to do so, steering mortgage investment towards new energy efficient housing.

Following global financial crises, indebted governments were often forced to sell their state banks – a process facilated by policy makers in many Anglo countries. Many were indeed privatised to become profit making institutions, which aimed to grow through increasing their loan book – with little concern for public policy concerns of affordability and access[7]. Compared to mutual and state mortgage providers, commercial players tended to operate according to a different set of norms. Demutualisation, deregulation and the growth of commercial players (including non-deposit taking shadow banks) led to the massive growth in mortgage lending, but price rises also fuelled a strong speculative market for existing homes and ultimately curtailed the expansion of home ownership, particularly to young and first home buyers. There is now a convincing body of empirical work charting the decline of home ownership in overly financialised housing systems such as the UK and UK, although this is not the focus here.

Of course, governments have the power to invest directly and purposefully in housing programs. Some have established their own affordable housing banks, such as the Housing Finance Agency in the Ireland, and the national Housing Finance Investment Corporation in Australia. The Finnish and Austrian regionals governments have been doing so for many decades, revolving repayments of public loans.

To finance affordable supply, each Austrian province designs public grants and conditional loan schemes. Public loans originate from regional government, (previously proportional transfers for housing programs from central government, now untied block transfers). Reflecting local policy preferences, these schemes are administered locally, respond to local development proposals and provide long term low interest public loans with various conditions for selected target groups that may differ across provinces and localities. Notably, loan repayments are re-invested into revolving funds for housing purposes in the provinces. Public loans are not considered as net expenditure from the public purse. Rather as investments that pay returns, and their repayments are required to be revolved for housing purposes in perpetuity. A similar revolving mechanisms forms the basis of the Finnish social housing model, with reinvestment of ARAVA loans). In addition to conditional public loans promoting affordability and energy efficiency, social landlords must access additional private funds, such as own equity, tenant equity and debt finance. However, both Finnish and Austrian schemes administer cost capped cost rent regulation, which contains

---

[7] And this process was also accelerated by banking norms under Basel II's which lowered the risk weighting of mortgages and consequence required lower reserves to be held by the issuing bank.

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

overall project costs, including financing costs. In Austria, as in Denmark, when their loans are repaid, surplus revenue is dedicated to new affordable housing projects. (Deutsch and Lawson, 2013, GBV, 2021).

Governments can also invest in home loans directly. In Australian state of Western Australia, the Department of Housing aims to make home ownership more accessible for low-and moderate-income households. It offers shared equity schemes as well as Keystart loans, which have assisted 85,000 Western Australians transition into home ownership. Keystart has lower rates of default (0.26%) than commercial banks (1.17%) and the loan portfolio also makes a return for the WA government (which is why it is often targeted for privatisation).

The key benefit of revolving funds, from the perspective of policy makers, is that it reduces the need for the government to constantly reinvest in housing provision. While revolving funds are unlikely to entirely eliminate the need for government investment, these funds can be ring fenced and thereby insulated from fluctuations in availability of public finance. A further benefit of revolving funds is their simplicity which facilitates transparency of reporting to policy makers and the general public and means that unintended consequences are less likely. Although, properly managed revolving funds are unlikely to be entirely simple since they require robust credit assessment arrangements. Consequently, large revolving funds are usually administered by a strong social housing sector, government or a special purpose financial intermediary (Gibb et al, 2013).

Individual affordable housing providers commonly operate *de facto* revolving funds by reinvesting any surpluses or profits they make from their existing housing stock into the provision of new dwellings or the renovation of existing ones. Going one step beyond this system, in the social housing sectors in several European countries the surpluses of individual social housing providers are used collaboratively, by pooling them into a central fund. There is evidence that this approach can bring important strategic benefits to the entire social housing sector. It can fund challenges such as the renovation of difficult to let estates, for instance, or can cross subsidise weaker or 'start-up' social housing providers. However inherent in this approach is the potential for disagreements over the use of the funding and the temptation for governments to extract funding for general revenue.

A carefully managed revolving fund can involve rental or ownership housing. In Denmark, rental surpluses contribute towards a National Building Fund and this in turn invests in renovation. A part of this fund also invests in new construction. Recently there has been a strong boost for energy efficiency renovations, also as a national counter cyclical measure post COVD19. There is also a strong policy tradition of public investment in housing improvements also for employment reasons (Vestergaard 2015; Vestergaard & Scanlon 2014)
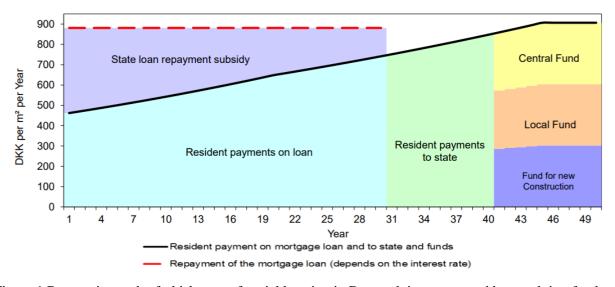

Figure 1 Renovation and refurbishment of social housing in Denmark is perpetuated by revolving funds

ENHR

OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

However, revolving funds can also be poorly regulated, mismanaged, and eroded. There are lessons in experiences of this – such as the revolving fund of Dutch social housing. During the 1990s self-sufficiency was promoted for housing associations. They had long been financed via public loans and operating subsidies for many decades, but in the 1990s these loans could be paid off with an advance payment of operating subsidies. With strong balance sheets, associations were to able access and rely on private investment, with the support of a favourable rent policy and joint government guarantee. Yet financial freedom and light touch performance-based regulation was not sufficient to protect their revolving funds a and continue to renovate and build new social housing as in the past. By the 2000s several associations faced numerous problems with risky investments, had entered into complex financial obligations over which they had little control or expertise and funds were mismanaged. Financial scandals led to forced sales to cover losses and a narrowing of their role by the government, further curtailing their revolving funds. Today, the Dutch government can on longer steer new housing construction through financing supply, and the shortages of affordable housing is estimated to be around 300,000 dwellings.

Tools to manage the cost of financial circuits

Who bears the cost of today' circuits of finance affecting housing provision and consumption? While the ECB insists governments monitor the role of their housing markets upon macroeconomic and macroprudential policy, such monitoring does not inform national policies to realise the Right to Adequate Housing or deliver on the promise of the Social Pillar: *"to bring back the social dimension of the EU, rebalance economic policies with social considerations, reconnect with European citizens."*

The rise of private finance since the 1990s, facilitated by the strong promotion of home ownership and decline in collective public investment in social housing has also been reinforced by international and EU public accounting rules and norms constraining long term direct public expenditure as well as rules affecting state support. For example, benchmark rules of the European Stability and Growth Pact (SGP) limit annual expenditure to potential GDP growth unless the excess is matched by increased taxation. While member states can increase revenue and spread the burden of investment over generations, tax cuts have a more immediate electoral appeal for politicians (IIEA 2017, in Lawson et al, 2018). EU rules governing State Aid also constrain investments in the social housing sector and have led to a narrowing its market shaping role, in some cases limiting it to being an ambulance service for unaddressed social and health problems, inadequate incomes as well as housing market failures.

Some social housing systems have coalesced with EU competition policy, narrowing their task to that segments disregarded by the private commercial sector. Far from Mazzucato's vision of an 'entrepreneurial state' (2013) public purpose entities and their activities have been curtailed in many countries – such as municipal housing in the UK. Notably countries which continued to evolve municipal and not for profit housing systems, such as Austria and Finland, have continued to improve their housing outcomes. Yet this strategy of reducing public expenditure and concentrating problems in social housing also has its electoral limits, as disenchanted populist movements in the Netherlands and the UK attest (but scape goat 'the Southern countries' or migrants rather than failures of public investment) .

We have already mentioned Austria's well developed cost-capped cost rent housing system, another variation on this model can be found in Finland, which also has some of the most positive housing outcomes in Europe (low and declining homelessness, youth independence, little over-crowding, moderate indebtedness). The Housing Finance and Development Agency of designates eligible borrowers, such as housing associations to provide social housing and these must commit to certain rules and legal framework of owning social rental dwellings: that they be non-profit organisations or Special purpose associations, in the case of student and old-age organisations, operating on a cost rent basis. The ensures that subsidies are channelled to residents and dwellings maintained for intended use at a reasonable cost. A reasonable land price is also a prerequisite for public support, and ARA approves the lot's price or lease amount in a partial decision. Such approval is regulated by regionally determined maximum lot prices (lot price charts_ and are updated annually.

Dwellings must be let on a cost recovery principle and under market rents. Rents must not exceed the amount that is needed to cover the expenses incurred in financing the dwellings and related premises and in sound property management. Cost rent includes a yield on capital invested by the owner. The maximum

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

yield is defined by the legislature and is currently 8 per cent. This yield must be reinvested in the association.

Also in Finland it is possible for a commercial company to establish a subsidiary with non-profit status, in order to fulfil the public service obligation and receive state aid accordingly. In this way, the interest subsidy system combines a strictly controlled approach to the allocation of aid with the opportunity for all operators in the sector to receive public support. However, most registered associations are non-profit organisations and must not act as commercial business. A non-profit corporation may not take risks with its capital other than those associated with its line of business or organize its structure in a way that jeopardizes its core mission. It may only include as income a reasonable yield calculated for the assets invested in the corporation by the owner. Accrued assets or surpluses must be used for the corporation and is residents. In 2014, the number of corporations granted non-profit status is not restricted and at the moment stands at about 500 (Ministry of the Environment & Administrative Branch 2014).

There are tenant selection principles to reflect local needs and requirements for tenant democracy (co-decision law) affecting management decisions. Legislation on the provision of state support, also requires that dwellings are used for rental purposes for a minimum of 40 years. The non-profit obligations on the borrower corporation remain in effect as long as the corporation owns property subject to restrictions.

In addition to circuits of finance and investment to reduce costs in social housing, there are also many circuits which operate to do the same for home ownership. Shared equity schemes, such as the Netherlands KoopGarant facilitate affordable access to home ownership, with entry at a discounted price and this discount is repaid plus the share of the capital gain, on future resale. The valuation of the dwelling is carried out by an independent real estate appraiser and improvements of the dwelling by the home owner are taken into account in the valuation process. The dwelling can be resold as a KoopGarant dwelling or added to the social rental stock. While the scheme emerged from the social housing sector, since 2011, is also provided by a number of commercial project developers, who use it to sell dwellings which have proven hard to sell at the market price (Elsinga et al, 2015). A similar scheme is now getting off the ground in Scotland. Many of these schemes have co-operative elements, which again, offer non-commercial circuits of investment (as illustrated previously in Denmark).

Tax tools to drive fairer, more productive and sustainable outcomes

Special mention needs to made of taxation tools, which also mediate circuits of housing investment. Taxes may apply to the purchase and exchange of housing and land, the construction and maintenance of dwellings and any income derived from their sale or rent. Housing related taxes typically include property and land value tax, value added tax on construction materials and the sale of dwellings, taxes on housing rental income, capital gains and inheritance taxes on the sale of housing.

The taxation of housing production, use, value, and exchange exerts a strong influence on the origin, scale, and flow of investment into housing as well as the rates of return that can be generated from different forms of housing. Taxes may favour different housing tenures and housing management models, such as owner occupation, private renting via commercial landlords or affordable rental via non-profit organisations. Local, state, and national governments may be involved in collecting and distributing taxation revenues. Taxes are also the main source of revenue used to find public investment and services. Therefore, purposefully designed taxes affecting housing are a key instrument in the affordable housing toolbox.

The design, application and use of tax instruments can affect housing costs and benefits and lead to inequality between first home buyers and investors, owners and renters, income groups and even between generations (Wijberg, 2020). In many countries taxation of housing has undermined, rather than promoted, housing affordability and inclusivity as benefits of income tax concessions on housing investments flow disproportionately to more affluent households – particularly homeowners, commercial landlords and investors in housing.

As more households rent their homes, the lack of neutrality of direct assistance and indirect tax benefits for investors in homes (both individual and corporate) has come under scrutiny. Australian as in other countries, has experienced fierce public debate over the fairness of tax and assistance measures. Homeowners and investors take the lion's share of housing assistance, via Capital Gains Tax exemption

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

(66%) and negative gearing tax provisions (16,5%), with social housing receiving a mere 2% (Duncan, Hodgson et al. 2018; Wood, Cidgem et al. 2017, Groenhart and Burke 2014 in Lawson et al, 2018).

Tax measures, such as Capital Gains tax discounts and Mortgage Income Tax Reduction, can involve a considerable loss in government revenue. For example, foregone revenue from the Dutch *Hyotheekaftrek* costs its government an estimated €32 billion per year, [8]according to a recent n European housing policy review (Krapp & Vaché 2020), primarily benefiting mortgage banks and promoting household indebetedness. In the United States around US$10 billion is foregone each year via tax credits for high income companies, but these tax credits are pooled and resold to contribute capital funding to over 2 million affordable rental dwellings in a remarkably effective and sustained financial circuit.[9]

Examples of recent taxes shaping or taming investment pathways include NZ's Bright Line policy, which introduces capital gains tax on properties sold within 10 years.[10] Since 2021 in the Netherlands first-time homebuyers aged between 18-35-year-old that purchase their first property are now exempt from paying the property transfer tax of 2%, whereas buy-to-let investors pay a higher property transfer tax of 8%. Also the Netherlands Zelfwoonplicht makes it obligatory to live in any newly built home that has been purchased, and not rented out.[11] Germany has recently altered real estate transfer tax to be levied if at least 90% of the shares in a corporation that owns real estate change hands, directly or indirectly, within a rolling 10-year time frame. The government aims to stop avoidance of transfer taxation, costing a significant amount of foregone revenue each year, and make them liable from 2021.[12]

There remain significant challenges for using taxation to promote affordable and inclusive housing, however. At the end of the day, poorly designed tax incentives, such as mortgage interest tax relief in the Netherlands above, have not only eroded the tax base, they have fuelled household indebtedness and undermined affordable supply. The US LIHTC provides an exception. Costing the government around US$ 10 billion per annum in foregone revenue, coupled with strategic public investment, this tax measure has supported over 2 million affordable rental dwellings since its inception. However, most national taxation systems have largely failed to design such effective tax tools to drive fairer more productive housing systems.

Indeed, many governments have chosen to adopt tax reforms which have accelerated the liquification of housing investment enabling Real Estate Investment Trusts (REITS)[13] to take hold in specialist accommodation provision for the aged, students and tourists, without attempting to manage negative knock-on impacts on the adequacy or affordability of such housing or its impact on surrounding communities. A recent European review of housing evidence stressed the need to address speculation and egregious tax distortions in land and housing markets (Gibb and Haynton, 2018).

Despite these challenges, taxation can make an important contribution to promoting affordable and inclusive housing outcomes. Typically, non-profit housing providers are charitable organisations and are subject to lower rates of sales tax, corporation tax and capital gains taxes than would be paid by private

---

[8] According to Krapp, M-C & Vaché, M., Egner, B., Schulze, K., and S. Thomas (2020) "A 2016 report from the Central Planning Bureau highlighted that the number of households using the mortgage interest tax deduction facility grew from 2 million in 1990 to over 3.5 million in 2014. The average annual tax deduction grew from around€3,000 in 1990 to slightly less than €9,000 in 2014. The total mortgage tax deduction more than quadrupled in that period from €7 billion to €32 billion." p.91

[9] For background on this circuit see: https://www.nhlp.org/resource-center/low-income-housing-tax-credits/

[10] https://www.ird.govt.nz/pages/campaigns/brightline

[11] https://mistermortgage.nl/changes-mortgage-rules-2021/

[12] https://home.kpmg/ch/de/blogs/home/posts/2021/04/germany-real-estate-transfer-tax.html

[13] REITs have many different names across Europe, in Spain they are called SOCIMIs Public Limited Investment Companies in real estate.

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

for-profit housing providers, for instance. Some governments use tax provisions to provide incentives to promote investment in affordable and sustainable housing (e.g., tax breaks for private landlords to provide housing on social terms). Sometimes tax incentives are provided to investors in rental housing – regardless of the rent setting or allocation mechanisms being used. This can be otherwise, as in France, the 'Louer abordable' ('affordable rental') scheme attempts to channel some of this investment into providing additional rental housing for households eligible for social housing, by providing tax and other benefits to investors. This scheme has existed in various forms for about thirty years. It currently secures around 9,000 additional affordable dwellings each year and has thus far accumulated a dedicated stock of 100,000 dwellings, which are provided under this tax framework Lawson, Norris, Wallbaum, 2021).

These examples show that there is considerable potential to use taxation (and regulation of finance) far more effectively and actively to address some of the factors which are undermining housing affordability. As a recent review of financialization from the European Commission's 'Joint Research Centre' (JRC) noted:

"policy plays an important role in the degree to which housing is, or can be, financialised…Thus, to understand the financialization of housing, also the governance of housing should be understood (or the lack of it)" Ven Heerden, et al 2020).

In other words, a nation or region's capacity to resist financialization is only as robust as the governance structures underpinning its fiscal, finance and housing systems.

From dystopia to informing policy progress: focus, scale, number, cost and taxation

So far government efforts to manage financialization have involved modest, short term interventions. They are far cry from the market shaping credit policies and special purpose circuits which aimed to deliver access to adequate supply of affordable housing in the 20th century. Clearly policy ambition has been lacking despite the GFC and current COVID19 pandemic. Monitoring has focused on the risks to financial institutions, and overlooked the focus, scale, composition and cost of financial circuits which have generated unaffordable and inaccessible housing. While many evidence based policy reforms have been put forward, they have been watered down or resisted. Remaining tools have had to be defended from competition policy and selective austerity measures. The promise of the EU's Social Pillar demands a re-assessment of the role of policy in shaping financial circuits and creation of more long term, extensive, market shaping measures. This paper has suggested where efforts should be placed- with attention to focus, scale, number and cost of circuits and their balanced and purposeful taxation.

One bright light from the COVID era has been the flourishing policy co-operation and engagement between policy makers, advocates and researchers facilitated by online workshops, conferences and policy related events. While we all miss face to face conferences, to some degree, COVID19 has also brought together public interest researchers and policy experts online, also via podcasts and written commentaries, allowing for more rapid testing of ideas and transparent engagement and exchange. Housing2030 is certainly an outcome of this. It was conducted over a period 18 months entirely online, involving over 56 countries, 80 experts, 1,200 participants and engaged more than 2,500 listeners.

This paper has drawn heavily on the work of the UN *Housing2030* project, which emerged from a year long series of evidence review, workshops and podcasted interviews. Its resulting report and revamped website will be launched at the United Nations in Geneva on October 5-6 2021 alongside an Action Plan to be adopted by 56 countries of the UNECE region. We do not contend a launch a report and a website will transform thinking about current financial pathways, or be the final word in policy debates. Yet it does build the capacity to question government actions, inform policy makers and illustration how to shape better housing systems to realise the right to adequate housing.

The Housing 2030 - Action Plan

As epilogue, it is timely to flag key aspects of the Housing2030's Action Plan which concerns the design of financial circuits. These action points of the this Plan aim to shift entrenched policy perspectives on the role and regulation of financial circuits generating housing outcomes. It will be presented for adoption by 56 countries of the UN ECE region in October 2021, Towards this long end, Housing 2030 and the UN Action Plan can provide practical guidance on the tools to tame financialisaton.

Table 3: Selected recommendations of the Housing2030- Action Plan

Policy Area B: SUSTAINABLE HOUSING AND HOMES
Goal B3: Finance and Funding

Rationale: Appropriate financial, fiscal and taxation frameworks, together with purposeful housing delivery models and consumer support can enable policy makers to shape housing finance systems to ensure investment expands and protects affordable housing opportunities.

	Target		Action
B3.1	*Financial Regulation:* Regulate national finance systems in order to expand investment in affordable and sustainable housing and address housing needs	B3.1.1	*Regulate finance systems to promote housing market stability and prioritise sustainable investment to expand the supply of climate neutral, affordable and inclusive housing.*
		B3.1.2	*Legislate and implement long term rent setting and indexing systems to promote affordability and security while sustaining long term investment in supply and quality provision.*
		B3.1.3-	*Modify state aid rules to support purposeful public investment in social housing provision that shapes better housing markets and addresses locally identified housing needs not met by market mechanisms.*
B3.2	*Investment*: Investment prioritised through housing delivery models that have affordable, sustainable and needs based allocation as their core purpose supported by a range of regulatory, funding and financing tools	B3.2.1	*Develop, support and enforce the implementation of responsible credit norms and standards, (e.g., deposit ratios, loan to income and loan to value ratios) which prioritise access to first home buyers, prevent over-indebtedness and also stabilise house markets.*
		B3.2.2	*Encourage long term investment in affordable housing supply, maintenance and renovation, and discourage investment strategies that erode housing affordability, quality and security.*
		B3.2.3	*Establish dedicated and revolving cycles of investment in affordable housing, which are insulated from fluctuations in the availability of finance from governments and financial markets in order to support social and economic wellbeing and play a counter-cyclical role.*

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

		B3.2.4	*Use long term public investment in the form of equity, grants, long term loans, interest rate subsidies, guarantees and insurances to ensure and accelerate affordable housing supply and innovation, improve energy efficiency, promote economic stability and ensure access for people excluded from local market processes.*
		B3.2.5	*Promote investment in sustainable housing through private and public investments, public-purpose partnerships, and other means of financing.*
B3.3	*Frameworks, Funds & Capacities:* The establishment of effective financial frameworks, public purpose financial intermediaries and revolving funds that channel investment towards expanded access to affordable, adequate and sustainable housing	*B3.3.1*	*Establish special purpose financial intermediaries to support households and affordable housing providers that may otherwise have limited access to the private market.*
		B3.3.2	*Develop and support financial investment frameworks and their compliance that channel long term low-cost investment to social and affordable housing assets.*
		B3.3.3	*Improve capacity of households to afford decent housing, by stabilising housing prices, improving and securing household incomes and, when required, provide adequate assistance in the payment of housing costs.*
		B3.3.4	*Encourage stable, fair rent setting and indexing systems which support adequate, well-maintained and affordable provision.*
B3.4	*Mechanisms & Instruments:* New legal mechanisms that shield residents from excessive financial risks and burdens as a consequence of the design and enforcement of credit norms, consumer protection, financial literacy and regulation of financial products. Taxation instruments that support and promote affordable, adequate and sustainable housing outcomes	*B2.4.1*	*Prevent and mitigate the risks to households associated with predatory lending and over-indebtedness.*
		B2.4.2	*Design and enforce taxation codes to encourage the efficient use and more equitable distribution of land and dwellings; to discourage speculation in land and housing markets; and, to attract investment in recognised affordable housing projects.*
		B2.4.3	*Take specific measures to counteract housing speculation in order to protect scarce affordable housing resources.*
		B2.4.4	*Provide assistance to households who are unable to afford decent housing.*

Source: UN (2021) to be launched for adoption Ministerial Meeting, Geneva, October 5-6

Acknowledgements

Europe, UNECE and UN Habitat in initiating and supporting the Housing 2030 project upon which this paper draws inspiration.

References

Aalbers, M. B. (2008) 'The Financialization of Home and the Mortgage Market Crisis', Competition and Change, 12(2), pp. 148–166.

Aalbers, M. B. (2017) 'The Variegated Financialization of Housing', International Journal of Urban and Regional Research, 41(4), pp. 542–554.

Aalbers, M. B., Van Loon, J. and Fernandez, R. (2017) 'The financialization of a social housing provider', International Journal of Urban and Regional Research, 41(1), pp. 1–17.

Adelino, M., Schoar, A. and Severino, F. (2018) 'The Role of Housing and Mortgage Markets in the Financial Crisis', Annual Review of Financial Economics, 10(1), pp. 25–41.

Adkins, L., Cooper, M. and Konings, M. (2021) 'Class in the 21st century: Asset inflation and the new logic of inequality.', Environment and Planning A: Economy and Space., 53(3), pp. 548-572.

AHURI (2021) AHURI Brief: New Zealand housing investment tax changes explained. Melbourne.

Alexander, W., Enoch, M. and Balino, T. (1995) The adoption of indirect instruments of monetary policy. Occasional Paper No. 126. Washington DC: International Monetary Fund.

Andrews, D. and Caldera Sánchez, A. (2011) The Evolution of Homeownership Rates in Selected OECD Countries: Demographic and Public Policy Influences. Paris: OECD.

Arena, M. et al. (2020) Macroprudential policies and house prices in Europe. Washington, DC: International Monetary Fund.

Arundel, R. and Doling, J. (2017) 'The end of mass homeownership? Changes in labour markets and housing tenure opportunities across Europe', Journal of Housing and the Built Environment. Springer Netherlands, 32(4), pp. 649–672. doi: 10.1007/s10901-017-9551-8.

Arundel, R. and Ronald, R. (2021) 'The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality', Urban Studies, 58(6), pp. 1120–1140.

Basel Committee on Banking Supervision (2017) High-level summary of Basel III reforms, December 2017. Geneva: Bank for International Settlements.

Beswick, J. et al. (2016) 'Speculating on London's housing future: The rise of global corporate landlords in "post-crisis" urban landscapes', City, 20(2), pp. 321–341.

Bezemer, D. et al. (2018) Credit where it's due: A historical, theoretical and empirical review of credit guidance policies in the 20th century. London: UCL Institute for Innovation and Public Purpose.

Bezemer, D. and Zhang, L. (2019) 'Credit composition and the severity of post-crisis recessions', Journal of Financial Stability, 42(1), pp. 52–66.

Bonde-Hansen, M. (2021) The Dynamics of Rent Gap Formation in Copenhagen: An empirical look into international investments in the rental market. Malmö: Malmö University.

Brenner, R. (2006) The Economics of Global Turbulence. London: Verso.

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

British Columbia (2021) Residential Tenancy Policy Guideline 2B: Ending a Tenancy to Demolish, Renovate, or Convert a Rental Unit to a Permitted Use. Victoria.

Bryan, D. and Rafferty, M. (2018) Risking together: How finance is dominating everyday life in Australia. Sydney: Sydney University Press.

Byrne, M. (2016) 'Entrepreneurial Urbanism After the Crisis: Ireland's "Bad Bank" and the Redevelopment of Dublin's Docklands', Antipode, 48(4), pp. 899–918.

Christophers, B. (2015) 'The Limits to Financialization', Dialogues in Human Geography, 5(2), pp. 183–200.

Daly, P., Moloney, K. and Myers, S. (2021) Property funds and the Irish commercial real estate market, Financial Stability Notes, Central Bank of Ireland. Dublin.

Deutsch, E and Lawson, J (2012) International measures to channel investment towards affordable housing: Austrian Case study for RMIT AHURI, commissioned by Department of Housing, WA Government pp. 1-70

Edwards, M. (2016) 'The housing crisis and London', City. doi: 10.1080/13604813.2016.1145947.

Engelen, E., Konings, M. and Fernandez, R. (2010) 'Geographies of financialization in disarray: The dutch case in comparative perspective', Economic Geography, 86(1), pp. 53–73.

Fernandez, R. and Aalbers, M. (2016) 'Financialization and housing: Between globalization and Varieties of Capitalism', Competition and Change, 20(2), pp. 71–88.

Fernandez, R. and Aalbers, M. B. (2017) 'Housing and Capital in the Twenty-first Century: Realigning Housing Studies and Political Economy', Housing, Theory and Society, pp. 151–158. doi: 10.1080/14036096.2017.1293379.

Fernandez, R., Hofman, A. and Aalbers, M. (2016) 'London and New York as a safe deposit box for the transnational wealth elite.', Environment and Planning A, 48(12), pp. 2443–2461.

Fields, D. and Uffer, S. (2014) 'The financialization of rental housing: A comparative analysis of New York City and Berlin', Urban Studies, 53(7), pp. 1486–1502.

Forrest, R. and Hirayama, Y. (2015) 'The financialization of the social project: Embedded liberalism, neoliberalism and home ownership', Urban Studies, 52(2), pp. 233–244.

Fritsch, N., Prebble, J. and Prebble, R. (2013) A Comparison Of Selected Features Of Real Estate Investment Trust Regimes In The United States, The United Kingdom And Germany. 14/2013. Victoria.

García-Lamarca, M. and Kaika, M. (2016) '"Mortgaged lives": the biopolitics of debt and housing financialization', Transactions of the Institute of British Geographers, 41(3), pp. 313–327.

Gibb, K and Haynton, J (2018) Overcoming Obstacles to the Funding and Delivery of Affordable Housing Supply in European States https://ec.europa.eu/futurium/en/system/files/ged/2018.10.22_overcoming_obstacles_to_the_funding_and_delivery_of_affordable_housing_supply_in_european_states_1.pdfp.44

Gibb, K, Maclennan, D and Stephens, M (2013), Innovative Financing of Affordable Housing: international and UK perspectives, York: Joseph Rowntree Trust. https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/affordable-housing-finance-full.pdf

Goodhart, C. (1989) Money, information and uncertainty. London: Macmillan.

Grace, T., Hallissey, N. and Woods, M. (2015) 'The Instruments of Macro-Prudential Policy', Central Bank Quarterly Bulletin, 65(1), pp. 90–105.

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

Guironnet, A., Attuyer, K. and Halbert, L. (2014) 'Building cities on financial assets: The financialization of property markets and its implications for city governments in the Paris city-region', Urban Studies, 53(7). doi: 10.1177/0042098015576474.

Gupta, R., Lv, Z. and Wong, W.-K. (2019) 'Macroeconomic Shocks and Changing Dynamics of the U.S. REITs Sector.', Sustainability, 11(10), pp. 2776–86.

Halbert, L. and Attuyer, K. (2016) 'Introduction: The financialization of urban production: Conditions, mediations and transformations', Urban Studies, 53(7), pp. 1347–1361.

Van Heerden, S., Ribeiro Barranco, R. and Lavalle, C. (2020) Who owns the city? Exploratory research activity on the financialization of housing in EU cities. Brusels: European Commission Joint Research Committee.

Hoffman, L. and Schimitter Heisler, B. (2021) Airbnb, short-term rentals and the future of housing. New York: Routledge.

Horgan-Jones, J. (2021) 'Stamp duty will rise to 10% for multiple house purchases under Government plans', Irish Times, 18 May, p. 6.

Hunter, P. (2016) 'The Englishman's castle and the impact of foreign investment in residential property.', in Raco, M. (ed.) Britain for Sale? Perspectives on the Cost and Benefits of Foreign Ownership. London: The Smith Institute, pp. 41–50.

Krapp, M-C & Vaché, M., Egner, B., Schulze, K., and S. Thomas (2020) Housing policies in the European Union; Institute for Housing and Environment (Institut Wohnen und Umwelt GmbH, IWU) and Institute of Political Science, Technical University, Darmstadt

Kuttner, K. and Shim, I. (2016) 'Can non-interest rate policies stabilize housing markets? Evidence from a panel of 57 economies', Journal of Financial Stability, 26(1), pp. 31–44.

Lapavitsas, C. (2013) 'The financialization of capitalism: "Profiting without producing"', City, 17(6), pp. 792–805.

Lavoie, M. (2014) Post-Keynesian Economics: New Foundations. Northampton: Edward Elgar.

Lawson, J., Norris, M. and Wallberg, H. (2021) Housing2030: Effective Policies to Deliver Affordable Housing. Geneva: United Nations.

Lawson, J., Pawson, H., Troy, L. van den Nouwelant, R. and Hamilton, C (2018) Social Housing as Infrastructure – an investment pathway, Peer Reviewed AHURI Final Research Report as part of the Inquiry into Social Housing as Infrastructure, Australian Housing and Urban Research Institute Limited, Melbourne. https://www.ahuri.edu.au/research/final-reports/306 ISBN: 978-1-925334-71-5

Lawson, J (2013) Chapter 5; Postulating an explanation for housing divergence in Critical Realism and Housing Research, Routledge, e book
https://www.taylorfrancis.com/books/9780203770368

Leyshon, A. and French, S. (2009) '"We all live in a Robbie Fowler house": The geographies of the buy to let market in the UK', British Journal of Politics and International Relations, 11(3), pp. 438–460.

Lunde, J. and Whitehead, C. (2016) Milestones in European housing finance,. Chichester: Wiley Blackwell.

Mayock, P., Sheridan, S. and Parker, S. (2015) '"It's just like we're going around in circles and going back to the same thing …": The Dynamics of Women's Unresolved Homelessness', Housing Studies, 30(6), pp. 877–900. doi: 10.1080/02673037.2014.991378.

Mazzucato, M. (2013) The Entrepreneurial State: Debunking Public vs. Private Sector Myths. London: Anthem Publishing.

ENHR

OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

NAO (2013) Savings from operational PFI contracts, National Audit Office, Her Majesty's Treasury, London, https://www.nao.org.uk/wp-content/uploads/2013/11/Savings-fromoperational-PFI-contracts_final.pdf.

NAO (2015) The choice of finance for capital investment, National Audit Office, Her Majesty's Treasury, London, https://www.nao.org.uk/wp-content/uploads/2015/03/The-choice-offinance-for-capital-investment.pdf.

NAO (2018) PFI and PF2, Report by the Comptroller and Auditor General, National Audit Office, Her Majesty's Treasury, London, https://www.nao.org.uk/report/pfi-and-pf2/.

NAO (2018a) Investigation into the government's handling of the collapse of Carillion, Report by the Comptroller and Auditor General to the Cabinet, National Audit Office, Her Majesty's Treasury, London, https://www.nao.org.uk/wp-content/uploads/2018/06/Investigation-intothe-governments-handling-of-the-collapse-of-Carillion.pdf.

Nethercote, M. (2020) 'Build-to-Rent and the financialization of rental housing: future research directions', Housing Studies, 35(5), pp. 839–874.

Nocera, A. and Roma, M. (2017) House prices and monetary policy in the euro area: evidence from structural VARs. Frankfurt: ECB.

OECD (2021) Brick by Brick: Building Better Housing Policies. Paris: OECD.

Orr, A. (2021) 'Some Policy Lessons from a Year of COVID-19: A speech delivered by Adrian Orr Governor, New Zealand Federal Reserve', in New Zealand Economics Forum.

Piketty, T. (2015) Capital in the Twenty-First Century. Harvard MA: Harvard University Press.

Rolnik, R. (2013) 'Late Neoliberalism: The Financialization of Homeownership and Housing Rights', International Journal of Urban and Regional Research, 37(3), pp. 1058–1066.

Ryan-Collins, J. (2019) 'Breaking the housing–finance cycle: Macroeconomic policy reforms for more affordable homes.', Environment and Planning A: Economy and Space., 53(3), pp. 480–502.

Sokol, M. (2017) 'Financialisation, financial chains and uneven geographical development: Towards a research agenda', Research in International Business and Finance, 39, pp. 678–685.

Special Rapporteur on Adequate Housing (2020) Guidelines for the Implementation of the Right to Adequate Housing. Geneva: United Nations.

Stein A, Castillo (2005), 'Innovative financing for low-income housing improvement: lessons from programmes in Central America'. Environment and Urbanization.17(1):47-66. doi:10.1177/095624780501700117

Stiglitz, J. (2015) The Great Divide Unequal Societies and What We Can Do About Them. New York: Norton.

United Nations Environment Programme (2015) The Financial System We Need: aligning the financial system with sustainable development. Nairobi: UNEP.

Van Heerden, S., Ribeiro Barranco, R., & Lavalle, C. (2020). Who owns the city? Exploratory research activity on the financialization of housing in EU cities. Brussels: European Commission Joint Research Committee. https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/who-owns-city-exploratory-research-activity-financialisation-housing-eu-cities

Vestergaard, H 2015, 'From physical improvement to holistic renewal', in Turkington, R., and Watson, C., Renewing Europe's Housing, Policy Press, Bristol

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands

Vestergaard, H & Scanlon, K 2014, 'Social Housing in Denmark', in Social Housing in Europe, John Wiley & Sons, Ltd, pp. 75–89.

Waldron, R. (2018) 'Capitalizing on the State: The political economy of Real Estate Investment Trusts and the "Resolution" of the crisis', Geoforum, 90, pp. 206–218.

Waldron, R. and Redmond, D. (2014) 'The Extent of the Mortgage Crisis in Ireland and Policy Responses', Housing Studies, 29(1), pp. 149–165. doi: 10.1080/02673037.2013.825694.

Wetzstein, S. (2021) 'Toward Affordable Cities? Critically Exploring the Market-Based Housing Supply Policy Proposition, ', Housing Policy Debate. doi: 10.1080/10511482.2021.1871932.

Wijburg, G. (2020) 'The de-financialization of housing: towards a research agenda', Housing Studies. doi: 10.1080/02673037.2020.1762847.

Wijburg, G. and Aalbers, M. B. (2017) 'The alternative financialization of the German housing market', Housing Studies, 32(7), pp. 968–989.

Wijburg, G., Aalbers, M. B. and Heeg, S. (2018) 'The Financialisation of Rental Housing 2.0: Releasing Housing into the Privatised Mainstream of Capital Accumulation', Antipode, 50(4), pp. 1098–1119.

Wijburg, G. and Waldron, R. (2020) 'Financialised privatisation, affordable housing and institutional investment: the case of England', Critical Housing Analysis, 7(1), pp. 114-129,.

Wolf, M. (2021) 'What central banks ought to target', Financhial Times, 3 March, p. 5.

Wood, J. D. G. (2017) 'The effects of the distribution of mortgage credit on the wage share: Varieties of residential capitalism compared', Comparative European Politics, 15(6), pp. 819–847.

Housing affordability and the city. Disentangling the urban and spatial dimensions of housing affordability in Europe

Marco Peverini

Politecnico di Milano, Department of Architecture and Urban Studies,
Via Bonardi, 3, 20133 Milano, Italy
e-mail: marco.peverini@polimi.it

Rebecca Cavicchia

Norwegian University of Life Sciences, BYREG-Institutt for by- og regionplanlegging
Email: Rebecca.cavicchia@nmbu.no

Abstract

This article deals with the multidimensional and contested notion of housing affordability (HA). In the past century, scholars (especially in Anglo-Saxon countries) have widely debated on definitions, measurements and problems related to HA. The result of this debate is an extensive, complex, and often controversial body of literature that explores increasingly multidimensional approaches to the analysis of HA at various levels. The attention on the urban - rather than on the national - scale of housing problems is relatively recent and remarkably growing. Recent research has discussed the so-called "global urban affordability crisis" (Wetzstein, 2017), which is increasingly affecting especially attractive and growing global cities. While studies have analyzed HA in connection to a variety of different issues, ranging from poverty and social policies to financialization and socio-spatial inequalities, its spatial and urban dimensions and implications have not been dealt with enough in research (Haffner, Hulse, 2021). The paper contributes to expanding this knowledge by exploring the European context and focusing on the urban and spatial implications of HA, in terms, among other themes, of spatial filtering, suburbanization of poverty, spatial mismatch and accessibility to various urban opportunities. Against this backdrops, specific aims of the article are: (i) providing orientation between the different themes and issues connected to the multifaceted concept of HA from an urban and spatial perspective; (ii) highlighting advancements, unresolved issues, and possible pathways for future research; (iii) breaking new conceptual ground for the analysis of HA (and HA policies) at the local level, especially aiming at scrutinizing its spatial dimension and outcomes.

Keywords: Housing affordability, affordable housing, urban housing affordability, socio-spatial inequalities, housing policies.

Introduction: searching for the state of the art of research on housing affordability

Housing affordability (hereafter, HA) refers generically to the sustainability of housing costs in relation to socio-economic conditions, in particular incomes. The debate on the concept of housing affordability originated at the end of the nineteenth century - at the latest with "The Housing Question" by Friedrich Engels (1872) - with studies on poverty and on the rural-urban drift concerning industrial cities. The relevance of affordability has exploded several times, especially in relation to housing shortage issues (e.g., with the inflation of the first post-war period, the crisis of 1929, the destruction of the second post-war period). In the thirty glorious years of the welfare state, HA has become central both in the claims of political and trade union movements and in public policies in many European states. With the advancing homeownership society and the residualization of housing policies, the issue of affordability has not disappeared, but has rather tended to concentrate in the weaker parts of the society, losing, at least in part, its previously broad relevance. However, with the increasing commodification of housing (where home becomes real estate) determining a continuous condition of "housing crisis" (Madden, Marcuse, 2020), also characterized as "global urban affordability crisis" (Wetzstein, 2017), the issue of affordability has returned central in both policy arena and research.

Compared to the tradition of the affordability debate, today research needs to deal with phenomena that are extremely different from the past: economic stagnation, financialization, increasing urbanization, concentration of economic flows, and gentrification. Intertwined with these dynamics, affordability, as a phenomenon and a concept, has become more complex and multifaceted. Against this backdrop, traditional theoretical and analytical tools appear often too limited to interpret affordability in its complexity, and some authors call for comprehensive approaches and "fresh" looks (Haffner, Hulse, 2021).

Research on affordability is multidisciplinary - it crosses the fields of housing studies, sociology and social policies, economics, urban planning - and makes use of extremely diverse analytical lenses and points of view. Conscious of these complexities, with the series of seminars *Housing affordability and the city*, held between March and April 2021 and still ongoing[1], we have involved researchers who deal with the issue in various ways and asked them to address and discuss affordability from the point of view of their research.

The paper builds on two main sources: a review of the recent literature on housing affordability and the contents of the seminar series. Integrating and discussing the contents of the seminars in the light of the recent literature on housing affordability, the purpose of the paper is to draw a contemporary narrative of HA as a concept and an urban phenomenon.

The literature review draws on both theoretical and empirical contributions. Several valuable reviews on the concept of affordability already exist (Haffner & Hulse, 2021; Addinson et al., 2013; Galster & Lee, 2020), but affordability is not something fixed. The underlying mechanisms that affect it, as well as its implications, change over time and contextual conditions, continuously opening to new perspectives, interpretations, and approaches. Thus, new and fresh reviews on housing affordability are needed in order to provide orientation among the multiple emerging dimensions of this concept, especially in connection with its changing urban and spatial dimension. This latter aspect, as the literature review reveals, still lack of in-depth research.

The second source on which we elaborate for this contribution is the mentioned seminar series *Housing Affordability and the City*. The series was articulated around the contributions of three expert scholars in housing affordability and housing matters: Christine Whitehead, Melissa García Lamarca and Marietta Haffner. The seminars have touched upon different scales, contexts, and topics, many of which were recurring in the narratives of the three researchers. Even though the number and the specific topics of the seminars give limited possibility for generalization, the seminars have somewhat offered complementary perspectives that allowed us to build a first, still partial, frame for exploring contemporary urban socio-spatial issues through the lens of HA.

Specific aims of the article are: (i) providing orientation between the different themes and issues connected to the multifaceted concept of HA from an urban and spatial perspective; (ii) highlighting

---

[1] The article builds on the seminars of the first round of the series only. The second round will take place in the fall 2021.

advancements, unresolved issues, and possible pathways for future research; (iii) breaking new conceptual ground for the analysis of HA (and HA policies) at the local level, especially aiming at scrutinizing its spatial dimension and outcomes.

The paper is structured as follows. In section 2, we summarize the findings from the literature review. In section 3, we briefly present the contents of the three seminars and in section 4 we discuss the main themes that have emerged, focusing specifically on the urban dimension of housing affordability and on its spatiality. In section 5, we delineate a research agenda to address the underlined aspects and we finally propose some concluding reflections.

2. Literature review

Our search on Scopus with the keyword "housing affordability" initially produced 2563 results. Then, we filtered the search according to the following criteria: keywords (including all those with "urban" or a spatial connotation), year of publication (from the Global Financial Crisis in 2008), geographical context (limited to Europe), and research field (social and environmental sciences, economics). The final result was 82 papers. Scrutiny of the abstracts resulted in 53 relevant papers for this research. Subsequently, we extracted the most relevant themes connected to HA and its urban and spatial dimensions, and we grouped the papers accordingly.

(1) *housing supply* (Fingelton, 2008; Cheshire, 2008; Gallent, Durrant, May, 2017; Coelho, Dellepiane-Avellaneda, Ratnoo, 2017; Fingleton, Fuerst, Szumilo, 2019). The theme of housing supply is explored in terms of quantity of housing provision in relation to the demand. The papers we scrutinized explore housing supply also in relation to other aspects such as how and what kind of housing is provided (housing submarkets, price and rent levels), but also *where* housing is supplied. Affordability is therefore analyzed as a character of the housing supply, often within urban housing markets and with a spatial approach.

(2) *social mix* (McIntyre, McKee, 2012; McIntyre, McKee K., 2018; Alves, 2019). HA is considered in these papers as a fundamental determinant of social mix. Social mix brings inherently spatial factors in connection to affordability, such as the spatial filtering of different social groups through housing prices. Additionally, exploring social mix opens reflections on the actual effectiveness of social mixing policies in providing affordability for various population groups.

(3) *employment and labor market* (Fingelton, 2008; Andrew, 2012). HA is explored in relation with local employment and labor market conditions, looking for spatial mismatches between affordability conditions and job opportunities. HA and local labor markets might be considered as mutually influencing factors. On one hand, the lack of housing affordability in central locations can generate spatial mismatches and strong inequalities. On the other hand, attractive job markets are fundamental factors affecting local housing markets and HA.

(4) *urban renewal and regeneration* (Arbaci S., Tapada-Berteli T., 2012; Leccis, 2019). Transformations in the urban fabric usually involve consequences on the housing conditions and on the social groups that are housed, for which HA is a crucial variable. Urban renewal is deeply entangled with gentrification dynamics, various types of displacement and exclusionary effects.

(5) *housing financialization* (Fields, Uffer, 2016; Lestegás, Seixas, Lois-González, 2019). The financialization of housing, meaning that housing prices are detached from local dynamics (e.g. incomes, labor conditions, etc.) and hooked on international capital dynamics, deeply influences HA.

(6) *urban land rent and land policies* (Berto, Cechet, Stival, Rosato, 2020; Debrunner, Hartmann, 2020). Land prices have the most important influence on housing prices (in relation to other production costs) and have an inherently spatial effect on HA.

(7) *transportation costs* (Coulombel, 2018; Cao, Hickman, 2018; Bohman, 2021). Transportation costs are associated with the housing localization of households, which is often determined also by HA conditions.

(8) *ecological retrofitting* (Golubchikov, Deda., 2012; Chatterton, 2013; Lind, Annadotter, Björk, Högberg, Klintberg, 2016; Macmillan, Davies, Shrubsole, Luxford, May, Chiu, Trutnevyte, Bobrova, Chalabi, 2012). The emergence of a strong environmental agenda has triggered a massive wave of actions of housing retrofitting, which has often unexpected and uncontrolled effects on HA and related gentrification dynamics.

(9) *short-term rental* (Yrigoy, 2019; Franco, Santos, 2021). It is nowadays widely acknowledged that Aibnb and other forms of short-term rental have deep local effects on housing prices and therefore on HA where tourism is a major industry.

(10) *affordability measurement at local level* (Jones, Watkins, Watkins, 2011; Argiolas, 2013; Argiolas, 2014). Measuring affordability at the local level, including spatial factors, involves numerous methodological issues.

(11) *community land trusts* (Moore, McKee, 2012; Moore, 2018). HA problems are frequently linked to market dynamics and to housing (and land) commodification, and solutions are proposed to improve it by taking land and housing out of the market.

(12) *housing governance and local planning* (Jones, Coombes, 2013; Bramley, Watkins, 2014; Bramley, Watkins, 2016; Wijburg, 2021). HA is also an outcome of housing governance and planning.

(13) *urban focus* (Wetzstein, 2017; 2021). HA is identified as a mainly urban phenomenon.

(14) *urban sprawl* (Ehrlich, Hilber, Schöni, 2018). The form of the city is also shaped by the housing market and HA (and the other way around): a high demand can trigger urban expansion and providing affordable housing can involve urban sprawl.

(15) other themes: "spatial consequences" (Szumilo, 2019), history (Carmona, Lampe, Rosés, 2017), temporary housing (Debrunner, Gerber, 2021), residential location choices (Frenkel, Bendit, Kaplan, 2013), livability vs affordability (Cramer-Greenbaum, 2021), key worker concept (Morrison, 2013), homeownership (Radzimski, 2014), community sustainability (Winston, 2014), integrated rental markets (Matznetter, 2020), "Nimbysm" (Matthews, Bramley, Hastings, 2015), studentification (Kinton, Smith, Harrison, Culora, 2018).

3. The seminar series: three possible approaches to researching housing affordability

The heterogeneity of topics emerged from the literature review reveals the complexity and multidisciplinarity of the research on HA. It crosses the fields of housing studies, sociology and social policies, economics, urban planning and makes use of extremely diversified points of view. The organization of the seminar series *Housing affordability and the city* was driven by this awareness and by the discussions and exchanges on our personal research. The series has explored the topic of affordability in Europe both conceptually and empirically, trying to give orientation on the state of the art and with the aim of triggering discussions about current issues, for research, policy and practice. The three different, and yet coherent, contributions are summarized in the following paragraphs.

3.1 Marietta Haffner. Grasping the urban dimension of housing affordability from a comparative European perspective

Marietta Haffner's lecture, based on a recent publication (Haffner & Hulse, 2021) proposes a *fresh look* on affordability, highlighting emerging themes and challenges. The issue of affordability is addressed in its complexity, exploring multiple dimensions on a national scale (with a particular focus on the

connections between income and the two main segments of the housing market: rental housing and home ownership) and in a comparative perspective through four geographical clusters (Western, Eastern, and Southern Europe, and Nordic countries). Haffner's narrative, built on the basis of EU-SILC data and indicators, offers a critical perspective on the limits of considering affordability as a mere relationship between income and housing cost (fig. 1). Haffner tackles the issue of what Wetzstein (2017) has recently defined *global urban affordability crisis*, highlighting its main trends: a sharp increase in housing prices, which can be found mainly in urban contexts[2], and in particular in global cities; the evolution and the complexification of housing financialization and gentrification processes, which are strongly interconnected; and the emergence of new social and spatial inequalities linked to commuting poverty, the suburbanization of the most vulnerable social groups, and a profoundly unequal intergenerational distribution of wealth. These are dynamics, which disproportionately affect low-middle-income households, young people, first-time buyers and tenants.

Two main issues emerging from Haffner's speech have highlighted both the complexity of the concept of affordability and the importance of addressing it in its multidimensionality. The first is the transport costs, generally more onerous with increasing distance from the central business district (CBD) and which require an in-depth study of the spatial dimension of affordability - generally the least explored. The second is the quality of housing - which is crucial in housing affordability research - both in terms of conditions and size of dwellings.
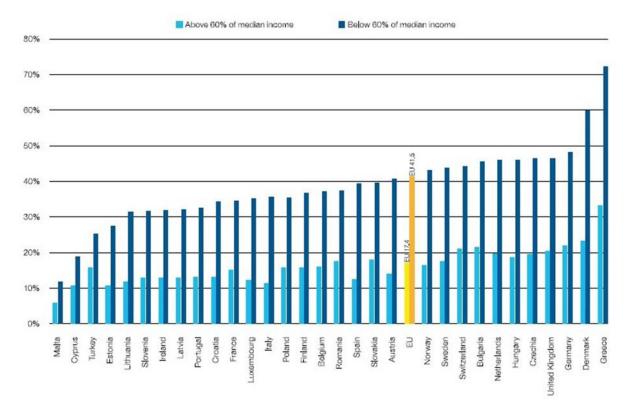
Fig. 1: Housing Europe, Share of housing costs on households' available incomes (above and below 60% of the median income) per European country in 2017, 2019.

3.2 Christine Whitehead. A comprehensive vision of affordability within a local (metropolitan and globalised) market

The contemporary character of the housing issue in Greater London (fig. 2) - a metropolitan agglomeration with a 50% population increase between 1980 and 2020 - is made explicit by Christine Whitehead in her contribution with a few data apparently paradoxical for the (quantitative) categories

---

[2] EU-SILC data on housing cost overburden rate by degree of urbanization
https://ec.europa.eu/eurostat/cache/digpub/housing/vis/housing_02_02_01/

of classical housing research. The median residential price is in continuous growth (from £100,000 in 1980 to over £450,000 per average dwelling in 2020) and affordability for median incomes in continuous decline, despite the number of dwellings now exceeding the number of households. The British researcher - a recognized pioneer on the topic in Europe (see Whitehead, 1991) - articulates a "comprehensive" analysis that frames the issue of affordability within a discourse on the structure and dynamics of the London residential market, phenomenologically intertwined with other issues that are not primarily in the field of residential research: transport policies and infrastructure (e.g. congestion charge); growth of online commerce and conversion of commercial premises into housing; tourism (demand flows, Airbnb); incomes and unemployment. Finally, Whitehead hypothesizes some determinants of affordability in the future of the city focusing on some fundamental factors affecting the dislocation of workers: the *brexit*, the pandemic, the expansion of remote work (in her words, "people leaving the country and people leaving *to* the country") and urban policies such as the historic green belt or the recent liberalization of change of use of housing units -. Taking advantage of the rich availability of data provided by the various (public) agencies that deal with the housing market in the British capital, the researcher then narrates affordability as the result of the intertwining of complex dynamics that unfold across different geographies and phenomenologies, composing an articulated metropolitan portrait for the specific reality of London.

Fig. 2: Office for National Statistics, The Great London urban region, with the boroughs, 2017.

3.3 Melissa García Lamarca. Housing financialization and urban inequalities.

The issue of affordability was explored by Melissa García Lamarca in relation to a global phenomenon, the financialization of housing. Her lecture explored the role of real estate investment trusts (REITS) and corporate landlords in some historically disadvantaged neighborhoods of Barcelona. Three fundamental themes have emerged from her narrative. The first concerns the intrinsic relationship between financialization and affordability. The issue of financialization, indeed, raises political matters related to speculative practices. In the case of Barcelona, such practices are specifically manifested in terms of rent value extraction by corporate landlords (in particular the hedge fund Blackstone) and have involved national and supranational governments, especially after the economic crisis of 2008. The second issue concerns the overlap between speculative financial practices and the deregulation of rental

policies, which in Barcelona dates back to 2013. The conjunction of such events even exacerbated the affordability issues that the city was already facing. Finally, in García Lamarca's narrative the spatial dimension of affordability acquires a central role. Her neighborhood-scale analysis on the housing markets generated by Blackstone properties gives important insights about the socio-spatial inequalities generated by financialization processes, especially in the rental market. The figures she presented are alarming. Blackstone properties soar with costs 38% higher than neighborhood levels. The issue of affordability is therefore intertwined with the creation of new and unjust urban geographies, forged by what David Harvey has defined as dynamics of accumulation (of financial capitalism) by dispossession (of the most vulnerable social groups). Such dynamics have generated, in the case of Barcelona especially in the last 10 or 15 years, strong local reactions and mobilizations (fig. 3), a "resistance" that is also at the center of her analysis of HA problems.

Fig.3_Sindicat de Llogateres, Protest against rent increase in Sant Joan Despí (municipality in the metropolitan area of Barcelona), 2018.

4 Gap analysis

HA is connected in the recent literature to a variety of themes that are not typical of Housing Studies. It seems that there is increasing awareness over the multidimensionality of HA and in particular to its noticeable urban and spatial dimensions. In this section, the paper builds an urban and spatial reading of housing affordability, with the aim of providing a narrative that is more coherent with the themes that emerge from the literature and the seminars.

4.1. An urban reading of housing affordability

4.1.1 Disentangling the "urban" dimensions of housing affordability

Recently, researchers have referred to an urban affordability crisis, or to urban housing affordability, pointing as cities as the fulcrum of the contemporary affordability crisis, but without explicitly unpacking the "urban", its nuances and theoretical dimensions (Wetzstein, 2017; Haffner & Hulse, 2021). What does the reference to an "urban" character of affordability exactly mean? Here, building on our data, we hypothesize some possible interpretations.

The first dimension concerns geography and territory. Since Engels (1872), the housing question has been primarily seen as an urban phenomenon, linked to the urbanization of the population pushed by the industrialization process and the housing shortage for a growing urban population. One century later, a new wave of housing shortage and affordability crisis has hit urban contexts in a very differentiated way, with housing costs being much heavier in cities and especially in attractive and global ones. This issue has been clearly highlighted by Marietta Haffner in her lecture where, through EU-SILC data, she showed that in most of the European countries (eastern Europe seems to make an exception in this respect) housing overburdens predominantly hit urban contexts (fig. 4). In this sense, a primary dimension of the urban character of HA is a geographical one, characterizing some (more urban) territories with a stronger intensity.

However, it is important to underline, coherently with the "new political economy of scale" proposed by Brenner (2004), that when we talk about the urban scale (local, municipal, metropolitan or regional depending on the context) is not a fixed and unique scale of analysis and intervention for tackling housing affordability. Instead, we are aware of the multiscalarity of phenomena (and policies) that influence and affect HA in the light of current research. Moreover, the urban "scaling" should not be intended as a fixed and immobile arrangement, but - coherently - as a process in which multiple decisions made at different levels (individual, corporate, regional, national or global) converge in determining relevant effects on HA at the urban scale.

Housing cost overburden rate by degree of urbanisation, 2019
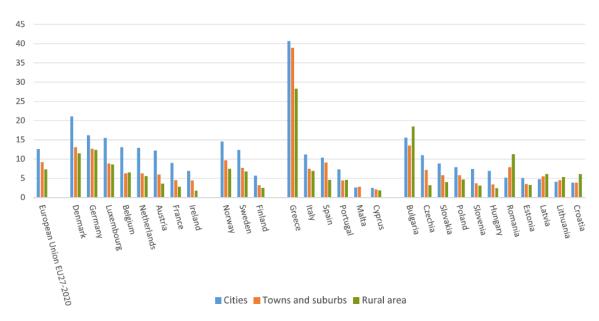
Fig. 4. Housing cost overburden rate by degree of urbanization, 2019. Source: EU-SILC 2019.

The second dimension concerns governance. As statehood has been at least in part rescaled and urban governance has become a more important scale of state intervention (Brenner, 2004), the competence for housing has also increasingly been devolved to the urban level. Together with that of HA problems, also the scale of intervention has shifted from a national to a local (regional or urban) one. In this sense, we could interpret the urban dimension as referring to a specific level in a multilevel governance arrangement and to an unprecedented role and responsibility of urban governments in responding to supra-urban dynamics of the contemporary housing crisis. This point has been addressed in all three seminars, with Whitehead highlighting the specificity of the Great London housing issue and the various policy levels that intervene on that and García-Lamarca showing how global dynamics (tourism, short term lettings) are dealt at a local level.

The third dimension concerns the issue of urban citizenship and the emergence of what Kazepov (2005) called "cit(y)zenship", stressing "the territorial dimension of social citizenship as well as the role of cities as building blocks of social inclusion strategies" to counterbalance the protagonist role given to

the national scale in social studies[3]. In this sense, the adjective "urban" could refer to the fact that HA, at the same time is influenced by urban dynamics (e.g., agglomeration, infrastructures, etc.) and influences and defines the borders of social cit(y)zenship, being a primary condition for accessing urban citizenship. These borders are inherently spatial, as the possibility of accessing urban opportunities highly depends on the location, an issue that will be addressed in the next section.

The last dimension concerns culture. Urban living has become popular and has shaped, from the 1970s on, a "great inversion" that saw middle class people attracted in downtowns. These dynamics have overlapped with the transition from a Fordist to a post Fordist society, with deindustrialization processes and gradual professionalization of urban societies (Hamnett, 2003), with the succession of gentrification waves (Hackworth & Smith, 2001), and have been reinforced with the rise of the creative class (Florida, 2005) and the renovated interest for urban lifestyle and its consumption habits. Consequent transformations have triggered changes in the housing market and in the targets of urban policies that have made cities more suitable (and affordable) for urban elites.

4.1.2 New urban poor and the uneasy relationship between housing affordability and housing quality

Among the consequences of the urban housing affordability crisis, central is the emergence of new urban poor. In the comprehensive contribution of Marietta Haffner, some social groups emerged as the most hardly affected by the urban affordability crisis: low-medium income (often unemployed and part-time workers), renters and first-time buyers. In all these groups there is often an overrepresentation of immigrant population and young people. For several years now, young people have been among the most affected by European dysfunctional housing markets (The expression "generation rent" was coined in the UK in the 2010s – and refers to young adults in the new generations remaining longer in the rental sector than the previous generations) and the situation has even exacerbated as a result of the Covid-19 pandemics. The 2021 overview of housing exclusion in Europe from Feantsa (2021) has pointed out worrying trends of increasing homelessness and housing distress among young people in all the European countries.

More in general, diverse phenomena (increasing urban housing prices and rents, residualization of social housing, privatization of public housing etc.) have exacerbated social and spatial inequalities in the way different social groups access the housing market, being increasingly dependent on capital and wealth. Another related trend emphasized by Haffner, is that new social-spatial dividing lines are forged, for example, through the intergenerational transmission of wealth and housing assets. Especially for young first-time buyers, "parent banking", inheritances and gifts - which are obviously not evenly distributed - mark new social divisions (Galster & Wessel 2019). In their study of poverty suburbanization in Amsterdam and Rotterdam, Hochstenbach and Musterd (2018) considered young graduates entering the labor market as part of the "working poor" group. They observed that over a time span of 10 years (2004-2013) before and after the GFC, this category increased in both central and peripheral areas of both cities. While the suburbanization trend was explained through housing price and rent surge, shrinking of the social rental sector and gentrification, their main explanation for increasing working poor in central areas (even in gentrifying neighborhoods) concerned the spread of collective and shared forms of living, acting as coping strategies. Households for which the location within the city is important for several reasons (job, study, urban opportunities) may accept housing cost overburden and low quality/reduced space/not pleasant sharing conditions - see Bricocoli and Sabatinelli (2016) - or could fall into "residual income" unaffordable conditions. In such dynamics, the trade-off between housing affordability, housing quality, and location, sharply illustrated by Marietta Haffner in her contribution, becomes evident. Haffner illustrated the "misunderstanding" that affordability assessments that do not include quality and location may generate: "*if you under-consume housing, that housing might look affordable".* However, it might not provide decent living conditions, and this is a matter of both quality, size of the dwelling and location. Renters, overrepresented among the low-income, young and immigrant population, are particularly affected. The case presented by Melissa García Lamarca has documented the incredibly low quality and substantially decreasing affordability of Blackstone properties in Barcelona and is representative of a widespread condition in which corporate landlords all

---

[3] See as a reference: https://arc.commons.gc.cuny.edu/2014/11/01/from-citizenship-to-cityzenship-cities-as-laboratories-of-social-innovation-against-poverty/

over Europe (see, for instance the Swedish Akelius or Deutsche Wonen in Berlin) inflate rental prices without providing decent housing.

Overcrowding is as well an increasingly problematic issue, as the COVID-19 pandemics has made explicit in the last year, illustrating how people living in crowded conditions are more exposed to poor health conditions and more likely to get infected on average. 16,7% of European households live in overcrowded conditions and of these, 23,5% are young people between 25 and 29 years old (Feantsa, 2021).

4.2. The spatiality of housing affordability. Disentangling the socio-spatial implications of a urban phenomenon

4.2.1 Disentangling the "spatial" dimension of housing affordability

In the previous section, we unpacked the urban dimension of housing affordability. Here, we build a spatial narrative of housing affordability, driven by questions such as: what is the spatial dimension of housing affordability and how can we ontologically define it? Where are the affordability issues and what are their spatial consequences in urban contexts? Who is mostly affected?

More than 10 years ago, Edward Soja (2009) has argued about the importance of exploring in a much more explicit and active way the spatial dimension of justice, not as an alternative to other conceptual forms of justice but as a way to look at it from a critical spatial perspective. Extending the same critical spatial approach to housing affordability can open to a better understanding of the mechanisms behind housing affordability issues as well as of their outcomes in urban contexts, with potential enrichments for research, both empirical and theoretical.

A first point is that housing affordability issues are intrinsically spatial. Housing, its value, and the opportunities it produces are necessarily linked to location and space. In this sense, Urban Economics provide helpful conceptual and analytical material to disentangle the spatial dimension of HA, especially the concept of urban land rent - the monetary counterpart of the advantages of urban locations - and that of "filtering" (Camagni, 2016): wealthier households locating in better and more expensive areas (filtering up) and poor households locating in cheaper and less accessible areas (filtering down). Geographies of housing affordability and land rent (with generally decreasing values from the center - see the Burgess model) tend to overlap and to be causally linked (Berto et al., 2020; Peverini, 2021). Therefore, housing affordability is not just a matter of ratios such as cost/income or demand/supply. It is also a matter of *what* housing is provided *where* and *at what cost.*

Additionally, a critical spatial approach to housing affordability is fundamental to understand and disentangle its spatial implications, which might go further the urban scale and require nuanced and multi-scalar conceptual and empirical approaches.

Housing affordability issues have been traditionally linked to poverty (Bunting et al., 2004). Exploring housing affordability issues today means taking into account, among other things, the changing urban social geographies, with the major trends of poverty suburbanization and increasingly financialized and exclusive inner cities. These aspects have emerged as central during the seminar series and we explore them in the next paragraphs, highlighting the narratives of the seminars' contributors. We argue that a deep engagement with the spatiality of affordability is important not only for research but also for a spatially informed political action.

4.2.2 Suburbanization of poverty and uneven urban affordability geographies

In her contribution "*Housing developments in Europe",* Marietta Haffner has clearly framed poverty suburbanization as one of the main spatial consequences of the urban housing affordability crisis and related gentrification processes. Mainstream gentrification processes and upward pressure on housing costs (spillover from the urban center into areas previously deemed unlikely candidates for gentrification) have forced lower-paid service workers to suffer from 'poor housing, longer commute times, and poor working conditions' (Gibbs & Krueger 2007; Hochstenbach & Musterd 2018).

Therefore, while central and attractive areas have become increasingly inaccessible and unaffordable, other areas - typically downgraded peripheries - have seen stronger concentrations of poverty.

In the European context, cities have been historically characterized by lower levels of socio-spatial segregation and inequalities compared to other continents (Kazepov 2005). For instance, with respect to the highly segregated residential patterns of US cities, where the suburbanization of the elites has been a traditional trend (see Burgess model built on the city of Chicago) strongly related to a sprawling development, European cities did not experience such divisive suburbanization (Arbaci 2019). They rather followed, even if with mixed and fragmented patterns, an opposite trend (see the "inverse Burgess theory") with the bourgeoisie never really abandoning the center and the working-class predominantly locating in the peripheries (Leontidou et al. 1990). Increasingly, scholars have discussed the exacerbation of this trend (Cucca & Ranci 2016; Van Kempen & Murie 2009), illustrating how suburbs are increasingly becoming home for urban poor, especially after the GFC (Hochstenbach & Musterd 2018).

As recently noted by Arbaci (2019) spatial concentration (of a social group) is not necessarily a problem *per se* but deepening social inequalities and residential marginalization are (Wetzstein, 2017). Poverty suburbanization, as a central consequence of the urban housing affordability crisis, can produce several unjust outcomes. As clearly explained by Whitehead in her contribution focused on the case of London, the poverty suburbanization trend has been particularly strong in this context, with significant consequences in terms of commuting poverty and spatial mismatch (i.e. the spatial gap between the living place and the working place). The strong protection of the peri-urban areas (by the Green Belt law) may trap the poor, who usually have less resources to be mobile, behind the city, triggering a "lock-out" effect, configuring a contentious trade-off between green infrastructure and the production of accessible housing. London, but also other contexts such as Manchester or Le Hague region are significant examples of such phenomena (Westerink et al. 2013). As the city expands while functionally remaining monocentric, those living further out must face longer trips and travel time and expense increases. According to the report "Living on the edge: the impact of travel costs on low-paid workers living in outer London" (BDRC Continental, 2015), transportation costs are prohibitive for those living outside the inner city but still in need of reaching central areas for their job. Low-paid workers spend on average almost 10% of their monthly income for commuting, which, translated into working hours, is from 44 minutes up to 2 hours of work per-day.

Coulumbel (2018) found that prudential affordability measures translated in policies capping only on housing overburden rates (usually housing costs=30% of the household income) might have an involuntarily relocation effect, encouraging especially low-income households to settle in distant locations with low housing prices, but high *housing+transportation* burdens. Cheaper housing (which can still imply a cost overburden for the most disadvantaged) but higher transportation costs in peripheral areas reveal the importance that affordability measures (commonly reduced to the mere "housing cost to income" ratio) include other dimensions. In this respect, there is increasing consensus that affordability measures should include both housing and transportation costs. Haffner & Hulse (2021), for instance, refer to the Location Affordability Index (LAI) of the US Department of Housing and Urban Development (HUD), which takes housing and 'transportation' costs into the picture of affordability.

Long and expensive commuting is a great source of socio-spatial inequality between those living in well served areas and those living further out (Aquino & Gainza 2014) also in terms of accessibility to urban opportunities. This might be a matter of job, as we mentioned, but also of accessibility to amenities and various facilities. Access to green, to good quality schools, to health care might be profoundly unequal and unaffordable housing might represent a social and spatial barrier which filters who can and who cannot access, affecting lifestyles, choices, and life paths.

Spatial inequalities deriving from poor housing affordability are not just a matter of urban/suburban divisions. Intra-urban inequalities are, indeed, central in understanding the consequences of affordability issues where processes of financialization are increasingly recognized as fundamental mechanisms (Fields & Uffer, 2016; Lestegás et al., 2019; Yrigoy, 2019). In this respect, the lecture of Melissa García Lamarca "*Residential real estate investment trusts: socio-spatial inequalities and resistance in Barcelona*" offered a picture of the socio-spatial consequences of housing financialization, an increasingly common phenomenon in the European context. The lecture shed light on widespread dynamics in European cities, where the increasing demand for rental solutions has influenced the flows

11

of capital investments into the residential real estate market, often through speculative practices operated by corporate landlords, private equity funds, pension- and investment-funds. Lamarca's spatial mapping of Blackstone properties (acquired as a result of mass mortgage foreclosures and evictions after the GFC) illuminates on the capillarity of the financialization phenomenon, which has hit in particular historically affordable lower income areas of Barcelona, dramatically impacting on the affordability of the housing stock. Forced evictions, rent increases, empty properties - which impact on the growing housing demand - housing distress, exclusionary displacement, and low-quality housing, are some of the results of increasingly financialized urban areas and shape profoundly unjust urban affordability geographies.

The geographical trajectories that we have just traced and the emerging inequalities - in relation to location of housing, economic burden, poor quality of the dwellings, socio-economic profile of the dwellers - that we have highlighted, illuminate on how a spatial reading of housing affordability is highly interconnected with a spatial reading of injustice. Housing affordability is not merely translatable in terms of housing cost overburden but touches upon several other aspects that require researchers to actively ask: what kind of housing is affordable and where?

5. Agenda setting and concluding remarks

The urban and spatial narrative constructed in the previous two paragraphs, based on the results of a review of the literature and on the debate resulting from the first round of an ongoing series of dedicated seminars, delineated useful directions for research and policy in addressing the contemporary urban housing affordability crisis. What we attempt in this paper is therefore to highlight concrete gaps in the understanding of the urban and spatial dimensions of housing affordability (section 4) and propose directions for research and policy making in order to address them (Table 1).

The contents of the three seminars, discussed in the light of contemporary research on housing affordability highlighted by the literature review, give an idea of the complexity of the concept and of the variety of connotations it assumes, if observed from different scales and theoretical perspectives. This complexity opens up challenges for research and policy-making that concern two main aspects: 1) the limits of enclosing the concept of affordability within theoretical boundaries, specific metric and indicators; 2) the difficulty of framing the scale and the extent of the impacts that housing affordability, and its changing patterns and dynamics, may have.

Some aspects repeatedly emerged in the seminars, such as: the transformation of the intrinsic value of the house (from use to exchange); housing distress - linked to the dwelling itself or its location; the break of the constitutive link between individual/households and their dwelling that generates vulnerability and social emergency, but with varied outcomes in different contexts. This complexity of phenomena makes us think that the concept of affordability can be a key to reading not only the housing question but, more generally, the contemporary urban question, shifting the problem of housing from individuals to the society, its changes and spatial organization. In this sense it seems appropriate, rather than using stringent definitions, to keep a comprehensive look at the concept of housing affordability, embracing the variety and heterogeneity of scales and characteristics of the contemporary housing and urban issue. In doing so, we individuated some research and policy gaps that we grouped in two main branches: the urban dimensions and the spatial dimensions. For each of those, in table 1, we identified specific theoretical and empirical gaps in current research and challenges for policy making, and we set an agenda for further future research on the topic of contemporary housing affordability. We hope with this paper to provide some orientation to dive in the complexity of current research on HA and some possible pathways for future research.

Table 1. A research and policy agenda for addressing gaps in the urban and spatial understanding of housing affordability

	Research needs		Policy needs
	theoretical	empirical	
Urban dimensions	Defining and unpacking the dimensions of the "urban".	Engaging with data limitations and spatial definition of the urban (municipal administrative borders, metropolitan areas, functional urban areas)	More active inclusion of housing affordability strategies in planning documents, e.g. municipal plans?
	Addressing housing affordability implications in terms of right to the city urban social cit(y)zenship	Investigating the "borders" of social citizenship, connected to the urban dimension, that are defined through housing affordability (e.g., spatial filtering, spillover effect, suburbanization of poverty, etc.)	Implementing policies that address housing affordability as a cause of exclusion by the right to the city and social citizenship
	Unpacking the complex (multi level) governance mechanisms that govern urban housing affordability	Developing new analytical and conceptual models for housing affordability governance that could apply to specific cases	Designing governance systems and housing regimes that are able to address housing affordability at the urban level within the multi scalar hierarchies
	Addressing the housing quality-affordability trade off	Investigating the concrete choices patterns and pathways of households in choosing among better or more affordable housing (motivations, consequences)	Policies that contemporarily address quantitative and qualitative targets and avoid incoherent "crossfire" (e.g. norms for adequacy that prevent affordable housing provision)

Spatial dimensions	Better engagement with transportation affordability in the European context	Analysis of transportation affordability and its implications in the more compact European cities	Development of indexes and measurements of affordability that more actively include locational components and transportation costs.
	Definitions of critical geographies of urban housing affordability	Neighborhood-scale analysis and definition of affordability-shaped intra-urban inequalities. Qualitative analysis of people experiencing the urban affordability crisis	Including spatial components in housing policies that address housing affordability (e.g., accessibility, amenities, etc.)
	Addressing the housing quality-affordability-location trade off	Investigating the concrete choices patterns and pathways of households in choosing among better, more affordable or better located housing (motivations, consequences)	Policies that contemporarily address quantitative, qualitative and spatial/locational targets and avoid incoherent "crossfire" (e.g. affordable housing provision in inaccessible locations)

13

General references

Addison, Carey, Sumei Zhang, and Bradley Coomes. 2013. "Smart Growth and Housing Affordability:A Review of Regulatory Mechanisms and Planning Practices."   28 (3):215-57.

Aquino, Felipe Livert, and Xabier Gainza. 2014. "Understanding density in an uneven city, Santiago de Chile: implications for social and environmental sustainability." Sustainability 6 (9):5876-97.

Arbaci, Sonia. 2019. Paradoxes of segregation: Housing systems, welfare regimes and ethnic residential change in Southern European cities: John Wiley & Sons.

BDRC Continental. 2015. "Living on the edge: The impact of travel costs on low paid workers living in outer London." In. London.

Brenner N. 2004, New State Spaces. Urban Governance and the Rescaling of Statehood, Oxford University Press.

Bricocoli, M., & Sabatinelli, S. 2016. House sharing amongst young adults in the context of Mediterranean welfare: the case of Milan. International Journal of Housing Policy, 16(2), 184-200. doi:10.1080/14616718.2016.1160670

Bunting, Trudi, Alan R Walks, and Pierre Filion. 2004. "The uneven geography of housing affordability stress in Canadian metropolitan areas." Housing Studies 19 (3):361-93.

Burgess, EW. 1925. "The growth of the city " In The city, edited by Parks R, Burgess EW and McKenzie RD. Chicago: University of Chicago Press.

Camagni R. 2016, "Urban development and control on urban land rents", Annals of Regional Science, 56: 597–615.

Cucca, Roberta, and Costanzo Ranci. 2016. Unequal cities: The challenge of post-industrial transition in times of austerity. London: Taylor & Francis.

Engels F. 1950 [1872], *The housing question.* available at:
https://www.hlrn.org/img/documents/Engels%20The%20Housing%20Question.pdf

FEANTSA. 2021. "The 6th Overview of Housing Exclusion in Europe 2021."

Galster, George, and Terje Wessel. 2019. "Reproduction of social inequality through housing: A three-generational study from Norway." Social Science Research 78:119-36.

Galster G. and Lee K.O. 2020, Housing affordability: a framing, synthesis of research and policy, and future directions. International Journal of Urban Sciences.

García-Lamarca, Melissa 2020. "Real estate crisis resolution regimes and residential REITs: emerging socio-spatial impacts in Barcelona." Housing Studies:1-20.

Haffner, Marietta EA, and Kath Hulse. 2021. "A fresh look at contemporary perspectives on urban housing affordability." International Journal of Urban Sciences 25 (sup1):59-79.

Harvey D. 2005. *The new imperialism*, Oxford University Press, Oxford.

Hochstenbach, Cody, and Sako Musterd. 2018. "Gentrification and the suburbanization of poverty: changing urban geographies through boom and bust periods." Urban Geography 39 (1):26-53. doi: 10.1080/02723638.2016.1276718.

Kazepov, Yuri 2005. "Cities of Europe: Changing contexts, local arrangements, and the challenge to social cohesion." Cities of Europe 1:3-33.

Leontidou, Lila. 1990. The Mediterranean city in transition: Social change and urban development: Cambridge University Press.

Madden D., Marcuse P. 2016. *In defense of housing. The politics of crisis*, London, Verso.

Peverini M. (2021) "Grounding urban governance on housing affordability: a conceptual framework for policy analysis. Insights from Vienna", *Partecipazione e Conflitto, The Open Journal of Sociopolitical Studies*, 14(2): 848-869.

Van Kempen, Ronald, and Alan Murie. 2009. "The new divided city: Changing patterns in European cities." Tijdschrift voor economische en sociale geografie 100 (4):377-98.

Westerink, Judith, Dagmar Haase, Annette Bauer, Joe Ravetz, Françoise Jarrige, and Carmen BEM Aalbers. 2013. "Dealing with sustainability trade-offs of the compact city in peri-urban planning across European city regions." European Planning Studies 21 (4):473-97.

Wetzstein, S. 2017. "The global urban housing affordability crisis." Urban studies 54 (14):3159-77. doi: 10.1177/0042098017711649.

Whitehead C. 1991, *From need to affordability: an analysis of UK housing objectives*, Urban Studies, 28 (6), pp. 871-887.

Literature review - References

Alves S. 2019, "Nuancing the international debate on social mix: evidence from Copenhagen", Housing Studies, in press.

Andrew, M. 2012, "Regional market size and the housing market: Insights from a new economic geography model", Journal of Property Research, 29(4): 298-323.

Antoniucci, V., Marella, G. 2018. "Is social polarization related to urban density? Evidence from the Italian housing market", Landscape and Urban Planning, 177: 340-349.

Arbaci, S., Rae, I. 2013. "Mixed-Tenure Neighbourhoods in London: Policy Myth or Effective Device to Alleviate Deprivation?", International Journal of Urban and Regional Research, 37(2): 451-479.

Arbaci, S., Tapada-Berteli, T. 2012. "Social inequality and urban regeneration in Barcelona city centre: Reconsidering success", European Urban and Regional Studies, 19 (3): 287-311.

Argiolas, M. 2013. "Offer prices, data mining and spatial econometrics: A complementary approach to study real estate market dynamics", Urban and Regional Data Management, UDMS Annual 2013 - Proceedings of the Urban Data Management Society Symposium 2013, Pages 23-36.

Argiolas M. 2014. "Surveying housing market supply affordability using a spatial data mining approach", WIT Transactions on Ecology and The Environment, 191: 125 - 137.

Berto, R., Giovanni Cechet, C. A. Stival, and P. Rosato. 2020. "Affordable Housing vs. Urban Land Rent in Widespread Settlement Areas." Sustainability 12:1-21.

Bohman, H. 2021. "Same, same but different? Neighbourhood effects of accessibility on housing prices", Transport Policy, 107: 52-60.

Bramley, G., Watkins, D. 2016. "Housebuilding, demographic change and affordability as outcomes of local planning decisions: Exploring interactions using a sub-regional model of housing markets in England", Progress in Planning, 104: 1-35.

Bramley, G., Watkins, D. 2014. "'measure twice, Cut once'—revisiting the strength and impact of local planning regulation of housing development in england", Environment and Planning B: Planning and Design, 41(5): 863-884.

Cao, M., Hickman, R. 2018. "Car dependence and housing affordability: An emerging social deprivation issue in London?", Urban Studies, 55(10): 2088-2105.

Carmona, J., Lampe, M., Rosés, J. 2017. "Housing affordability during the urban transition in Spain", Economic History Review, 70(2): 632-658.

Chatterton, P. 2013. "Towards an agenda for post-carbon cities: Lessons from lilac, the uk's first ecological, affordable cohousing community", International Journal of Urban and Regional Research, 37(5): 1654-1674.

Cheshire, P. 2008. "Reflections on the nature and policy implications of planning restrictions on housing supply. Discussion of 'Planning policy, planning practice, and housing supply' by Kate Barker", Oxford Review of Economic Policy, 24(1): 50-58.

Cheshire, P.C., Hilber, C.A.L. 2018. "Housing in Europe: A different continent – A continent of differences", Journal of Housing Economics, 42: 1-3.

Coelho, M., Dellepiane-Avellaneda, S., Ratnoo, V. 2017. "The political economy of housing in England", New Political Economy, 22(1): 31-60.

Coulombel, N. 2018. "Why housing and transport costs should always be considered together: A monocentric analysis of prudential measures in housing access." Transport Policy 65:89-105.

Cramer-Greenbaum, S. 2021. "Who can afford a 'livable' place? The part of living global rankings leave out", International Journal of Urban Sustainable Development, 13(1): 70-82.

Debrunner, G., Gerber, J.-D. 2021. "The commodification of temporary housing", Cities, 108, Article number 102998.

Debrunner, G., Hartmann, T. 2020. "Strategic use of land policy instruments for affordable housing – Coping with social challenges under scarce land conditions in Swiss cities", Land Use Policy, 99, Article number 104993.

Ehrlich, M.V., Hilber, C.A.L., Schöni, O. 2018. "Institutional settings and urban sprawl: Evidence from Europe", Journal of Housing Economics, 42: 4-18.

Fields D, Uffer S. The financialisation of rental housing: A comparative analysis of New York City and Berlin. Urban Studies. 2016;53(7):1486-1502. doi:10.1177/0042098014543704

Fingleton, B. 2008. "Housing supply, housing demand, and affordability", Urban Studies, 45(8): 1545-1563.

Fingleton, B., Fuerst, F., Szumilo, N. 2019. "Housing affordability: Is new local supply the key?", Environment and Planning A, 51(1): 25-50.

Franco, Sofia F., and Carlos Daniel Santos. 2021. "The impact of Airbnb on residential property values and rents: Evidence from Portugal." Regional Science and Urban Economics 88:103667. doi: https://doi.org/10.1016/j.regsciurbeco.2021.103667.

Frenkel, A., Bendit, E., Kaplan, S. 2013. "Residential location choice of knowledge-workers: The role of amenities, workplace and lifestyle", Cities, 35: 33-41.

Gallent, N., Durrant, D., May, N. 2017. "Housing supply, investment demand and money creation: A comment on the drivers of London's housing crisis", Urban Studies, 54(10): 2204-2216.

Golubchikov, O., Deda, P. 2012. "Governance, technology, and equity: An integrated policy framework for energy efficient housing", Energy Policy, 41: 733-741.

Górczyńska, M. 2018. "Mechanisms of property ownership change and social change in inner-city Warsaw", Urban Studies, 55(13): 2803-2820.

Gruber, E., Franz, Y. 2020. "What can the housing market teach us? University fieldtrips identify current transitions in vienna's urban development and housing market policies", Mitteilungen der Osterreichischen Geographischen Gesellschaft, 161:s 379-394.

Hackworth, Jason, Smith N. 2001. "The changing state of gentrification", Tijdschrift voor economische en sociale geografie, 92 (4):464-77.

Jones, C., Coombes, M. 2013. "An Assessment of Tenure-Specific Housing Market Areas for Housing Planning", Housing Studies, 28(7): 993-1011.

Jones, Colin, Craig Watkins, and David Watkins. 2011. "Measuring local affordability: variations between housing market areas." International Journal of Housing Markets and Analysis 4 (4):341-56. doi: 10.1108/17538271111172148.

Kinton, C., Smith, D.P., Harrison, J., Culora, A. 2018. "New frontiers of studentification: The commodification of student housing as a driver of urban change", Geographical Journal, 184(3): 242-254.

Leccis, F. 2019. "Regeneration programmes: Enforcing the right to housing or fostering gentrification? The example of bankside in London", Land Use Policy, 89, Article number 104217.

Lestegás, I., Seixas, J., Lois-González, R.-C. 2019. "Commodifying Lisbon: A study on the spatial concentration of short-term rentals", Social Sciences, 8(2)9, Article number 33.

Lind, H., Annadotter, K., Björk, F., Högberg, L., Klintberg, T.A. 2016. "Sustainable renovation strategy in the Swedish million homes programme: A case study", Sustainability (Switzerland), 8(4), Article number 388.

Macmillan, A., Davies, M., Shrubsole, C., Luxford, N., May, N., Chiu, L.F., Trutnevyte, E., Bobrova, Y., Chalabi, Z. 2016. "Integrated decision-making about housing, energy and wellbeing: A qualitative system dynamics model", Environmental Health: A Global Access Science Source, 15, Article number 37.

Maloutas, T., Siatitsa, D., Balampanidis, D. 2020. "Access to housing and social inclusion in a post-crisis era: Contextualizing recent trends in the city of Athens", Social Inclusion, 8(3): 5-15.

Matthews, P., Bramley, G., Hastings, A. 2015. "Homo Economicus in a Big Society: Understanding Middle-class Activism and NIMBYism towards New Housing Developments", Housing, Theory and Society, 32(1): 54-72.

Matznetter, W. 2020. "How and Where Non-profit Rental Markets Survive–A Reply to Stephens", Housing, Theory and Society, 37(5): 562-566.

McIntyre, Z., McKee, K. 2012. "Creating sustainable communities through tenure-mix: The responsibilisation of marginal homeowners in Scotland", GeoJournal, 77(2): 235-247.

Moore, T. 2018. "Replication through partnership: the evolution of partnerships between community land trusts and housing associations in England", International Journal of Housing Policy, 18(1): 82-102.

Moore, T., McKee, K. 2012. "Empowering Local Communities? An International Review of Community Land Trusts", Housing Studies, 27(2): 280-290.

Morrison, N. 2013. "Reinterpreting the key worker problem within a university town: The case of Cambridge, England", Town Planning Review, 84(6): 721-742.

Radzimski, A. 2014. "Subsidized mortgage loans and housing affordability in Poland", GeoJournal, 79(4): 467-494.

Szumilo, N. 2019. "The spatial consequences of the housing affordability crisis in England", Environment and Planning A, 51(6): 1264-1286.

Tomal, M. 2020. "Moving towards a smarter housing market: The example of Poland", Sustainability (Switzerland), 12(2), Article number 683.

Wetzstein, S. 2017. "The global urban housing affordability crisis." Urban studies 54 (14):3159-77. doi: 10.1177/0042098017711649.

Wetzstein, S. 2021. "Assessing post-GFC housing affordability interventions: a qualitative exploration across five international cities", International Journal of Housing Policy, 21(1): 70-102.

Wijburg, G. 2021. "The governance of affordable housing in post-crisis Amsterdam and Miami", Geoforum, 119: 30-42.

Winston, N. 2014. "Sustainable Communities? A Comparative Perspective on Urban Housing in the European Union", European Planning Studies, 22,(7): 1384-1406.

Yrigoy I. (2019) Rent gap reloaded: Airbnb and the shift from residential to touristic rental housing in the Palma Old Quarter in Mallorca, Spain. *Urban Studies*. 56(13):2709-2726. doi:10.1177/0042098018803261

European Network for Housing Research

Service Rationing and the Impact of Private Sector Provision on the Administration of Homeless Services in Ireland

Niamh Murphy
School of Applied Social Studies, University College Cork, Ireland
E-mail: 111223835@umail.ucc.ie

Abstract

Service rationing plays a key role in the administration of social services as demand generally outstrips supply wherever public goods are concerned. Scrivens (1979, p. 54) describes rationing as 'essentially that process by which a limited resource is divided between various competing bodies'. There has been a significant increase in the usage of private sector providers for homeless accommodation over the last number of years in Ireland. This research will illustrate how this can lead to 'selection' (or creaming) playing an important role in rationing of homeless accommodation due to a need to maintain relationships with private providers. This results in frontline workers making normative judgements around who they feel is most suitable for this type of accommodation based on their perceived likelihood to cause problems. The frontline workers justify this approach on the utilitarian grounds that it will ensure provision for the greatest number of people as it avoids jeopardising relationships with private providers.

Keywords: rationing, homeless services, selection, Ireland

Introduction

Rationing inevitably plays a role in the administration of welfare wherever decisions are made around eligibility and the level of services offered to those who apply for them. Rationing has been described by Scrivens as 'essentially that process by which a limited resource is divided between various competing bodies' (1979, p. 54). There are a number of approaches that can be taken to study rationing, one of which is the taxonomy approach. This approach involves the study of the *forms* that rationing can take, which, according to Klein *et al* (1996), include rationing by denial, selection, deflection, deterrence, delay, dilution, and termination. A form of rationing that has emerged as dominant in this research when it comes to rationing homeless services (and to a limited extent Housing Assistance Payment (HAP) tenancies when sourced by local authority frontline workers), is selection. This paper will outline how the use of selection means that some frontline workers are making normative judgements based on a person's perceived likelihood to cause issues in a placement. This is done in order to avoid the risk that relationships with private providers of accommodation will break down, resulting in them withdrawing their accommodation for use as emergency homeless accommodation.

To address these findings, this paper will begin with a discussion around the structured approach to the study of rationing. It will include a framework that situates the approach used in this paper within the wider range of approaches. Secondly, the structure of homeless services in Ireland will be outlined, illustrating how the use of private emergency accommodation has increased over the past number of years despite a Government commitment to end this form of emergency accommodation provision. Thirdly, the methodology will be outlined looking first to the research strategy used for the PhD research

and then to the research process. This paper's findings constitute just one element of wider PhD research, which is evident from its position within the thematic map included in the methodology (see figure 4). Fourthly, the paper will outline the findings of the research related to the ways that 'selection' is used as a form of rationing in order to maintain relationships where private sector providers of accommodation are concerned. The final section will include a discussion and conclusions of the findings.

A structured approach to the study of rationing

Demand for social services is potentially limitless. As demand tends to exceed available resources there is a need that these resources are rationed. Rationing can take place at a macro level, where governments and authorities will set priorities and allocate specific resources *to* individual government departments or programmes (Klein *et al*, 1996). Whereas, the micro level of rationing involves the rationing of resources *within* departments or programmes by frontline workers tasked with determining eligibility. Therefore, micro level rationing involves 'the distribution of resources to individuals at the point of service delivery' (Arksey, 2002, p. 83).
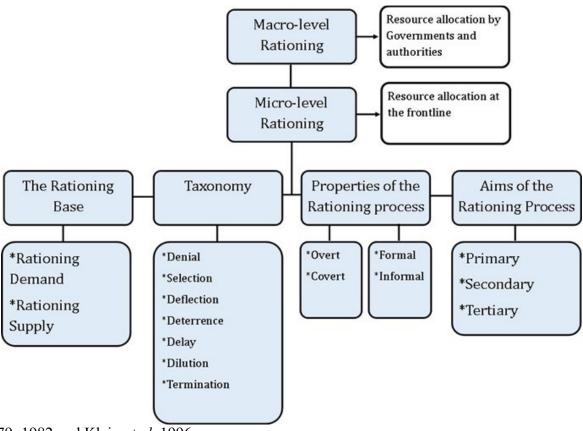
At the micro-level, the study of rationing can be undertaken in a number of different ways. Scrivens (1979; 1982) outlines the approaches to rationing under four headings:

1. The rationing base or that part of the system upon which rationing processes act
2. Taxonomy of the rationing processes
3. Properties of the rationing process
4. The specific aims of the rationing process

The first approach is concerned with rationing processes that act to reduce demand and those which act to reduce supply. The second approach focuses on the different forms that rationing can take. The third approach is concerned with the identification of overt (obvious) and covert (hidden) practices in rationing, as well as formal and informal process. The final approach is related to whether rationing takes place at a primary, secondary or tertiary level. Although slightly different from Scrivens conception of the aims of the rationing process, Foster's (1983) conception of primary and secondary rationing are most relevant when it comes to the study of social housing rationing systems. For Foster, primary rationing is concerned with determination of eligibility. Whereas, secondary rationing determines both the type and quality of accommodation offered to those deemed eligible. A framework of the approaches for studying rationing is outlined in figure 1.

Figure 1: A Framework of approaches for studying rationing in the distribution of public goods and services

Devised from Scrivens, 1979; 1982 and Klein *et al*, 1996

The taxonomy approach is the one used in this paper. A number of authors have outlined the *forms* of rationing that they believe should constitute a taxonomy approach to rationing (Stevens, 1972; Parker, 1975; Scrivens, 1982; Scrivens, 1979; Klein *et al*, 1996; Rees, 1972; Coulton and Rosenberg, 1981). The forms vary slightly between authors but the seven forms outlined by Klein *et al* (1996) are comprehensive in that they cover in some way all of those outlined by the previous researchers. These include rationing by denial, selection, deflection, deterrence, delay, dilution, and termination. The focus of this paper will be the use of selection as a means to ration homeless resources. Rationing by selection (also known as *creaming*) is the converse of rationing by denial (turning away potential beneficiaries), although they both have the same outcome (Klein *et al,* 1996). Service users are selected by service providers based on normative judgements, for example their likelihood to succeed through an intervention (potentially improving the success rate of the programme), their likelihood to cause problems, or their perceived deservingness.

Watts (2014; 2013) research serves as an example of how selection is prominent in the administration of particular forms of homeless services in Ireland. Official policy on homelessness states that a housing-led approach should be used for homeless services (Government of Ireland, 2016). This approach to homelessness involves focusing on housing need to determine eligibility as opposed to normative judgements around a potential tenant's deservingness or perceived ability to maintain a home. However, research has illustrated how rationing by selection based on 'housing readiness' and desert is still a feature of Irish homeless service provision (Watts, 2014; Watts, 2013). Indeed, wherever a staircase of transition (Sahlin, 2005) or continuum of care approach to homelessness is used, selection will play a central role in service administration. In these models of service delivery good behaviour and/or abstinence is rewarded with a move up a step starting at the informal sphere (living in institutions, hospitals, staying temporarily with friends or family, and sleeping rough) towards more 'normal' housing.

Fitzpatrick and Stephens (1999) argue that an element of selection may be necessary when it comes to social housing in order to avoid an over concentration of the most socially excluded people in the one area. For example, the high concentration of vulnerable tenants in the Ballymun Estate in Dublin during the 1970s and 1980s contributed in part (along with other factors such as poor design and lack of services) to the deterioration of conditions on the estate (Kintrea and Muir, 2009) and high levels of drug use and anti-social behaviour. Selection to avoid this kind of residualisation would mean that those most in need of housing are not always the first to receive it. These 'sensitive lettings' can bypass the applicants at the top of the waiting list so as to take account of both the applicant and the area characteristics (Pawson and Kintrea, 2002). As with all rationing that involves selection, there is the chance that 'sensitive lettings' could 'run the risk of excluding the individual, and perhaps heightening the social exclusion of some individuals, for the (sometimes dubious) benefit of the community' (Pawson and Kintrea, 2002, p. 663). Selection can be experienced both at the point of accessing emergency accommodation and social housing or HAP tenancies. For those presenting as homeless their immediate needs are for emergency accommodation. However, as the following section will illustrate, the lack of move on options means that many are getting stuck within this form of accommodation rather than quickly moving on to social or private tenancies.

Homeless service administration in Ireland

When a person or family finds themselves homeless in Ireland, they are required to present to the local authority (LA) in order to declare themselves homeless and undergo an assessment to determine their

European Network for Housing Research

eligibility for services. Decisions will be made firstly about a person's eligibility for homeless services (primary rationing) and secondly, if they are deemed to be homeless, around the accommodation in which they will be placed (secondary rationing). There has been a significant increase in the numbers of people accessing homeless services in recent years. The official statistics most likely represent a significant under estimation of the extent of homelessness. However, in using these figures as an indicator of the extent of homelessness within the country, it is clear that homelessness has grown significantly in recent years. In the period from December 2014-December 2020 the number of adults accessing emergency accommodation more than doubled from 2858 to 5873 (106% increase). The increase for dependent children was even more marked, increasing from 880 dependents to 2327 (164%) (Department of Housing, Local Government and Heritage, Various years-a).

There are three main types of temporary homeless accommodation that these people are accommodated in. These are:
- Temporary emergency accommodation (TEA), which is emergency hostel accommodation with no or minimal support,
- Private emergency accommodation (PEA), which may include emergency use of hotels, B&Bs and other residential facilitates (visiting support sometimes available).
- Supported temporary accommodation, which includes family hubs and hostels with onsite professional support.

Although the government made a commitment to phase out PEA as far back as 2016 (Government of Ireland, 2016), its use has actually increased by 94% (+1591) between January 2016 and January 2021. It is clear, therefore, that many of the local authorities are very dependant on private businesses to accommodate people who are experiencing homelessness.

Many people are spending a considerable amount of time in this emergency accommodation which is intended to be short term. The available national figures show how many adults are resident in emergency accommodation for less than or greater than six months (2,099 and 3,416 respectively). However, more detailed figures are available for families in the Dublin region where the majority of homeless people are located.

Table 1: Families in emergency accommodation in Dublin by length of time

Length of time in emergency accommodation[1]	Families	Adults in families	Dependants	Total adults + dependants	Proportion of adults + dependants by length of time in EA
< 6 months	278	385	518	903	*28.2%*
6-12 months	168	240	384	624	*19.5%*
12-18 months	130	194	353	547	*17.1%*
18-24 months	86	135	203	338	*10.6%*
24+ months	183	275	512	787	*24.6%*
Total	845	1,229	1,970	3,199	*100%*

Source: Department of Housing, Local Government and Heritage (Various years-b) *Homeless Quarterly Progress report Q3 2020*.

---

[1] Monthly breakdown is based on the way that the data is outlined in the progress report

European Network for Housing Research

Table one shows how 1,068 children spent more than a year in emergency accommodation and 512 children spent more than two years. A high proportion of these families were staying in PEA accommodation as this is the first port of call for most when they present to the local authority (as the family hubs usually have a waiting list). However, this type of accommodation is generally inadequate for families long-term, as often they are placed together in one room with little space for privacy, sometimes with less beds than there are people (Walsh and Harvey, 2015). Coupled with the fact that there are often no cooking facilities available to people staying in hotels and limited facilities in B&Bs, and the reasons why the long term use of this form of accommodation is inappropriate becomes clearer still. Strict rules are often placed upon residents with some people having reported being banned from entering the rooms of other residents, as well as other rules decided by the facility owner (Walsh and Harvey, 2015; Murphy, 2016). Indeed, research has shown how this form of accommodation can negatively impact the wellbeing of the families who have to live within it (Nowicki, Brickell and Harris, 2019; Mercy Law Resource Centre, 2019). Despite the issues associated with PEA, many of the participants involved in this research felt that the perception of those who present as homeless was often that this form of accommodation was preferable to other forms of emergency accommodation due to having your own private room, less rules and more autonomy. Therefore, it is likely that many would pick this form of accommodation over TEA if they were given a choice.

As well as granting access to homeless services, in a small number of the local authorities, these frontline workers had the ability to grant access to longer term tenancies through HAP. HAP is a form of social housing support administered by local authorities. This payment is used by recipients, who are eligible for social housing, to access accommodation in the private rental market. In many local authorities administration of the HAP scheme involves payment for accommodation with minimal support in accessing it. However, in three of the local authorities included in this research, more support was offered to some people in terms of gaining a tenancy. This involved specific frontline workers building relationships with private landlords in order that they would allow them to place HAP tenants within their accommodation.

Methodology

The research strategy

The findings presented in this paper constitute a section of the findings of broader PhD research. The focus of the wider research is to study the interpretation of the statutory definition of homelessness in Ireland. Studying official definitions and policy documents tells us nothing of how these policies are interpreted and implemented at the frontline. Therefore, this research took a 'bottom-up' approach to the study of policy implementation which involved focusing on the 'doers' of policy (frontline implementers) as opposed to the 'makers'. The research involved interviewing those frontline workers or street-level bureaucrats (Lipsky, 2010) involved in the process of homeless assessment and placement. The objectives of the research was to examine the degree of discretion available to these frontline workers; the ways in which they use this discretion in carrying out their role and the factors that influence this; and what this means for the people who present to them as homeless.

Epistemologically, the most suitable means for examining the views, perceptions and values of frontline workers was through the application of a qualitative interpretivist approach in order to interpret the meanings of their actions. For example, in attempting to understand the values of participants, interpretation is key as the meanings of such concepts are not always directly accessible to researchers.

European Network for Housing Research

From an ontological perspective, the underpinnings of this research are rooted in a social construction approach, which views social reality as constructed and recognises that research must analyse the processes in which this social construction occurs (Berger and Luckmann, 1991). This approach involves a 'critique of certain social institutions or practices that are deemed objectionable, but which, according to constructivists, receive some specious support from the mistaken belief that they are natural and inescapable' (Collin, 2016, p. 455). In keeping with the epistemological and ontological underpinnings of the research, in-depth qualitative interviews were chosen as the method to address the research questions. These interviews were carried out with frontline workers who had the ability to make decisions around the assessment and placement of people who present to them as homeless. The current paper will focus on some of the findings around the placement aspect of their role.

The research process

The homeless crisis in Ireland is having an impact across the country, although the extent of the issue differs nationally. Therefore, local authorities from around the country were invited to participate in the research. The sampling process comprised a combination of purposive and convenience sampling. The purposive element involved choosing the local authorities invited for participation based on the numbers of people homeless. Those with the highest numbers were included in the sample. Any local authority with less than 40 people homeless at the time of compiling the sample were excluded. This left 16 local authorities (out of a total of 31) which were suitable for inclusion. Of these, interviews were carried out with staff from eight different local authorities, giving coverage of 50 per cent of the possible research sites.

The convenience element of the sampling was related to the research participants. The parameters for inclusion were outlined to the manager within the homeless units and they suggested people for participation. Unfortunately, the researcher had no say in who would take part. However, they had to fit specific criteria for inclusion. This approach was necessary as it was the only way to reach the research population. Permission for inclusion generally had to be sought from the unit manager as there was no other means of contacting the potential participants. Some managers sent the research details to their staff and asked for volunteers, whereas others approached specific staff directly. There was the potential that managers would approach the staff who they felt would present the local authorities in the best light. However, multiple workers were interviewed within the larger local authorities as a means to overcome this.

The research population was a relatively homogenous one as the frontline workers undertook very similar roles. Therefore, data saturation was reached at 15 interviews. The interviews were transcribed verbatim and NVivo was used as a tool for data analysis. A thematic approach was taken to the data analysis, which was based on Braun and Clarke's (2006) six phases of thematic analysis. Thematic analysis is a method of data analysis that assists researchers to interpret and make sense of their data (Maguire and Delahunt, 2017). Within a social construction framework, this approach to analysis 'seeks to theorize the sociocultural contexts, and structural conditions, that enable the individual accounts that are given' (Braun and Clarke, 2006, p. 85).
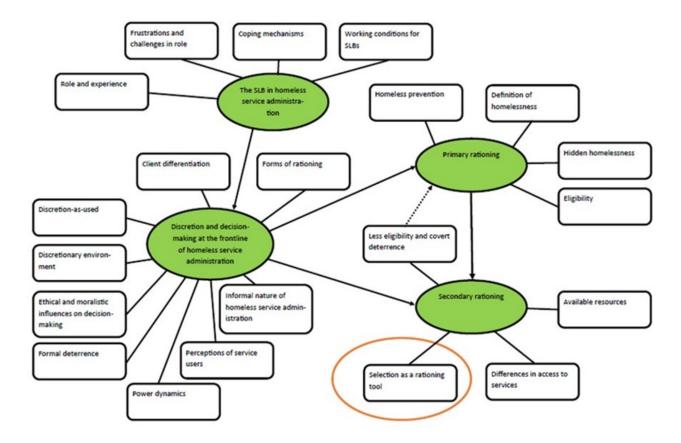
One sub-theme that was identified through the data analysis process was the use of selection as a secondary rationing tool when frontline workers were making decisions around the placement of people into private emergency accommodation. There was limited, but important data available around selection when frontline workers are involved in the process of sourcing HAP properties for people to move to

European Network for Housing Research

from emergency accommodation to more independent living. It is this sub-theme of selection that will be addressed in the following sections. Figure two illustrates the position of the findings covered in this paper, within the context of the wider PhD research.

Figure 2: Thematic Map of PhD research – working version

Rationing by selection for privately owned accommodation

When a person or family is deemed eligible for homeless services, a frontline worker must make a decision around where to place them. Through the data analysis process, it became clear that selection was used by frontline workers in rationing access to privately owned accommodation. Through this process, many of the frontline workers selected *'the best'* (APO[2], rural LA) service users based on normative judgements around their likelihood to succeed within private accommodation. Many of the frontline workers stated that PEA was only available for families. However, when probed further it became apparent that it was in fact available for single people if the frontline worker felt that they were deserving of it for some reason, for example if they were older or were considered *'normal, decent'* people (APO, urban LA) and thus seen as being too vulnerable for TEA. Therefore, although the frontline workers said that where they placed someone was related to what was available to them on a given day, in reality the placement process was often more nuanced than this with judgements around behaviour and deservingness playing a role.

In most of the local authorities, the use of private sector providers for accommodation provisions was shown through the interviews to impact decision-making around the placement of people into homeless services. This was due to the need for the frontline workers to build and maintain relationships with these providers. Frontline workers were risk averse when it came to placement as they worried that some placements could jeopardise the relationship with the provider and thus impact the availability of this accommodation for other people. The following two sections will outline the findings related to this, firstly for access to PEA and secondly for access to HAP tenancies.

Private Emergency Accommodation (PEA)

The use of private sector suppliers of emergency accommodation was described as something that caused stress to some of the frontline workers in carrying out their role. This was due to the need to build up relationships with these providers in the first instance and then make appropriate placement decisions in order to facilitate the maintenance of these relationships. In essence, what this meant was that the people who were placed within this accommodation were required to behave in a certain way that was acceptable to the accommodation provider. In describing their role, one of the interviewees described the stress that they experienced when they first started working in the homeless unit:

> *...like at the start it was very hairy, at the start, like trying to put people into accommodation and making sure that people weren't left out on the street and trying to build relationships with B&Bs and everything, very, very stressful* (APO, urban LA).

Having spent the time to source private emergency accommodation, this worker was reluctant to then place anyone into these B&Bs who they were worried could impact the owners' willingness to provide this form of accommodation if their behaviour was troublesome:

> *If it's, if they seem like a normal decent family I suppose, that might sound very vague, but they are a decent family, you are more likely to let them in. Where if its Johnny who looks like Johnny is a bit of a drinker and Maura is strung out of her head your, you would be a bit more hesitant*

---

[2] The role titles varied slightly between local authorities but the catch-all title of Assessment and Placement Officer (APO) is used for this study.

about, because as I said like we are placing people into B&B's, we have, we worked hard to build up a relationship with B&Bs and we can't, you know, we know that we can't risk that relationship by sending off some, two loopers into the B&B and them to wreck, so that's probably a major factor (APO, urban LA).

This sentiment was echoed by other frontline workers who were reluctant to make placements that they felt may jeopardise access to the accommodation for the other residents if the relationship with the property owner broke down:

And I think that comes back to what I was saying to you about we don't place single people in B&Bs, okay. If you're going to place a single male or female who has issues and you place them in a B&B, you are taking a chance that that B&B owner is going to say, 'I've had enough of this.' So you'll potentially jeopardising five rooms for families for the sake of one single person. So that's why we never placed singles in B&Bs (APS[3], urban and rural LA).

'Yeah, I mean, if we had a history of the person and we knew that there was social problems with them, like, you know, you wouldn't be happy jeopardising your relationship in a B&B by placing this client in because you know trouble's going with them.' (APO, Urban LA).

Despite outlining these various factors that can impact the ways that they make decisions around placement, the interviewees generally described assessment and placement as a very structured process. For example, one of the interviewees discussed their belief that the LA had clear criteria around the process. However, these criteria where not formalised, rather were described as an understanding amongst staff members around the way that assessment and placement should be approached. Despite this focus on structure, the majority of the frontline workers felt that the ability to use discretion in making decisions was crucial for undertaking their role. For example, to make normative judgements around a person's suitability for a particular placement:

Generally it's very structured. As I said, we'd have our criteria of whether you are homeless, we have our criteria of where we are going to place someone. But then like you know, I could meet someone and think, do you know what, they weren't too bad, we have to place them in a B&B, we can't and you could be in a room and I'm going, 'Jesus, your one was a fucking head de ball, absolute nutter. No way could we [inaudible] so there is always that kind of personal perception into it (APO. Urban LA)

A colleague of this interviewee went further in describing the determinants of their decision-making around placement where there are no written guidelines:

There's no, there's no written guidelines but generally it's you know, is there a risk that this person will get kicked out of a B&B or a hotel? That's basically what it boils down to you know? Have they got an addiction history? Have they, how are they presenting, how are their presenting behaviours at the counter? Are they being aggressive? Are they being violent, you know? If we think there is a risk that we put them into a B&B and they get kicked out and that can compromise other people we have in that B&B, then we won't put them in B&B accommodation… (APO, urban LA).

---

[3] Participants with a supervisory role are categorised as Assessment and Placement Supervisors (APS).

One of the frontline workers, who held a supervisory role, spoke about the issues associated with using private providers of homeless accommodation for people with complex needs. For this worker, building links and networks with other agencies within their LA area was key so that they could work together in accommodating people with a high level of need. This was so that relevant agencies could play a role in attempting to sustain a placement. For example, through the provision of community mental health services:

> *We're going over to do a presentation to mental health in the coming weeks…We work within your process, but you've got to understand ours and you've got to understand that we have limitations as well…Because there is the reality we are dependent on private hoteliers, we're dependent on B&Bs, and that's a work in itself having to maintain those relationships, having to— Now, I suppose the thing about us is that we outreach all of our clients in hotel and B&B. We have the staff on the ground making those—working on those relationships constantly* (APS, rural LA).

For this APS, access to support was crucial for people staying in PEA as it can help in flagging potential issues before a crisis situation arises. Unlike in the urban LAs that had more TEA availability, for some of the rural ones, access to TEA was more limited and therefore there was a high usage of PEA. However, this participant recognised that there were still limits to who they could accommodate through PEA, even with the provision of support, as the risk of breaking down the relationships with the accommodation providers was just too great.

It was recognised that having to use privately owned accommodation for people with complex needs, even where visiting supports may be available, can result in a situation that is stressful for all involved including the person being accommodated, the frontline worker, the property owner and the other people who are living there:

> *We had a death in one of our B&Bs and I got the phone call as they were resuscitating the person, a young person. And again that day you have two hats on. There's the huge empathy for what's going on, but there's the other side of I have twelve other families inside there and what the hell are we going to do? Because there was their trauma, there was theirs, there was the provider who couldn't find—'I just can't do this anymore', and you're feeling—like I remember coming out that day feeling completely exhausted, going, today I'm after managing—and you're managing a situation* (APS, rural LA).

> *Like we are not equipped to deal with people with mental health issues, we just don't have that. But we can't risk putting people into B&Bs if they have a serious mental health, we've had people climb on scaffolding outside of B&Bs and threaten to throw themselves off because they are depressed, you know…that shouldn't be on the B&B owner to manage that but we don't, we're also not meant to be managing that either, you know'* (APO, urban LA)

This need to build and maintain relationships with providers of PEA was circumvented in some instances by the use of 'self-accommodation', which places the onus on the homeless person to find their own privately owned emergency accommodation. However, this practice was generally being phased out in most of the local authorities at the time of interview. One participant stated that their LA would continue with this practice in exceptional circumstances, while another described how their local authority has

only started to use self-accommodation more recently as a means to avoiding conflict with property owners:

> *And then we also turned that around as well because we used to be in awful trouble with the B&Bs. We'd send a family up to a B&B. There'd be war in the B&B…So we changed that around and we said we'll pay for a B&B if you'll find it. So we sent them all—again it's kind of it's probably cheating a wee bit. You know, we're putting the onus on them to go and find their accommodation* (APO, rural LA).

Although consideration around the type of person placed within PEA, most notably B&B accommodation, was the dominant discussion on this topic, there was an instance where a frontline worker stated that some hotel providers did not care who was placed there as they would simply make them leave if there was trouble:

> *'Look, some of the places don't care…They don't mind who we send. They will get rid of them quick as they go in if there's any trouble'* (APO, Urban LA)

In summary, frontline workers feel that they are required to make normative judgments about a person's potential to be successfully placed within a particular form of accommodation as the relationships with property owners can be fragile and precarious. There was always the fear that an issue with a placement would result in the property owner withdrawing their accommodation for use as PEA. Although there are many issues associated with PEA, it was described by the frontline workers as being more desirable to many of those presenting than TEA hostels, with one participant describing TEA as *'the bottom rung homeless accommodation…where nobody wants to be'* (APO, urban LA). If the provision of emergency accommodation was for a short period of time these issues would be less prominent as it would in fact be 'emergency' and short term. However, as table one shows people are spending considerable amounts of time within emergency accommodation. Although important, the issue therefore is less about the kind of emergency accommodation provided, and more about options so that people can move out of homeless services much quicker. However, as the following section will illustrate, some people face the same issues associated with selection or creaming when it comes to accessing HAP tenancies, which are their most likely means of being able to leave homeless services.

Housing Assistance Programme (HAP) tenancies

For most people living in homeless accommodation, their best chance of moving out of it comes from sourcing a HAP tenancy. The onus is generally on people eligible for these tenancies to source it themselves. However, there are varied levels of HAP assistance available for homeless people. The Place Finder service was discussed as a support for accessing HAP tenancies by most of the research participants. However, the level of assistance offered through this service differed between local authorities. In some of the local authorities the Place Finder service offered assistance in locating potential properties that were advertised online, as well as paying the deposit for tenants. Whereas other local authorities were more active in seeking out tenancies through building up relationships with landlords so that they would provide tenancies for homeless people. Although this constitutes a small proportion of the research findings, it is important to discuss in this paper as it offers another example of how selection is a significant form of rationing where privately owned accommodation is used for social tenants.

In seeking to access independent accommodation, homeless people face a multitude of barriers related to peoples' perceptions of them. When they try to access this accommodation independently, they can face a form of selection as landlords are under no obligation to house the most vulnerable. Rather, they are more likely to make decisions based around who they think will be the most reliable/unproblematic tenant, as well as considering how they can maximise their rental income:

> *Well, again, landlords want the higher money, so they're going to take the mother and one child, or the dad and one child, do you know what I mean, over taking a single individual. They're getting double the amount, you know. So it is tough, like* (APS, urban LA).

Recognising difficulties faced by homeless people in accessing HAP tenancies, some of the frontline workers sought to build up relationships directly with landlords to gain access to more tenancies. For these participants, discretion to make normative judgements about a person's likelihood to be able to maintain a tenancy was important in order that the relationship with the landlord could be maintained:

> *You know, you can see it from the point of view of the applicant. You can see why a landlord wouldn't be interested in taking on a social client. And then there's a fine balance that you have to walk. You have to keep your landlord contacts and you have to try and place people who are presenting with social issues. So I do have to use my judgement on a person, homeless person, you know, all the time. Every person I meet I am judging them, going, what sort of tenant would you be, you know?* (APO, urban LA).

> *'...no management would expect you to do anything with them like, because you couldn't, it's just not possible until they deal with their own issues first and their addiction and that and that's what I'd inclined to encourage them to do all the time...Like we have 100...single people like, I just pick the best of them all of the time'* (APO, Rural LA)

In attempting to maintain landlord relationships, one of these participants described how they have adapted their role to maximise tenancy sustainment and keep landlords 'on side'. They did this through incorporating tenancy sustainment into their work, even though it was not officially part of their role, so that they could identify potential issues before they arise:

> *Now, to keep landlords on side, of course, I'll be ringing tenants and will go, 'pull your socks up here, the landlord's complaining to me,' you know. Because that landlord will have other properties and—you know, it's a fine line you're walking. So while I don't officially have a tenancy sustainment role, I do...otherwise my name would be mud around [here]. It's too small. Landlords talk to each other and they'd be like, 'Oh, my God, [they] gave me this tenant and stay away from [them].' I can't afford to have that go out there into the general public. I need them to know [they] got me a tenant, and it's working out great, you should ring [them] if you have a house. And most of the way I get my tenancies is through word of mouth between landlords, like* (APO, urban LA).

This level of involvement in sourcing HAP tenancies was not a feature of the work of most of the frontline workers included in this research. However, it is useful to consider the issues associated using private sector providers for the provision of social housing. It illuminates how frontline workers have to adapt their role from helping those most in need, to helping those most likely to succeed so that they can maintain the support of private sector providers for the provision of accommodation for homeless people.

Two of the interviewees described how they work with a small number of landlords who have provided them with multiple tenancies. For these workers, there was a lot of pressure to maintain these relationships as withdrawal of accommodation could have a significant impact on the availability of HAP properties. In recognising the issues associated with using large scale landlords to provide a large number of tenancies, another of the frontline workers described a preference for working with individual landlords who provide a smaller number of tenancies. For this interviewee, the multiple provider landlords were *'too tough'* and therefore they found them more difficult to work with. However, they described the smaller scale landlords as *'too caring'*, which they saw as an advantage when it came to tenancy sustainment as they felt they were less likely to withdraw tenancies (APO, rural LA).

Discussion and conclusions

The purpose of the study of rationing is not to make conclusions around whether rationing is 'good' or 'bad'. Rather, it is about recognising that wherever a demand is placed on public goods, rationing is inevitable as decisions need to be made about who gets what. Research should focus on identifying and critiquing the rationing practices at the front line, with the research structured through a recognition of the different approaches one can take as outlined in figure one.

Some of frontline workers considered placement of people who presented as homeless within privately owned accommodation as constituting a stressful element of their role. This was due to the need to accommodate people who were in need, whilst maintaining good relationships with hotel/B&B owners and, in some cases, landlords. They did this through using the rationing strategy of selection which involves only offering this accommodation to those who were seen as most likely not to cause any issues once in a placement/tenancy. In effect, this meant that the agenda is being set by the accommodation providers rather than the policy makers and internalised by those at the frontline in order to maximise accommodation provision.

When it comes to rationing through selection, it appears reasonable to conclude that this is not a desirable form of rationing to use for homelessness and social housing, as it moves the focus from those most in need. However, the situation is a nuanced one and it has been well argued that an element of selection can be useful for allocations of social housing in order that the most vulnerable are not overly concentrated within the one area (Fitzpatrick and Stephens, 1999; Pawson and Kintrea, 2002). This is in the context of traditional social housing built by the state, as opposed to the newer form of 'social housing assistance' used in Ireland, where those who are eligible are offered HAP and they must source accommodation through the private market. In this situation, and indeed when private providers are used for homeless emergency accommodation, selection is no longer about social mix, but rather about keeping out all those people who are perceived to be troublemakers, difficult and/or unreliable tenants. In recognising the reluctance of private property owners to accommodate those with complex needs or those perceived to be potentially bad tenants, the LA workers can use selection as a means to avoid potential issues related to this by only offering privately owned accommodation to those viewed as most likely to be successful within it.

To this end, a utilitarian rationale was used by the frontline workers to justify the decisions that they made. As Fitzpatrick and Watts (2010, p. 108) explain, utilitarianism 'supports actions that maximise the sum total of societal "welfare"', in other words, the greatest happiness for the greatest number. Utilitarianism is a type of teleological theory of ethics, which argues that specific actions should be performed as their consequences warrant such actions. In other words, it is consequences that have a

central role in morality rather than intention, universalism or equal justice which are important for deontological approaches, as Osmo and Landau suggest (2006, p. 872):

> Utilitarian principles have traditionally been the most popular guides to social workers' ethical decisions, at least in part because they appear to foster generalized benevolence; a principle that requires one to perform acts resulting in the greatest good appeals to professionals whose primary mission is to provide aid to those in need.

On the surface, this seems like common sense. However, as Fitzpatrick and Watts (2010) argue, this approach fails to respect people as ends and not just means. Taken at the extreme, a utilitarian approach could be used to justify 'trampling on the rights of a vulnerable minority in order to benefit the majority' (Osmo and Landau, 2006, p. 874). The potential consequences of this approach for the most vulnerable, bring to light the appeal of a human-rights based approach to welfare provision and deontological ethics more generally (Fitzpatrick and Watts, 2010).

For the frontline workers in this research, they justified their actions as it ensured accommodation access for a greater number of people, even though it resulted in those most in need not always being able to access PEA. As a form of emergency accommodation PEA, whilst problematic in the longer term, appears to be preferable to many who present as homeless over TEA hostel accommodation. Therefore, it meant that there were no options for those deemed to be problematic other than placement within TEA hostel accommodation (and later STA if they are considered suitable), even if they wished not to be placed there. If this form of temporary accommodation was indeed temporary, it would be less problematic. However, as table one showed, many people end up within temporary emergency accommodation for a considerable amount of time.

Where longer term tenancies were concerned, this approach resulted in those in the greatest need of social housing, oftentimes receiving the least amount of support to access it. In other words, those deemed less problematic received more support in accessing a HAP tenancy if the frontline worker had built up a relationship with landlords for the provision of this form of accommodation. Therefore, it is probable that those who were more likely to be able to access this accommodation themselves were also more likely to be offered a tenancy through the frontline worker. As HAP is generally the way that people exit homelessness at present, and it relies on private property owners to provide the accommodation, it is important that the supports are focused on those who find it most difficult to access this accommodation themselves, rather than being focused on those who may need less support.

Housing First presents an opportunity to move away from housing based on desert, towards housing as of a right. As long as homeless service access is tied to behaviour/abstinence, the homelessness issue will never be resolved. Ireland is making movements towards this housing first model at a policy level. However, at the frontline, the dominant service mentality remains very much geared towards the staircase of transition model of service delivery, where one earns their way towards standard housing (Sahlin, 2005), rather than being housing-led. To this end, selection will continue as a dominant rationing tool for placing homeless people within emergency accommodation and, where relevant, in HAP tenancies.

European Network for Housing Research

Acknowledgements

References

Arksey, H. (2002) 'Rationed Care: Assessing the Support Needs of Informal Carers in English Social Service Authorities', *Journal of Social Policy,* 31(1), pp. 81-101.

Berger, P. L. and Luckmann, T. (1991) *The social construction of reality: A treatise in the sociology of knowledge.* London: Penguin Books.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative research in psychology,* 3(2), pp. 77-101.

Collin, F. (2016) 'Social Constructivism in Social Science and Science Wars', in Lippert-Rasmussen, K., Brownlee, K. and Coady, D. (eds.) *A Companion to Applied Philosophy*. Chichester, UK: John Wiley & Sons, Ltd, pp. 455-468.

Coulton, C. J. and Rosenberg, M. (1981) 'Social Justice and Rationing Social Services', *The Journal of Sociology and Social Welfare,* 8(2), pp. 415-431.

Department of Housing, Local Government and Heritage (Various years-a) *Overall social housing provision*. Dublin: Department of Housing, Local Government and Heritage.

Department of Housing, Local Government and Heritage (Various years-b) *Homelessness Reports*. Dublin: Department of Housing, Local Government and Heritage.

Fitzpatrick, S. and Stephens, M. (1999) 'Homelessness, Need and Desert in the Allocation of Council Housing', *Housing Studies,* 14(4), pp. 413-431.

Fitzpatrick, S. and Watts, B. (2010) ''The Right to Housing' for Homeless People', in Edgar, B. and Doherty, J. (eds.) *Homelessness Research in Europe*. Brussels: FEANTSA.

Foster, P. (1983) *Access to Welfare: An Introduction to Welfare Rationing.* London and Basingstoke: The Macmillan Press Ltd.

Government of Ireland (2016) *Rebuilding Ireland: Action Plan for Housing and Homelessness.* Dublin: Stationery Office.

Kintrea, K. and Muir, J. (2009) 'Integrating Ballymun? Flawed progress in Ireland's largest estate regeneration scheme', *The Town Planning Review,* 80(1), pp. 83-108.

Klein, R., Day, P. and Redmayne, S. (1996) *Managing Scarcity: Priority Setting and Rationing in the National Health Service.* Berkshire: Open University Press.

European Network for Housing Research

Lipsky, M. (2010) *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services.* 30th Anniversary Expanded Edition edn. New York: Russell Sage Foundation.

Maguire, M. and Delahunt, B. (2017) 'Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars', *AISHE-J: All Ireland Journal of Teaching and Learning in Higher Education,* 8(3), pp. 3351-3364.

Mercy Law Resource Centre (2019) *Report on Lived Experiences of Homeless Families*, Dublin: Mercy Law Resource Centre.

Murphy, N. (2016) *Travelling Through Homelessness: A study of Traveller homelessness in County Offaly*, Offaly: The Offaly Traveller Movement.

Nowicki, M., Brickell, K. and Harris, E. (2019) 'The hotelisation of the housing crisis: Experiences of family homelessness in Dublin hotels', *The Geographical Journal,* 185(3), pp. 313-324.

Osmo, R. and Landau, R. (2006) 'The Role of Ethical Theories in Decision Making by Social Workers', *Social Work Education,* 25(8), pp. 863-876.

Parker, R. A. (1975) 'Social Adminstration and Scarcity', in Butterworth, E. and Holman, R. (eds.) *Social Welfare in Britain: An Introductory Reader*. Glasgow: Fontana/Collins, pp. 204-212.

Pawson, H. A. L. and Kintrea, K. (2002) 'Part of the Problem or Part of the Solution? Social Housing Allocation Policies and Social Exclusion in Britain', *Journal of Social Policy,* 31(4), pp. 643-667.

Rees, A. M. (1972) 'Access to the Personal Health and Welfare Services', *Social Policy and Administration,* 6(1), pp. 34-43.

Sahlin, I. (2005) 'The staircase of transition', *Innovation-the European Journal of Social Science Research - INNOVATION,* 18, pp. 115-136.

Scrivens, E. (1979) 'Towards a Theory of Rationing', *Social Policy & Administration,* 13(1), pp. 53-64.

Scrivens, E. (1982) 'Rationing -- Theory and Practice', *Social Policy & Administration,* 16(2), pp. 136-148.

Stevens, A. G. (1972) 'Rationing in the Social Services', *Welfare Officer,* 21, pp. 5-12.

Walsh, K. and Harvey, B. (2015) *Family Experiences of Pathways into Homelessness: The families' perspective*, Dublin: The Housing Agency.

Watts, B. (2013) 'Rights, needs and stigma: A comparision of homelessness policy in Scotland and Ireland', *European Journal of Homelessness,* 7(1), pp. 41-68.

Watts, B. (2014) 'Homelessness, Empowerment and Self-reliance in Scotland and Ireland: The Impact of Legal Rights to Housing for Homeless People', *Journal of Social Policy,* 43(4), pp. 793-810.

Sustainability and The Smart Home:
The Challenges of an Interconnected Environment

Francesca Gennari, PhD student

Mykolas Romeris University, Last JD RIoE, Ateites st, 2008303, Vilnius, Lithuania
e-mail: frgennari@stud.mruni.eu

Abstract

This paper would like to be a bridge between technical and legal knowledge as far as the construction of environmentally sustainable and privacy compliant homes is concerned. Uniting data protection law as the leading legal subject guiding us through the Digital Revolution with the SDG30 objectives is already the preferable option for housing in unsettled times like the ones we are living. This paper will analyse the actual weakness of the current smart home from a data protection point of view and will argue that the principle of privacy by design and by default is already influencing new techniques that could fix the Internet of Things (IoT) paradigm from within. It is wished that the interdisciplinary collaboration between legal scholars and technical experts becomes stronger as regulation will never be able to keep up with the pace of technology.

Keywords: smart home, sustainability, IoT, environment, housing

Introduction

Summer 2021 showed us once more that climate change is real and unsettling: fires and floods all over Europe and the world are just the tip of the iceberg. How the smart/connected/ IoT home can help stopping Nature's deterioration while ensuring comfort and the respect of human rights, especially data protection and privacy, is the question that this paper aims to answer or, at least, to provide useful insights to any relevant stakeholder.

In order to do that, it is necessary to have a brief and succinct outline of the structure of the argumentation. Firstly, I will deal with the methodological issues: my aim is to try to find a balance between the observation of technological feeble points of the smart home and the relevant legal background. Secondly, I will restrict my analysis to the European Union (EU) because of the first-hand knowledge of its legislative acts and, because, as I intend to deal with data protection law, the General Data Protection Regulation is an inspiring legal model recognised worldwide.

After pinpointing the main data protection problems of the current smart home, the constructing part of this paper will develop from a quite simple idea: law and technology need to be combined in order to make the smart house a sustainable and empowering reality for people. On the one hand there will be the analysis of some technological developments of the home IoT, such as Edge Computing and Distributed Ledger Technologies (DLT) protocols for the connected home and how these innovations can accommodate data protection concerns. On the other hand, studies in the new Green IoT are having a momentum and could be an important connection between environmental sustainability and data protection in the smart home.

In conclusion, it will be argued that building a sustainable smart home is indeed possible, but there

must be a close cooperation between legal and technical disciplines, otherwise a smart home could do more harm than good.

The Actual Smart-Home. A Dream Becoming Reality?

In this first part, the technical state of the art will describe what the Internet of Things (IoT) paradigm implies and its connection to the smart house. Subsequently, there will be an explanation about why the smart house is still not a widespread reality today. In the second part of this section there will be a brief outline of the two main legal instruments that I will use throughout my analysis. On the one hand the Sustainable Development Goals 2030 (hereinafter SDG30) and, on the other hand, the General Data Protection Regulation in the EU (hereinafter GDPR).

Technical Issues and State of the Art: How an Interconnected Environment Works

When referring to the smart/connected/ubiquitous home (I will use these terms almost interchangeably as for law scholars the differences among these terms are not substantial) it is important to refer to the IoT paradigm as a general way to explain the functioning of an interconnected environment, such as a smart home.

Since its first concretisation in 1999 by K. Ashton, the IoT has been one of the most adaptable technologies. There are still several definitions of IoT but more and more authors, although with some personal differences, are transitioning to a concept of seeing the IoT paradigm as an enabling set of technologies for more complex ones such as Artificial Intelligence (AI). The IoT thus relies on many 'supporting technologies' such as sensing, software, communication, networking, and information technologies, but it will become more and more an infrastructure connecting the digital to the physical world and vice versa. It is true that the IoT paradigm was derived from studies in the RIFID technology, but, maybe, the union between the words Internet and Things will never lose its 'fuzziness' entirely.

In short, we could say that the IoT is an ensemble of sensors, actuators, gateways, antennas, electromagnetic waves, cloud and networks that is able to create a connected environment, such as a smart home. A connected environment is a smart environment in the sense that its parts can learn from each other and interact not only among themselves but with users. Moreover, these connected objects can learn from users too and adapt their functions accordingly.

From a technical point of view, however, most literature agrees on dividing the layers of the IoT in three parts: *i)* perception (physical) layer, which is the one of the object that the user; *ii)* network layer which is responsible for the connection with other things and *iii)* the application layer, through which the user interacts. However, there exists even four, five and seven layer models. They are less used as they are quite complicated to use. It is interesting to notice that legal informatics scholars tend to rely on a three layers' model as well but taking the perspective of the network that the IoT creates, thus labelling the layers in the following way: 'level of basic connectivity; level of network interoperability and level of syntactic interoperability', which correspond more or less to the three technological layers mentioned before.

Nevertheless, the IoT is a 'general' technology that can be adapted to many different fields (from healthcare to transportation, from housing to industrial manufacturing). What is generally specific to the smart home is that there are sensors (standalone or in devices) that should allow the gathering of data. Then, data is sent through a gateway (which can be both a physical but also a digital device), and then is sent to the cloud (or proprietary network) where data analytics techniques known as processing (e.g. Machine Learning) analyse it. Subsequently, a new input is sent back through the same route in the opposite direction and the IoT object might respond and interact thanks to the use of actuators. At the moment, however, there is not such a thing as a completely connected home: there exist different smart objects which can more or less connect to the same network but that do not always cooperate with each other. So 'the ubiquitous home' days as derivation of ubiquitous computing have not come yet.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

It is interesting to know that the concept of smart house was indeed foreseen before the development of IoT technology. The first ideation of the smart home as the *non plus ultra* of luxury housing dates back to the 1930s. However, the first prototypes of interconnected home environments (mainly for experiments in assisted living) started to be built in the 1990s in Japan and in the US. The reasons for which the connected house is not yet a widespread reality are several. In the past, it was because of the high costs of any kind of connected/automated object and, more generally, because of the lack of a sufficient quantity and quality of computational power. Nowadays, the lack of common protocols among the different objects, sensors and applications (even though things are evolving under this aspect) and of a homogeneous 5G infrastructure are among the most important reasons because of which there is not a widespread presence of smart homes.

Legal Methodology

The possibilities to make the smart home a powerful driver in the implementation of equality for housing and for ensuring human rights seem to be quite apparent: if we take objective SDG30 n. 2 (good health and well-being) quite a lot of wearables IoT can already connect inside the house and there are several rehabilitation pilot programs to conduct from an environment (their home) that the users consider safer than a general hospital, especially during a pandemic.

Moreover, in recent years there have been several 'assisted living' pilot projects with the function to provide help for elderly or disabled people. This would foster the way to reach objective 11 (sustainable cities and communities). Moreover, if the connected environment can 'learn' from its inhabitant's habits, it can make objective 13 (climate action) reachable through the management of clean energy, if these smart objects are coupled with renewable energy sources for the house (objective 7). Overall, smart homes can inspire people to have a more responsible approach to consumption and daily habits (objective 12).

The SDG30 objectives are important policy instruments but they are general and they are considered as part of 'soft law'. Even though states decided to respect them, there is a lack of coordination and binding nature of these objectives. With the Next Generation EU (hereinafter NG EU) plan in the EU, each Member State (MS) has rules to follow in order to implement the Green Deal objectives, which are inspired from the SDG30 ones. For housing, great expectations were born from the presentation of the New Consumer Agenda and from the launch of the Bauhaus initiative to rebuild more energetically sustainable buildings and infrastructures.

However, at the moment of writing, the MS are still in the process to see each of their NG EU plans approved and there is no guarantee about a common and efficient approach to follow sustainability and technological rules for housing.

Despite that, I argue that the General Data Protection Regulation EU 676/2016 (GDPR) can become a truly effective vehicle in making access to housing more environmentally sustainable and fairer while waiting that all the aforementioned policy and legislative instruments become effective in the EU.

Methodologically, I decided to restrict the field of investigation to the EU regulation not only because of the first-hand experience I have of it, but also because it addresses a human right that the SDG30 do not single out explicitly but that is of fundamental importance when talking about technology: I refer to data protection. Data protection law is the field of legal studies that is absorbing part of what was considered as consumer law as more and more objects and tools we use are somehow connected. It is assumed that along with an attention to environmental issues, the near future will also investigate how technology can help to attain environmental sustainability.

Furthermore, the selection of the European approach to regulating data protection is motivated by the diffusion and influence the GDPR has had all around the world. In fact, the State of California, Brasil, Japan, South Korea and Switzerland (among many others) got inspired by this regulation which can therefore provide a *fil rouge* when discussing about data protection all over the world. A reason for its success is that it tries to balance fundamental rights protection with a risk assessment *rationale*.

Legal Issues in The Smart Home

The functioning of the smart house described previously and how the IoT and cloud technology operate put into focus two technical phenomena *i)* the first one is described as data deluge. It means that the quantity of inputs that are created and received even in a closed connected environment such as the smart home are way too many. This has consequences on the differences between the personal and non-personal data distinction and how to ensure the respect of the GDPR data minimisation principle; *ii)* the IoT and smart-house model just appears to be close to the user. On the contrary, the smart house paradigm as it is built today is founded on the reliance on the cloud, where the most important processing and data analysis phases are carried out. This is a weak point not only under a cybersecurity perspective but also under a legal one, especially when we are thinking about liability issues in a very complex chain of stakeholders

What Is Personal in an IoT Environment?

The GDPR is the EU regulation that deals with personal data. Despite the definition of personal and non-personal given at Article 4.1 GDPR seems to be straightforward, the legal scholarship has pointed out some relevant issues. The first thing is that the definition of what is personal according to the regulation is not just limited to what is proper of a certain individual. It expands and considers personal also what is just a means to make a certain person identifiable. The reason of this drafting lies in the respect of previous judgements of the Court of Justice of the EU (hereinafter CJEU). The CJEU adopted this view in order to protect fundamental rights of individuals and, for example, in one occasion it even considered IP addresses as personal data. However, it has been pointed out that this large definition of 'personality' is also given because what is personal is time and context dependant. For example, at the beginning of the 2000s, the ZIP code was not primarily considered as something personal, whereas in recent years it was used in combination with other data (personal and indirectly personal) to infer personal information about people (such as their income and if they were part of minorities or not). In the house there are several kinds of data that will be interested and that belong also to more sensitive, hence more protected, groups of personal data, such as data concerning health and biometric data (see Article 9.1 GDPR). These kinds of data can be processed only under specific exceptions, which can be found at Article 9.2 GDPR. These protected groups of personal data are also among the mostly used in our IoT home. Let us think about our face image used as a security key to unlock doors and smartphones, or our smart-watch, taking our heartbeat and syncing it with other smart gym furniture that we might have in the house. The hypotheses are already many right now and they will not stop growing in the near future.

Consequently, if data is personal, the producer of the device will have to respect several obligations and will have to carry out specific duties to ensure their protection (see Section 2 of Chapter 4 GDPR). This is understandable, but, if we consider that the majority of data is personal there can be some unwanted consequences for businesses: a very broad definition of personal data does not encourage innovators to invest in a field such as the IoT one, as the costs and risks in case of data breach (data leakage in technical parlance) could outweigh the profits.

Data Collection v. Minimisation Principle and Who is Who In The Data Processing Phase

In the last subsection we mentioned briefly the duties that the producer of the IoT device has according to the GDPR. In GDPR parlance, the producer or main manufacturer is the data controller as it needs to collect data for its activity (see Articles 4.7 and 27 GDPR). The data controller has not only several compliance duties to ensure (such as the safety and security of the data processing and the drafting of a data protection impact assessment), but does also have to ensure the respect of fundamental rights principles while processing personal data (and within an interconnected environment it can be challenging).

In the GDPR, processing basically encompass any operation on personal data both in digital and in a non-digital way (Article 4.2 GDPR). Article 5.1 GDPR lists the principle concerning processing and one of the most important ones is the principle of minimisation of data collection and processing

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

(Article 5.1c GDPR). Commentators have advocated for a contextual approach when applying this principle, meaning that the quantity of personal data gathered needs to be the least possible. This is done by taking into account the specific circumstances of the case. However, ascertaining this 'permissible level of data collection' in an interconnected environment such as the IoT smart house is not that simple even now when smart houses are not so diffused.

As a matter of fact, the IoT paradigm on which the modern concept of smart house is built is based on collecting as much data as possible. This is because the more data is obtained, the more can be sent through the gateway in the cloud, analysed and used for 'feeding' Machine Learning (ML) models, and then sent back to IoT home objects to perform better, to adapt to new situations and requests from their users.

Moreover, quite often, it is not the data controller which performs these operations, but the data processor. In theory, the data processor (Articles 4.8 and 28 GDPR) has a more instrumental and operative function than the controller (this is also reflected from a reduced responsibility at Article 24 GDPR but not from liability which is regulated at Article 82 GDPR). Concretely, the data processor can be a contracting software agency that handles the whole or a huge part of the processing phase and thus might be the first stakeholder responsible for a personal data breach in the sense of Article 4.12 GDPR. However, the stakeholder which will respond concretely (meaning, paying compensation) is the controller, because it has delegated part of its functions to the processor. However, if it is the processor which acted with a level of negligence that could not have been expected, it is unfair that the controller has to pay for everything.

Another problem might arise and it is partly connected to the difficulty in establishing who is who in a smart home. In the near future, with the progression in sharing interoperability and internet protocols among several IoT domestic objects, it could happen that different objects start communicating among themselves sharing inputs and maybe personal data. At that point, it will be complicated to also ascertain responsibility/liability whenever a substantial damage arises: if two IoT producers (who are respectively controllers for the data gathered by their products) find themselves as joint controllers for a damage caused by two interoperable IoT objects, what should they do? The GDPR does allow joint controllership for personal data processing, but in order to do that it is indispensable that there is a written agreement (Article 26 GDPR). It is argued that in the future, with the possibility of IoT objects connecting spontaneously without the data controllers knowing about it, the lack of this written joint-controllership document can establish a further title of liability for IoT producers and discourage investment from this area overall.

The Processing: Still Too Far from The User

The last important element in this synthetic overview of the clashes of modern domestic IoT technology with GDPR is that the cloud system on which the home IoT objects rely on is not transparent and it is also far from to the users. Knowing the full width of consequences after giving an IoT object consent to operate with our data (personal or non-personal) can be problematic even for people who know more than average about these matters.

Moreover, recent scandals and data breaches (from Cambridge Analytica onwards) have made EU citizens warier of what they do on the Internet. Furthermore, the relatively low price for which one person can buy these new domestic objects is not always accompanied by a sufficient level of cybersecurity of the object itself.

What I argue is that this IoT cloud centred paradigm has to change as soon as possible for several reasons. Firstly, if users are granted to have control and they can rely on relative proximity (e.g. within a possible EU cloud or in a MS server) to the place where their data is being stored and processed, the market could flourish more. This would happen because people would trust IoT technology more. Secondly, enhancing data proximity and data control would produce a lesser quantity of energy. It could allow the future entirely connected smart house to be more self-sufficient from an energy point of view. Lastly, having data proximity and data control as new paradigms for building a better interconnected

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

house can help fulfil the GDPR requirements, most of which are in opposition to the rules according to which the IoT objects are built today.

Technical and Legal Insights for A Sustainable Smart Home

What I argue in this part of the essay is that solutions to the aforementioned issues cannot just rely on regulation and legal enforcement. Of course, there will be the need, of rules but IoT technology is proceeding at a faster pace than any known democratic political process. In this case, any regulation will always be late and will not satisfy completely the needs of users and innovators. What I suggest is to combine the overarching principle of privacy by design and by default set in the GDPR with the most promising technologies to change the centralised IoT paradigm from within (through the help of techniques such as Edge Computing, DLT and Blockchain protocols for the house). To sum up, it is essential to promote an interdisciplinary dialogue between legal and technical experts. This could effectively help not only in building more privacy and data protection compliant smart homes, but also more environmentally sustainable consumer habits and buildings.

Privacy by Design and By Default As An Overarching Principle

There is an important principle at Article 25 of the GDPR. It is called the principle of privacy by design and by default. The principle of privacy by design was formulated in the 1990's by Ann Cavoukian (former privacy officer of Ontario, Canada) and the privacy by default was just one of the consequences of it.

Instead, in the GDPR the two principles are separated and coexist in the same article. On the one hand, privacy by design means that privacy must be the core value since the design and first ideas about the development of a new technology. On the other hand privacy enhancing options must be the default options and not left to the choice of the consumer.

The GDPR entered into force in 2018, and already the scientific and the legal worlds have started collaborating both in the creation of new technology (which is data protection compliant from the beginning) and in the assessment of the privacy compliance level of already existing technologies.

Surely commentators have questioned also the generality of this ultra-broad data principle and some rightly worry about the economic interests that building technology in this new way might compromise. These doubts are founded but at least this principle is hardwired in the EU legislation that has been source of inspiration for many other countries. It is true that things are not made easier by the fact of thinking ahead a 'practically more difficult to obtain and maybe less economically rewarding' solution, but the advantages that could spread among society and consumers could be much more rewarding and lasting in the long term. Users would trust privacy technology and green compliant IoT for the house as they acknowledge privacy and environment protection as urgent issues to solve. Moreover, if a consumer is satisfied with the purchase of an IoT product that respects the user's privacy and the environment, they will be more likely to buy other IoT objects of the same brand.

The Promise of Edge Computing

To understand Edge Computing, one has to know a bit more in detail how the data cycle in the IoT concerning the house work. I will recall briefly what stated *supra*. After the sensorial inputs are collected at the physical/device layer through sensors on the objects, data are transformed into and are sent to a gateway which has the function of selecting the data and sending them to the cloud or proprietary network. However, the traffic on the web has increased in an astonishing way during the last ten years. Even before privacy, structural concerns interested the technical experts: it was apparent to many that the Internet infrastructure based on the cloud model could not last forever. Because of these infrastructure concerns, Edge Computing was developed. The idea is actually quite simple and some commentators actually consider it as a derivation of Moore's law. If computational power cannot exceed a certain threshold, nothing actually prevents objects or parts at the edge of the entire cloud system to become more powerful computationally, thus maintain an overall balance. This will mean that small computational units will be hosted by more devices that will able to process and analyse data but

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

also to keep a log of all the operations done at the edge by the IoT object. The problem of sending all data to the cloud (which maybe it is outside the EU) would not exist anymore.

Even if the reason why Edge Computing exists is entirely technical and structural, it can have good effects on the application of Art. 25 GDPR: keeping the data closer to the user is indeed something that responds to the privacy by default and by design principle.

It is true that some commentators say that the IoT model is quite centralised and that better optimization could reside in a better use of the fog layer, a sort of a transparent layer before the cloud invented by CISCO. Honestly, I think that Edge Computing responds better to the challenges set by data analysis in an era where data protection is more and more felt as a value and something to care for even by non-experts. To make this technique more GDPR compliant, there would be the need to ensure that the logs and data entries are explained in a comprehensible and transparent manner but also that can be retrieved safely and that can be also translated in a machine readable format according to Art. 20 GDPR, which ensures data portability (which is more or less the legal equivalent of interoperability).

DLT and Blockchain Protocols for The House

The IoT has been the paradigm for object 'intelligent' communications since the beginning of the '00s. Despite that, it has been known for a while that the security level and integrity of IoT (especially domestic ones) can be easily breached. One of the main liabilities is that, overall, the IoT is quite a centralized system. At both ends, at the edge of it and in the immateriality of the cloud, there are basically no techniques in order to protect the data from being stolen by hackers. It goes without saying that the problems are tougher if third party data is involved in a data breach. But centralisation is not the only structural problems with IoT in general, and home IoT in particular. Also, the low battery and traditionally low computational power (including memory) made security and data protection challenges more apparent in the IoT objects which are also called constrained devices. It is true that Edge Computing can be quite a game changer in augmenting the computational strength of even home IoT objects but also some efforts have been made in order to apply some low-weight cryptography (cryptography is a method of developing techniques and protocols to prevent a third party from accessing and gaining knowledge of the data from the private messages during a communication process) which can adapt better to the specificities of the IoT.

That is why technical scholarship but also legal scholars are wondering whether Distributed Ledger Technologies (DLTs) and Blockchain can serve as corrective of traditional structural IoT deficiencies. Distributed ledgers are *ipso facto* de-centralised structures, which fix in an unmodifiable way transactions of users that work in a collaborative way

However, the kind of cryptographic techniques used by DLT (symmetric and asymmetric functions together with hash functions) require quite a lot of power to perform the communication between simple IoT objects, therefore some questions persist about whether a full implementation of DLT and Blockchain protocols in IoT objects would give problems in terms of scalability. Most technical experts are convinced that there must be specific DLT/Blockchain protocols to make the IoT more secure. That is why there are already experimentations of protocols such as IOTA, Chain of Things, Riddle &Code; Modum.io.

The advantages could be quite sensible not only under the cyber security and privacy angles but also on the liability one. Transparency in transactions can explain better what happened and who caused a damage. At the moment there is no way to know it easily through the cloud system. Furthermore, in the event of a damage, the IoT could register all that happened and ascertain almost exactly who or what was at fault for causing the damage.

The Green IoT

The Green IoT (hereinafter GIoT) is a promising new field of automation engineering combined also with material research whose objectives is to decentralise the IoT cloud based structure and make it ecologically more sustainable. The structure of the GIoT is practically the same described before, but what changes is the effort in reducing network wastes of energy. This is obtained with also new techniques of routing data and making them closer to the user and by using new materials that are known for their non-toxicity and that could in principle be recycled. This promising field is at its dawn (the first publications are of 2020) and it is definitely promising.

Conclusions

This paper hopes to be like a bridge. Hopefully, it would be a bridge between the law and the best technological developments that are taking place in the field of the smart home automation. The fact that the smart home is still not realised (or, at least, not generalised as a means of living) can become an asset under a double point of view.

On the one hand, the development of privacy and data protection policy and legislative instruments (GDPR included) is already influencing the IoT domestic technology in making it more transparent, more decentralised and more understandable to the common user. On the other hand, climate change and policy endeavours to make housing fairer and greener are taking place and are influencing how technology is built and conceived. Furthermore, it appears that a more decentralised IoT model can ensure at the same time good results both in terms of data protection and environmental sustainability.

It is wished that home IoT producers and manufacturers see this combination of both environmental sustainability and data protection not as just an economic hurdle, but as a chance to make the best product on the market and to increase the trust users have towards new technologies for the house. These two aspects (environment and data protection) cannot be dealt with separately as they will become soon not just an option but the only option. What the legal scholars could start doing is to begin a shared discussion with innovators about the advantages and the limits of the concept of personal data and be open to learn about the specificities of the production process of domestic IoT in order to create a liability system that is fairer and boosts innovation while maintaining a satisfactory level of user protection.

This article is cautiously optimistic as both the GDPR or GDPR inspired legislation and environmental policy objectives seem to stir businesses and states in the right direction.

In this historical conjuncture, if privacy and environment issues are not taken as a necessary challenge, we all have to lose, users and businesses alike. The alternatives such as systemic personal data breaches and impossibility to limit the impact of climate change from our houses are far worse than continuing to create cheaper, less secure and more polluting technology. That is why furthering cooperation among data protection and technical experts is the only way forward to meet the challenges of environment sustainability and a more trustful relationship with new technologies.

Acknowledgements

References

Albreem M., Sheik A., Alsharif M. et al. (2021) '' Green Internet of Things (GIoT): Applications, Practices, Awareness, and Challenges, *IEEE Access*, 9, pp: 38833-38858.

Alfa A., Alhassan J., Olaniyi O. et al (2021) '' Blockchain technology in IoT systems: current trends,

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

methodology, problems, applications, and future directions, *Journal of Reliable Intelligent Environments*, 7, pp: 1153-143.

Ali B., Awad A. (2018) ''Cyber and physical security vulnerability assessment for IoT-based smart homes, *Sensors (Switzerland)*, 2018, 18(3), pp: 817.

Bandyopadhay D., Sen J. (2011) '' Internet of things: Applications and challenges in technology and standardization, *Wireless Personal Communications*, 2011, 58(1), pp: 49-69.

Bygrave L. (2017a) "Hardwiring Privacy", in R. Brownsord, E.Scotford and K. Yeung (eds.) *The Oxford Handbook of Law, Regulation and Technology*, Oxford University Press, Oxford, pp: 754-772.

Bygrave L. (2017b) '' Data Protection by Design and by Default : Deciphering the EU's Legislative Requirements, *Oslo Law Review*, 2017, 1(2), pp: 105-120.

Cavoukian A. (2009) '' Privacy by design. The 7 Foundational Principles. www.ipc.on.ca. (06/08/2021).

Chevru S., Kumar A., Smith N. et al (2020) *Demystifying Internet of Things Security. Successful IoT Device/Edge and Platform Security Deployment*, Apress Open: New York.

De Conca S. (2020) '' Between a rock and a hard place: owners of smart speakers and joint control, *SCRIPT-ed*, 17(2), pp: 238-268

Edwards W.K., Grinter R. E (2001) "At Home with Ubiquitous Computing: Seven Challenges", in G. Abwod, B. Brumitt, S. Schafer (eds.) *Proceedings of the International Conference on Ubiquitous Computing (Ubicomp 2001)*, LNCS 2201-Springer, Berlin, pp: 256-272.

EU Commission (2021) Next Generation EU, https://europa.eu/next-generation-eu/index_en (06/08/2021).

EU Comission (2020 a) COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL New Consumer Agenda Strengthening consumer resilience for sustainable recovery COM/2020/696 final.

EU Commission (2020b) New European Bauhaus: Shaping more beautiful, sustainable and inclusive forms of living https://europa.eu/new-european-bauhaus/index_en (06/08/2021).

EU Commission (2019) COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS The European Green Deal, COM/2019/640 final.

EU Fundamental Rights Agency, Council of Europe (2018), *Handbook on European Data Protection Law*, EU publishing: Luxembourg.

EU Parliament and Council, REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L 119,4.5.2016.

Floridi L. (2014) *The Fourth Revolution. How the Infoshpere is Reshaping Human Reality*, Oxford University Press: Oxford.

Floridi L. (2020) *Il Verde e il Blu. Idee ingenue per migliorare la politica*, Raffaello Cortina Editore:

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Rome.

Gonçalves M. E. (2020) '' The risk-based approach under the new EU data protection regulation: a critical perspective, *Journal of Risk Research*, 23(2), pp:139-152.

Huh J., Seo Y. (2019) '' Understanding Edge Computing: Engineering Evolution with Artificial Intelligence, *IEEE Access*, 7, pp. 164229-16245.

Jain S. (2019) '' Can Blockchain accelerate Internet of Things (IoT) adoption?, https://www2.deloitte.com/ch/en/pages/innovation/articles/blockchain-accelerate-iot-adoption.html (06/08/2021)

Leenes R., De Conca S (2018) "Artificial intelligence and privacy- AI enters the house through the Cloud", in W. Barfield, U. Pagallo (eds.) *Research Handbook on the Law of Artificial Intelligence*, Edgar Elgar Publishing, Celthenham, pp: 285-306.

Minoli D., Occhiogrosso B. (2018) '' Blockchain mechanisms for IoT Security, *Internet of Things*, 2018, 1(2), pp: 1-13.

Mocrii D., Chen Y., Musilek P. (2018) '' IoT-based smart homes: A review of system architecture, software, communications, privacy and security, 1(2), pp: 81-98.

Nativi S. et al. (2020) *IoT 2.0 and the INTERNET of TRANSFORMATION (Web of Things and Digital Twins) A multi-facets analysis*, JCR: Luxembourg.

Ohm P. (2010) '' Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization. *UCLA Law Review*, 57(6), pp: 1701-1777.

Pagallo U., Durante M., Monteleone S. (2017) "What is New with Internet of Things in Privacy and Data Protection? Four Legal Challenges on Sharing Control in IoT", in R. Leenes, R. Van Brakel, S. Gurtwith et al., *Data Protection and Privacy: (In)visibilities and Infrastructures*, Springer International, Cham (Switzerland), pp: 59-78.

Pranit Jeba Samuel C., Dharani K.G., Bhavani S. (2020) ''Power algorithm to improve the IoT device for lightweight cryptography applications, *Materials Today*, DOI: 10.1016/j.matpr.2020.11.326 (article in press).

Purtova N. (2018), '' The law of everything. Broad concept of personal data and future of EU data protection law, *Law, Innovation and Technology*, 10(1), pp: 40-81.

Sahu M. (2021) ''Criptography in Blochain: types and applications, *UpGrad Blog*, https://www.upgrad.com/blog/cryptography-in-blockchain/ (06/08/2021)

Simmons D., (2021) '' 13 Countries with GDPR-like Data Privacy Laws, *Comforte Blog*, https://insights.comforte.com/13-countries-with-gdpr-like-data-privacy-laws .(06/08/2021)

Shabandri B., Maheshwari P. (2019), '' Enhancing IoT Security and Privacy Using Distributed Ledgers with IOTA and the Tangle, in *2019 6th International Conference on Signal Processing and Integrated Networks (SPIN)*, pp: 1069-1075.

United Nations, *Sustainable Development Goals (SDG30)*, https://sdgs.un.org/goals (06/08/2021)

Van Alsenoy (2019), *Data Protection Law in the EU: Roles, Responsibilities and Liability.* Intersentia: Cambridge-Antwerp-Chicago.

Varjovi A., Babaie S. (2020) '' Green Internet of Things (GIoT): Vision, applications and research challenges, *Sustainable Computing: Informatics and Systems*, 28, pp: 100448- 1004456.

Voigt P., von den Bussche A. (2017), *The General Data Protection Regulation (GDPR) A Practical Guide*, Springer: Cham (Switzerland).

Wolters P. (2017) '' The security of personal data under the GDPR: A harmonized duty or a shared responsibility? *International Data Privacy Law*, 7(3) pp: 165-178.

Yamazaki Y. (2007) '' The Ubiquitous Home, *International Journal of Smart Home*, 1(1), pp: 17-22.

Zeadally S., Das A.K., Skavlos N (2021), '' Cryptographic technologies and protocol standards for *Internet of Things*, 14, pp: 100075-100065.

Zhang J., Chen B., Zhao Y et al., '' Data Security and Privacy-Preserving in Edge Computing Paradigm: Survey and Open Issues, *IEEE Access*, 6, pp: 18209-18237.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

SOCIAL HOUSING AS A PUBLIC SERVICE: A COMPARATIVE ANALYSIS OF ITALIAN AND ENGLISH HOUSING SYSTEMS

Chiara Prevete

University La Sapienza of Rome, Faculty of Economics, Economics and Law Department, Rome, Italy

e-mail: chiara.prevete@uniroma1.it

Abstract

This conference paper charts the idea of social housing in England and Italy from its emergence as part of a public housing system to its management by social bodies as 'surreptitious privatisation'. This kind of privatisation was caused by deregulations or confusing regulations under the States and the EU law influences that 'social nature' was more secure than private. The first paragraph synthesises English and Italian public policies over the years to classify social housing in both jurisdictions and the role of the social bodies in them. The second paragraph underlines the EU policies between social and competition law to explain the EU's influence on the definition of social housing as a service of general economic interest. The third paragraph describes how the idea of 'social' in housing has changed and how social housing should work as a public service in the future. The paper ends with a short explanation about the concept of the new role of the States as social housing controller, coordinator and accountant.

Introduction

Since the beginning of the twentieth century, public housing has represented the primary response to guarantee housing for those who cannot access the private real estate market. Across Europe, due to extensive privatisation of housing in the eighties and nineties, the financial market crisis in 2008 and now COVID-19, the State role has changed massively. This paper explores how public power has changed over the years to provide public and social housing in Italy and England. The significant difference between these two jurisdictions is the presence of a solid social housing system in England. This paper's first goal is to deeply understand the difference between the social and public housing provision. Consequently, it discusses the varied definitions of public and social in England and Italy and EU law. Then, this paper explores how the EU concept of social housing has progressively changed the State member definition of social housing.

The second goal is to outline whether social housing can be defined as a public service. In the continental tradition, public service can be described in two ways: i.) as a public activity, and ii.) as the body that manages it. This work is focused more on the bodies that provide housing, mainly on the role of social organisations as non-profit organisations in the housing provision. This paper also enquires whether the social bodies can deliver a public service, such as housing and the public authority roles in this kind of service. The last goal of this paper is to argue the essential role of central State control in both jurisdictions despite the differences regarding social and public housing. The structure of this paper will be as follows:

The first paragraph briefly outlines the public policies in England and Italy and the different choices made on housing service. Next, the difference between social and public housing and how these two systems work in both countries will be more apparent. England was forced to create the 'third arm' of housing (i.e. social housing) because of the enormous house-selling after implementing the Right to Buy policy. Italy abandoned the management of the public housing system to implement homeownership and general subsidies for rent.

The second paragraph discusses the definition of social housing in EU law, primarily in competition law. The EU Treaty is incompetent on housing provisions because it is a State member goal. However, competition EU law defines social housing as services of general economic interest (SGEI). According to key case-law and Commission decisions, EU competition law is willing to allow State aid for social housing as SGEI is exempt in competition law. This qualification has influenced the EU housing market and pushed State members to regulate social housing as an 'economic' service.

The third paragraph focuses on the public service structure and analyses whether the social housing model fits in the public service structure. This part argues interpreting the social bodies activities in housing provisions and their relationship with public authorities on the importance of defining the role of the modern states and public powers in social housing services.

I. England and Italy: from public to social housing policies

England is a forerunner in public housing and, even earlier, on the idea of State intervention to satisfy the need for housing (**1**). While England invested in the construction of 'homes fit for heroes' (**2**), with the Housing Act 1919, on a national scale, in Italy, there was only the Institutes for Popular Homes (IACP) which, together with other public bodies, cooperatives and mutual aid companies could access mortgages and finance the construction of houses through bond issues.

Until the middle of the sixteen century, local authorities were England's most crucial public housing provider. The local authority is a public body defined as 'any person or body of persons who receive or expend the proceeds of any rate and any other public body which the Ministry of Health may determine to be a local authority' (**3**). Many functions were progressively transferred from single-purpose local boards to local authorities in the late nineteenth and early twentieth century. The idea behind this evolution was 'that the local

inhabitants might look to a single institution for the basic services that government should provide at the local level' (**4**). With the Town and Country Planning Act of 1947, greater functions were attributed to the local authorities. After regenerating the slums, more than a million houses had already been built outside the cities (**5**). In Italy, the first national legislation on public housing was in 1949 when Parliament approved the INA-Casa Plan (**6**). The INA-Casa Plan was undertaken by the Minister of Labour, Amintore Fanfani and financed by worker and employer contributions supplemented by State resources and the intervention of the banking system. Fanfani was inspired by the Beveridge Report (**7**) and the English housing system. Since then, the public housing service in Italy has comprised a large-scale organisation, National Insurance Institution (INA), a national body, various regional organisations (IACP) and municipalities. However, since the seventies, Italian public housing policies provided only incentives and deductions to favour ownership, and at the same time, public housing management started to decline.

As with the other local services, the national level began to take over many responsibilities in England. Indeed, the agenda of the Conservative government was to transform radically local authorities and change, as much as possible, how public services were provided at the local level. Local governments should become 'enablers and regulators rather than providers of services'. In those years, the Thatcher government introduced its most iconic policy: the Right To Buy (RTB) (**8**). RTB allowed tenants in publicly-owned council housing to buy their rented accommodation at a heavily subsidised price (**9**). Since the 1980s, public dwellings were also transferred to the housing associations through the Large-Scale Voluntary Transfer Process (LSVTP) (**10**). Consequently, public housing privatisation grew substantially, and social housing passed from a residual model to a massive one, replacing traditional public housing. Until now, I have used a generic expression of public housing to describe the service in England, correctly, 'council housing system'. Council housing is the service that manages and provides public dwellings by the local authorities. Contrarily, social housing is the system managed by housing associations. Even this point sounds like a gross simplification, and this definition is crucial because, over time, social and public (or council) housing services improperly overlap. That also happened because of the massive growth of public housing due to the RTB and the LSVTP. The social housing system passed from a residual model to a colossal one, replacing traditional public housing. Consequently, the eighteen-century social housing system was called the 'third arm' of the housing provision (**11**), in addition to the private and public housing market.

On the contrary, in Italy, the social housing system was present in Italian legislation since 1977. However, until 2008 there was still no national public policy on social housing. In 2008, the EU commission's decision (2005/842/EC) forced the Italian legislators to introduce the social housing regulation (**12**). This decision set out the conditions under which State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest is to be regarded as compatible with the common market and exempt from the requirement of notification laid down in Article 108 (3) – ex 88(3) – of the Treaty. Indeed, with the House Plan I law 133/2008, Italy introduced the definition of social housing as an SGEI and a set of instruments to apply the EU decision (**13**). The most important

instruments for implementing social housing services are planning and urban standards and public, private and social funding. Indeed, the goal of this law was to build new social dwellings and recover the existing ones, to be achieved with the involvement of public and private capital destined for disadvantaged social categories. This law wanted to configure a public service, as an alternative to the traditional public system, with a more prominent role in the private sector. In this way, the legislators imposed minimum and mandatory rules on switching the power from the State to the planning authorities, which are regional or municipal.

Since 2008, the coordination of the social housing fund has been handled by CDP (Cassa Depositi Prestiti) (**14**). CDP is an Italian investment bank, with 83% of the share capital owned by the Italian Ministry of Economy and Finance. Various banking foundations held 16%, while the remaining 1% is in treasury shares. As CDP does not have the structure and competence to implement social housing projects, from the beginning, it has involved the Social Housing Foundation (FHS) as a project advisor (**15**). FHS is a social body that promotes new houses for rent to newly formed or single-income families, students, older adults, immigrants and other individuals at risk of social exclusion. FHS also designs houses and services to guarantee innovative living forms (i.e. cohousing and co-living), using ethics finance and public funds. Each project has several houses for sale or rent in the private market and a few houses for sale in the social market. After the project design, FHS has tried to figure out how to present the housing management (i.e. maintenance services and car-sharing) to social bodies, such as a community cooperative or 'social manager'. Even though there are no social body regulations to manage social housing in practice, FHS implements the social housing projects. Consequently, today CDP and FHS are the providers of these social housing projects, mostly without public administrative control. On the contrary, the public housing regulation is regulated and provided by regional governments and public bodies (as I described before). However, the national legislator has wholly abandoned the regulation of previous public housing in favour of social housing regulation without providing a proper organisation.

In England, this switch from council to social housing has also been called 'residualisation' of council housing, described as 'a process embracing changes in the social composition of council housing as well as the related policy changes' (**16**). However, over the years, social housing has become a massive housing service system provided by housing associations, and the different governments have increased the housing associations power. For instance, with the Localism Act 2011, the government handed more power to the housing associations as social landlords, offered fixed-term tenancies and, consequently, transformed social rent into an unsecured contract (**17**). In addition, in 2015, the government allotted social landlords the power to charge market rents to households with an income of over £60,000 (**18**). Moreover, the Grenfell Tower disaster revealed that the management, repair and regeneration of social housing had been contracted out by the State, and non-profit bodies, to private companies for profit. On 14 June 2017, one of the social housing towers, the Grenfell, was destroyed by fire, and 72 died, and hundreds more were missing. Literature and practitioners have started investigating how housing associations (and local authorities) manage dwellings (**19**). As Hodkinson well-argued, the Grenfell disaster and the discovery of 'other Grenfell's are rooted in neoliberal

housing privatisation policies, and deregulation rolled out since 1979' (**20**). Public housing – its homes, tenure, affordability and security, as well as its more comprehensive regulatory system of municipal building control and health and safety regulation – made a remarkable contribution to driving up the quality and safety of working-class housing over the 20th century.

On the contrary, the RTB and the LSTV to the housing associations led to the rise of outsourced regeneration in a dangerous self-regulatory environment geared towards maximising profit. Even though the housing associations are formally still non-profit bodies, the variety and scale of housing association activity and the relationship with government, both national and local, generated a substantial body of law. Housing associations promote low-cost renting and low-cost homeownership through various government part-funded projects. Over the last twenty years, they have raised more than £65bn of private finance (**21**). Their roles have diversified: not only do they provide housing, but they are substantial providers. I will argue how this ambiguous nature of the housing associations in England has produced a dangerous impact on tenants' lives. Still, it has generated confusion on the housing system provided between public and private. In Italy, the impact of social bodies' management on housing providing is marginal (**22**), even if there are already any negative consequences in this system. However, if the government ignores the public housing system and finances social housing, it will probably cause a similar effect in England. The EU cannot help the State members systems if they do not distinguish between social and public housing, and public and social bodies, as I will argue in the next paragraph.

2. Social housing in Europe between social protection and competition law

This paragraph shows how the EU policies have influenced the introduction, and the importance, of social housing in the Member States and the Eurozone. It is impossible to analyse this influence profoundly. However, it can be summarised in three points related to three European policies: i. social policies, charters, and the provision of social rights (i.e. institutions and remedies to respect it); ii. social housing as an urban policy, to implement the right to the city, or, in other words, as a part of 'smart city' policies; iii. competition law, and precisely the commission decision on social housing as a service of general economic interest (SGEI). Though housing is not regulated in the Treaty and is not covered by EU law, the EU has changed housing policies in the State members differently with these three interventions. Housing finds fundamental and social rights protection in the European Court of Human Rights (ECHR), the Community Charter of Fundamental Social Rights of Workers, the European Social Charter, and the Charter of Fundamental Rights of the EU and the European Pillar (**23**). The other EU policy that influences a specific idea of social housing for the EU States, specifically Italy, is the connection between city and housing. Indeed, the city is a space where the most significant and current challenges are concentrated, such as segregation, unemployment and poverty. Issues at the European level have found ample space in various charters, protocols, programmes and agreements and explicit halt in the Urban Agenda for the EU, of 30 May 2016 (**24**). More generally, in the context of social

legislation and city policies, social housing is not regulated but always connected with other issues or to pursues multiple purposes. So much so that the European Economic Social Committee has called for a more explicit EU housing policy on several occasions. This list shows how the EU has created strong protection for housing rights with different legal instruments (i.e. soft law, conventional law, open method of coordination).

However, the economic crisis and the austere response have created a checkered system over the years. This point is more understandable if we remember that the central policy in the EU competition law is freedom in market protection. At the same time, it is essential to remember that social housing is a competition law exception because it is defined as an SGEI, referred to in Articles 14 and 106 of the Treaty on the Functioning of the European Union (TFEU). A few decisions from the commission and the majority have limited State intervention to providing housing to defend the market competition. Social housing appears as a financial service that has lost the idea behind public housing as a State intervention for those who cannot afford the home. Moreover, the legal framework on SGEI is confusing, and each decision depends on political and economic issues more than the protection of housing rights. As a result, there is a considerable incoherence between legal protection in social rights regulations and competition law. In this paper, it is impossible to write in-depth about SGEI, but I highlight three considerations around this obscure topic. First, it is necessary to recover the fundamental goal of competition law (consumer welfare) to implement housing as a social right in practice. Second, the commission role in this field requires a structured guideline not to be subject to political variation. Third, the EU policies have missed defining the meaning of social housing and the differences between social and public and, consequently, who needs to manage this financial service.

In conclusion, on the one hand, the EU affirms the importance of social rights (above all after Lisbon); on the other hand, the ordoliberal nature (after the austere 2007/2008 policies) imposes to respect the Gramble formula 'free economy and strong State' (**25**). This last idea pushes the EU commission to have strict control on the State investment in housing and transforms social housing into an 'economic' service (i.e. transport, energy) instead of a 'service of general interest' (i.e. health, education). The crucial difference between SGEI and (service of general interest) SGI is that the SGEI are generally contracted out under competition law. At the same time, the SGI has more frequently maintained the possibility of direct administrative management (**26**). Consequently, the SGEI configuration of social housing has pushed each State member to conform the social housing service to the EU law. In Italy, for example, as examined before about the commission decision, social housing had been introduced because of the competition rules on State aid and compensations. So, the idea is that the State can invest in social housing and leave the implementation of the project to the private system.

However, and again, the EU policies regarding housing are wavering. In England, social housing was already present, and there was a robust free-market housing system. On the contrary, there was a public or private system in Italy, and after these mixed EU policies, the housing provider has changed in two principal ways. First, there is the idea that housing is a service that can be delivered from a private body or social in a sort of free market without the control and accountability of the State. Second, social housing management is

outsourced to non-profit bodies, which are like a public body. Behind these effects, the idea was that the public is less efficient than private, and the 'social' could be more transparent than private because the social bodies are non-profit. However, as we can learn from English history, it does not matter the legal nature of the bodies or the abstract goals on their statutory. To find the actual functions and effects, it needs to investigate how these public or social bodies work in practice. In this context, and to prove this idea in this paper, it would be helpful to use another fundamental European theory: the functionalism approach (**27**). This approach would be beneficial to understand whether social housing is a public service in England and Italy and how the State and public role should be in the social bodies' management. The functionalism approach is also connected to the principle of neutrality (Art. 345 TFUE) (**28**). It is necessary to investigate the role of bodies to understand the nature of an institution in the legal context and relation to others because it does not matter the formal qualifications of public or private – and social – ownership of undertakings.

3. Social housing and public service structure: public–private–social is a new partnership for a public service model

The service of general interest (economic or social) is a European definition that pretends to contain the Member States' different 'public service' traditions. As the EU commission said: 'In the Member States different terms and definitions are used in the context of services of general interest thus reflecting different historical, economic, cultural and political developments. Community terminology tries to account for these differences' (**29**). However, it is common in several traditions to divide the public service into two notions: objective and subjective. In this paper, there is no space to explain both concepts, but it is well-known that the objective theory is focused on the service activity and subjective on the bodies' nature. In European tradition, the subjective theory is irrelevant because of the principle of neutrality, which imposes to investigate the activity to understand the real bodies' structure (economic or not).

Regarding housing, social housing is considered ex-ante SGEI because of its social and economic nature's activity. This concept has met some objections. Specifically, the European Economic and Social Committee (EESC) argues that: 'The Commission should reconsider its decision-making practices for checking obvious mistakes in Member States' classification of social housing as a service of general economic interest, because they may not always reflect the specific needs of the sector. Member States should be given the discretion to set access conditions and prices for housing in a way that takes account of local needs and local preferences, as well as the real needs of disadvantaged citizens or socially less advantaged groups, in accordance with the provisions of Protocol No 26 on services of general interest' (**30**). The EESC is right to ask the EU for more flexibility to classify social housing because classifying this service as 'economic' is insufficient to read and categorise different housing activities. This position is also because EU law does not distinguish between social and public housing in each State. EU competition and law aim to protect uncompetitive behaviours in social housing because this involves the private sectors. Still, this confusion in classification has generated more than

a problem. The Italian case is a perfect example. The Italian government have destined every public fund and policy to implement social housing projects in the last years, forgetting the older public system. The new Italian policies, even after COVID-19, are focused on social housing projects vaguely and confusingly, careless of long-term planning (**31**). In addition, the idea behind this public investment in social housing is that it offers safe and secure management because the partnership is composed of non-profit entities, and the private role is subordinate to the social and public institutions.

However, England housing history can enlighten the social and non-profit entity – housing associations – as a social housing manager. Since 2017, housing associations have shown the problem of contracting out the public and social housing to housing associations as 'hybrid organisations'. The nature of housing associations in England is profoundly questioned because they are in between public and private bodies. The literature discusses 'shallow or entrenched hybridity', where 'entrenched hybrids are more subject to State or market influences on organisational cultures and strategies than shallow hybrids' (**32**). However, as I have underlined for the European formalist (and neutrality) approach, at least in the housing case, institutional nature is not enough to classify a service as public (economic or not). In my opinion, the discussion between classifications is fundamental to understand the role of the State and other public authorities in coordination, direction, control and accountability. For instance, again, about the England case, local authority environmental health officers have the power to inspect and prosecute private landlords and housing associations (**33**).

However, local authorities are generally unable or reluctant to prosecute private landlords because of cuts to inspection teams and because they have come to depend on them for housing the homeless due to the shortage of social housing. There is evidence that local authority inspections and prosecutions of private landlords are falling. About 50% of councils had served none or only one enforcement notice in 2014/15, with just one London council serving 50% of notices nationally and 70% of those in London (**34**). As a critical Italian doctrine wrote (**35**), housing as a public service means that the public – a central undertaking or agency – is a controller of the multiple bodies involved in the housing provisions. Maintenance bodies' plurality is essential, but the presence of public bodies' control must be prevalent. I am conscious that public control seems like an old-style concept related to the welfare nation-State. Still, in this paper, I affirm that it is central to rethink the State role more than reorganising an innovative partnership – even though it is crucial to recognise new actors as community or social organisations. Recently, economists have termed the State as 'entrepreneurial' (**36**). This new idea aims to see public authorities as public service leaders and innovation producers. In England and Italy's housing system, there is a constellation of social and public housing bodies that do not function well (for inefficiency or because they have a profit goal) because the State loses its public control. It is important to remember that 'public' means to represent the collective. Even if 'social' sounds more innovative and competitive, history shows that non-profit bodies are not better than for-profit when they do not have public coordination.

Conclusion

This paper has shown that the transition from public to social housing needs to be reconsidered. In the past, English and Italian housing traditions showed the importance of the State to provide affordable and safe housing for poor people or the working class. Over the years, privatisation has declared the death of public housing and transformed this public service into a social one. England has exposed the consequences of social housing management and the importance of State control. I have explained how the EU does not help understand how social housing can be a public service because competition law policies are prevalent to social rights. However, in the last pandemic years, the EU institutions have understood the importance of State intervention in economics and the State challenges in public services (**37**). We can gain a powerful housing service system that rethinks public authorities' role in contracting out housing management, but above all in control, coordination and accountability of the implementation of this service. Without public control, the 'social' idea has lost its charm and its first objective: to give a house to those who cannot access the private housing market.

References

(**1**) Cranston R. (1985) *Legal Foundations of the Welfare State*. London: Weidenfeld & Nicolson, p 46
(**2**) Boughton J. (2019) *Municipal Dreams: The rise and fall of council housing*. Edinburgh: Verso, p 30
(**3**) Act of Parliament 1916, https://www.gov.uk/government/organisations/hm-revenue-customs
(**4**) Loughlin M. (1996) *Legality and Locality: The Role of Law in Central-Local Government Relations*, Oxford University Press, Oxford, pp 80-81
(**5**) Ginsburg N. (1999) "Housing", in Page R. M., Silburn R. (eds.) *British Social Welfare in the Twentieth Century*. London: Palgrave Macmillan Publishers Limited, p 234
(**6**) P. Di Biagi (2001) *La grande ricostruzione: il Piano INA-Casa e l'Italia degli anni '50*. Roma: Donzelli editore, pp 33-62
(**7**) Beveridge W. (1945) *Social Insurance and Allied services. Report by Sir William Beveridge*, London: The Stationery Office. In Italy see: Fanfani T. (2013) *L'azione di Amintore Fanfani nelle emergenze del secondo dopo Guerra: discontinuità, solidarietà e attese economiche*. Firenze: Edizioni Polistampa, p 41
(**8**) Housing Act del 1980; Jones C., Murie A. (2006) *The Right to Buy: Analysis and Evaluation of a Housing Policy*. Oxford: Blackwell Publishing Ltd.
(**9**) Disney R., Luo G. (2017) "The Right to Buy public housing in Britain: A welfare analysis", Journal of Housing Economics, 35, pp 51–68
(**10**) Malpass P. (1982) *Housing Associations and Housing Policy: A Historical Perspective*. London: Palgrave Macmillan, p. 256. Cobbald C., Dean J. (2000) "Views on the Large Scale Voluntary Transfer Process", in *Department of the Environment, Transport and the Regions*, p. 6
(**11**) Lund B. (2016) *Housing and politics, Power, planning and protest*, Bristol University Press, Bristol., p. 29
(**12**) 2005/842/EC: Commission Decision of 28 November 2005 on the application of Article 86(2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest (notified under document number (C(2005) 2673)
(**13**) The legislative decree implementing Council Directive 2003/86 / EC, of 22 September 2003. Relating to the right to family reunification, as well as the legislative decree implementing Directive 2004/38 / EC of the European Parliament and of the Council of 29 April 2004 on the right of citizens of the European Union and their family members to move and reside freely within the territory of the Member States, is extended by three months.

(14) See Macfarlane L., Mazzucato M. (2018), *State investment banks and patient finance: An international comparison*, Working Paper IIPP WP 2018-01

(15) FHS today operates throughout Italy, having put in place a network of collaborations that go from Cassa Depositi e Prestiti to the major real-estate funds, to banking foundations and key operators in housing partnerships (https://www.fondazionecariplo.it/en/the-foundation/specialized-foundations/housing-sociale.html)

(16) Malpass P., Murie A. (1999) *Housing Policy and Practice,* London: Palgrave Macmillan, p. 17-18.

(17) DCLG- Department of Communities and Local Government (2011) Grant Shapps: new rules will help end prejudices about social housing. Press Release, 23 November (www.communities.gov.uk/news/housing/2033453)

(18) Powell R. (2015) "Housing benefit reform and the private rented sector in the UK: on the deleterious effects of short-term, ideological "knowledge"", in *Housing, Theory and Society*, 32:3 pp 320–345

(19) Bulley D., Edkins J., El-Enany N. (2019) *After Grenfell. Violence, Resistance and Response*, Pluto Press: London

(20) Hodkinson S. (2019) *Safe as Houses*, *Private Greed, Political Negligence and Housing Policy After Grenfell*, Manchester University Press, Manchester, DOI: 110.7228/manchester/9781526141866.001.0001, p. 18

(21) Handy C., Alder J. (2018) *Housing Associations: a legal handbook*, London: Legal Action Book, *iBook*, p. 10

(22) Public housing has 74 local authorities and companies, 806,000 housing, of these 759,000 are rental housing and 25,000 rent-controlled housing for a total of 2.2 million inhabitants. Social housing is managing approximately 20,000 total housing (www.federcasa.it)

(23) Delli K. (2013), *Report on social housing in the European Union* (2012/2293(INI)), Brussel, European Parliament, Committee on Employment and Social Affairs

(24) Urban Agenda for the EU, Pact of Amsterdam*,* agreed at the Informal Meeting of EU Ministers Responsible for Urban Matters on 30 May 2016 in Amsterdam, The Netherlands, http://urbanagendaforthe.eu/pactofamsterdam

(25) Allena M. (2020) "La smart city per il social housing", in Ferrari G.F. (edits), *Smart city. L'evoluzione di un'idea*, Sesto San Giovanni: Feltrinelli, p. 254

(26) Bovis C. (2007) "How should services of general interest be financed: Does the relation between state aids and market forces reveal a link with Public Private Partnerships?", in *European Procurement & Public Private Partnership Law Review*, pp 153-174; Gruis V., Elsinga M. (2014) *Tensions Between Social Housing and EU Market Regulations*, in *Eur. St. Aid L.Q.*, 13, 3, p. 463.

(27) Della Cananea G., Franchini C. (2017), *I principi dell'amministrazione europea*, Torino: Giappichelli, p 9

(28) Bonefeld W. (2012) "Freedom and the strong state: on german ordoliberalism", in *New Political Economy*, 17:5, pp 633-656; Gamble A. (1979), "The Free Economy and the Strong State", in *Socialist Register*, 16, pp 1-25

(29) Green Paper on Services of General Interest, Brussels, 21.5.2003 COM (2003) 270 final

(30) Opinion of the European Economic and Social Committee on 'Issues with defining social housing as a service of general economic interest' (own-initiative opinion) 2013/C 44/09

(31) The last policy is the National Recovery and Resilience Plan (*Piano Nazionale di Ripresa e Resilienza*, NRRP) is part of the Next Generation EU (NGEU) programme. The Recovery and Resilience Plan presented by Italy envisages investments and a consistent reform package, with € 191.5 billion in resources being allocated through the Recovery and Resilience Facility and € 30.6 billion being funded through the Complementary Fund established by Italian Decree-Law No. 59 of 6 May 2021

(32) Billis D. (2010) *Hybrid Organisations and the Third Sector. Challenges for Practice, Theory and Policy*, London: Palgrave Macmillan, p. 12; «what we are now facing are fundamental changes in the nature of the

organisations that are financing, planning and delivering welfare. It is not just the 'economy', but the organisations themselves that have become 'mixed'»

(33) Ministry of Housing, Communities and Local Government, 'Live Table 101: Dwelling stock: by tenure, United Kingdom (historical series)', 2018, at https://www.gov.uk/government/uploads/ system/uploads/attachment_data/file/710181/Discontinued_LT_101.xls

(34) Buck K., Battersby S. (2015), *The Challenge of Tackling Unsafe and Unhealthy Housing. Report of a Survey of Local Authorities for Karen Buck MP*, at http://sabattersby.co.uk/documents/KBReport2.pdf

(36) Nigro M. (1957) *"L'edilizia popolare come servizio pubblico"*, in *Riv. Trim. Dir. Pub.,* p. 118

(37) Mazzucato M. (2011), *The Entrepreneurial State*, London: Demos

(38) For instance, the Commission decision about the "Temporary framework for State aid measures to support the economy in the current COVID-19 outbreak" COM 2020/C 91 I/01

Housing pathways of refugees towards the Flemish nebular city

Babette Wyckaert

KU Leuven, Faculty of Architecture, Campus Sint-Lucas, Brussels / Ghent, Belgium
e-mail: babette.wyckaert@kuleuven.be

Hans Leinfelder

KU Leuven, Faculty of Architecture, Campus Sint-Lucas, Brussels / Ghent, Belgium
e-mail: hans.leinfelder@kuleuven.be

Pascal De Decker

KU Leuven, Faculty of Architecture, Campus Sint-Lucas, Brussels / Ghent, Belgium
e-mail: pascal.dedecker@kuleuven.be

Abstract

It is known that migration is primarily an urban phenomenon and so is the settlement of refugees in their host country. However, national figures and various international studies have shown how migrants increasingly expand their housing search towards smaller, medium-sized, and suburban gateways. In Belgium, unlike neighbouring countries like France and the Netherlands, there are no specific post-arrival dispersal policies underlying this changing geography of arrival. Based on the housing pathways of 15 refugee households, this paper explores the changing geography of arrival towards the Flemish nebular city. This contribution ascribes these housing outcomes to the structure-agency duality composed of a balance of anti-metropolitan housing preferences, structural barriers to accessing housing (the lack of individual social, cultural and economic capital; shortfalls on the social/regular housing market) and the agency of refugees, but more importantly other migrants and civil-society organisations to challenge these constraints. Starting from the theoretical concept of 'path dependency', this research further attributes these structural barriers to a historical embedding within integration and migration policies and the institutional and spatial conditions that result from this and affect the housing experiences, e.g., within reception facilities, of refugees.

Keywords: Anti- metropolitan housing preferences, changing geography of arrival, structure-agency, path dependency

Introduction

Climate change, terrorism, etc. are just a few of the many global challenges that will continue to result in future migratory flows of people seeking a safe haven in Europe. Many newcomers have been allowed to settle on Belgian territory in recent years. This inevitably results in demographic and social challenges for the Flemish (housing) context, particularly the housing market, housing policy, and our spatial or living environments. A major challenge for refugees is found in access to housing and the transition from shelter to housing (Astolfo et al., 2018; Saeys et al., 2018; D'Eer at al., 2019; Wyckaert et al., 2020).

To this day, the transition from reception to housing for refugees continues to be very complicated. Themes related to housing are largely absent from substantial discussions around Flemish integration policies. In addition, there is a lack of, as Schillebeeckx (2019) argues, interest in the influx of migrants and increasing diversity in our society within various social debates. The debate on an increasingly severe housing crisis is an illustration thereof. These kinds of observations are even more disturbing as several researchers demonstrate the importance of housing and residential environments as a first step and a 'spatial opportunity framework' (Balampanidis, 2019) in the integration process of newcomers (Francis & Hiebert, 2014; Phillips, 2006; Firang, 2018; Teixeira and Drolet, 2017).

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

A substantial body of current research, such as Saunders' (2010), examines newcomers who are concentrated in the arrival neighbourhoods of large-scale metropolitan areas. However, a more diverse focus is emerging within international research which addresses a 'changing geography of arrival/settlement' (Reeve & Robinson, 2007; Lichter & Johnson, 2009; Singer, 2013; Pavolini & Barberis, 2015; Schillebeeckx, 2019). As Lichter & Johnson (2009) argue, this changing geography is determined by the mobility of both in and out-migrants. Not only is there an internal migration, whether in terms of social mobility, of established migrants outside long-standing metropolitan gateways, more and more newcomers from abroad (deliberately) bypass these areas while settling in new countries (Lichter & Johnson, 2009). The research outlined in this paper mainly focuses on this second pattern in relation to the settlement of refugees in the Flemish (Northern part of Belgium) spatial context.
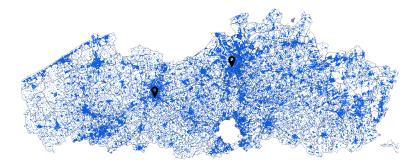
Changing geography of arrival for refugees in Belgium

Barberis and Pavolini (2015) note that this trend is not a global one, as for several (developing) countries migration processes are still mainly directed towards metropolitan areas. Though, in countries like the US, where migration has been mostly metropolitan for decades, and in more recent immigration countries like Italy (Mediterranean Europe) rescaling migration processes arise (Barberis and Pavolini, 2015). Equally in Belgium, and more specifically in Flanders, it is relevant to study these kinds of changing migration processes focusing on the settlement of recently (since 2015) arrived refugees because of two aspects:

1. Post-arrival geographies of refugees in Belgium (El Moussawi & Shuermans, 2021)

2. The spatial configuration of the Flemish nebular city (Dehaene et al, 2003; Indovina, 2009)

Compared to the general Belgian (Flanders and Wallonia) population (21%), foreigners from outside the European Union (60% in 2015), including refugees, do concentrate in metropoles such as Brussels, Antwerp, Ghent, or Liège. This demonstrates, as El Moussawi and Schuermans (2021) argue, that when given the freedom, as Belgium has, unlike the UK or the Netherlands no post-asylum dispersal plan, many refugees reside towards cities. However, based on national statistics, they note that more than half of the recently arrived refugees from both Syria (55%) and Iraq (61%) are registered in small towns and suburban municipalities. In fact, some of these suburban areas, with good connectivity by public transport, have the highest rates of refugees per capita. Refugee shares in rural municipalities, however, are relatively low (El Moussawi & Schuermans, 2021).

Figure 1. Land use in Flanders 2019

Notes: The Flemish metropoles Antwerp and Ghent are marked by the author
Source: Poelmans et al. (2021)

Resulting from a review of international literature, Barberis & Pavolini (2015) distinguish four similar new destinations in the settlement patterns of newcomers, namely new metropolitan destinations, rural areas, but especially suburban areas of main gateways, small and medium-size towns (Barberis & Pavolini, 2015). Let this spatial diversity of environments be precisely what characterizes the Flemish territory. Flanders' spatial structure (figure 1) consists of a dispersed set of human settlements, also known as the "Flemish nebular city" (Indovina, 2009; Dehaene et al., 2003). Flanders' space consumption, the land occupied by human activity, contains 32, 5 % of the total territory. Only 7 % of this space comprises urbanised areas, which mainly consists of smaller and regional towns, rather than major cities such as Antwerp and Ghent. Even more typifying Flanders are the many sprawling towns and villa districts on the fringes of city centres and far beyond, namely the peripheral or suburban area.

When rising welfare in the 1970s also meant increasing (car) mobility, it became possible for many households to fulfil their individual suburban housing preferences (Albeda & Schuermans, 2014). In addition, our cities were becoming impoverished and colourised. The 'suburban dream' was therefore not only based on the acquisition of a property, but also on the desire, often as part of educating children, to live in a protected and safe environment, away from diversity and criminality (Meeus et al. 2013). This housing ideal still exists today. However, it has not been the case for a while those suburban areas are solely attractive to white middle-class families. Less wealthy immigrants, steered by an affordable housing supply or labour opportunities, are also increasingly settling outside major cities (Schillebeeckx, 2019; Vias, 2012). Not only does housing supply play a role in counter urbanisation or bypassing metropolitan arrival areas, there's an interaction with spill-over effects from major cities but also specific push factors (toward major cities) and pull factors (toward suburban areas and smaller towns) among newcomers (Vias, 2012). Therefore, it can be argued that both individual preferences and restrictions imposed by structural mechanisms in the housing – or the job market, are at play here.

Until 1970 many Flemish towns functioned relatively autonomously through their own facilities such as schools, stores, and public transport. However, rising welfare, and particularly rising (car) mobility, resulted in a regionalisation of the earlier local life (Dehaene et al. 2003; Thissen, 2014). More and more, activities, work and social relations are situated outside the perimeter of the town. Many communities are therefore transforming from autonomous towns to residential villages that depend on other places in function of social, cultural, and economic activities (Thissen, 2014). In the Flemish nebular city, therefore, cities but also smaller towns form nodes in urban; economic; mobility; and social networks. For this reason, the term 'network city' is applied in some cases (Boonen & Smits, 2002).

This last observation is highly relevant when studying immigration towards, as well as integration and settlement in, new destinations. After all, there is no possibility of approaching these 'new immigrant gateways' autonomously from wider scale relationships; the interdependence with existing 'gateways' and networks with other medium-sized and small towns and cities (Glick Schiller & Çağlar, 2011). As Glick Schiller & Çağlar (2011) argue, cities and towns not only differ in terms of scale but also in the extent of interaction and occurrence in different networks. Besides insights regarding scale and networks, the notion of 'place' also plays an important role in understanding mobility (Barberis & Pavolini, 2015). Mobility involves not only daily movements related to a certain (residential) environment, but also the (direct) migration of newcomers to Belgium and subsequently to the Flemish nebular city.

There are many housing-related aspects that can be the incentives for refugees to settle in a certain location. These aspects not only relate to the dwelling itself; number of rooms, affordability, housing quality, but also to the living environment or 'place'. Besides a context for socio-spatial interaction, a 'spatial opportunity framework' as mentioned above, places also refer to the subjective feelings and experiences that people associate with this environment (Netto, 2011). Netto (2011) refers to the importance of the link between identity formation and 'place', particularly the strong relationship between 'who we are' and 'where we are'.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Research issues

The research of which this paper highlights only a portion, draws on the 'changing geography of arrival' of newcomers in relation to the Flemish nebular city (scale, (mobility) networks, ...) and addresses the importance of 'place' in these new settlement patterns. This study attempts to understand the *residential behaviour or housing practices* of newcomers in and towards the Flemish nebular city. By residential behaviour, the researchers understand both the *transition from reception to housing in medium-sized and small towns* and the (subsequent) *social and spatial interaction or housing practices of newcomers in their (new) residential environment.*

The research therefore focuses on the following questions:

1. *What steers the housing trajectories of newcomers towards the Flemish nebular city?*
2. *How do newly arrived refugees make use of the Flemish nebular -or network city?*

Regardless of the observation concerning new arrival destinations for newcomers, Barberis & Pavolini (2015) point out the lack of understanding on what (housing supply, spatial characteristics, sentimental attachments, and experiences, etc.) makes these medium-sized and smaller cities or towns especially attractive to these people. This contribution focuses primarily on the first research question. To situate refugees housing outcomes within housing processes and broader aspects of life experience, we utilize Clapham's (2002) housing pathway approach, allowing us to gain other insights (e.g., aspects of vulnerability within housing) through qualitative research (Finn & Mayock, 2021).
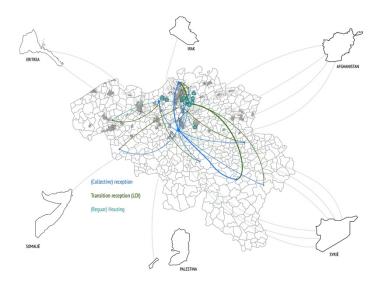
To contextualize the arguments used in this paper, a short overview on the housing trajectories of refugees, especially focusing on reception and subsequent transition from shelter to housing in medium-sized and smaller cities and towns, is explored by the application of Anita Aigner's (2018) 'housing entry pathways' framework on the Belgian context. This is continued by a brief elaboration of some theoretical issues concerning Clapham's housing pathways approach applied in this research. This approach allows us not only to detect the barriers newcomers experience in accessing housing, but also to identify the strategies they and other actors in the housing field use to counteract them, as well as the active choices newcomers themselves make when moving to a specific dwelling and living environment. In this respect, two theoretical concepts; path dependency and structure-agency dualism, are then introduced as a basis for the analysis of the housing pathway as a framework in the empirical part of this study. This is followed by some extra comments on the research methods. The empirical part of this paper deals with path dependency and the structure-agency dualism defining the housing pathways of refugees. These concepts are used for analysing the structural, relational, and interpretive dimensions of the housing pathways experienced by 15 refugee households that have settled in the Flemish nebular city after gaining status. The main aims of this contribution, like it was for Nathalier & Johnson (2011) research on youth-care leavers, are to provide an explanation of the ways in which refugees housing is the outcome of an intersection of meaning making and the structures and institutions with which they engage directly and indirectly.

The housing trajectories of refugees in Belgium

Figures from the waiting register (list of people applying for asylum) in relation to the reception statistics from Fedasil (federal agency for the reception of asylum seekers) and its partners show that a significant number of asylum seekers are waiting for their decision independently outside reception structures (Hertogen, 2020). However, for the purpose of considering the impact of the asylum procedure and housing experiences in reception facilities on refugees' housing trajectories (figure 2), this study will only address refugees undergoing a route organised by the Belgian authorities:

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Figure 2. Housing trajectories of interviewees in Belgium

Source: Author's own drawing (2021)

Once arrived in Belgium, often not yet accompanied by family, a two-stage reception process sets in. When registering and applying for asylum at the Commissariat General for Refugees and Stateless Persons (CGVS in in Dutch) in Brussels, refugees, who are still asylum seekers at the time, are mostly assigned to large-scale collective reception centres all over Belgium. When Belgium experienced a sudden increase in the influx of asylum seekers at the end of 2015, former elderly homes, old hospitals, and vacant church patrimony were occupied as additional collective reception facilities. When a ministerial decree on 30 October 2015 made it possible to grant a permit exemption for a temporary reallocation to reception centres for asylum seekers, potentials were explored within the own building stock and that of the Ministry of Defence. As a result, many military barracks and holiday parks were converted to collective reception centres.

Typical for accommodations like military barracks and holiday parks are not only the introverted architecture but also their isolated location. In this regard, data from research by El Moussawi & Schuermans (2021) show that in 2016, 34% of existing collective centres were situated in rural settings, 17% in suburban areas, 7% in agglomerations and only 12% in urban settings. This is where the majority, including our respondents, end up spending most of their, on average 10-12 months, procedure. Afterwards they relocate, usually only after gaining status, to a more individual Local Reception Initiative (LOI in Dutch). At that time a period of so-called transitional reception commences.

When allocating to an LOI, refugees can, depending on the capacity available, indicate some location preferences. Thereby it appears that a lot of refugees, including some of our respondents, prefer a location in Flanders (Northern part of Belgium) and wish to abandon Wallonia (Southern part). This is also evident from the numbers on the relocation movements of refugees starting from the place of residence upon admission ((collective) reception location) (Buysschaert & Doyen, 2019). It shows that 38 % of the refugees living in Wallonia at the time of admission is moving to Flanders shortly after.

Starting from this LOI, newcomers embark on their very challenging search for housing (Aigner's 'housing entry pathway'). A search that frequently results in a settlement within a metropolitan context, but more often within smaller cities and suburban environments as well. This too is reflected in the relocation data, showing a clear attraction of smaller central cities, provincial regional urban areas, and their suburbs (Buysschaert & Doyen, 2019).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Empirical results in this contribution will further illustrate this attraction for Flanders and the Flemish nebular city.

'Housing entry pathways' for newcomers in Belgium

Aigner (2018) identifies four different 'housing entry pathways' for newcomers; the non-assisted entry, the welfare-assisted entry, the local assisted entry, and the migrant-assisted entry. This division emerged from research on how recently admitted refugees, with the help of different actors, networks and intermediaries, gain access to the housing market in Vienna. In what follows, these different paths serve as a framework to outline the socio-political context for the transition from shelter to housing for refugees in Belgium.

I.   Non-assisted entry

Unlike neighbouring countries such as Germany, Denmark, Sweden and the Netherlands, Belgium does not provide initial housing and newcomers must therefore find accommodation by themselves. After recognition, a transition period of two to four months starts in which refugees are expected to find housing. As refugees are mainly self-reliant in this search, they can search anywhere in the country. For many newcomers, however, this term of two months appears to be unfeasible as, on average, the search for housing takes up to five or six months (VVSG, 2017). Refugees face many societal barriers in their highly pressured search for housing. First, accessing social housing is challenging due to long waiting lists and their associated criteria of local anchoring and language. As a result, refugees mainly depend on the regular housing market, but similar deficiencies exist in the low-cost housing segment of this market. In addition, many landlords refuse to rent to ethnic-cultural minorities or people with migrant backgrounds. 'Taste-based discrimination' (Loopmans et al., 2014) or 'static discrimination' – the distrusting of ethnic minorities to fulfil tenant obligations, is mainly caused by anxiety, language barriers, and an insufficient guarantee of adequate income. The stigmatisation of refugees hampers their access to the regular housing market. A 'non-assisted entry' to the housing market without formal or informal support therefore appears to be almost unattainable.

II.   Welfare-assisted entry

Whereas the housing crisis for refugees, in terms of a difficult transition from shelter to housing, can obviously be attributed to the shortfalls on the housing market and the absent organisation of refugees' accommodation by an active government, the lack of coordination between the areas of reception and housing can also be stated by another less apparent cause. An additional explanation is to be found in the reform of integration and migration policies in recent years (Debruyne, 2019). Belgium has a complex state structure characterised by strictly defined federal and regional policy areas regarding asylum and migration, integration, and housing (Martiniello, 2012). Because of the gap between federal reception and regional housing policies in the Belgian federal state context, the responsibility to assist refugees in their search for housing is continuously passed from one authority to another. Via a state-led transition, several competences were shifted towards the regional (Flemish) level and then gradually restructured. As did the task of ensuring integration which was, out of vote-oriented reasons and political conviction, gradually reformed into a policy grounded by individual responsibility, language acquisition and citizenship (Debruyne, 2019). A substantial body of integration support, including securing access to housing as part of the nexus between reception and housing, dropped from the regional political agenda.

At the time of the transfer of refugees from a federal reception system to a regional housing system, no state agency or formal organisation has the authority to coordinate this transition. Consequently, a great deal of pressure, responsibilities but also liberties are shifted to local governments when refugees, often residing in (transitional) reception, approach municipalities requesting support (Vandevoordt, 2019). However, local authorities are only 'obliged' to provide social support to residents. It is therefore the autonomy of local administrations to offer support, for instance in access to housing, to newcomers who do not yet reside in the municipality because, for instance, they have just left the federal reception

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
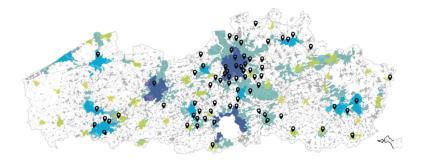Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

system. Several municipalities refuse this support as part of a disengagement policy (Groeninck et al 2019). Other Public centres for social welfare (CPASs and CAWs) simply do not have the necessary resources (financial and staff) and volunteers to deal with these additional tasks; in 2017 the Flemish government stopped the financial resources for housing counselling and psychosocial support for recognised refugees (D'Eer et al., 2019). As a result, the 'welfare-assisted entry', by social workers and other (local) state actors, is very limited.

III.   Active agents in the local-assisted and migrant-assisted entry

Due to the transfer of responsibilities from the federal to the regional and subsequently the local level, without the support of local authorities, many refugees in the search for housing ultimately must rely on NGO's and local civil society organisations and voluntary work (Saeys et al., 2018), the so-called local-assisted entry, but also on migrant networks or the migrant-assisted entry (Aigner, 2018). While the combination of austerity measures, a housing crisis and discriminatory practices negatively impacts migrants' chances on the housing market, migrants, but also different local actors (mostly voluntary organisations) are not passively undergoing these challenges. They become active agents that develop alternative housing strategies based on multi-local networks, facilitate change, and raise political awareness. In Flanders, there are about 60 organisations that are active in the housing support of refugees (D'Eer et al., 2019). This research starts from two of these organisations as part of the local-assisted housing entry of newcomers. The respondents in this study are thus refugees who gained access to the housing market in the Flemish nebular city via these organisations.

Figure 3. Location of civil society organisations for the housing support of refugees in Flanders

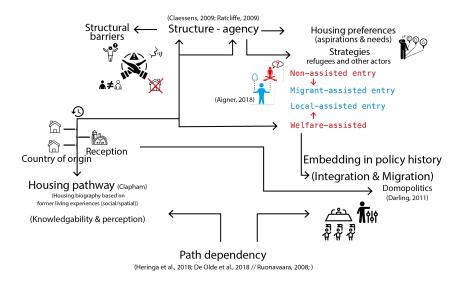Source: Author's own drawing based on information of D'Eer et al. (2019)

'Housing pathway' concept

It is important to realise, as Bolt & Kempen (2010) argue, that a household's present housing situation is a snapshot in a total housing career. Although 'housing careers', often subject to quantitative research, may be considered valuable, changes in the housing trajectory are underpinned mainly based on a set of universal preferences and rational actions that drive the consumption of housing (Claessens et al. 2009). The social meaning of housing, the interaction between different actors (housing market, government, ...), daily activity patterns and concepts such as 'identity' and 'lifestyle' are overlooked (Clapham (2005) in Claessens et al. (2009)). Clapham defines the concept of housing pathways as 'patterns of interaction (practices) concerning house and home, over time and space' (Clapham 2002: 63). He furthermore stresses the need to adopt the 'housing pathway' as an analytical framework rather than a method: it is a way of organising thoughts that, through various methods, captures the housing trajectory of households or individuals in time and space. Nor is the 'housing pathway' a theory; rather, theories can be shaped through the use or analysis of this framework in empirical research (Clapham, 2005). Clapham also points out the necessity of a certain focus or approach when studying housing pathways (Clapham, 2005). That's why this research combines two theoretical concepts; path

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

dependency and structure-agency dualism to analyse the housing pathways of refugees in Flanders (figure 4).

Figure 4. Theoretical framework

Source: Author's own drawing (2021)

Structure- agency dualism

Criticism on earlier research exists because the analysis of housing trajectories of ethnic minorities mainly focuses on the limited freedom of choice, due to e.g., poor housing supply or discrimination, rather than on the generation of housing preferences and the choice process itself (Kesteloot & De Decker, 1992). It often ignores the notion that the housing seeker, in this case refugees, has their own perceptions on housing and consequently develops their own motivations and housing preferences (Balampanidis, 2020; Claessens et al., 2009; Meeus & De Decker, 2013). These housing preferences result from certain desires or aspirations concerning the residence (style, size) and the living environment (greenery, quiet, social composition). In this respect, it is important to consider the underlying needs, such as identity and security, that may drive these desires (Claessens et al., 2009).

Whether or not someone can act on his/her housing preferences is determined by what Eskela (2018) describes as the 'choice and constraint' relationship. Choices relate to both quantitative aspects, such as scale and price, and social meanings and/or relationships. The choice for a residence is then part of the choice for a particular lifestyle or community in a certain neighbourhood (Eskela, 2018). Researchers such as Claessens et al. (2009), De Decker (2004) and Ratcliffe (2009) describe this using the more dynamic and layered 'structure-agency dualism' or the relationship between degrees of liberty ('agency') and structural constraints ('structure') within a certain context (socio-spatial, policy, market). Where 'agency' refers to preferences as well as the (housing) strategies that people seeking housing, but also other actors such as migrant networks and volunteer organisations, develop in relation to certain constraints (Harrison & Phillips, 2003; Glick Schiller & Çağlar, 2009).

Therefore, we explore the 'choice-constraint' or 'structure-agency' dualism that underlies the changes in the housing trajectories of refugees to the Flemish nebular city. In doing so, we try to gain insight into the nature of the constraints (policy, spatial conditions, market) and strategies, but equally into the 'housing aspirations' and underlying 'housing needs' that form the basis of specific housing preferences.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Path dependency

In addition to the structure-agency dualism, this contribution considers a second element, namely path dependence, which is likely to be important in the transition from shelter to housing. 'Path dependency' is a concept that is often applied in economic and social research, but its use can also be valuable in housing research (Meeus et al., 2011). Within housing research, the concept of path dependency is addressed in two different ways: 1. the influence of the housing biography on people's knowledge and perception that define future residential preferences and increased possibilities (De Olde et al. 2018; Heringa et al. 2018) 2. the significance of policy evolutions over time (Ruonavaara 2008; Bengtsson & Ruonavaara, 2010). We include both approaches.

Housing biography defining knowledgeability and perception

'Path-dependency' also exists, as Heringa et al. (2018) describe, because future behaviour, in this case entering a new stage in the housing pathway, is embedded in past actions and current situations whilst also depending on the 'knowledgeability' (language, spatial environment, social systems) and perception of individuals shaped through living experiences. Experiences that arise from the interaction with people and space (Heringa et al. 2018; De Olde et al. 2018). Hence, (previous) places of residence can be considered as 'generative spaces' that help determine how newcomers settle, live, and participate (Geldof, 2019). Previous living experiences of recently arrived refugees are mainly shaped by experiences in the country of origin and the reception conditions from which refugees continue their housing trajectory. Research by, amongst others, De Decker et al. (2013) and De Olde et al. (2018) demonstrate the importance of tradition, parental housing culture and the associated housing experiences in choosing a place to live, with individuals preferring a residential environment similar to former ones (De Olde et al. 2018).

In this context, institutional arrangements in terms of, for example, organising reception (scale, typology, location), and the implementation of policy by means of whether to activate or mobilise asylum seekers, have a direct effect on the socio-spatial interactions and social possibilities that are available to asylum seekers (Wyckaert et al., 2020). Accordingly, to this day, asylum centres are used as political instruments (Beeckmans & Vanden Houte, 2019).

Policy history matters

Political and institutional arrangements concerning asylum and organising reception are grounded in what Walters (2004) describes as a 'domopolitical' logic – a logic as to how to govern the state as a home. Domopolitics is a governmental approach in which the security and management of the mobility of people seeking protection are central points of attention. Specifically, it produces a series of modes (and moments) of governance concerning the lives of, in this case, asylum seekers (Darling, 2011). These modes of governance appear to have a significant impact on the future housing trajectories of newcomers in their host countries.
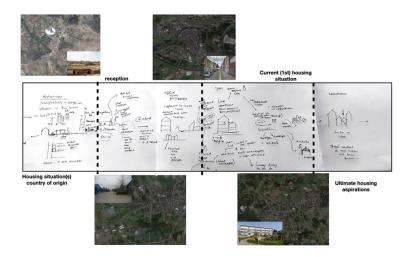
The current reception- and integration model, as well as the institutional arrangements and policies that are associated with it, are rooted in history. According to Ruonavaara (2008;2010) a core aspect of the notion of path dependency is that 'history matters'. The analysis of path dependency then implies that certain historical outcomes are traced back to the events from which they emerged. Ruonavaara (2008) describes these events as 'critical junctures'; e.g., state reforms (integration policy) and asylum crises (reception policy) and the resulting decisions and responses. The current reception model, for instance, has evolved from decisions based on a certain 'domopolitical logic' in reaction to various asylum crises over time. The evolution of the integration policy and the associated reforms, on the other hand, meant, as already mentioned, that securing access to housing for refugees has disappeared completely from the policy agenda.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Research area and data collection

This contribution starts from the housing pathways of 15 refugee households used as an analytical framework for the settlement of refugees in new gateways. By using semi-structured in-depth interviews based on limited life histories, an anthropological retrospective technique, these housing pathways are constructed. The conversations were simultaneously translated into graphics (figure 3), allowing for a different way of communicating with refugees who are not always fluent in the language spoken. For practical and financial reasons, it was not possible to call on professional interpreters. The interviews date from the period between January 2019 and May 2020.

Figure 4. Graphical output of an in-depth interview on the housing pathway

Source: Author's own drawing (2020)

Former living situations, in Afghanistan, Syria, Eritrea, Iraq, Palestine or Somalia, are explored alongside Belgian reception situations and primary and/or current residential contexts in the Flemish nebular (Lier, Boechout, Nijlen, Koningshooikt, Temse, Berlaar, Zandhoven, Sint-Niklaas, Leuven). However, some of these places are urban (Leuven, Sint-Niklaas, Lier) or urbanised areas (Temse), in an international context they can rather be considered large villages.
Of course, we deliberately selected respondents who settled outside metropolitan contexts (like Ghent or Antwerp) because of the objective to study the phenomenon of a 'changing geography of arrival'.

The respondents (table 1) were recruited via two organisations (local-assisted entry), namely Mondiale Werken Regio Lier and VLOS vzw., which are active in the housing support for refugees. In addition to newcomers, experts (table 2), as members of these organisations but also local authorities (welfare-assisted entry), who assist refugees in their search for a home, were questioned.

The focus of interest while interviewing lies in the motivations, preferences, constraints, (counter)actions, and interactions, the 'structure agency' dualism, at the transition from shelter to housing. What perception and knowledge, or lack thereof, that people bring from previous housing experiences contribute to this transition (path dependency)?

Table 1. Listing of respondents' country of origin, family situation, reception locations, and housing outcome

Respondent	Country of origin	Family situation	Collective reception	LOI	(primary) housing Outcome
R1	Syria	Family (6)	Hotton	Lier	Koningshooikt (rural)
R2	Syria	Family (5)	Bovigny	Lier	Lier (small-town)
R3	Syria	Family (6)	/	Lier	Lier
R4	Syria	Family (5)	Kapellen	Lier	Lier
R5	Afghanistan	Family (5)	Sint-Niklaas	Ingelmunster	Temse (small-town)
R6	Syria	Family (4)	Doornik	Berlaar	Berlaar (rural)
R7	Eritrea	Family (4)	Broechem	Lier	Nijlen (rural)
R8	Syria	Family (5)	/	Bonheiden	Koningshooikt (rural)
R9	Iraq	Family (6)	Lint	Schilde	Zandhoven (rural)
R10	Palestine	Single	Ans	Bonheiden	Leuven (urban)
R11	Afghanistan	Single	Kapellen	Kontich	Lier
R12	Afghanistan	Single	Hotton	Berlaar	Boechout (suburban)
R13	Somalia	Family (4)	Kapellen	Lier	Lier (small-town)
R14	Afghanistan	Single	Belgrade	Sint-Niklaas	Sint-Niklaas (urban)
R15	Eritrea	Single	Etterbeek	Bonheiden	Boechout (suburban)

Notes: The categories; urban, small-town, suburban, and rural are based on a report of the Flemish government (Pisman et al. 2018)
Source: Author's own listing (2020)

Table 2. List of interviewed experts in the housing support of refugees

Expert	Organisation
Volunteer	Mondiale Werken Lier
Key figure	VLOS Sint-Niklaas
Key figure	Mondiale Werken Lier
Volunteer/buddy	Mondiale Werken Lier
Volunteer/buddy	Mondiale Werken Lier/Gastvrij Boechout
Buddy	Mondiale Werken Lier (Nijlen)
Employee	CPAS

Source: Author's own listing (2020)

Results

The analysis of the data revealed several aspects in relation to housing experiences of refugees that affect the generation of knowledge and perception (around people, society, and space) and consequently housing preferences in the transition to housing in Flanders (De Olde et al., 2018). Some of these aspects are (partly) discussed in the next sections: *housing situations and traditions in the country of origin, the disciplining effect of reception accommodations, anti-metropolitan housing preferences based on perceptions on social contact, integration, and education*. In addition, some (external) factors

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

can be identified that, on the one hand, hinder the fulfilment of certain housing preferences; *structural barriers in the access to housing*, but, on the other hand, contribute to fulfilling them; *civil-society organisations and migrant networks creating a sub (housing)market for refugees.*

Housing situations and traditions in the country of origin

Tradition and culture shape the living experiences in refugees' country of origin in which ownership, living as 'extended families', and (individual) agricultural activity are common. These traditions are common to living in certain settlements or villages from which most of the respondents have migrated. It is, for example, common to own a property where several generations live together under the same roof in 'extended families'. This is not only the case in, for example, Syrian villages, but also in cities.

"We lived in a flat in Damascus, but it was a large building and everything from my family. Floor one was mine, downstairs from father and mother, and upstairs was for my brother. It was all build by my family, all from us and we were all living together" (R3, Syria)

This tradition ensures that some refugees have never rented a house before arriving in Belgium. Others have rented temporarily, e.g., while studying, but refer to differences in the (rental) housing system. This knowledge gap is insufficiently compensated for later, e.g., during integration courses, because little (practical) attention is paid to housing.

"Many people like my parents have never rented a house. They have always lived in their own and they have never moved." (R2, Syria).

" I have never seen those things in real life, always in the centre and never outside. It is difficult because in Afghanistan you don't have a real estate office for example. You get a lot of information and short but not deep."
(R11, Afghanistan)

Next to their property, people often dispose of a garden or a piece of land outside the village or city so that they can also be (partially) self-sufficient through agriculture. This is the case for Syrians, but also for Afghans and Eritreans, ... A third key aspect relates to the resident composition of certain villages and urban districts from which refugees emigrated. These settlements are at times highly homogeneous. These elements in relation to culture and tradition are cited by several respondents when outlining housing preferences.

"We grew in a village with a garden and vegetables and ... we find it nicer and easier to live in a quiet place. We always thought of looking for something similar to where we lived in Syria " (R2, Syria)

"Here the city is a bit weird for us. A lot of people from other countries and cultures. Here in Berlaar a lot of Belgian culture. Only of one Belgian culture but Antwerp or Brussels of 100." (R6, Syria)

The disciplining effect of reception accommodation

Boccagni (2018) points out the existential nature of living experiences during the reception stage, which are significant for the later housing trajectories of refugees. These experiences are defined by what Darling (2011) defines as "*domopolitics – to govern the state as a home".* Darling (2016) discusses three ways, from the national to the more local level, in which domopolitics are reflected in the asylum system in the UK which is very similar in Belgium: the filtering of refugees and the management of their mobility; the regulation of dispersal; and the disciplining effect of accommodation. Especially the latter has a concrete impact on the living experience within reception facilities.

As previously discussed, the evolution within migration policies has determined the present domopolitics and the current reception model (cf. path dependency). Asylum policies have evolved from laissez-faire self-governance (Darling, 2011), which allowed refugees to settle anywhere and to benefit from financial support to an increasingly regulated system. Since 2000, this has resulted in a

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

compulsory connection of material support (bed/bath/bread) to an appointed reception accommodation (Pleysier et al., 2011). This reform was a response to a former asylum crisis, which also had to eliminate a pull effect for new asylum seekers. Later, more and more prominence was given to collective accommodation as a standard to further mitigate this effect (Loopmans et al., 2005). To this day, these collective centres are the standard and small-scale individual reception only the culmination or exception. The asylum policy in Belgium is characterised by crisis management. For years, this has resulted in a continuous increase and decrease in the number of reception facilities. Because of the organisation of reception infrastructure as a crisis measure, these infrastructures are mainly large-scale "left-over buildings" as described by Zill et al. (2019).

Not only the specific typology and introvert architecture ('material openness'), but also the isolated location of accommodations like holiday parks, barracks, and monasteries ('spatial openness') make collective centres far from ideal residential settings (Beeckmans & Vanden Houte, 2019). The presence of social, economic and transport facilities and places of encounter has a significant impact on the maintenance and expansion of social networks.

"In the centre we only got two bus tickets or one train ticket a month. Then I went to Liège because I didn't know other people here in Belgium. Only my uncle in Kortrijk I saw him once in three months.
It made me sick, for nine months I did nothing but eating and sleeping. It was not healthy… now I still have problems because of this. In the Flemish area it is better they give you an abonnement for the bus, we didn't get that. But even then, if your centre is in the middle of nowhere with only one bus a day… than it is also a problem. It happened to me too when I was in the centre in Liege no way to get there… so many times I walked four hours by foot because I lost my Bus." (R10, Palestine)

Furthermore, the institutional rules or regulations applicable within the centre regarding the activity and (freedom of) mobility of asylum seekers ('institutional openness') influences the daily living experiences of residents and the possibility of getting to know the surroundings (socially and spatially) (Zitt et al. 2019). Research on collective reception centres in Belgium by Platteau et al. (2017) indicates that there are varying local implementations of top-down imposed policies. This diversity is related to the interpretation of the 'concept of integration' by community workers and by the management of the centres. Their vision has a significant impact on the organisation of activities that can interconnect centres with neighbourhoods (Platteau et al., 2017). The nature of these activities differs when centres wish to focus solely on the integration of the reception centre with the neighbourhood or, the integration of individual residents in the community. Platteau et al. (2017, p. 54) reveal this with a statement by a centre director: 'Our task is not the individual integration of residents; they are here only temporarily. The centre, on the other hand, is structural, which is why the centre needs to be integrated into the institutional landscape'.

"I: What did you do during your stay?
R: Nothing only waiting for positive.
I: Didn't you get bus tickets or train tickets?
R: No, only for Brussels, for appointment. I went to friends but not that often because I had no money." (R1, Syria)

Another, less evident, aspect that complicates the (social) interaction of asylum seekers in the neighbourhood is the image of asylum seekers by politicians and the media which can have a local impact. In the past, this discourse and lack of proper communication has led to massive protests against new asylum centres and the emergence of hostility between the local population and those living in the centres (Blommaert et al. 2004).

"Yes, when you say I live in asylum centre people are scared. He has no address and lives in asylum centre then the people have a bit of fear, I feel that, but if you have an address in that street then it's okay." (R12, Afghanistan)

The passage to transit reception LOI based on a first familiarisation with Flanders

The living experiences of our respondents in collective reception centres contained few interactions with people and places outside the reception facilities. Hence, social networks were almost exclusively extended by inhabitants of the centre or other newcomers from, for example, language courses. Besides, due to limited mobility (institutional & spatial openness), little familiarity was obtained with the Belgian spatial context other than the nearby city (ethnic food, language course) or residence of an already existing social network. According to Archambault's (2012) research, the feeling of belonging is above all related to the social relationships that can be developed in a particular place.

The preferences according to a LOI-location are therefore driven by limited social networks: the choice for a place where relatives, friends or family already live or the choice to stay in the vicinity of the reception centre. The latter is mainly based on keeping contact with those who still live there or maintaining the network created through schools. A preference that, within the scope of this research, only emerged among newcomers who lived or went to school in a more interactive or urbanised context (Sint-Niklaas, Lier).

"I choose Lier because already I started my Dutch courses in Lier, I'm already familiar with people there. I told you before already, if I go out from here, I face some problems… because it takes some time to introduce the people, some shops etc." (R7, Eritrea)

I then chose Lier and around Lier... I said only Lier... I: Why Lier?
Because I have a friend there." (R11, Afghanistan)

Structural barriers in the access to housing

Refugees often experience a deficit in cultural capital, i.e., knowledge of the Belgian housing system or renting in general and language, when they start their housing search.

"If you don't understand Dutch, you can't find a house. Next we don't know much of the system in Belgium too... what should I do... which is the best way to find a house." (R11, Afghanistan)

"After I get a positive decision, when I came to Lier, I tried to look through real estate website. Then I went to MoWe (civil society organisation) because I could not communicate to the owner or the real estate office." (R7, Eritrea)

Besides cultural capital, the other components of individual capital (Bourdieu), social and economic capital, are also limited. Due to a lack of economic capital, refugees have to rely on a living wage. This is one of the motivations for the discrimination by estate agents and landlords experience by vulnerable tenants.

"The owners asked me all the time about work or if I was a student or not. If I said I had CPAS they told me "Excuse me I will call you back". I called so much… "where are you from? I'm from Palestine… Oh thank you but I can't help you" (R10, Palestine)

Research by Verhaege et al. (2020) on discrimination in the rental housing market in Mechelen reveals discrimination against tenants based on three grounds of discrimination: ethnic origin, source of income and family composition. For those at the bottom of the rental market, the problem is bigger than discrimination. There is also an enormous competition in the lower segment of the housing market.

"I make an appointment and then I go to the house, and I see many families there and always the family from Belgium. I have no chance. I think that owner don't want to get from CPAS, and I have big family four children." (R9, Iraq)

Without support (non-assisted entry), most refugees are unable to overcome these structural barriers in accessing housing. Besides, as previously discussed, they can hardly rely on support from local

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

authorities (welfare-assisted entry). Yet, by means of agency, refugees try to counter these obstacles by calling on their (limited) social network of relatives and friends and/or search for other migrants who are willing to rent to them.

"I have tried myself first... sometimes also asking Afghan people if they have seen a flat then they can call me. Friends yes...but it is very difficult."(R11, Afghanistan)

"The owner for example from Afghanistan is a bit easier for us because he speaks English, and it is also not so bad that we are not from Belgium. My neighbour upstairs is also from Afghanistan." (R6, Syria)

Civil-society organisations and migrant networks creating a sub (housing)market for refugees

Aigner (2018) refers to the latter as the 'bad informal prof- it-orientated sub-market'. 'Bad' because in some cases the reliance of refugees is abused. Quite a few housing pathways of refugees in Belgium are determined and steered towards certain cities, such as Antwerp, by the dependency on other migrants who act both as informal intermediaries and landlords. Unfortunately, these landlords and intermediaries sometimes demand handfuls of money for access to housing (Daems, 2017).

"My uncle also tried to help me. He introduced me to some people but sometimes they said they would help me if I paid a guarantee in cash. I found a lot of houses where they told me OK no problem, I want to rent to you but you must pay me and also pay the guarantee of three months in cash. Others only wanted to rent if I had work." (R10, Palestine)

Alongside the informal prof- it-orientated sub-market, Aigner also endorses a second sub-market, the 'good' 'de-commodified civil-society sub-market', whereby volunteers attempt to create a housing supply for refugees through various strategies (agency). This is done, for example, by building connections with local real estate offices, contacting landlords in name of the refugee, or by renting and then subletting houses to refugees. In fact, it is the objective of several civil-society organisations to anchor refugees locally.

Anti-metropolitan housing preferences based on perceptions on social contact, integration, and education

Finally, anti-metropolitan housing preferences, as part of the agency of refugees, represent an essential factor in shaping their housing pathways to the Flemish nebular city.

These housing preferences arise from certain desires, referred as 'housing aspirations' related to former experience, for example, in the country of origin. However, as Claessens et al. (2009) argue, attention should likewise turn to the 'housing needs' that drive these desires and the resulting housing practices. The term 'housing need' refers to the fulfilment of certain basic needs (security, identity, freedom, participation, etc.) via the home or residential environment (Claessens et al. 2009).
The anti-metropolitan preferences of the interviewees are based on needs of security and perceptions regarding integration/participation, cultural diversity/identity and education.

"Antwerp is not good. I have children and in a big city like Antwerp or Brussels my children on the street smoking, drinking, drugs... Bad example there, my children better in here, the house and the school." (R1, Syria)

"Here in village, it is quiet, and people know each other and there are no big problems and no different cultures. For example, in Antwerp that is very difficult to live. I think maybe because I lived in a village in Syria, I find the quiet place is better for me to live." (R4, Syria)
"I live in Belgium now, but Eritrean people always speak with mother tongue... yes not good with Dutch... I had gone to Antwerp last week. I was there three days, no Dutch... I thought... where am I? In Eritrea or what?! In the big cities is many Eritrea people. In Antwerp everywhere Eritrean" (R15, Eritrea)

In the absence of a (social and regular) housing stock of large-scale family homes, certain households end up in more rural localities. In this case, respondents usually look for suburban and more rural

locations in the commuter zone of small or regional urban areas. Accessibility and facilities are an important part of newcomers' housing aspirations, with the underlying need for an affordable living.

"I would choose Lier but it's difficult to find a house or apartment for my family there, so I prefer to live in the surroundings. The most important is first transport… second it was not too far away from Lier as I'm familiar with Lier and surrounding, if I go out from here, I face some problems… because it takes some time to introduce the people, some shops etc. Already I'm familiar with the surrounding area…that's why. Second Living in Belgium we have little money from CPAS… it is difficult to live. So, you prefer one transport, second the shop special Aldi and Lidl it is fair in costs that's why I prefer places like Nijlen or Berlaar." (R7, Eritrea)

Respondents living in more rural areas (Zandhoven, Nijlen) indicate, whether with the intention of justifying their situation, the advantages in terms of social integration (contact with Belgians) and independence.

"Yeah, because in Nijlen everything is quiet, clean, not many people, maybe that's good…
Because like I told you sometimes you want to be independent.
When you are independent you get so many things… Introduce with people, improve your language, you'll be social…" (R7, Eritrea, Nijlen)

Even though people prefer not to live there, metropolitan areas such as Antwerp provide cultural, social and economic facilities used by all respondents.

"On Sunday every two weeks, or every week we go to Antwerp… To church and other day, we can go for shopping, special for our culture's food. Because as I told you... everything is in Antwerp, specially for a fair price also. Also, for Habesha food we go there to buy." (R7, Eritrea)

Conclusion and reflections

In this study we searched for an explanation of the ways in which the changing geography of arrival of refugees in Flanders is the outcome of an intersection of meaning making and the structures and institutions with which refugees engage directly and indirectly. Yet we must point out that the findings must be considered with caution. Our research concerns only a modest number of respondents. Nevertheless, we managed to identify some aspects that can explain, albeit partially, the settlement of refugees outside the metropolitan context in Flanders.

Fundamental to refugee settlement in the nebular city is a structure-agency duality formed by the relationship between refugees' housing preferences and the structural constraints affecting these preferences and/or hindering their fulfilment. Refugees face many structural barriers in the transition from shelter to housing, such as discrimination, lack of cultural and economic capital and a shortage of affordable housing. Besides, their search for housing is an individual responsibility with little or no support from a reluctant (local) government. This restraint of local authorities is rooted in the evolution of Belgian integration policies (path dependency).

The lack of cultural capital, and more specifically the notion about how to rent, the Belgian (housing) system, language skills and awareness of Flanders' spatial context, can be understood as part of the 'knowledgeability' of refugees. Knowledge (language, spatial environment, social systems) and perceptions of refugees are shaped by previous living experiences in the country of origin and within reception facilities. They determine future residential preferences and opportunities (path dependency). These experiences result from the interaction with people and space. Interactions that rarely, if ever, occur within the context of collective reception centres. In Belgium strongly regulated large-scale collective centres are politically considered as the ultimate standard. Again, this is embedded in the evolution of migration polices.

Refugees are often unable to overcome the above-mentioned structural barriers on their own (non-assisted housing upon entry) and thus depend on the agency and (housing)supply by others (migrant-

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

assisted and local-assisted housing entry). Moreover, refugees are influenced by limited experiences with socio-spatial interaction in Belgium (reception) and anti-metropolitan housing preferences based on experiences in the country of origin. However, these preferences are also based on other housing aspirations and needs. Besides the need for a roof over their heads, refugees are influenced by perceptions on diversity, security, identity, education, and integration or participation.

References

Albeda, Y., & Schuermans, N. (2014). De suburbane droom aan diggelen? Gevestigden en buitenstaanders in veranderende gemeenschappen. In G. Verschraegen, C. de Olde, S. Oosterlynck, F. Vandermoere, & D. Dierckx (Eds.), *Over gevestigden en buitenstaanders- Armoede, diversiteit en stedelijkheid.* (pp. 105–120). Acco.

Astolfo, G., Boano, C., Allsopp, H., Cho, H., Cocina, C., & Liu, S. (2018). *Affordable housing policy and practice*. The Bartlett Development Planning Unit, University College London (UCL).

Balampanidis, D. (2019). Housing Pathways of Immigrants in the City of Athens: From Homelessness to Homeownership. Considering Contextual Factors and Human Agency. *Housing, Theory and Society*, *37*(2), pp.230–250.

Barberis, E., & Pavolini, E. (2015). Settling outside gateways: The state of the art, and the issues at stake. *Sociologica*, *9*(2), 1–34.

Beeckmans, L., & vanden Houte, E. (2019). Asielarchitectuur als politiek instrument. *Samenleving En Politiek : Tijdschrift Voor Een Democratisch Socialisme.* 26(2019)2, pp.69-75.

Bengtsson, B., & Ruonavaara, H. (2010). Introduction to the Special Issue: Path Dependence in Housing. *Housing, Theory, and Society*, *27*(3), 193–203.

Blommaert, J., Meert, H., & Stuyck, K. (2004). *Van balen tot onthalen : de geografische en discursieve dimensie van attitudes tegenover asielzoekers: casestudies uit Vlaanderen en Brussel*. Academia.

Boccagni, P. (2018). At home in home care? Contents and boundaries of the "domestic" among immigrant live-in workers in Italy. *Housing Studies*, *33*(5), 813–831.

Bolt, G., & van Kempen, R. (2002). Moving Up or Moving Down? Housing Careers of Turks and Moroccans in Utrecht, the Netherlands. *Housing Studies*, *17*(3), 401–422.

Boonen, K., & Smits, R. (2002). Katern: Ruimtelijke patronen in de nevelstad. *AGORA Magazine*. (2002)3, pp.272-288.

Buysschaert, P., & Doyen, G. (2019). *Verhuisbewegingen van erkend vluchtelingen en subsidiair beschermden*. pp.1-37.

Carr, P. J., Lichter, D. T., & Kefalas, M. J. (2012). Can Immigration Save Small-Town America? Hispanic Boomtowns and the Uneasy Path to Renewal. *Annals of the American Academy of Political and Social Science*, *641*(1), 38–57.

Claessens, B., Vlerick, E., & de Decker, P. (2009). *Op zoek naar de betekenis van wonen. Een verkennend literatuuronderzoek.* pp.1-100.

Clapham, D. (2002). Housing Pathways: A Post Modern Analytical Framework. *Housing, Theory, and Society*, *19*(2), 57–68.

Clapham, D. (2005). *The meaning of housing: a pathways approach*. Policy Press.

D'Eer, L., Robeyns, L., & Geldof, D. (2019). *Capteren en ontsluiten van inspire- rende praktijken inzake werken met vrijwilligers bij woononderstuening van vluchtelingen.* pp. 1-295.

Daems, E. (2017). Vluchtelingen vinden geen woning zonder honderden euro's te dokken aan tussenpersoon. *MO,* July(2017).

Darling, J. (2011). Domopolitics, governmentality and the regulation of asylum accommodation. *Political Geography*, *30*(5), 263–271.

Darling, J. (2016). Asylum in Austere Times: Instability, Privatization and Experimentation within the UK Asylum Dispersal System. *Journal of Refugee Studies*, *29*(4), 483–505.

De Decker, P. (2004). *De ondraaglijke lichtheid van het beleid voor de stad in Vlaanderen. Van geïndividualiseerd woonmodel tot stedelijke crisis: een sociologische analyse*. Doctoraat in de Politieke en Sociale Wetenschappen, Universiteit Antwerpen.

de Olde, C., Descamps, G., Diels, E., Maes, M., van Rooij, S., & Wyckmans, J. (2018). Tussen stad en rand: percepties op push- en pullfactoren bij de woonplaatskeuze van jonge gezinnen in Vlaanderen. *Ruimte & Maatschappij*, *9*(4), 8–31.

Debruyne, P. (2019). Inburgering en integratie zijn gewoon instrumenten van migratiebeheer geworden. *MO Papers.*, *no:2019*(124).

Dehaene, M., & Loopmans, M. (2003). De argeloze transformatie naar een diffuse stad: Vlaanderen als nevelstad. *AGORA Magazine*, *19*(3), 4–6.

El Moussawi, H., & Schuermans, N. (2021). From Asylum to Post-Arrival Geographies: Syrian and Iraqi Refugees in Belgium. *Tijdschrift Voor Economische En Sociale Geografie*, *112*(2), 164–178.

Eskela, E. (2018). Housing Pathways of Skilled Migrants: Indian Professionals in Helsinki, Finland. *Housing, Theory, and Society*, *35*(4), 474–494.

Finn, M., & Mayock, P. (2021). The housing experiences of immigrants in a "new immigrant gateway": an exploration of process in an era of 'super-diversity.' *International Journal of Housing Policy*, pp.1–20.

Firang, D. (2019). Exploring housing careers among Ghanaians in Toronto, Canada. *Housing Studies*, *34*(5), 868–891.

Francis, J., & Hiebert, D. (2014). Shaky foundations: Refugees in Vancouver's housing market. *Canadian Geographer*, *58*(1), 63–78.

Geldof, D. (2018). Compacter wonen in een context van superdiversiteit. Nood aan meer inzicht in de woonwensen en wooncultuur van mensen met een migratie-achtergrond in Vlaanderen. *Ruimte & Maatschappij,* 10 (1), 92-117.

Glick Schiller, N., & Çağlar, A. (2009). Towards a comparative theory of locality in migration studies: Migrant incorporation and city scale. *Journal of Ethnic and Migration Studies*, *35*(2), 177–202.

Glick Schiller, N., & Caglar, A. (2011). *Locating Migration. Rescaling cities and migrants*. Cornell University Press.

Heringa, A., Bolt, G., & Dijst, M. (2018). Path-dependency in segregation and social networks in the Netherlands. *Social and Cultural Geography*, *19*(5), 668–690.

Hertogen, J. (2020). *Niet de asielvraag maar afbouw opvang is/was probleem*. http://www.Npdata.Be/BuG/444-Asielopvang/.

Indovina, F. (2009). *Dalla città diffusa al l'arcipelago metropolitano*. pp. 1-298.

Kesteloot, C. & P. De Decker (1992). Territoria en migraties als geografische faktoren van racisme. In Deslé, E. & A. Martens (red.). *Gezichten van hedendaags racisme*. Brussel: VUB Press, pp. 69-108.

Lichter, D. T., & Johnson, K. M. (2009). The International Migration Review, Fall 2009, Vol. 43, No. 3 (Fall 2009), pp.496-518.

Loopmans, M., & Thissen, F. (2015). Leefbaarheid en het Vlaamse platteland als woondorpennetwerk. In *Hoera open ruimte! Plattelandsbeleid in steden en gemeenten* (pp. 108–121). Politeia; Brussel.

Loopmans, M., Esam Awuh, H., de Decker, P., Heylen, K., Meeus, B., Minon, C., Moris, M., Perrin, N., Winters, S., Spijkers, F., Teller, J., Vandenbroucke, S., den Broeck, K., & Verstraete, J. (2014). *Onderzoek van de private huisvestingsmarkt in België in het kader van de Diversiteitsbarometer*. Brussel.

Loopmans, M., Stuyck, K., & Cieters, Y. (2005). Halve burgers? Over menswaardige huisvesting, ook voor asielzoekers en mensen zonder papieren, ... In *Wonen aan de onderkant* (pp. 195–216). Garant, Antwerpen-Apeldoorn.

Martiniello, M. (2012). Immigrant integration and multiculturalism in Belgium. In *Challenging Multiculturalism: European Models of Diversity* (pp. 120–137).

Meeus, B., Claessens, B., & de Decker, P. (2011). *Woonpaden in Vlaanderen. Deel 3: Analyse.Steunpunt Wonen.* pp. 1-184.

Meeus, B., de Decker, P., & Claessens, B. (2013). *De geest van suburbia*. Garant.

Natalier, K., & johnson, G. (2012). Housing Pathways of Young People Who Have Left Out-of-Home State Care. *Housing, Theory, and Society*, *29*(1), 75–91.

Netto, G. (2011). Identity negotiation, pathways to housing and "place": The experience of refugees in glasgow. *Housing, Theory and Society*, *28*(2), 123–143.

Phillips, D. (2006). Moving towards integration: The housing of asylum seekers and refugees in Britain. In *Housing Studies* (Vol. 21, Issue 4, pp. 539–553).

Pisman, A., Vanacker, S., Willems, P., Engelen, G., & Poelmans, L. (2018). *Ruimterapport Vlaanderen (RURA)*. http://www.ruimterapport.be/

Platteau, E., Coenen, L., Beckers, J., Bossens, N., Hondeghem, A., & Elsa, M. (2017). *Beleidsevaluatie van de buurtinitiatieven in de open opvangcentra voor asielzoekers.* pp.1–125.

Pleysier, B., den Bulk, D., de Coninck, M., & e.a. (2011). 25 jaar asielopvang. *Samenleving En Politiek : Tijdschrift Voor Een Democratisch Socialisme.* 18(2011)1, pp.1-5.

Ratcliffe, P. (2009). Re-evaluating the Links between "Race" and Residence. *Housing Studies*, *24*(4), 433–450.

Reeve, K., & Robinson, D. (2007). Beyond the multi-ethnic metropolis: Minority ethnic housing experiences in small town England. *Housing Studies*, *22*(4), 547–571.

Ruonavaara, H. (2008). How are housing policies path dependent? *ENHR International Research Conference "Shrinking Cities, Sprawling Suburbs, Changing Countrysides."*

Saeys, A., Vandevoordt, R., & Verschraegen, G. (2018). *Samenleven in diversiteit Kwalitatief onderzoek naar de perspectieven van vluchtelingen*. pp. 1-103.

Saunders, D. (2010). *Arrival city: how the largest migration in history is reshaping our world*. Heinemann.

Schillebeeckx, E. (2019). *Aankomstwijken in Vlaanderen. Een onderzoek naar gelokaliseerde bronnen voor het aankomst -en transitieproces van migranten*. Doctoraat in de Architectuur, Universiteit Antwerpen.

Singer, A. (2013). Contemporary immigrant gateways in historical perspective. *Daedalus*, *142*(3), 76–91.

Teixeira, C., & Drolet, J. L. (2018). Settlement and housing experiences of recent immigrants in small- and mid-sized cities in the interior of British Columbia (Canada). *Journal of Housing and the Built Environment*, *33*(1), 19–43.

Thissen, F. (2014). Het stervende dorp. *Karakter*, (2014)47, pp.19-21.

Vanderslycke, D. (2016). *"Er is wél gebrek aan beleidsplan en hoge woningnood onder erkende vluchtelingen."* http://www.Dewereldmorgen.Be/Artikel/2016/03/04/Er-Is-Wel-Gebrek-Aan-Beleidsplan-En-Hoge-Woningnood-Onder-Erkende-Vluchtelingen.

Vandevoordt, R. (2019). Eroding rights, crafting solidarity? Shifting dynamics in the state–civil society nexus in Flanders and Brussels. *Social inclusion,* Vol.7(2), pp. 106-117.

Verhaeghe, P.-P., Verstraete, J., Vermeir, D., & de Decker, P. (2020). *Discriminatie, toegankelijkheid en betaalbaarheid op de huurwoningmarkt in Mechelen*. Vakgroep Sociologie, Vrije Universiteit Brussel.

Vias, A. C. (2012). Micropolitan areas and urbanization processes in the US. *Cities*, *29*(1).

VVSG. (2017). *Materiële opvang: Invoering nieuw opvangmodel asielzoekers heropgestart.* http://www.Vvsg.Be/Sociaal_beleid_en_werk/Vreemdelingen/Pages/Materiële_opvang.Aspx.

Wyckaert, E., Leinfelder, H., & de Decker, P. (2020). STUCK IN THE MIDDLE: THE TRANSITION FROM SHELTER TO HOUSING FOR REFUGEES IN BELGIUM. *Transactions of the Association of European Schools of Planning*, *4*(1), 80–94.

Neighbourhood trajectories in Stockholm:
Investigating the role of mobility and in situ change

Louisa Vogiazides

Department of Human Geography, Stockholm University
e-mail: louisa.vogiazides@humangeo.su.se

Hernan Mondani

Department of Sociology, Stockholm University
e-mail: hernan.mondani@sociology.su.se

Abstract

Neighbourhoods are dynamic entities that can change due to selective mobility and transformations in the demographic and socioeconomic situation of their non-moving residents. The aim of this paper is to describe and explain the long-term dynamics of neighbourhoods in Sweden's capital city—Stockholm—over a twenty-five-year period, from 1990-2015. We investigate to what extent and how the characteristics of neighbourhoods change over time, as well as the factors driving those changes. We use Swedish register data and a three-step methodology to answer these questions. Our results show that neighbourhood trajectories in Stockholm are characterised by stability: around 80 percent of the neighbourhoods stay in the same type for the whole period, and this applies to vulnerable, middle-class and elite areas. The remaining trajectories comprise the emergence of new elite areas, ageing and downward trajectories, with no trajectory type exhibiting upgrading from a vulnerable area to a socioeconomically stronger area.

Keywords: Neighbourhood trajectories, gentrification, filtering, k-means clustering, sequence analysis.

Introduction

Neighbourhoods are dynamic. Their composition is continuously changing as a result of mobility inflows and outflows, but also due to the changing situation of non-moving residents, the so-called "in situ changes" (or "incumbent changes") (van Ham, Manley, Bailey, Simpson, & Maclennan, 2013). These include demographic change, such as births, deaths and ageing, as well as changes in the socioeconomic status of individuals. Neighbourhoods can even be altered by government- and/or market-led regeneration initiatives and other policy reforms.

The issue of neighbourhood change has been the focus of rich theoretical discussions, dating back from the Chicago School of human ecology at the turn of the 20th century. Chicago school theorists described processes of competition for urban space resulting in the residential segregation of different groups of people in the city (Burgess, 1925; Hoyt, 1939). Chicago school writings also emphasized the progressive downgrading of the city center and flourishing of wealthy suburbs. The life cycle model, developed by Hoover & Vernon (1959), predicts that central-city neighbourhoods in the U.S. would follow a number of stages, leading towards inevitable decline. From the 1970s, the emphasis of the theoretical discussions has shifted towards neighbourhood upgrading, with the term "gentrification" describing processes of improvement of lower class neighbourhoods through the inflow of more affluent residents (Lees, 2015). However, it must be noted that changes in the composition of neighbourhoods do not always lead to a change in their socioeconomic or demographic profiles. Selective mobility into and out from neighbourhoods may actually reproduce, rather than alter, the characteristics of a neighbourhood. For example, when individuals with low socioeconomic status

move into socioeconomically deprived neighbourhoods while individuals with relatively higher socioeconomic positions leave such areas, neighbourhood deprivation persists (Andersson & Bråmå, 2004). Existing empirical research on neighbourhood dynamics indeed suggests that long-term stability in neighbourhoods' characteristics is a frequent pattern (Delmelle, 2017; Hedin, Clark, Lundholm, & Malmberg, 2012; Meen, Nygaard, & Meen, 2013).

Despite its richness, the literature on neighbourhood dynamics tends to focus on specific transformations—upgrading or downgrading—and consists of case studies of particular neighbourhoods. Studies that systematically identify and characterize typical neighbourhood trajectories within cities or countries are surprisingly rare, especially in the European context. Moreover, studies on neighbourhood dynamics usually compare the characteristics of neighbourhoods at two points in time (Delmelle, 2016). This is largely due to the overall lack of adequate longitudinal data with multiple measurements of neighbourhood characteristics (Meen et al., 2013). Such an approach, however, runs the risk of giving an incomplete and simplified understanding of neighbourhood change, and not being informative of the comprehensive trajectories followed by neighbourhoods over time. For instance, it does not reveal whether a change in neighbourhood characteristics is long-lasting or temporary. Neither can it describe the timing of change or characterize multiple changes in neighbourhood profiles. Such complex patterns can only be captured through the study of comprehensive neighbourhood trajectories, based on multiple points of measurement. Finally, studies of neighbourhood dynamics tend to focus on a single dimension of neighbourhood characteristics (Delmelle, 2017), notably socioeconomic status (e.g. Hedin et al., 2012; A. Séguin, Apparicio, & Riva, 2012; Teernstra, 2014) or ethnic composition (e.g. Bader & Warkentien, 2016; Catney, Wright, & Ellis, 2021; Zwiers, van Ham, & Manley, 2018). Given that these dimensions co-evolve to give rise to a neighbourhood's dynamic, there is a need for further research that simultaneously analyses multiple relevant dimensions: socioeconomic, demographic and housing factors.

With these knowledge gaps in mind, the aim of this study is to describe and explain the long-term dynamics of neighbourhoods in Sweden's capital city—Stockholm—during the period 1990-2015. It seeks to answer the following two research questions:
1. *To what extent* and *how* do the characteristics of Stockholm neighbourhoods change over time?
2. What is the role of in situ change and residential mobility in driving neighbourhood change?

This study contributes to the literature on neighbourhood dynamics with an empirical examination of long-term neighbourhood trajectories in Stockholm County. Insights about the level of stability of neighbourhoods are also useful to the Swedish literature on neighbourhood effects, studying the significance of geographical surroundings on individuals' life outcomes, but also to residential mobility research examining the flows into and out from different types of areas. Finally, an understanding of typical neighbourhood trajectories, and their determinants, is also relevant to policymakers and urban planners, as it can help predict how cities will evolve in the future.

The remainder of this study proceeds in three steps. First, we apply k-means clustering to identify a number of states Stockholm's neighbourhoods can exist in. The time evolution of the states constitutes a neighborhood trajectory. Second, we use sequence analysis to obtain a typology of ideal-typical neighbourhood trajectories. We then examine the prevalence of the different types of trajectories identified and map their geographical locations. Third, we focus on the trajectories involving a change in neighbourhood type, examining the extent to which it is determined by selective mobility and/or changes in the characteristics of non-moving residents.

Theory and literature review

In the early 20th century, human ecologists from the Chicago School theorized on processes of urban growth and neighbourhood change borrowing concepts from the natural sciences. They conceptualized

2

social organization in the city as being governed by processes of dominance and competition for space leading to the residential segregation of different groups. Burgess' *concentric zone model* described the urban space as a series of circles around the Central Business District, with the more central zones hosting newly-arrived immigrants and industry workers and the outer zones hosting more affluent households. The model envisioned a process of *invasion* and *succession* where different social groups expanded to the adjacent zone, gradually displacing the existing residents who relocated to the subsequent zone. Immigrants leaving the central zone were later replaced by more recent immigrant cohorts (Burgess, 1925). Instead of concentric zones, the *sector model* by Hoyt (1939) assumed that the city was structured in sectors of activity, including the Central Business District, industry and residential areas for different social groups. According to Hoyt, urban expansion was triggered by the demand for newly constructed suburban housing among wealthy households. With those households relocating to the suburbs, only residents with low socioeconomic status were left in older neighbourhoods, a process that he described as *filtering*. The *life cycle model*, proposed by Hoover & Vernon (1959), also emphasized neighbourhood decline. Based on the case of New York, the model predicts that central city neighbourhoods go through five stages: 1) in the *development stage*, they comprise single-family housing; 2) in the *transition stage*, the neighbourhoods become more densely populated and apartment buildings are constructed; 3) in the *downgrading stage*, they become increasingly populated by ethnic minorities and are affected by overcrowding; 4) in the *thinning-out stage¸* they experience a population decline as middle-class residents moved to the suburbs and many jobs are relocated there; and 5) finally, in the *renewal stage*, neighbourhoods are subject to urban regeneration policies involving the demolition of obsolete housing and construction of high-standard apartment buildings.

Looking at other aspects of neighbourhood change, the issue of neighbourhood upgrading gained prominence in the literature in the 1960s, when Ruth Glass (1964) coined the term "gentrification" in the context of the renewal of the center of London. Gentrification refers to the process where middle- and upper-class households move into working-class neighbourhoods, gradually displacing their original residents. It is thus the opposite of filtering. Gentrification research is divided in two main traditions, with each highlighting different driving forces. A Marxist tradition, led by Neil Smith (1979), stresses the potential profits that can be realized through the redevelopment of old central neighbourhoods. The driving actors in this process are real estate developers and mortgage lenders seeking to make financial gains, supported by governmental agencies that target the regeneration of deteriorating neighbourhoods. A cultural tradition, headed by David Ley (1996), emphasises the demand for central living among a new politically progressive and culture-oriented middle class. Apart from the classical upgrading of central working-class neighbourhoods, other types of gentrification have been suggested based on the neighbourhood's initial socioeconomic status and the sort of transformation at play (e.g. Hedin et al., 2012; Lees & Phillips, 2018; Van Criekingen & Decroly, 2003).

While residential mobility is central in Chicago School and gentrification writings, other scholars stress that neighbourhood change does not necessarily involve mobility. Demographic processes such as natural population growth and ageing can change the characteristics of neighbourhoods (Bailey, 2012). In situ neighbourhood change can also take the form of changes in the socioeconomic status of non-moving residents (Andersson & Hedman, 2016; Teernstra, 2014; Temelová, Novák, Kährik, & Tammaru, 2016) or physical renewal, such as when homeowners renovate their dwellings (Grigsby et al., 1987).

Much of the literature on neighbourhood change focuses on specific transitions, notably gentrification (e.g. Hochstenbach et al., 2015), and consists of case studies of specific neighbourhoods (e.g. Bråmå, 2013; Lumley-Sapanski & Fowler, 2017). In the last decade, however, a growing research body has sought to identify and analyze neighbourhood trajectories in entire cities. The bulk of this research focuses on the North American context, but the number of European studies is steadily increasing, and different methodological designs have been used to obtain typologies of neighbourhood trajectories. A number of studies use a two-step approach. First, they employ cluster analysis based on multiple demographic, socioeconomic and housing indicators to identify ideal-typical neighbourhood types

such as 'struggling', 'ageing' or 'suburban'.[1] Next they analyze their evolution over time through the use of transition matrices (e.g. Catney et al., 2021; Delmelle, 2015; Foote & Walter, 2017; Mikelbank, 2011; Morenoff & Tienda, 1997) or sequence analysis (Delmelle, 2016, 2017; Patias, Rowe, & Cavazzi, 2020; Santis, 2018; Wei & Knox, 2014). This latter approach is also the one adopted in this study. Another recurrent method for studying neighbourhood dynamics is latent class growth modelling (Bader & Warkentien, 2016; Zwiers, Ham, & Manley, 2018). Some researchers examine the trajectories of neighbourhoods in a single city, while others look at several cities or even entire countries (for example Patias et al.'s (2020) study of neighbourhood dynamics in England). Most studies have a time span of analysis of two or three decades, but some also compare trends of neighbourhood change between several shorter time periods (e.g. Bilal et al., 2020; Hedin et al., 2012).

The results of neighbourhood trajectories research are varied and depend on the methods, data and time span of analysis. Most typologies include trajectories of neighbourhood upgrading and neighbourhood downgrading, characterised by an increase or a decrease in the socioeconomic status of the residents. There are also 'lateral shifts' in neighbourhood type, such as when the population of a neighbourhood ages or rejuvenates. Neighbourhood change can occur rapidly (see for example Bilal et al. (2020)) or unfold over a long period of time. Yet, stability tends to be the most frequent characteristic of neighbourhoods' pathways. For example, Delmelle (2016) found that 79% of neighbourhoods in Los Angeles followed a stable trajectory during the period 1970-2010. When looking at 50 US metropolitan cities, Delmelle (2017) showed that nearly half of the neighbourhoods belonged to a trajectory of stability between 1980 and 2010.

Study Area

This paper focuses on the Greater Stockholm Area, which is Sweden's administrative capital and economic motor. Stockholm is one of Europe's fastest growing regions. Between 2011 and 2020, its population grew by 15%, reaching 2,377,000 inhabitants (Eurostat, 2021). International migrants constitute an important and growing share of the Stockholm population. In 2020, 26% of the residents were foreign-born, while two decades earlier, in 2000, the corresponding proportion was 17% (Statistics Sweden, 2021a). Stockholm's labour market is characterised by a knowledge-intensive service sector and a relatively low unemployment rate (European Commission, 2021). It has strong international connexions and hosts the headquarters of several multinational corporations (Invest Stockholm, 2020). Despite its prosperity, the region suffers from consistently high levels of socioeconomic residential segregation, compared to other European cities (Haandrikman, Costa, Malmberg, Rogne, & Sleutjes, 2021; Tammaru, Marcinczak, van Ham, & Musterd, 2016). Individuals with low socioeconomic status and non-European migrants are overrepresented in suburban neighbourhoods, which are dominated by rental housing and were built during so-called Million Homes Programme (*Miljonprogrammet*). Implemented between 1965 and 1974, this programme aimed at addressing housing shortage through the construction of mainly high-rise apartment buildings in urban peripheries (Andersson 2013). The inner-city of Stockholm, in contrast, is more affluent. Since the 1960s, many formerly working-class industrial areas, notably the district of Södermalm, have undergone a process of gentrification (Franzén, 2005).

Over the last three decades, the housing market structure of the Stockholm inner-city has also shifted, from being characterised by a mix of tenure types towards being increasingly dominated by homeownership. This is partly a result of a neoliberal turn in Swedish housing policy since the 1990s, encouraging homeownership and particularly the conversion of public and private rental housing into tenant-owned (cooperative) housing by selling to sitting tenants (Wimark, Andersson, & Malmberg, 2019). The increase in the share of tenant-owned housing is also related to the construction of new neighbourhoods. Since the turn of the century, several urban regeneration projects have been implemented in Stockholm in formerly industrial and military zones. Hammarby Sjöstad, which is

---

[1] The statistical identification of neighbourhood types is not a novel area of scientific inquiry. Factorial ecology, which was popular among geographers in the 1960s and 1970s, used factor analysis to investigate socio-spatial patterns in cities. However, this approach produced cross-sectional neighbourhood categorizations and did not consider the dynamics of neighbourhood change (Kenny, 2009).

internationally renowned for its environmentally sustainable profile, is an example of such a regeneration project. Although Million Homes Programme neighbourhoods in Stockholm continue to be dominated by rental housing, the share of tenant-owned housing is increasing as a result of tenure conversions and new constructions. Tenure mix is considered to provide the conditions for a mix of socioeconomic backgrounds (social mix), thereby reducing segregation. Yet, it may also lead to displacement of the most vulnerable residents (Alm Fjellborg, 2018; Hedin et al., 2012).

During the last decades, a number of area-based policies have attempted to lift deprived neighbourhoods, in Stockholm and other Swedish cities, by tackling multiple domains, including education, employment and health. However, such initiatives have not resulted in a lasting social upgrading of the targeted neighbourhoods, arguably due to selective mobility, i.e. the outflow of the most affluent residents and inflow of new low-income residents (Andersson & Bråmå, 2004).

Data and Methods

Our data consist of Swedish longitudinal register data that include a number of socioeconomic, housing and demographic variables and cover the whole Swedish population for the period 1990-2015. Neighbourhoods correspond to the so-called DeSOs (*Demografiska Statistikområden*), that is geographical units that are rather homogeneous in terms of population size and take into account physical barriers (Statistics Sweden, 2021b). The DeSO areas are constant over time, which facilitates longitudinal analyses. Our study focuses on the neighbourhoods in Greater Stockholm, which is equivalent to Stockholm County and comprises 26 municipalities (henceforth called 'Stockholm'). It consists of a total of 1,287 DeSOs. The DeSO areas vary in size, with an average population of around 1,480 inhabitants over the whole time period, ranging from 0 to 3,640 inhabitants.

This study applies a three-step methodology to describe,visualize and explain the typical trajectories followed by neighbourhoods in Stockholm over the period 1990-2015 (see Figure 1). The two initial steps of the methodology were first applied by Elizabeth Delmelle (2016) to study neighbourhood dynamics in Chicago and Los Angeles, and were subsequently replicated in other contexts (Delmelle, 2017; Patias et al., 2020; De Santis, 2018). In the first step, we apply k-means clustering to identify a number of states in which the neighbourhoods in Stockholm can exist. A sequence of neighbourhood types is then created based on the data from each measurement year. In the second step, we use sequence analysis to obtain a typology of ideal-typical neighbourhood trajectories. Finally, we take a closer look at the periods around which neighbourhood change occurs and examine the determinants of neighbourhood change, to understand to what extent this is a result of individuals' mobility and/or of changes in the characteristics of non-moving residents.
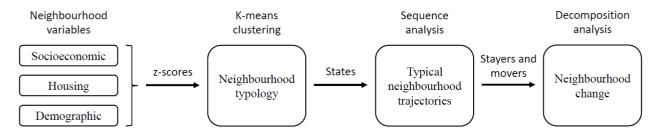

Figure 1. Flow diagram indicating the methodological steps in the analytical strategy.

In order to obtain the neighbourhood states, we apply k-means clustering on 10 variables classified in three domains: socioeconomic, housing and demographic characteristics (see Table 1). Neighbourhood characteristics were measured every fifth year, in 1990, 1995, 2000, 2005, 2010 and 2015. The choice of variables was inspired by previous studies of neighbourhood trajectories (e.g. Delmelle, 2016, 2017; Foote & Walter, 2017; Bilal, 2020, Patias et al., 2020) as well as contingent on the data available. *Socioeconomic characteristics* correspond to the proportion of residents which in a given year have tertiary education, the proportion who are unemployed, the proportion with a high income, the

proportion who are at risk of poverty and the proportion who receive social benefits. *Housing characteristics* are the share of housing units that are owned, and the share of housing properties that were built during the decade preceding the measurement year. *Demographic characteristics* are related to the age structure in the neighbourhood (proportion of older residents and proportion of children) and to the origin of neighbourhood residents (proportion of immigrants born in less economically advanced countries).

Table 1. Variable description.

Variable	Description
Socioeconomic	
% with tertiary education	Proportion aged 25-64 with tertiary education (post-secondary degree of two years or more).
% unemployed	Proportion aged 25-64 who have received unemployment benefits at some point in the reference year.
% with high income	Proportion aged 25-64 with an income from gainful employment the highest decile.
% at risk of poverty	Proportion aged 25 or older who have a disposable income below 60 percent of the median disposable income value.
% recipients of social assistance	Proportion aged 18-64 who have received social assistance at some point during the reference year.
Housing	
% of owner-occupied housing	Proportion of housing units that are owner-occupied.
% of new housing	Proportion of housing structures built in the last ten years.
Demographic	
% persons 65 years and above	Proportion of persons aged 65 and above.
% children	Proportion of persons aged under 18 years.
% migrants born in less economically advanced countries	Proportion of international migrants born in non-developed economies

The variables above were standardised by computing the yearly z-scores (see Table A1 in Annex). This is done for comparability of scales before clustering. Similar clustering methods have been used in previous studies (Delmelle, 2016; 2017; Patias et al., 2020; De Santis, 2018). The k-means clustering is performed on the pooled dataset for all measurement years. Sparsely populated neighbourhoods (defined as areas with less than 100 residents) and uninhabited neighbourhoods were not used in the k-means clustering. The output of this first step is a typology of neighbourhoods. Since the k-means clustering is performed on the whole dataset, a given neighbourhood can change type over time, which allows to construct neighbourhood trajectories. The k-means clustering was performed in Stata.

The second step of the analysis consists of taking the states from the previous step and running a sequence analysis. Sequence analysis is a family of methods used to analyse longitudinal data in terms of ordered series of states and transitions between states (Billari, 2001; Cornwell, 2015). The main advantage of sequence analysis is that it provides a holistic picture of trajectories. A dissimilarity score was computed by optimal matching, defining costs to transform a given sequence into another one by state substitution. The substitution costs were set at the standard constant value, meaning that changing from a state to any other different state has a constant cost.[2]

Once the dissimilarity scores were computed, neighbourhood sequences were grouped using a combination of two clustering techniques: the Ward method for the initial clustering, and Partition around the Medoid subsequently (Studer, 2013). This combination of clustering techniques favours grouping sequences with similar timings of transition between states.[3] We analysed the sequences with TraMineR, an R package for sequence analysis (Gabadinho et al., 2011). Maps of the neighbourhood trajectories were produced with the R package tmap (Tennekes, 2018). As a final step, we use the clusters from the sequence analysis to decompose the neighbourhood change into in situ and mobility-related change; see Results section for more details.

Results

Neighbourhood Typology

The k-means clustering resulted in five neighbourhood clusters, the characteristics of which are summarized in Table 2. The neighbourhood types (and number of neighbourhoods in parenthesis) are:

---

[2] We use the standard constant costs for state substitution to compute the dissimilarity matrix. This is different from (Delmelle, 2016), which uses transition probabilities as costs. Our approach does not use the information of the whole sequence population to construct the matrix, and thus is not dependent on the global distribution of state transitions, making our results less anticipatory.

[3] The number of neighbourhoods in a given sequence is used as a weight in the sequence analysis.

Table 2. Mean values and standard deviation of each variable, by k-means cluster. Average over the whole time period.

Variable	Ageing middle-class areas	Elite areas	Middle-class family areas	Vulnerable areas	New elite family areas
Socioeconomic					
% with tertiary education	0.330 (0.136)	0.334 (0.137)	0.332 (0.137)	0.344 (0.139)	0.336 (0.137)
% unemployed	0.063 (0.035)	0.063 (0.035)	0.064 (0.035)	0.063 (0.035)	0.061 (0.034)
% with high income	0.175 (0.102)	0.176 (0.102)	0.175 (0.102)	0.176 (0.103)	0.175 (0.102)
% at risk of poverty	0.107 (0.073)	0.108 (0.073)	0.107 (0.073)	0.113 (0.075)	0.110 (0.073)
% recipients of social assistance	0.070 (0.075)	0.069 (0.074)	0.070 (0.075)	0.067 (0.072)	0.068 (0.073)
Housing					
% of owner-occupied housing	0.670 (0.353)	0.674 (0.350)	0.671 (0.352)	0.683 (0.344)	0.676 (0.349)
% of new housing	0.069 (0.143)	0.069 (0.143)	0.069 (0.142)	0.070 (0.143)	0.070 (0.144)
Demographic					
% persons 65 years and above	0.143 (0.082)	0.143 (0.081)	0.143 (0.082)	0.143 (0.079)	0.143 (0.081)
% children	0.222 (0.080)	0.222 (0.080)	0.222 (0.080)	0.223 (0.079)	0.223 (0.079)
% migrants born in less economically advanced countries	0.096 (0.113)	0.098 (0.114)	0.097 (0.114)	0.103 (0.117)	0.099 (0.115)

1. *Ageing middle-class areas* (we report the number of neighbourhoods in 1990 and in 2015. n=430/379). Mainly situated in the inner-city, these neighbourhoods are characterised by fairly high levels of education and income and low levels of unemployment and reception of social assistance. They contain the largest average proportion of older residents (over 65 years), the lowest average proportion of children and a moderate proportion of migrants from less economically advanced countries. They consist of multi-family housing with a mix of owned and rented housing units, and very few newly built ones.

2. *Elite areas* (n=291/316). These mainly suburban neighbourhoods comprise the highest average proportion of residents with high income and the lowest average levels of unemployment, social assistance uptake and risk of poverty. They also have the lowest average proportion of migrants from less economically advanced countries. Contrary to the ageing middle-class areas, they are characterised by very high levels of homeownership and a high share of children.

3. *Middle-class family areas* (n=349/343). These suburban neighbourhoods mainly consist of single-family housing. Similar to elite areas, they contain on average large proportions of homeowners and children, as well as a low proportion of migrants from less economically advanced countries. However, their residents have on average a lower socioeconomic status than those in elite areas. In particular, the proportion of individuals at risk of poverty is fairly high.

4. *Vulnerable areas* (n=104/184). These neighbourhoods correspond to socioeconomically deprived areas as they have the highest average proportion of residents at risk of poverty, unemployeds and social allowance recipients, as well as the lowest proportion of high earners and highly educated residents. Vulnerable areas also contain the highest average proportion of migrants from less economically advanced countries. Located in the city suburbs, they comprise the average highest proportion of rented housing-units, often within large multi-family apartment buildings.

5. *New elite family areas* (n=60/64). These neighbourhoods contain the highest average proportion of housing units built during the last decade. The average proportion of homeownership is also high. Residents have a high socioeconomic status and the average proportion of children is very high.

As noted above, the *sparsely populated/uninhabited areas* (n=53/1) were not used in the clustering, but were included as a sixth neighbourhood state.

Typical neighbourhood trajectories

Using sequence analysis, we identified ten sequence clusters representing typical trajectories followed by neighbourhoods in Stockholm during the period 1990-2015[4]. Figure 2 depicts the sequence index plots of neighbourhood trajectories. Sequence states correspond to the neighbourhood types obtained through the k-means clustering, and are represented by different colours in the figure: blue for *Ageing middle-class areas*, green for *Middle-class family areas*, orange for *Elite areas*, red for *Vulnerable areas*, purple for *New elite family areas*. Yellow corresponds to sparsely populated/uninhabited areas. The horizontal axis represents the years in the study period. The clusters are presented in order of descending frequency.[5]

---

[4] Note that the state *Sparsely populated/uninhabited* is considered when running the sequence analysis.

[5] To account for the quality of the clustering in the solution, we analyzed statistics on the 10-cluster solution, as implemented in the Weighted Cluster package (Studer, 2013). In particular, we computed the Average Silhouette Width (ASW), which is a measure of the coherence in the assignment of sequences to clusters, and of the degree to which sequence clusters are distinct from one another. It is interpreted as a measure of the plausible underlying structure in the cluster solution, and it ranges from 0 to 1. Values above 0.71 are considered as indicators of a strong underlying structure (Studer, 2013). We obtained an ASW value of 0.68 for the overall cluster solution, with four cluster-specific ASW values above 0.71 and seven above 0.5.
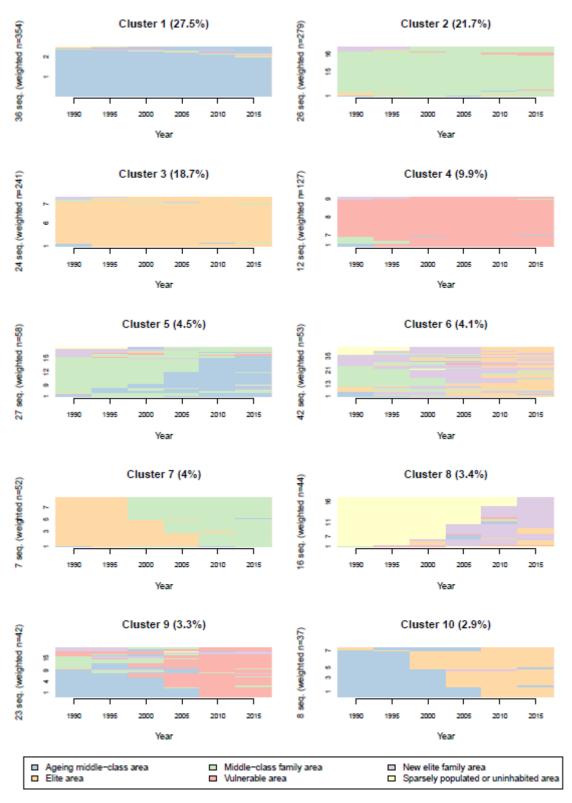
Figure 2. Typical neighbourhood trajectories, clustered.

A first important result is that the vast majority of neighbourhoods in Stockholm belong to the same neighbourhood type throughout the twenty-five-year follow-up period. Indeed, nearly 80% of neighbourhoods followed a trajectory characterised by stability. The most common neighbourhood trajectory, involving around 28% of the neighbourhoods, is *Stable ageing middle-class area* (Cluster 1). In the second place comes the trajectory *Stable middle-class family area* (Cluster 2) including around 22% of neighbourhoods. Taken together, these two clusters make up for roughly half of Stockholm's

10

neighbourhoods. The third most frequent trajectory is *Stable elite area* (Cluster 3) comprising nearly 19% of the neighbourhoods. The final trajectory characterised by stability is *Stable vulnerable area* (Cluster 4) involving 10% of neighbourhoods.

The remaining six clusters, which contain a fifth of Stockholm neighbourhoods, are characterised by a transition between different neighbourhood types. Cluster 5 denotes mainly a transition between the two types of middle-class areas: *From middle-class family area to ageing middle-class area* (4.5% of neighbourhoods). This neighbourhood trajectory could be described as a "lateral shift" entailing the ageing of the neighbourhood population. In contrast, Clusters 6 and 10 indicate neighbourhood upgrading: *Ending as elite area* (4.1% of neighbourhoods) and *From ageing middle-class to elite area* (2.9%), respectively. Neighbourhoods in Cluster 8 belong to the trajectory *From sparsely populated/uninhabited to new elite family area* (3.4% of neighbourhoods). This transition thus involves the construction of new housing units[6]. The remaining two clusters indicate neighbourhood downgrading. Roughly 4% of neighbourhoods belong to the trajectory *From elite area to middle-class family area* (Cluster 7). Finally, Cluster 9 is a trajectory starting from an ageing middle-class area or middle-class family area and *Ending as a vulnerable area* (3.3%).

Spatial patterns

The maps of the neighbourhood trajectories are shown in Figures 3–5. To begin with, Figure 3 shows that the *Stable elite areas* (Cluster 3, in dark orange) include neighbourhoods in the notoriously affluent inner-city districts of Östermalm and Vasastaden, as well as prosperous suburban areas in the municipalities of Danderyd (e.g. Djursholm) and Täby in the north, Lidingö in the northeast, Nacka (e.g. Saltsjöbaden) in the southeast and Bromma in the west. Many stable elite areas in the city periphery are adjacent to areas that follow a trajectory *Ending in an elite area or new elite family area* (Cluster 6, in light orange). In the inner-city, stable elite areas are typically adjacent to areas that shifted from ageing middle-class to elite area (Cluster 10, in yellow). Such areas cover a large proportion of the districts of Vasastaden and Östermalm, as well as in Kungsholmen and Stora Essingen. Although a sizable number of inner-city neighbourhoods underwent an upgrading during the period 1990-2015, a substantial amount of central Stockholm neighbourhoods consistently remained ageing middle-class areas (Cluster 1, dark blue in Figure 4), particularly in the districts of Norrmalm, Gamla stan (the Old Town) and Södermalm. This cluster, however, does not only appear in the inner-city, but also in the central parts of surrounding municipalities such as Solna and Sundbyberg in the northwest and Södertälje in the southwest.

---

[6] It must be noted that, within Cluster 8, there is a fair amount of variation as to the timing of the transition from sparsely populated/uninhabited areas to new elite family areas. Most transitions occur from 2005 and onwards, but some do happen at an earlier stage in the follow-up period.
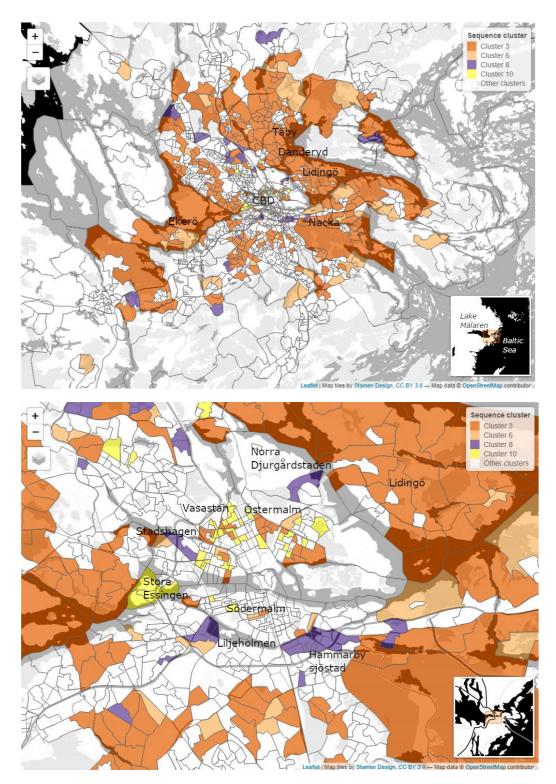
Figure 3. Map of neighbourhood trajectory clusters, elite areas. Upper panel: Stockholm metropolitan area. Lower panel: Stockholm city center.

As shown in Figure 4, a major portion of Stockholm's peripheral neighbourhoods have consistently been middle-class family areas (Cluster 2, in dark green). Cluster 5 (in light blue) entails a shift *From a middle-class family area to an ageing middle-class are*a. Such ageing neighbourhoods are scattered across Stockholm's periphery (e.g. Orminge in Nacka Municipality, southeast, and Tumba in Botkyrka Municipality, southwest). Another typical neighbourhood trajectory involves a downward shift *From an elite to a middle-class family area* (Cluster 7, in light green). Such neighbourhoods are typically suburban and they often share their border with a stable middle-class family area. Examples include the

12

southern part of Kista (in the northwest of Stockholm Municipality) and parts of Tullinge (in Botkyrka Municipality in the southwest).
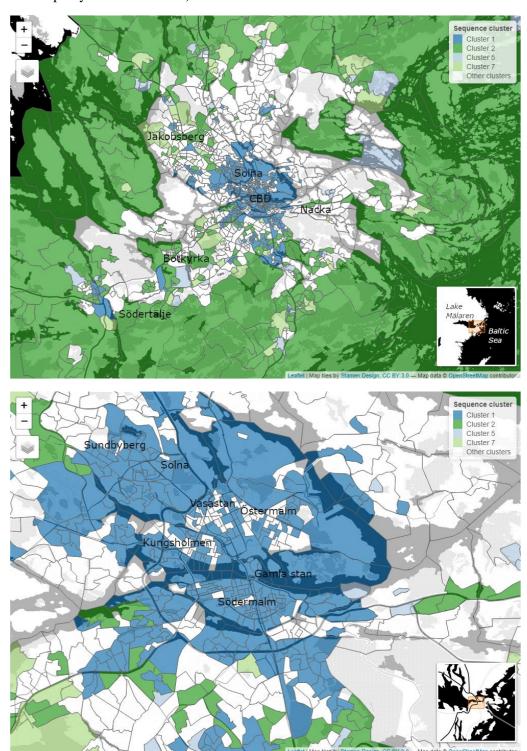
Figure 4. Map of neighbourhood trajectory clusters, middle-class areas. Upper panel: Stockholm metropolitan area. Lower panel: Stockholm city center.

The spatial distribution of clusters related to vulnerable areas is shown in Figure 5. Consistently vulnerable neighbourhoods (Cluster 4, in dark red) are exclusively located in the periphery of the city, typically in Million Homes Programme areas. *Stable vulnerable areas* include, but are not exclusive to, neighbourhoods that were targeted by the Metropolitan Development Initiative, an area-based policy for urban renewal implemented in the early 2000s. Some of those neighbourhoods are located in Stockholm

Municipality–e.g. Husby, Tensta and Rinkeby (northwest), Rågsved (south), Skärholmen (west)–while others car situated in surrounding municipalities such as Fittja, Alby and Hallunda-Norsborg in Botkyrka (southwest) and Ronna and Geneta in Södertälje (southwest). The aforementioned areas also correspond to the areas that were classified as 'particularly vulnerable' by the Swedish Police (2017). The map in Figure 5 also clearly shows that neighbourhoods that follow a trajectory of downgrading *Ending as a vulnerable area* (Cluster 9, in light red) are typically adjacent to or in close proximity to *Stable vulnerable areas*.
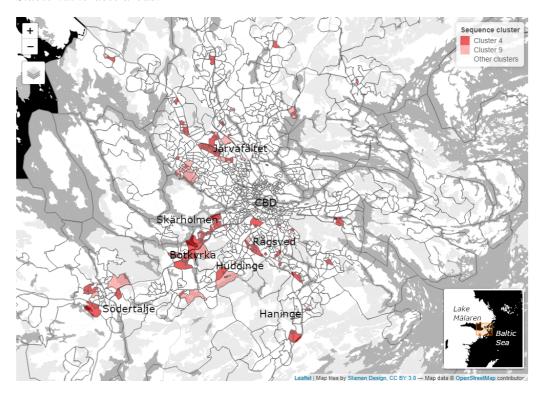
Figure 5. Map of neighbourhood trajectory clusters, vulnerable areas.

Finally, neighbourhoods following the trajectory *From sparsely populated/uninhabited to new elite family area* (Cluster 8, in purple in Figure 3) are spread all across the city. Many of them emerged through the urban redevelopment of former industrial harbour zones. One example is the neighbourhood of Hammarby sjöstad, which was built in the 2000s as part of the redevelopment of a former industrial harbour zone in the southern part of the inner-city. The area is internationally renowned as an environmentally sustainable city district. Other new neighbourhoods built in former harbours include Liljeholmen, Stadshagen and Norra Djurgårdsstaden. New neighbourhoods have also been constructed in abandoned military areas (e.g. Järvastaden) and former airports (e.g. Barkabystaden).

Determinants of neighbourhood change: the role of mobility and in situ change

In order to analyze the role that in situ change and mobility change play in neighbourhood change in Stockholm, we perform a decomposition analysis. Our point of departure are the neighbourhoods experiencing transitions between neighbourhood types. Thus, we focus on Clusters 5 to 10. Out of those, Cluster 6 exhibits multiple transitions apart from the modal transition, at different years, and as such is difficult to interpret as in the same light as the rest of the transition clusters. Thus, it is excluded. Furthermore, Cluster 8 is excluded because the transition From sparsely populated or uninhabited areas to new elite family areas is related to new construction and the inflow of new residents. Thus it does not entail an interplay between in situ and mobility change. This leaves four clusters, comprising 189 neighbourhoods (DeSos) experiencing a transition. Finally, our decomposition focuses on the five-year period encompassing the observed transition. For example, if the neighbourhood type changed in 2005,

we focus on the change between 2000 and 2005.

The computation of the change decomposition is as follows. For each variable in consideration, e.g., individuals with tertiary education, and each year t, there is a number of individuals $n(t)$ exhibiting that property in the neighbourhood, out of the $N(t)$ total number of individuals in the neighbourhood that year. Furthermore, comparing the neighbourhood populations in two successive periods t_1,t_2, we can see that some individuals stay in the neighbourhood (this is the in situ group, labelled (S) while others come in and leave (the mobility group, labelled I and O, respectively). The births (B) and deaths (D) related to people living in the area, so-called natural change (Bailey, 2012), are part of the in situ change. The absolute change can then be expressed as $n(t_2,t_1)=(n_S(t2)+n_B(t_2)+n_I(t_2))-(n_S(t_1)+n_D(t_1)+n_O(t_1))$. Note that the numbers of stayers might change, because the numbers of individuals having a property like tertiary education might change. The change relative to the total neighbourhood populations is then given by

$$\Delta f(t_1, t_2) = \left(\frac{n_S(t_2)+n_B(t_2)+n_I(t_2)}{N(t_2)} \right) - \left(\frac{n_S(t_1)+n_D(t_1)+n_O(t_1)}{N(t_1)} \right).$$

After some arithmetic work, the expression above can be rewritten as

$$\Delta f(t_1, t_2) = \left(\frac{n_S(t_2) \cdot N(t_1) - n_S(t_1) \cdot N(t_2)}{N(t_2) \cdot N(t_1)} + \frac{n_B(t_2)}{N(t_2)} - \frac{n_D(t_1)}{N(t_1)} \right) + \left(\frac{n_I(t_2)}{N(t_2)} - \frac{n_O(t_1)}{N(t_1)} \right),$$

(1)

where the first term between parentheses quantifies the change in the variable in consideration due to in situ change in the neighbourhood (including natural change), and the second term quantifies the net change in the variable in consideration due to mobility.

In order to visualize the relative contribution of in situ and mobility change, the changes above are expressed as a fraction of the total neighbourhood change in each variable, so that it sums up to 1 (or 100%) at the neighbourhood level. For example, if the in situ part of the change accounts for 10% increase and the mobility part for 5 percent, then 15% is the total change, i.e. 0.67 for in situ and 0.33 for mobility. Finally, the median value of the relative change is computed for each cluster and variable, and the result is shown in Figure 6.
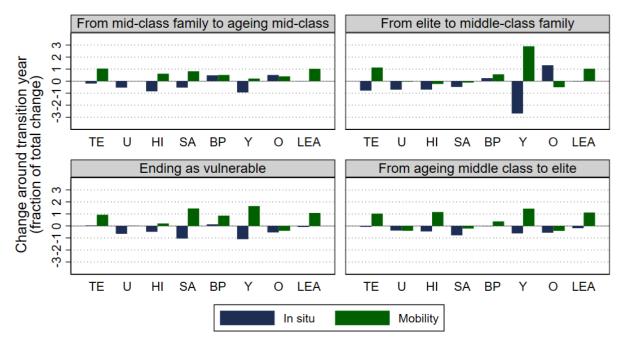

Figure 6. Decomposition analysis by transition cluster and variable. Key to variable names: TE: with tertiary education, U: unemployed, HI: with high income, SA: recipients of social assistance, BP: at risk of poverty, Y: children, O: persons 65 years and above, LEA: migrants born in less economically advanced countries.

15

Consistent with other studies (e.g. Bailey 2012; Hedin et al. 2012; Teernstra 2014; Andersson & Hedman 2016), we find that neighbourhood change is driven by a combination of selective mobility and in situ change. The relative contribution of the two processes to the overall neighbourhood change, however, depends on the type of trajectory at play as well as on the variable in consideration. Overall, the ageing process in the cluster *From middle-class family area to ageing middle-class area* (Cluster 5) is mostly driven by the ageing of sitting (non-moving) residents, as can be seen by the fact that in situ change dominates in the reduction of young people (below 18 years) and, to a lesser extent, the increase of old people (65+ years) in the neighbourhood. The neighbourhood upgrading transition *From ageing middle-class to elite area* (Cluster 10) is driven mainly by selective mobility, with the transition being related to a net inflow of people with tertiary education and people with high income. It is also characterised by a net inflow of young people and a net outflow of old people. The trajectory *Ending as a vulnerable area* (Cluster 9) is also generally more driven by selective mobility, as we can see in the net inflow of people born in less economically advanced countries, people receiving social assistance and people below the poverty line, as well as a similar net mobility increase in the fraction of young people. However, the trajectory is also driven by an in situ decrease in the share of high income earners and surprisingly a decrease in the share of unemployed among sitting residents. Lastly, mobility and in situ change appear to determine the downgrading trajectory going *From an elite to a middle-class family area* (Cluster 7) to a similar extent. The cluster is characterised by a net inflow of individuals born in less economically advanced countries and people below the poverty line, but also by a decrease in the share of high income earners among sitting residents. Contrary to our expectation, the trajectory cluster also exhibits a decrease in the proportion of unemployed and recipients of social assistance among the residents who stayed in the area.

Concluding discussion

This study investigated the typical trajectories followed by neighbourhoods in Greater Stockholm during the period 1990-2015. A first key finding is that the vast majority of neighbourhoods followed a trajectory denoting stability in terms of socio-demographic and housing characteristics. Based on our sequence analysis, only around a fifth of the neighbourhoods followed a trajectory characterised by a change in neighbourhood type. The prevalence of stability in neighbourhood characteristics has also been highlighted in previous research on neighbourhood dynamics (e.g. Delmelle 2016, 2017; Foote & Walter 2017; Seguin et al. 2012; Wei & Knox 2014). In the case of Stockholmt, Hedin et al. (2012) also found that 87% of neighbourhoods retained the same income profile between 1986 and 1991 and 77% between 1996 and 2001. Similarly, Andersson (2013) showed that 80% of the city's neighbourhoods remained stable in terms of their proportion of non-Nordic residents in the period 2005-2008. These studies focus on a single indicator and a relatively short time span, so our study adds to the Swedish literature on neighbourhood change through its multivariate approach and longer follow-up period (25 years).

Another important result of this study is that a noticeable number of neighbourhoods underwent a transition to become an elite area during the period 1990-2015. This was particularly the case in the inner-city districts of Östermalm and Vasastaden. From a geographical perspective, such upgrading neighbourhoods are typically adjacent or close to stable elite areas, which suggests a process of spatial diffusion of neighbourhoods' elite character. Regarding the determinants of neighbourhood upgrading, our decomposition analysis showed that a shift *From an ageing middle-class to an elite area* (Cluster 10) is largely the result of selective mobility. This transition can therefore be characterised as gentrification (Hedin et al. 2012). However, despite the upgrading of several inner-city neighbourhoods, a substantial proportion of Stockholm's city centre consistently belonged to the 'ageing middle-class' category during the study period. This seems to go against the evidence of a 'youthification' process in North American cities where young adults make up an increasing share of the residents in city-centre areas (Moos 2016; Lee 2021).

Furthermore, this study documented a downgrading trend among several Stockholm neighbourhoods, either shifting *From an elite area to a middle-class family area* (Cluster 7) or *Ending as a vulnerable area* (Cluster 9). Echoing the spatial diffusion among elite areas, the neighbourhoods following a downgrading trajectory tend to be geographically proximate to the type of neighbourhood state they end up in. For instance, neighbourhoods *Ending as a vulnerable area* are close to *Stable vulnerable neighbourhoods*. A similar 'spill-over effect' was described by Andersson (2013) regarding Stockholm neighbourhoods experiencing a rapid increase in the share of non-Nordic migrants between 2005 and 2008. Considering the determinants of downgrading trajectories, our decomposition analysis reveals mixed results, with the role of in situ change and mobility varying depending on the type of downward shift at play and the variables in consideration. The neighbourhood trajectory Ending as a vulnerable area is largely explained by the outflow of individuals with a stronger socioeconomic status and inflow of less affluent individuals and individuals born in less economically advanced countries. Even though there is also an in situ decrease in high income earners, the trajectory is mostly mobility driven and can thus be characterised as filtering. In contrast, the trajectory shifting From an elite to a middle-class family area seems to be determined both by mobility (e.g. regarding the variables born in a less economically advanced country and below the poverty line) and in situ change (when it comes to the variable high income earners). Finally, the "lateral" trajectory of neighbourhood ageing appears to be mostly determined by in situ change. The ageing of non-moving residents is indeed the main factor behind the transition *From a middle-class family area to an ageing middle-class area* (Cluster 5).

Two results of the study are particularly important from a housing policy perspective. Firstly, our analysis showed that newly-built neighbourhoods typically have a high socioeconomic status. This is shown by the fact that neighbourhoods characterised by the construction of new housing (Cluster 8) end as elite family areas. This finding casts doubt on the effectiveness of new constructions as a means to address the shortage of affordable housing in Stockholm. Secondly, a remarkable feature of the sequence analysis results is the absence of a trajectory involving an upgrading shift from a vulnerable area to a socioeconomically stronger area. This implies that the vulnerable position of neighbourhoods persists over relatively long periods of time.

Despite its empirical contributions to the literature on neighbourhood dynamics, the present study left a number of areas unexplored. First, our study covered a time span of twenty-five years. A longer follow-up period might have revealed more trajectories experiencing neighbourhood change, including trajectories involving multiple transitions between neighbourhood types. In addition, our decomposition analysis to assess the factors shaping neighbourhood change considered a five-year period. A longer time span could shed light on the possible succession and time order of mobility and in situ change. Previous research from the Netherlands, for instance, has shown that in-movers in upgrading neighbourhoods may have a lower socioeconomic status than sitting residents, but they increase their income after moving in (Teernstra, 2014; Hochstenbach et al., 2015). Second, one can further decompose the role of mobility in shaping neighbourhood change by distinguishing between the short-distance, inter-regional and international moves (see Andersson 2013). Third, our study has analysed the factors behind neighbourhood transition. Nonetheless, the dynamics at play in neighbourhoods following stable trajectories are also worth exploring, as they may conceal both mobility and in situ change that balance out in the aggregate. Finally, spatial diffusion processes such as those studied in this paper can be conceptualized in terms of an underlying structure of flows between neighbourhoods. This network perspective to neighbourhood connectedness has been recently applied to understand the impact of mobility patterns on the development of American cities (Phillips et al., 2021) and on their disadvantageous positions in terms of levels of violent crime (Levy et al., 2020). Altogether, it has the potential to provide insights into neighbourhood dynamics from a systemic perspective.

References

Alm Fjellborg, A. (2018). Housing tenure and residential mobility in Stockholm 1990-2014. (PhD thesis). Uppsala University.

Andersson, R. (2013). Reproducing and reshaping ethnic residential segregation in stockholm: The role of selective migration moves. Geografiska Annaler, Series B: Human Geography, 95(2), 163–187. https://doi.org/10.1111/geob.12015

Andersson, R., & Bråmå, Å. (2004). Selective migration in Swedish distressed neighbourhoods: Can area-based urban policies counteract segregation processes? Housing Studies, 19(4), 517–539. https://doi.org/10.1080/0267303042000221945

Andersson, R., & Hedman, L. (2016). Economic decline and residential segregation: a Swedish study with focus on Malmö. Urban Geography, 37(5), 748–768. https://doi.org/10.1080/02723638.2015.1133993

Bader, M. D. M., & Warkentien, S. (2016). The fragmented evolution of racial integration since the civil rights movement. Sociological Science, 3, 135–166. https://doi.org/10.15195/v3.a8

Bailey, N. (2012). How spatial segregation changes over time: Sorting out the sorting processes. Environment and Planning A, 44(3), 705–722. https://doi.org/10.1068/a44330

Bilal, U., Franco, M., Lau, B., Celentano, D., & Glass, T. (2020). Measuring neighbourhood social and economic change for urban health studies. Urban Studies, 57(6), 1301–1319. https://doi.org/10.1177/0042098019880754

Billari, F. C. (2001). Sequence Analysis in Demographic Research. Canadian Studies in Population 28(2): 439–458.

Burgess, E. W. (1925). The growth of the city. In R. E. Park, E. W. Burgess, & R. D. Mckenzie (Eds.), The City (pp. 47–62). Chicago: University of Chicago Press.

Catney, G., Wright, R., & Ellis, M. (2021). The evolution and stability of multi-ethnic residential neighbourhoods in England. Transactions of the Institute of British Geographers, 46(2), 330–346. https://doi.org/10.1111/tran.12416

Cornwell, B. (2015). Sequence Analysis: Methods and Applications. Structural Analysis in the Social Sciences 37. New York, NY: Cambridge University Press.

Delmelle, E. C. (2015). Five decades of neighborhood classifications and their transitions : A comparison of four US cities , 1970 - 2010. Applied Geography, 57, 1–11. https://doi.org/10.1016/j.apgeog.2014.12.002

Delmelle, E. C. (2016). Mapping the DNA of urban neighborhoods: Clustering longitudinal sequences of neighborhood socioeconomic change. Annals of the American Association of Geographers, 106(1), 36–56. https://doi.org/10.1080/00045608.2015.1096188

Delmelle, E. C. (2017). Differentiating pathways of neighborhood change in 50 U.S . metropolitan areas. Environment and Planning A, 49(10), 2402–2424. https://doi.org/10.1177/0308518X17722564

European Commission. (2021). Labour Market Information: Sweden, Stockholms Län. Available at: "https://ec.europa.eu/eures/main.jsp?catId=2615&countryId=SE&acro=lmi&lang=en&regionId=SE0&nuts2Code=SE01&nuts3Code=SE010&regionName=Stockholms%20l%C3%A4n", accessed on 16 June 2021.

Eurostat. (2021). Population on 1 January by broad age group, sex and metropolitan regions. Available at: https://ec.europa.eu/eurostat/databrowser/view/met_pjanaggr3/default/bar?lang=en, accessed on 15 June 2021.

Foote, N., & Walter, R. (2017). Neighborhood and socioeconomic change in emerging megapolitan nodes : tracking shifting social geographies in three rapidly growing United States metropolitan areas , 1980 –

2010. Urban Geography, 38(8), 1203–1230. https://doi.org/10.1080/02723638.2016.1217637

Franzén, M. (2005). New social movements and gentrification in Hamburg and Stockholm : A comparative study. Journal of Housing and the Built Environment, 20(1), 51–77.

Gabadinho, A., Ritschard, G., Müller, N. S. & Studer, M. (2011). Analyzing and Visualizing State Sequences in R with TraMineR. Journal of Statistical Software 40(4): 1–37.

Glass, R. (1964). Introduction: aspects of change. In the Centre for Urban Studies (Ed.), London: aspects of change. London: MacKibbon and Kee.

Haandrikman, K., Costa, R., Malmberg, B., Rogne, A. F., & Sleutjes, B. (2021). Socio-economic segregation in European cities. A comparative study of Brussels, Copenhagen, Amsterdam, Oslo and Stockholm. Urban Geography. https://doi.org/10.1080/02723638.2021.1959778 .

Hedin, K., Clark, E., Lundholm, E., & Malmberg, G. (2012). Neoliberalization of Housing in Sweden: Gentrification, Filtering, and Social Polarization. Annals of the Association of American Geographers, 102(2), 443–463. https://doi.org/10.1080/00045608.2011.620508

Hoover, E. M., & Vernon, R. (1959). Anatomy of a metropolis : the changing distribution of people and jobs within the New York metropolitan region. Cambridge, Massashusets: Harvard University Press.

Hoyt, H. (1939). The Structure and Growth of Residential Neighborhoods in American Cities. Washington D.C.: United States Government Printing Office.

Invest Stockholm (2020). Stockholm as a global force The significance of headquarters in the Nordics and the Stockholm region. Stockholm: Invest Stockholm.

Kenny, J. (2009). Neighborhood Change. In International Encyclopedia of Human Geography (pp. 343–348). https://doi.org/10.1016/B978-008044910-4.01064-6

Lee, H. (2021). Are Millennials leaving town? Reconciling peak Millennials and youthification hypotheses. International Journal of Urban Sciences, 0(0), 1–19. https://doi.org/10.1080/12265934.2020.1871061

Lees, L. (2015). Gentrification. In International Encyclopedia of the Social & Behavioral Sciences (Vol. 10, pp. 46–52). https://doi.org/10.1016/B978-0-08-097086-8.74013-X

Lees, L., & Phillips, M. (2018). Handbook of Gentrification Studies. Cheltenham: Edward Elgar Publishing Limited.

Levy, B. L., Nolan E. P., & Sampson, R. J. (2020). Triple Disadvantage: Neighborhood Networks of Everyday Urban Mobility and Violence in U.S. Cities. American Sociological Review, 85(6), 925 –956.

Ley, D. (1996). The New Middle Class and the Remaking of the Central City. Oxford: Oxford University Press.

Meen, G., Nygaard, C., & Meen, J. (2013). The Causes of Long-Term Neighbourhood Change. In M. van Ham, D. Manley, N. Bailey, L. Simpson, & D. Maclennan (Eds.), Understanding Neighbourhood Dynamics: New Insights for Neighbourhood Effects Research (pp. 43–62). Dordrecht: Springer.

Mikelbank, B. A. (2011). Neighborhood Déjà Vu: Classification in Metropolitan Cleveland, 1970-2000. Urban Geography, 32(3), 317–333. https://doi.org/10.2747/0272-3638.32.3.317

Moos, M. (2016). From gentrification to youthification? The increasing importance of young age in delineating high-density living. Urban Studies, 53(14), 2903–2920. https://doi.org/10.1177/0042098015603292

Morenoff, J. D., & Tienda, M. (1997). Underclass Neighborhoods in Temporal and Ecological Perspective. The Annals of the American Academy of Political and Social Science, 551, 59–72.

Patias, N., Rowe, F., & Cavazzi, S. (2020). A Scalable Analytical Framework for Spatio-Temporal Analysis of Neighborhood Change: A Sequence Analysis Approach. In P. Kyriakidis, D. Hadjimitsis, D. Skarlatos, & A. Mansourian (Eds.), Geospatial Technologies for Local and Regional Development. AGILE 2019. Lecture Notes in Geoinformation and Cartography (pp. 223–241). Springer, Cham.

Phillips, N. E., Levy, B. L., Sampson, R. J., Small, M. L. & Wang, R. Q. (2021). The Social Integration of American Cities: Network Measures of Connectedness Based on Everyday Mobility Across Neighborhoods. Sociological Methods & Research, 50(3), 1110–1149.

Santis, G. De. (2018). Trajectories of multidimensional neighborhood change over the long-run . An Italian case study : the city of Turin , 1971-2011 (ENHR, ed.).

Séguin, A., Apparicio, P., & Riva, M. (2012). Identifying , mapping and modelling trajectories of poverty at the neighbourhood level : The case of Montréal , 1986-2006. Applied Geography, 35(1–2), 265–274.

Smith, N. (1979). Toward a theory of gentrification: A back to the city movement by capital, not people. Journal of the American Planning Association, 45(4), 538–548. https://doi.org/10.1080/01944367908977002

Statistics Sweden. (2021a). Population by region, sex, region of birth and year. Available at: https://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__BE__BE0101__BE0101E/InrUtrFoddaReg AlKon/table/tableViewLayout1/, accessed on 15 June 2021.

Statistics Sweden. (2021b). DeSO – Demografiska statistikområden. Available at: https://www.scb.se/hitta-statistik/regional-statistik-och-kartor/regionala-indelningar/deso---demografiska-statistikomraden/, accessed on 11 August 2021.

Studer, M. (2013). WeightedCluster Library Manual: A Practical Guide to Creating Typologies of Trajectories in the Social Sciences with R'. LIVES Working Papers 24.

Tammaru, T., Marcinczak, S., van Ham, M., & Musterd, S. (2016). A multi-factor approach to understanding socio-economic segregation in European capital cities. In T. Tammaru, S. Marcińczak, M. van Ham, & S. Musterd (Eds.), Socio-Economic Segregation in European Capital Cities: East Meets West. (pp. 1–29). Oxford: Routledge.

Teernstra, A. (2014). Neighbourhood Change, Mobility and Incumbent Processes: Exploring Income Developments of In-migrants, Out-migrants and Non-migrants of Neighbourhoods. Urban Studies, 51(5), 865–867. https://doi.org/10.1177/0042098013494422

Temelová, J., Novák, J., Kährik, A., & Tammaru, T. (2016). Neighbourhood Trajectories in the Inner Cities of Prague and Tallinn: What Affects the Speed of Social and Demographic Change? Geografiska Annaler, Series B: Human Geography, 98(4), 349–366. https://doi.org/10.1111/geob.12109

Tennekes, M. (2018). tmap: Thematic Maps in R. Journal of Statistical Software 84(6): 1–39.

Van Criekingen, M., & Decroly, J. M. (2003). Revisiting the diversity of gentrification: Neighbourhood renewal processes in Brussels and Montreal. Urban Studies, 40(12), 2451–2468. https://doi.org/10.1080/0042098032000136156

van Ham, M., Manley, D., Bailey, N., Simpson, L., & Maclennan, D. (2013). Understanding Neighbourhood Dynamics: New Insights for Neighbourhood Effects Research. In Understanding Neighbourhood Dynamics: New Insights for Neighbourhood Effects Research (pp. 1–21). Dordrecht: Springer.

Wei, F., & Knox, P. L. (2014). Neighborhood Change in Metropolitan America , 1990 to 2010. Urban Affairs Review, 50(4), 459–489. https://doi.org/10.1177/1078087413501640

Wimark, T., Andersson, E. K., & Malmberg, B. (2019). Tenure type landscapes and housing market change: a geographical perspective on neo-liberalization in Sweden. Housing Studies, 0(0), 1–24. https://doi.org/10.1080/02673037.2019.1595535

Zwiers, M., Ham, M. Van, & Manley, D. (2018). Trajectories of ethnic neighbourhood change : Spatial patterns of increasing ethnic diversity. Population Space and Place, 24, e2094. https://doi.org/10.1002/psp.2094

Zwiers, M., van Ham, M., & Manley, D. (2018). Trajectories of ethnic neighbourhood change: Spatial patterns of increasing ethnic diversity. Population, Space and Place, 24(2), 1–11. https://doi.org/10.1002/psp.2094

Annex

Annex Table A1. z-score means across k-means clusters. Average over the whole time period.

Variable	Ageing middle-class areas	Elite areas	Middle-class family areas	Vulnerable areas	New elite family areas
Socioeconomic					
% with tertiary education	0.258	0.948	-0.660	-1.076	0.334
% unemployed	0.215	-0.727	-0.124	1.202	-0.253
% with high income	-0.217	1.273	-0.419	-1.097	0.377
% at risk of poverty	-0.201	-0.623	-0.059	1.936	-0.364
% recipients of social assistance	-0.090	-0.610	-0.211	2.009	-0.265
Housing					
% of owner-occupied housing	-0.639	0.685	0.662	-1.183	0.220
% of new housing	-0.290	-0.123	-0.056	-0.263	3.804
Demographic					
% persons 65 years and above	0.693	-0.222	-0.179	-0.607	-0.973
% children	-1.037	0.614	0.350	0.526	0.973
% migrants born in less economically advanced countries	-0.221	-0.528	-0.223	2.206	-0.149

Beyond (dys)functional: What Does Success Look Like in Irish Housing Policy?

Paul Umfreville

Technical University Dublin, School of Surveying and Construction Management, Dublin, Ireland
e-mail: d19127225@mytudublin.ie

Abstract

What are the attributes of a housing system that works, over one that is dysfunctional? What differentiates a system that is optimal from one which is purely adequate? What is success?

Reviewing the literature identifies a significant body of work around the outcomes of dysfunction, including the impacts of reduced affordability, security, availability and accessibility. This also identifies a broad range of suggested policy responses to address these concerns. However, literature is limited on what a successful housing system would do, what it would produce, what an optimal housing system provides, and for whom.

The dysfunctional Irish housing system provides the case-study to develop the distinction between a functioning and optimal housing system. This paper begins a discussion on this distinction and provides a working definition of success. Although focused on the Irish housing system, the novelty of this research and the issues arising has a much wider international relevance.

Keywords: housing; system; functional; optimal; Ireland

Introduction

The European Network of Housing Researchers (ENHR) annual conference aims to explore and understand uncertainties and instabilities which shape contemporary urban living, and to foster an inquiry into potential policy and governance responses. This paper ties into these themes by exploring questions which get to the heart of providing effective housing responses, offering some predictability within an often fragmented and changeable environment. What are the attributes of a housing system that works, or at least is functional, over a system that does not work, and is arguably dysfunctional? What differentiates a housing system that is optimal from one which is purely adequate? Therefore, what is success, and for whom?

Through reviewing the literature of housing system functionality, and undertaking a thematic analysis, this paper addresses these questions, bringing rigour into identifying what a functional, adequate or optimal housing system would, or should, provide. Key bases of consideration are the outcome processes of Clapham's (2019) policy domain and the definition developed by the United Nations High Commissioner for Human Rights (UNHCHR) (UN, 2009), establishing entitlements to housing security, restitution, access, and participation. This analysis broadens to consider the wider literature to address elements of functionality and whether these processes and definition continue to provide a useful template with which to analyse wider housing system effectiveness.

A broad body of literature establishes that housing systems have been failing and continue to provide unequal outcomes. Fields and Hodkinson (2018) suggest that the housing predicament in many states has been ongoing for many years and is a reflection less of an emergency though more of a consistent aspect of capitalist political economy. Alexandri and Janoschka (2018) emphasise the synergy of dysfunction within southern European states, whilst others recognise housing crisis in specific countries, exampled

within: the United Kingdom (Minton, 2017; Clapham, 2019); the United States (Khare, 2018); and Sweden (Christophers, 2013; Stephens, 2020). In Ireland, system dysfunction is manifested as housing crisis (Lyons, 2017; Norris, 2017; Byrne and Norris, 2018; Corrigan *et al.*, 2019; Ó Broin, 2019; Hearne, 2020). Furthermore, insight to the impacts of the housing crisis is provided in relation to, *inter alia*, the precarities of residential stability (Finnerty and O'Connell, 2017; Byrne, 2020b; Lima, 2020; Waldron, 2021); the experiences of the unrevealed casualties of mortgage stress (Waldron and Redmond, 2017); examination of the impacts on vulnerable families of the marketisation of social housing (Hearne and Murphy, 2018), and concern at the financialisation of the Irish housing market which is resulting in issues with affordability (Deva and Farha, 2019; O'Callaghan and Mcguirk, 2020).

Whilst there is a significant body of literature on housing system dysfunction and crises, the outcomes of that crises, and the unequal impact, there is less on what an adequate housing system would look like, what it would provide, or how it might be defined. We might imagine that a functioning housing system would ensure that there is no homelessness – for those visible on the streets, and those hidden – where choice provides for good quality housing being available to rent or to purchase at affordable prices and in accessible locations. That housing systems have been in crisis over a prolonged period of time highlights the importance of having a definition of success, a target, to aim. However, the literature on the definition of success, and for whom, is more limited.

The paper draws out the distinction between functionality and optimality, recognising the specificities of context. Assessing the dysfunctional Irish housing system as a case-study, the paper develops an Irish-specific definition of housing system optimality to answer the specific question: what is an optimal housing system for Ireland? Although focused on Ireland, this process has wider applicability, and aims to begin a discussion of adequacy, functionality and optimality, and to provide a working definition of what success might look like.

The paper comprises five sections: the first sets out the methods; the second reviews the literature around definitions and themes of housing system functionality. The third section develops the components of success, and the fourth the attributes of an optimal housing system. The final sections develop emerging themes into a definition of success, recognising that success is multi-faceted, and drawing conclusions that will be of benefit to a wider audience within the European Network of Housing Researchers and beyond.

Methods

This paper reviews the literature relating to definitions of housing success, aiming to identify one, or elements of more than one, which might provide the basis to test concepts of housing system functionality and optimality. Thereafter, reviewing the literature from a range of authors, within both the Irish and international housing fields, provides a range of suggestions for overcoming crisis and dysfunction. By grouping the ideas, suggestions and recommendations, the common attributes of functionality can be identified.

The 'Scopus' online database for academic literature provided an initial outline of relevant source material. Using the search terms '"housing system" and "Ireland" and "crisis" or "dysfunction"' this search was limited to English language journals focused on Ireland between 2016 and 2021 in order to provide specific and up-to-date material. Thereafter, a similar process was used to identify relevant sources from international literature on proposed action to improve housing outcomes. With the search identifying relatively few sources the review widened to deliberately include 'grey' literature in the field, in addition to earlier research in peer-reviewed journals, recognising the importance of both. Whilst peer-review assures credibility and validity, other literature offers less guarded analysis of housing problems and recommendations for improvement. The result is body of literature, comprising a total of over fifty references, in two parts: the first is a range of literature proposing action to improve functionality, and includes those authors' views and suggestions on overcoming housing system dysfunctionality; the second is a body of literature focused on the issues that makes the Irish housing system dysfunctional (set

out in Appendix).

Thematic analysis provides opportunity to identify the key attributes emerging around the characteristics, or elements, of a functional and an optimal housing system. These are distilled into outcome processes, categorised using the concepts that relate to David Clapham's (2019) policy domain (figure 1).

PRIVATISATION	• the privatisation of housing assets through sale, and here includes the reliance on the private sector in the provision of housing, for example through private sector mechanisms, such as the provision of a proportion of a development site for affordable housing.
MARKETISATION	• the marketisation of non-market institutions, with an emphasis of working on market-based principles, which here also includes measures of de-regulation, and limited or reducing social housing provision.
COMMODIFICATION	• with the recognition of the primary value of housing as a good, rather than a service, which here also includes affordability, though with the acknowledgement that affordability is a wider barometer of commodification, as well as other processes, including the effects of privatisation, marketisation, financialisation and individualisation.
INDIVIDUALISATION	• of housing provision - exemplified through the sale of public assets, though here also includes the transfer from the subsidy of construction to the individualisation of allocations.
FINANCIALISATION	• through integration within global financial structures.

Figure 1: Outcome processes (after Clapham, 2019).

In addition to the outcome processes, contributions are also assessed in relation to the thematic entitlements of: security of tenure; availability of services; affordability; habitability; accessibility; location; and cultural adequacy (UN, 2009, p. 4), set out in figure 2. These entitlements cover a broad spectrum of requirements, and the literature review provides opportunity to consider the scope of these as elements of a usable definition of success.

'Security of tenure: housing is not adequate if its occupants do not have a degree of tenure security which guarantees legal protection against forced evictions, harassment and other threats.
Availability of services, materials, facilities and infrastructure: housing is not adequate if its occupants do not have safe drinking water, adequate sanitation, energy for cooking, heating, lighting, food storage or refuse disposal.
Affordability: housing is not adequate if its cost threatens or compromises the occupants' enjoyment of other human rights.
Habitability: housing is not adequate if it does not guarantee physical safety or provide adequate space, as well as protection against the cold, damp, heat, rain, wind, other threats to health and structural hazards.
Accessibility: housing is not adequate if the specific needs of disadvantaged and marginalized groups are not taken into account.
Location: housing is not adequate if it is cut off from employment opportunities, health-care services, schools, childcare centres and other social facilities, or if located in polluted or dangerous areas.
Cultural adequacy: housing is not adequate if it does not respect and take into account the expression of cultural identity' (UN, 2009, p. 4).

Figure 2: The rights to adequate housing through entitlements (UN 2009).

The approach undertaken within this research assumes that if the authors' suggestions were implemented then the housing system would provide some functionality. To overcome any limitations associated with the assumption of this approach, a second method is developed. This aims to identify the difference between an adequate or functioning housing system and the attributes of a system which is optimal or successful. To develop this distinction the views of authors who have each identified the Irish housing system as being dysfunctional, or in crisis, are analysed, identifying their perceptions and thoughts on the causes or influences of that dysfunction. The assumption here is that if these causes of dysfunction were overcome, then the housing system would, in theory, provide some adequacy. As the authors are writing within the Irish housing context, this therefore would offer some pointers to system optimality (i.e. the best or most effective in the Irish context). Developing the paper from differing approaches – analysing the literature in relation to both housing adequacy and dysfunction – together with undertaking thematic analysis in relation to both outcome processes and entitlements, provides a measure of triangulation, supporting the convergence of information from different sources (figure 3).
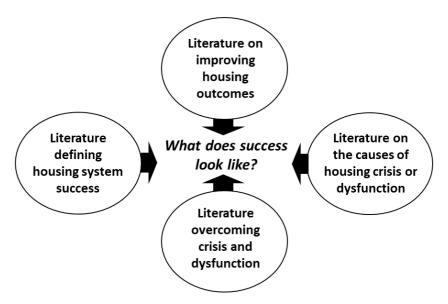

Figure 3: Converging sources of literature.

Reviewing the literature

Article 25 of the Universal Declaration of Human Rights (U.N., 1948), accepted by Ireland with accession to the U.N. in 1955, identifies that 'Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including… housing…'. The International Covenant on Economic, Social and Cultural Rights (ICESCR) (1966), with 175 state signatories, recognises the right to an adequate standard of housing, and for continuous improvement of living conditions. In Europe, the European Social Charter (1961, revised 1996) encourages signatories to prevent and work to eradicate homelessness, promote affordability and access to housing. The rights to adequate housing have been developed by the United Nations High Commissioner for Human Rights (UNHCHR) (UN, 2009, p. 3) establishing the entitlements of security of tenure; housing, land and property restitution; equal and non-discriminatory access to adequate housing; and participation in housing-related decision-making at the national and community levels. Stipulating that the right to housing does not require the state to build housing for the entire population, these entitlements do however require a minimum provision. More recently, the United Nation's Sustainable Development Goal (U.N., 2015) eleven, sets out the aim to make cities and human settlements inclusive, safe, resilient and sustainable, with access for all to adequate, safe and affordable housing.

Of these international human rights instruments, the ICESCR provides the comprehensive protection for the right to housing. Ireland signed up to ICESCR in 1973 and ratified it in 1989. The Optional Protocol to the Convention provides a mechanism to directly enforce the rights under the Convention. The Optional

Protocol provides for a complaints mechanism to the UN in relation to the ICESCR rights where all domestic remedies have been exhausted. Ireland signed the Optional Protocol in March 2012. It has not yet ratified it. Among the countries who have ratified it are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Portugal and Spain. Under the Optional Protocol, complaints of non-compliance with the ICESCR rights can be made to the UN Committee on Economic, Social and Cultural Rights (UNCESCR). The UNCESCR has emphasised that even in times of financial crisis, States must continue to work towards the protection of rights set out in the Covenant.

Much of the United Nations literature highlights the aim for housing adequacy, and a review of the wider literature highlights some consistency in the identification of the attributes of a functioning system providing housing adequacy. The 1969 Irish White Paper, *Housing in the Seventies*, set out the objectives of ensuring 'every family can obtain a house of good standard at a price or rent they can afford' (DHPLG, 1969 in Lewis, 2019, p. 6). Twenty-two years later, the Irish Department of Environment (1991) advocated that a functioning system must ensure that every household has a dwelling suitable to its needs, located in an acceptable environment, at a price or rent it can afford. Likewise, and more recently, Ó Broin (2019) outlines that a housing system should enable 'all people to access secure, appropriate and affordable accommodation that meets their social, economic and cultural needs and aspirations', whilst Hearne (2020, p. 109) suggests that a system should provide housing which is adequate, affordable, and with security of tenure and with opportunity to participate in community and society. Similar conclusions are found internationally. The Swedish Housing Crisis Committee (2014) suggests that housing must be provided for all stages of life; in sizes, style and locations that suit demand; with freedom of choice and mobility; which facilitates changing forms of tenure for people over time, whilst providing social protection. Crawford and McKee (2018) introduce the aspiration of home ownership in the Scottish context, whilst Clapham (2019) recognises the ability to achieve housing situation aspiration should not be constrained by lack of supply, affordability or location. Placing housing in the heart of governance, the Finnish Constitution enshrines an obligation on public authorities to promote the right of everyone to housing, a right which is mirrored in other countries, including Belgium, the Netherlands, Portugal and Spain.

Despite these sources, there is a limited literature around what ought to be put in place in order to achieve the goal of an adequate housing system. Reviewing the literature from within both the Irish and international housing fields provides a range of suggestions for overcoming crisis and dysfunction. Within this literature, some identified goals are aspirational, such as recognising housing as a home rather than a commodity (Elsinga, 2020), ending homelessness (Allen *et al.*, 2020), or ensuring affordability (Wetzstein, 2017). Others require systemic change, or suggest a pathway, such as promoting housing based rights, including constitutional or legislative rights to housing (Minton, 2017; Hearne and Murphy, 2018; Clapham, 2019; Ó Broin, 2019; Hearne, 2020), an increased or leading role for government (Healy and Goldrick-Kelly, 2018; Clapham, 2019) including increased government intervention in securing, providing and developing land (Whitehead, Scanlon and Holman, 2016; Bowie, 2017; Ryan-Collins, Lloyd and Macfarlane, 2017). There are suggestions for an increased role for civil society (Minton, 2017; Timperley, 2020), including questioning how collaborative forms of housing might compensate for the retreat of the state (Czischke, Carriou and Lang, 2020). Others offer more direction, such as separating land costs from housing (Ó Broin, 2019), facilitating house pricing to be a function of income (Bowie, 2017; McWilliams, 2021), taking a regional approach (Minton, 2017; Matznetter, 2020), moving from 'benefits to bricks' and towards tenure neutrality (Bowie, 2017, p. 140; Ó Broin, 2019) or connecting housing crisis with the climate crisis (Hearne, 2020). Within this, home ownership should be recognised as part of a mix of provisions, as individually-owned homes are a main driver of wealth accumulation (Voigtländer, 2019).

Some of the more specific recommendations and suggestions address either the causes of dysfunction, or the symptoms. In the former, the literature recommends halting the privileging of owner occupation, through stopping the tenant purchase of public housing (Bowie, 2017; Clapham, 2019; Timperley, 2020) and removing housing ownership subsidies (Clapham, 2019; Ó Broin, 2019), taxing appreciation of housing assets (Bowie, 2017) and regulating mortgage lending (Clapham, 2019). In addition to increasing the direct provision of social housing (Hearne and Murphy, 2018; Ó Broin, 2019; Hearne, 2020), a

proactive state can capture land value increase for the good of the community through land value tax (Minton, 2017; Ryan-Collins, Lloyd and Macfarlane, 2017; Clapham, 2019; Timperley, 2020), actively manage and use public land to promote housing development (Minton, 2017; Ryan-Collins, Lloyd and Macfarlane, 2017; NESC, 2018; Hearne, 2020; McWilliams, 2021), whilst promoting cooperative forms of ownership (Hearne, 2020; Timperley, 2020; McWilliams, 2021), and tax vacant land, to bring it forward for development (Williams and Nedovic-Budic, 2016).

Suggestions for policy focus which relate to addressing the symptoms of housing crisis include the reform and regulation of the private rental sector (PRS) (Bowie, 2017; Clapham, 2019; Ó Broin, 2019; Matznetter, 2020; Timperley, 2020; McWilliams, 2021), recognising the stratification within the sector (Sirr, 2014), whilst promoting new Housing First (Allen *et al.*, 2020) and cost rental approaches (Healy and Goldrick-Kelly, 2018; Lewis, 2019). The means for achieving change includes enabling a proactive planning system (Whitehead, Scanlon and Holman, 2016; Williams and Nedovic-Budic, 2016; Minton, 2017; Ryan-Collins, Lloyd and Macfarlane, 2017; Ó Broin, 2019), improving the available data on land value (Ryan-Collins, Lloyd and Macfarlane, 2017), and changing the narrative of the media (Minton, 2017; Clapham, 2019; Mcintyre, 2021).

Specifically in the Irish context, a range of authors have identified the causes and symptoms of a housing system which is dysfunctional and in crisis. Drudy and Punch (2002) set the scene two decades ago, when highlighting that housing provision by the market was, and had been, underpinned by tenure-based policies and subsidy. The state's policy for housing crisis then led to an increase in unaffordability whilst fuelling a private sector boom (Memery, 2001). Since then, the outcome of the further privatisation and marketisation of the sector is a supply of housing which is volatile, unreliable, wasteful and inefficient, and a provision which is unequal, based on speculation, unaffordable, and which lacks security, quality and availability (Finnerty, O'Connell and O'Sullivan, 2016; Williams and Nedovic-Budic, 2016; Healy and Goldrick-Kelly, 2018; Hearne and Murphy, 2018; NESC, 2018; Hearne, 2020). The primacy of the market has been promoted by the state (Murphy and Dukelow, 2016), reflected in the differential policies towards ownership and renting (Sirr, 2014) and the system continues to be a 'textbook example of the dualist model' (Hearne, 2020, p. 129).

Recommendations for action can be split between overarching goals; actions that require systemic change; and those actions which either address the causes or the symptoms of housing crisis. Figure 4 provides an outline of the type of theme emerging within each category.

The increasing emphasis of housing as a commodity, rather than a home (Dukelow and Considine, 2017), coupled with the privatisation and expansion of mortgage lending and the marketisation of home ownership (Norris, 2016; Ó Broin, 2019), has provided barriers to access, security and tenure (Hearne and Murphy, 2018). The cost of housing now has no correlation to median incomes (McWilliams, 2021), and with house-price growth outstripping income growth, affordability continues to be a significant issue (Sirr, 2018; Byrne, 2020a; Lima, 2020). The unequal burden of a system in crisis is highlighted through affordability, with those within the bottom quartile of income particularly affected, being required to spend between 40 to over 50 per cent of income on housing (Corrigan *et al.*, 2019).

In recent years, the government's pursuit of neoliberal economic policies has led to an increasing role for global finance (Clapham, 2020; Hearne, 2020), and reliance on the private rental sector to deliver social housing objectives has resulted in increased prices (Byrne and Norris, 2018; Ó Broin, 2019), attracting international equity organisations and real estate investment trusts (Quinlan, 2020; Waldron, 2021). The UN Special Rapporteur on the right to adequate housing, and the Chairperson of the Working Group on business and human rights, sent letters to Ireland, the Czech Republic, Denmark, Spain, Sweden and the USA which outlined that each had facilitated the financialisation of housing through preferential taxation and inadequate regulations of tenant rights. In the Irish context, particular attention was levelled at measures which have reduced public housing budgets whilst enabling investor land hoarding, which has restricted supply to raise house prices and rents, and through promoting real estate investment trusts (REITs) and selling non-performing loans of state-controlled banks to vulture funds (Deva and Farha, 2019).

Focus of literature suggestions	Examples of required policy focus, action, response or intervention
Wider goals	Establish 'whether housing is meant for making money or for supporting people's wellbeing'(Elsinga, 2020, p. 560)
	Connect the climate and housing crisis (Hearne, 2020)
	End homelessness (Allen *et al.*, 2020)
	Renting to be a viable alternative to ownership (Sirr, 2014)
Requiring systemic change	Break the positive feedback cycle between the financial system, land values and the wider economy (Ryan-Collins, Lloyd and Macfarlane, 2017)
	State to take a leading role (Whitehead, Scanlon and Holman, 2016; Healy and Goldrick-Kelly, 2018; Clapham, 2019)
	Move from benefits to bricks (Bowie, 2017)
	Provide a (constitutional) right to housing (Clapham, 2019; Ó Broin, 2019; Hearne, 2020)
	House prices to be a function of income (McWilliams, 2021)
	Increase the role of civil society (Minton, 2017)
Focusing on causes	Stop right to buy and subsidies on home ownership (Bowie, 2017; Timperley, 2020)
	Introduce a development land tax (Minton, 2017) and compulsory purchase to facilitate proactive land management (NESC, 2018)
	Increase direct provision of public housing (Hearne and Murphy, 2018; Clapham, 2019; Hearne, 2020)
	Local authorities to take equity stake in future value appreciation (Bowie, 2017)
	State promotion of cooperative housing (McWilliams, 2021)
Focusing on symptoms	Cost rental to be developed (Healy and Goldrick-Kelly, 2018; NESC, 2018; Lewis, 2019; Matznetter, 2020)
	Private rental sector to be regulated (Bowie, 2017; Clapham, 2019) and reformed (Ó Broin, 2019; Timperley, 2020)
	Rent caps at 30% of net income (Bowie, 2017; McWilliams, 2021)
	Rental tenancies for a minimum of 5 years (Bowie, 2017)

Figure 4: Examples from the literature of proposals to improve functionality – views on overcoming housing system dysfunctionality.

The literature suggests that the Irish government has supported financialisation, with fiscal policies boosting property acquisition and speculation (Williams and Nedovic-Budic, 2016), whilst actively seeking to achieve the highest prices in the development of its own land, which has encouraged vulture fund and REIT activity (Healy and Goldrick-Kelly, 2018; Deva and Farha, 2019; Lima, 2020). Thereby, the policy response to a crisis caused by financialisation, is to encourage greater involvement of financial actors, and by doing so transform the housing crisis into a financial opportunity (Lima, 2020). Facilitated by a marketised planning system (Lennon and Waldron, 2019), the Irish property development field provides a model of regulatory failure (Ní Fhloinn, 2018).

The results from this process are a reduced, pro-cyclical supply of social housing, which accelerates boom and intensifies bust (Norris and Byrne, 2018), increasing homelessness, and housing inequality and insecurity (Hearne and Murphy, 2018; Lewis, 2019). Social housing is residualised (Dukelow and Considine, 2017), and in low supply, and those dwellings which are deemed to be 'affordable' are often out of reach to first-time buyers (Sirr, 2018). Evictions, poor quality housing and overcrowding persist

(Byrne and McArdle, 2020), creating an overall picture of housing precarity, manifested through crisis in housing affordability, security and accessibility (Waldron, 2021). Often forgotten, Traveller and Roma communities face housing conditions which promote marginalisation and exacerbate wider societal inequalities (Van Hout and Staniewicz, 2012) with a quantity and quality of housing provision which violates their rights (Dukelow and Considine, 2017).

The Irish housing system therefore provides an ideal case-study within which to identify the means of addressing crisis and dysfunction, and the aim to provide a working definition for an adequate or even an optimal system.

The components of success

The literature provides a range of suggestions for counteracting the many facets of housing crisis and system dysfunction. By grouping the ideas, suggestions and recommendations, the common outcome processes based on Clapham's (2019) concepts of the policy domain can be identified (figure 5 below), confirming that the majority of suggestions for improving housing system functionality are responses to one or more of the concepts relating to the five policy domains, or a symptom of one of those processes. This outlines the processes at play, the themes identified in the literature to address negative outcomes, and the current policy response in Ireland in relation to these themes. The literature cumulatively recognises that each of the concepts of the policy domain are evident in the Irish housing context, and this provides a basis to identify the components of success.

Utilising the detail set out in figure 5, an outline of success might be a housing system which provides:

- availability to a mix of tenures, including a good supply of social housing (to address issues of privatisation)
- with processes of regulation that are effective, fair, and which are for the benefit of the community in general, and the protection of the end user specifically (to address issues of marketisation)
- where housing is recognised primarily as a home (to address issues of commodification)
- within which there is a balanced approach to tenure support, with home ownership recognised as part of a mix of provision (to address issues of individualisation)
- some of the land value appreciation which is generated by fortitude, luck and speculation is captured, maintained and utilised for the good of the community (to address issues of financialisaton).

The split of author suggestions and recommendations to address elements of housing crisis provides a basis to identify the components of success. However, the collective impact of the five conceptual themes is identified by various authors as resulting from market failure (for example, Bowie, 2017; Clapham, 2019; Timperley, 2020), or weak government planning (e.g. Sirr, 2014; Williams and Nedovic-Budic, 2016; Ryan-Collins, Lloyd and Macfarlane, 2017; Healy and Goldrick-Kelly, 2018). Minton (2017) suggests that reductions in public and democratic institutional participation in housing-related decision-making is also a cause, which links to the UN entitlement for participation in housing-related decision-making at the national and community levels.

The analysis of suggested policy focus provides a basis for the definition of success but does not provide a complete picture. In order to overcome any limitations associated with the assumptions of this method, that if these suggestions were implemented then the housing system would provide some functionality, and to extend to a fuller definition, a second approach is developed. The next section analyses the body of literature that emphasises the outcomes of housing crisis, in order to identify the difference between an adequate or functioning housing system and the attributes of a system which is optimal.

PROCESS:	THEMES FROM LITERATURE ON IRISH HOUSING DYSFUNCTION:	THEMES FROM LITERATURE TO ADDRESS NEGATIVE OUTCOMES:	IRISH POLICY POSITION:
PRIVATISATION	Reliance on private sector mechanisms to provide social housing	Increase the direct provision of social housing Stop right to buy (RTB) Use public land to develop housing Promote Housing First approaches	Limited direct provision of social housing RTB is a key policy for home ownership Yes, though questions of affordability Limited to pilot schemes
MARKETISATION	Reliance on private sector has led to de-regulation of planning and building standards control, and low levels of enforcement of remaining regulation	Regulate and reform the private rental sector Regulation of mortgage lending Proactive planning and management of land	Regulation through rent control Central Bank mortgage rules limiting the income multiplier to 3.5 times of gross income State-owned land sold to highest bidder
COMMODIFICATION	Housing is a commodity and a means of making money Housing provision is speculative and overwhelmingly by the market The cost of housing has no relation to household income, with an affordability gap	Recognise housing as a home rather than a commodity Separate land costs from housing Promote cooperative approaches Promote cost rental approaches House pricing to be a function of income rather than access to debt	Not reflected in housing policy Not reflected in housing policy Limited to pilot schemes Limited to pilot schemes Not reflected in housing policy
INDIVIDUALISATION	Reliance on the private rental sector to deliver social housing objectives has increased demand and prices Dualist housing policy privileges home ownership	Move from 'benefits to bricks' Stop privileging of owner occupation, remove home ownership subsidies, and move towards tenure neutrality	Since 2016, Housing Assistance Payment has increased individualised support Dualist model favours owner occupation - home ownership subsidies and support are a key facet of housing policy
FINANCIALISATION	An increasing role of global finance in Irish housing markets, the maximisation of profits, has encouraged speculation and increased prices	Tax the appreciation of housing assets Capture land value increases and instigate a land value tax	Not reflected in housing policy Not reflected in housing policy

Figure 5: Processes evident in the review of literature, dysfunction in the Irish context, suggestions for improvement and current policy position.

Beyond (dys)functional: identifying the attributes of an optimal housing system

Whilst the Irish housing system provides the case-study within which to develop the distinction between a functioning and an optimal housing system, this is not to suggest however that the Irish system is functional or adequate. The paper aims to begin a discussion on this distinction, to build on the outline of success identified above, and to provide a working definition of success as a means of assisting the development of certainty and stability into this changeable research environment.

The task is to define what an optimal housing system is, or the elements of that which an optimal system is comprised. Whilst 'optimal' is derived from the Latin word *optimus*, meaning 'best', the Cambridge Dictionary (2021) defines 'optimal' as being 'best or most effective possible in a particular situation'. Most theories of the policy process recognise that actors operate with bounded rationality and seek satisfactory rather than optimal outcomes (Shanahan *et al.*, 2018). Here, 'optimal' is taken to mean the best expected outcome within conditions, or limitations. For the Irish housing system, the conditions which define the limits to optimality include historical and cultural practice, social and economic policy, and political processes (Umfreville and Sirr, 2020, p. 231). The remainder of this paper considers the literature around the distinction between housing adequacy and optimality.

Whereas 'adequate' and 'functional' might be arguably indistinguishable, generic, or idiomatically non-specific, optimality instead infers some specificity – being, as defined above, the 'best or most effective possible in a particular situation'. To develop this distinction the literature which identifies the housing system dysfunctionality or crisis has been analysed, identifying the suggestions on the causes of that dysfunction. The assumption here is that if these causes of dysfunction were overcome, then the housing system would, in theory, provide some functionality. With a proportion of this literature within the Irish context, this therefore offers some pointers to system optimality. This approach enables consideration of what an optimal system might look like, or the elements that an optimal system might comprise. As previously undertaken above, with the literature which is suggesting change and considered in light of the concepts of the policy domain (Clapham, 2019), the wider literature is assessed in light of the minimum requirements of the entitlements set out by U.N. (2009) (figure 6 below).

Whilst some entitlements within the UN definition might be more relevant to the Irish context than others, the review of literature confirms the efficacy of the entitlements as an effective overarching definition for housing system functionality. In particular, the equal and non-discriminatory access to adequate housing (affordability and locational accessibility) and security of tenure are common themes arising in the literature, and indeed there are clear connections between each of the entitlements. For example, Lima (2020) highlights that lack of affordability in the private rental sector is a significant factor in evictions, thereby impacting on security. In addition, there are links between housing provision location and affordability (NESC, 2018), and accessibility and security (Waldron, 2021). Other literature recognises the aspiration of choice (Crawford and McKee, 2018; Clapham, 2019; Ó Broin, 2019). Therefore, success in the Irish context might be measured in terms of a system providing housing that meets the aspirations of its population, which is secure, affordable, available, habitable, accessible and culturally adequate, and supplied in appropriate locations which provide for access to employment opportunities, community services and other social facilities.

Specifically, in the Irish context, the literature highlights the need for particular emphasis and urgency of action on three key areas, relating to tenure insecurity; lack of affordability; and locational provision. In each case, the impacts of processes of financialisation, commodification, and individualisation are being manifested, though this is not to suggest provision in relation to the other elements is adequate. For locational accessibility, housing ought to be developed within an integrated policymaking process to ensure accessibility to employment opportunities, community services, and other social facilities, and accounts for the needs of marginalised groups. This emphasises the importance of ensuring 'appropriate supply of the right houses in the right places' (Clapham, 2019, p. 1), and for the housing system to play its part in achieving climate change and carbon reduction targets (Hearne, 2020).

Entitlements – examples of elements of Irish housing system dysfunction	Examples to overcome elements of a dysfunctional housing system
Security of tenure High level of evictions Reliance on provision from for-profit landlords is inferior to the security offered by traditional local authority direct provision, representing a dilution of housing security; tenure insecurity is a key element of housing precarity	Private rental sector to be reformed (Ó Broin, 2019; Timperley, 2020) Extend term for minimum tenancies (e.g. to 5 years) (Bowie, 2017) PRS to be better regulated and / or enforced (Bowie, 2017; Ní Fhloinn, 2018; Clapham, 2019; Byrne and McArdle, 2020; Lima, 2020) Increase public provision of housing (Hearne and Murphy, 2018b; Clapham, 2019; Ó Broin, 2019; Hearne, 2020) Tighten credit checks and regulation of mortgage lending (Clapham, 2019; Ó Broin, 2019)
Availability of services, materials, facilities and infrastructure Reliance on private provision, de-regulation and low levels of enforcement impact on safety	Strengthened regulation to ensure that housing provides a range of basic services and facilities (Dukelow and Considine, 2017; Ní Fhloinn, 2018)
Habitability Unsafe and inadequate housing exacerbates housing inequalities, which impact on quality of life	Strengthened regulation and / or enforced of the private rental sector (Bowie, 2017; Ní Fhloinn, 2018; Clapham, 2019; Byrne and McArdle, 2020; Lima, 2020) - to ensure that housing can guarantee physical safety, provide adequate space, and protect against other hazards
Affordability An increasing demand and limited supply causes prices to rise generally, whilst an increasing reliance on the private rental sector to deliver social housing objectives has further increased prices in that sector Ratio between house price growth and income growth is expanding High land prices impact on the provision of affordable housing Lack of PRS affordability is a significant factor to evictions	Increase public provision of housing (Hearne and Murphy, 2018b; Clapham, 2019; Ó Broin, 2019; Hearne, 2020) Move from 'benefits to bricks' and tenure neutrality (Bowie, 2017; Ó Broin, 2019) Develop cost rental approaches (Healy and Goldrick-Kelly, 2018; NESC, 2018; Matznetter, 2020) Link housing costs to household income; limit housing costs to a % of net household income (Bowie, 2017; McWilliams, 2021) Promote cooperative / collaborative housing approaches (Minton, 2017; Czischke, Carriou and Lang, 2020; Timperley, 2020; McWilliams, 2021) Introduce rent caps (Matznetter, 2020; McWilliams, 2021) Introduce a land value tax (Minton, 2017; Ryan-Collins, Lloyd and Macfarlane, 2017; Timperley, 2020)
Accessibility The PRS has little regard to social or community need, whilst deepening commodification of social housing leads to barriers and uncertainty to household access	Promote Housing First solutions (Allen *et al.*, 2020) Increase direct provision by the state (Hearne and Murphy, 2018b; Clapham, 2019) Regulate the private rental sector (Bowie, 2017; Clapham, 2019)
Location PRS does not necessarily provide supply where needed Land is not available in appropriate locations Too little affordable housing supplied in urban areas where demand is highest	Develop a proactive role for the planning system (Bowie, 2017; Minton, 2017) Promote active land management (NESC, 2018) Government to utilise compulsory purchase (Ryan-Collins, Lloyd and Macfarlane, 2017) to facilitate the bringing forward of large sites (Whitehead, Scanlon and Holman, 2016; McWilliams, 2021) Disincentivise underuse of existing stock (Bowie, 2017)
Cultural adequacy Unsafe and inadequate housing, with limited quantity and quality exacerbate inequalities for vulnerable communities	A national policy on realising adequate and culturally suitable permanent accommodation types, with rigorous needs assessment to feed into a structured spatial planning response (Van Hout and Staniewicz, 2012) which align with local area plans ((Murtagh, 2020)

Figure 6: Elements of housing system dysfunction and measures to overcome that dysfunction against the U.N. definition of rights and entitlements to adequate housing.

For affordability, housing costs ought to be at a level which enables the occupants' enjoyment of other human rights. In Ireland, Lewis (2019, p. 145) identifies the threshold for support being to keep housing costs, including 'rent, mortgage repayments and/or property tax below 35 per cent of net household income'. This threshold is evident in practice and legislation, with Corrigan et al. (2019, p. 127)

highlighting that this was the 'upper limit of Local Authority mortgage burden for tenant purchasers'. Further, the Planning and Development Act 2000 categorises eligibility for affordable housing against the 35 per cent threshold, although the Central Bank of Ireland defines affordable housing as 3.5 times gross income (Hearne, 2020, p. 24). In all cases, however, affordability is recognised as a function of income, rather than a focus on the existing (arbitrary) percentage of market valuation. For security of tenure, housing occupants ought to have a degree of tenure security which guarantees legal protection against forced evictions, harassment and other threats. In Ireland, the temporary suspension of evictions during the Covid-19 pandemic highlighted the lack of effective policy outcomes in more normal times. The identification of emerging themes from the literature enables the development of a wider definition of success.

Towards a definition of success

Analysing the international literature recommending action to overcome housing crisis, together with the Irish literature on the outcomes of dysfunction, provides the means to explore the themes arising, and to develop a comprehensive definition of success. This has been achieved through analysing the identified processes within the policy domain and the categories of adequate housing.

The suggestions and recommendations for improvements to the provision of adequate housing proposes a more active role for the state through, as examples, increasing direct provision of social housing, the regulation of markets, promotion of decommodified forms of provision, and capturing land value increases for the benefit of the wider community. The dysfunction which is particularly identified in the Irish housing literature relates as much to the state's deferral to, or reliance on, the private sector as it does to the government's facilitation of the private sector to seek to provide effective housing outcomes. This is evident in the themes from the literature to address negative outcomes, as well as the Irish-focused literature on housing crisis and dysfunction. The literature identifies the golden thread which links each as being the role of the state. In each of the three elements of significant crisis in the Irish context, locational accessibility, affordability, and security of tenure, the role of government in developing public policy is critical. The literature suggests an enhanced role for the various tiers of government in directing the right amount and type of housing to the right locations; changing the mindset on how affordability is discussed and measured; and ensuring regulation of standards.

In the same vein, public policy has had a role in facilitating or enabling privatisation, marketisation, commodification, individualisation, and financialisation of the housing system. Indeed, the U.N. Rapporteur, writing to the Irish government in 2019, expressed concern at the adoption of laws and policies 'which treat housing as a commodity and undermine the enjoyment of housing as a human right' (Deva and Farha, 2019, p. 1). In particular, the expanding amount and role of global capital in the housing market, with a focus on maximising profit, has disconnected housing from its social function, ensuring that it is 'less affordable, less available, less secure, and less habitable' (Deva and Farha, 2019, p. 3).

Whilst much of the literature suggests a greater, more proactive role for the state, some authors have identified the need for greater participation and devolution of responsibilities within that role, tying-in to the U.N. rights to adequate housing (UN, 2009) establishing entitlements to participation in housing-related decision-making at the national and community levels (Minton, 2017; Hearne, 2020). Rather than a state facilitating private, market-based solutions, this would provide for a state which promotes democracy in the policy process, and which encourages accountability, transparency and a greater community and civil society involvement.

However, whilst this paper seeks to address the question of what success is, an obvious follow-on question is success, but for whom? A housing system is multi-faceted, as indeed are the attributes of success for the variety of actors within a housing system, including the providers and recipients, beneficiaries and losers. The current system which by accident or design manages to constrict supply, raise prices, and promote inequalities in society results in many losers, and this is highlighted in the literature. But that same system might be recognised as successful for some. Consider the interests of developers, money-

lenders, land-owners, global capitalists and trustees of real estate investments, for whom the system currently works very well. With bank lending rates at a historic low (ECB, 2021), the opportunity for rental yields at 6.1 per cent (Lima, 2020), and the return on investments through housing construction of at least 15 per cent (Henneberry, 2016; Waldron, 2021), provides a level of viability which is attractive to investors (Minton, 2017; Ryan-Collins, Lloyd and Macfarlane, 2017; Healy and Goldrick-Kelly, 2018; Waldron, 2021). Consider also those many home-owners already established on the property ladder, for whom a rising market also provides security and opportunity, against those at the lower end of the housing ladder, first-time buyers, generation rent, and the homeless, for whom such price increases negatively impact. Contrast this with a falling market, negative equity, repossessions and evictions, which provides significant trauma and financial stress for those losing their tenure of choice and is not conducive for investment profit, but which provides opportunity for those not caught in the downward-spiralling market.

Controlling the housing system is a multi-faceted process, whereby each positive measure may have a negative effect. Therefore, if a housing system cannot be truly successful for all, the question for governments is: for whom does success matter most? And this brings to the fore the consideration by Elsinga (2020, p. 560) as to 'whether housing is meant for making money or for supporting people's wellbeing'. This is the crux of the debate and has been for some time. Drudy and Punch set out in 2002 (p. 661) the difference between 'housing as a commodity, based on exchange value, as opposed to non-commodified housing based on its use value'. Two decades on, this conundrum continues to be at the heart of policymaking, after all, policymaking is all about decisions and choice, 'a way of making sense of the complex processes of governing' (Colebatch, 2009, p. 1). The literature highlights that the choice of government to support, facilitate or rely on the private sector, particularly in the Irish context, is providing many negative outcomes. Figure 7 sets out indicative marginal perceptions of success, based on the variable cost of housing, highlighting the difficulty of policymaking.
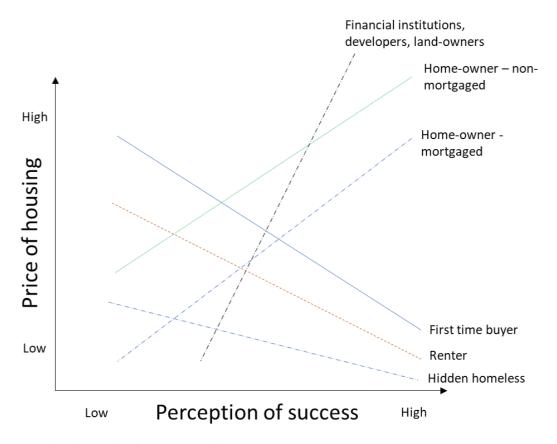

Figure 7: Indicative marginal perceptions of success.

Taking a rational approach might recognise that whilst not everyone can be winners, a successful housing system perhaps provides for those most in need, is fair, equitable and provides for opportunity. Therefore,

building on the components of the definitions identified above, and based on housing system outcome processes and entitlements for adequate housing, a more detailed definition can be advanced. The ideas of success are here merged with recognised causes and symptoms of dysfunction as a combined definition:

> *Success in the Irish context might be measured in terms of a system providing housing that meets the aspirations of its population, which is secure, affordable, available, habitable, accessible and culturally adequate, and supplied in appropriate locations which provide for access to employment opportunities, community services and other social facilities. This would provide: availability to a mix of tenures, including a good supply of social housing; with processes of regulation that are effective, fair, and which are for the benefit of the community in general, and the protection of the end user specifically; where housing is recognised primarily as a home; within which there is a balanced approach to tenure support, with home ownership recognised as part of a mix of provision; and with some of the land value appreciation which is generated by fortitude, luck and speculation captured, maintained and utilised for the good of the community.*

Conclusions and next steps

The processes of privatisation, marketisation, commodification, individualisation, and financialisation (Clapham, 2019) provide an effective overview of outcomes, and each of these are recognisable in the Irish housing context. Similarly, the entitlements and minimum standards required to overcome housing inadequacy developed by the United Nations High Commissioner for Human Rights (UN, 2009) provides good efficacy and coverage of the issues identified in the review of literature. However, the review emphasises that the Irish housing system cannot be considered optimal in regard to any of the attributes, and there is particular concern around three attributes against which the Irish housing system is especially lacking. The outcomes of a sub-optimal housing system include problems with new dwellings not being delivered in the locations in which they are needed; the affordability of housing; and ongoing concerns around security of tenure.

The literature identifies the outcomes of housing dysfunction, and some offers suggestions for remedies to the symptoms, or provides aspirations with regards to addressing the causes. There is, however, limited literature which takes a policy process-wide approach to analyse and identify how that dysfunction might be caused, produced and manifested, or how it might be overcome. Whilst this review is focused on the Irish context, it does identify learning of wider relevance to an international audience, and similar exercises might be appropriate to determine what the limits or base outputs / outcomes might be in different state-contexts. This review therefore highlights the need for further research into the elements of adequate or optimal housing systems in other locations and jurisdictions, and comparison between jurisdictions.

Through reviewing the literature, the significant elements of functionality are identified. However, the measures of functionality and adequacy would be more usefully considered in the light of addressing the question to whom is success important? Success in housing is multi-faceted, and it is unlikely that one definition might represent success for the many diverse actors in the housing field. Therefore, one succinct definition is unlikely to be adequate, instead requiring for a multi-faceted definition; the measures of success for a first-time buyer will be different to those for an established, no-mortgage owner-occupier. Similarly, who is to say that the current dysfunctional system, with high prices, is not successful for developers achieving an adequate, if not optimal, profit? This highlights the opportunities for further research, involving exploration of the motivations and perceptions of different actors in the housing policy process, including the providers and deciders, as well as the recipients of housing provision, the winners and the losers, and testing the indicative marginal perceptions of success based on housing costs, as well as against other variables, parameters or measures. Such research might include the engagement of the excluded, of first-time buyers, owner occupiers, developers, financial institutions, REITs, politicians, civil servants and advisors.

The key elements of this paper can be summarised as:

- The Irish housing system does not provide adequate outcomes, with particular concern for new dwellings not being delivered in the locations in which they are needed; the affordability of housing; and ongoing concerns around security of tenure.
- The literature offers suggestions for remedies to the symptoms or provides aspirations with regards to addressing the causes. There is, however, limited literature which takes a policy process-wide approach to analyse and identify how that dysfunction might be caused, produced and manifested, or how it might be overcome.
- But, with success being different outcomes for different groups, a multi-faceted definition for housing adequacy is required, although this raises the question as for whom is success important?

This review and analysis of literature explores the themes of unsettling practices and considers questions which get to the heart of implementing effective housing responses. The dysfunctional Irish housing system provides an appropriate case-study within which to develop the theoretical distinction between a functioning and an optimal housing system. This aims to begin a discussion on what is considered as success, and for whom, to foster an inquiry into potential policy responses, and thereby to assist the development of certainty and stability into this changeable research environment. Although focused on the Irish housing system, the novelty of this research and the issues arising have much wider international relevance.

References

Alexandri, G. and Janoschka, M. (2018) 'Who Loses and Who Wins in a Housing Crisis? Lessons From Spain and Greece for a Nuanced Understanding of Dispossession', *Housing Policy Debate*. Routledge, 28(1), pp. 117–134. doi: 10.1080/10511482.2017.1324891.

Allen, M. *et al.* (2020) *Ending homelessness? The contrasting experiences of Denmark, Finland and Ireland*. Bristol: Policy Press.

Bowie, D. (2017) *Radical solutions to the housing supply crisis*. Bristol: Policy Press. doi: 10.2307/j.ctt1t891hz.

Byrne, M. (2020a) 'Generation rent and the financialization of housing: a comparative exploration of the growth of the private rental sector in Ireland, the UK and Spain', *Housing Studies*. Routledge, 35(4), pp. 743–765. doi: 10.1080/02673037.2019.1632813.

Byrne, M. (2020b) 'Stay home: Reflections on the meaning of home and the Covid-19 pandemic', *Irish Journal of Sociology*, 28(3), pp. 351–355. doi: 10.1177/0791603520941423.

Byrne, M. and McArdle, R. (2020) 'Secure occupancy, power and the landlord-tenant relation: a qualitative exploration of the Irish private rental sector', *Housing Studies*. Routledge. doi: 10.1080/02673037.2020.1803801.

Byrne, M. and Norris, M. (2018) 'Procyclical Social Housing and the Crisis of Irish Housing Policy: Marketization, Social Housing, and the Property Boom and Bust', *Housing Policy Debate*. Routledge, 28(1), pp. 50–63. doi: 10.1080/10511482.2016.1257999.

Cambridge Dictionary (2021) *Cambridge Dictionary*, *Cambridge Dictionary*. Available at: https://dictionary.cambridge.org/ (Accessed: 10 May 2021).

Christophers, B. (2013) 'A Monstrous Hybrid: The Political Economy of Housing in Early Twenty-first Century Sweden', *New Political Economy*, 18(6), pp. 885–911. doi: 10.1080/13563467.2012.753521.

Clapham, D. (2019) *Remaking Housing Policy: An International Study*. Abingdon: Routledge.

Clapham, D. (2020) 'The Demise of the Welfare Regimes Approach? A Response to Stephens', *Housing, Theory and Society*, 37(5), pp. 548–551. doi: 10.1080/14036096.2020.1820374.

Colebatch, H. K. (2009) *Policy*. 3rd edn. Maidenhead: Open University Press.

Corrigan, E. *et al.* (2019) *Exploring Affordability in the Irish Housing Market*, *The Economic and Social Review*. Available at: https://www.esr.ie/article/view/1121 (Accessed: 8 July 2020).

Crawford, J. and McKee, K. (2018) 'Privileging the "Objective": Understanding the State's Role in Shaping Housing Aspirations', *Housing, Theory and Society*, 35(1), pp. 94–112. doi: 10.1080/14036096.2017.1302989.

Czischke, D., Carriou, C. and Lang, R. (2020) 'Housing, Theory and Society Collaborative Housing in Europe: Conceptualizing the Field', 37(1), pp. 1–9. doi: 10.1080/14036096.2020.1703611.

Department of the Environment (1991) *A Plan for Social Housing*. Dublin.

Deva, S. and Farha, L. (2019) *Mandates of the Working Group on the issue of human rights and transnational corporations and other business enterprises and the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-*. Geneva. Available at: https://www.ohchr.org/Documents/Issues/Housing/Financialization/OL_IRL_2_2019.pdf (Accessed: 11 May 2021).

Drudy, P. J. and Punch, M. (2002) 'Housing Models and Inequality: Perspectives on Recent Irish Experience', *Housing Studies*, 17(4), pp. 657–672. Available at: http://web.a.ebscohost.com.tudublin.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=57791ba3-9bd5-4808-8a04-10053fc913d4%40sessionmgr4006 (Accessed: 7 August 2020).

Dukelow, F. and Considine, M. (2017) *Irish social policy: A critical introduction*. 2nd edn. Bristol: Policy Press.

ECB (2021) *Key ECB interest rates*, *Official interest rates*. Available at: https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html (Accessed: 29 April 2021).

Elsinga, M. (2020) 'About Housing Systems and Underlying Ideologies', *Housing, Theory and Society*, 37(5), pp. 557–561. doi: 10.1080/14036096.2020.1816572.

Fields, D. J. and Hodkinson, S. N. (2018) 'Housing Policy in Crisis: An International Perspective', *Housing Policy Debate*. Routledge, 28(1), pp. 1–5. doi: 10.1080/10511482.2018.1395988.

Finnerty, J. and O'Connell, C. (2017) 'Changing precarities in the Irish housing system: supplier-generated changes in security of tenure for domiciled households', *Global Discourse*. Routledge, 7(4), pp. 473–488. doi: 10.1080/23269995.2017.1399708.

Finnerty, J., O'Connell, C. and O'Sullivan, S. (2016) 'Social Housing Policy and Provision: A Changing Regime?', in Murphy, M. and Dukelow, F. (eds) *The Irish Welfare State in the Twenty-First Century: Challenges and Change*. London: Macmillan, pp. 237–259. doi: 10.1057.

Healy, T. and Goldrick-Kelly, P. (2018) 'Ireland's housing crisis - The case for a European cost rental model', *Administration*, 66(2), pp. 33–57. doi: 10.2478/admin-2018-0017.

Hearne, R. (2020) *Housing shock: the Irish housing crisis and how to solve it*. Bristol: Policy Press.

Hearne, R. and Murphy, M. (2018) 'An absence of rights: Homeless families and social housing marketisation in Ireland', *Administration*. De Gruyter Open Ltd, 66(2), pp. 9–31. doi: 10.2478/admin-2018-0016.

Henneberry, J. (2016) 'Development Viability', in Crook, T., Henneberry, J., and Whitehead, C. (eds) *Planning Gain: Providing Infrastructure and Affordable Housing*. Oxford: John Wiley & Sons, pp. 115–139.

Van Hout, M.-C. and Staniewicz, T. (2012) 'Roma and irish Traveller housing and health - a public health concern', *Critical Public Health*, 22(2), pp. 193–207. doi: 10.1080/09581596.594872.

Khare, A. T. (2018) 'Privatization in an Era of Economic Crisis: Using Market-Based Policies to Remedy Market Failures', *Housing Policy Debate*. Routledge, 28(1), pp. 6–28. doi: 10.1080/10511482.2016.1269356.

Lennon, M. and Waldron, R. (2019) 'De-democratising the Irish planning system', *European Planning Studies*. Routledge, 27(8), pp. 1607–1625. doi: 10.1080/09654313.2019.1595532.

Lewis, E. (2019) *Social housing policy in Ireland: new directions*. Dublin: Institute of Public Administration.

Lima, V. (2020) 'The financialization of rental housing: Evictions and rent regulation', *Cities*. Elsevier Ltd, 104. doi: 10.1016/j.cities.2020.102787.

Lyons, R. (2017) 'Housing and austerity: a two-way street', in Heffernan, E., McHale, J., and Moore-Cherry, N. (eds) *Debating austerity in Ireland: crisis, experience and recovery*. Dublin: Royal Irish Academy, pp. 129–143.

Matznetter, W. (2020) 'How and Where Non-profit Rental Markets Survive - A Reply to Stephens', *Housing, Theory and Society*, 37(5), pp. 562–566. doi: 10.1080/14036096.2020.1816570.

Mcintyre, A. P. (2021) 'Home Truths: Property TV, Financialization, and the Housing Crisis in Contemporary Ireland', *Contemporary Irish Television*, 22(1), pp. 65–82. doi: 10.1177/1527476420975755.

McWilliams, D. (2021) *A solution to Irish house-price silliness*. Available at: http://www.davidmcwilliams.ie/a-solution-to-irish-house-price-silliness/ (Accessed: 11 May 2021).

Memery, C. (2001) 'The housing system and theceltic tiger: The state response to a housing crisisof affordability and access', *European Journal of Housing Policy*. Informa UK Limited, 1(1), pp. 79–104. doi: 10.1080/14616710110036445.

Minton, A. (2017) *Big Capital*. London: Penguin.

Murphy, M. and Dukelow, F. (2016) *The Irish Welfare State in the Twenty-First Century: Challenges and Change*. Edited by M. Murphy and F. Dukelow. London: Macmillan. doi: 10.1057.

NESC (2018) *Urban Development Land, Housing and Infrastructure: Fixing Ireland's Broken System*. Dublin. Available at: http://files.nesc.ie/nesc_reports/en/145_Urban_Development_Land.pdf.

Ní Fhloinn, D. (2018) 'Regulation of housing quality in Ireland: What can be learned from food safety?', *Administration*, 66(2), pp. 83–108. doi: 10.2478/admin-2018-0019.

Norris, M. (2016) 'Varieties of Home Ownership: Ireland's Transition from a Socialised to a Marketised Policy Regime', *Housing Studies*, 31(1), pp. 81–101. doi: 10.1080/02673037.2015.1061107.

Norris, M. (2017) 'The Rise and Fall of Ireland's Property-based Welfare state', in Dewilde, C. and Ronald, R. (eds) *Housing Wealth and Welfare*. Cheltenham: Edward Elgar, pp. 37–59.

Norris, M. and Byrne, M. (2018) 'Housing market (in)stability and social rented housing: comparing Austria and Ireland during the global financial crisis', *Journal of Housing and the Built Environment*. Springer Netherlands, 33(2), pp. 227–245. doi: 10.1007/s10901-018-9595-4.

O'Callaghan, C. and Mcguirk, P. M. (2020) 'Situating financialisation in the geographies of neoliberal housing restructuring: reflections from Ireland and Australia'. doi: 10.1177/0308518X20961791.

Ó Broin, E. (2019) *Home*. Newbridge: Irish Academic Press.

Quinlan, R. (2020) 'Investment in Dublin private rented sector remains robust in face of Covid-19', *The Irish Times*, 2 September.

Ryan-Collins, J., Lloyd, T. and Macfarlane, L. (2017) *Rethinking the economics of land and housing*. London: Zed Books.

Shanahan, E. *et al.* (2018) 'The Narrative Policy Framework', in Weible, C. and Sabatier, P. (eds) *Theories of the Policy Process*. 4th edn. New York: Routledge, pp. 173–214.

Sirr, L. (2014) 'Renting: Urbanisation, legislation and professionalisation', in Sirr, L. (ed.) *Renting in Ireland: The Social, Voluntary and Private Sectors*. Dublin: Institute of Public Administration, pp. 263–278.

Sirr, L. (2018) 'Introduction', *Administration*, 66(2), pp. 1–5. doi: 10.2478/admin-2018-0015.

Stephens, M. (2020) 'How Housing Systems are Changing and Why: A Critique of Kemeny's Theory of Housing Regimes', *Housing, Theory and Society*, 37(5), pp. 521–547. doi: 10.1080/14036096.2020.1814404.

Swedish Housing Crisis Committee (2014) *A Functioning Housing Market - A Reform Agenda*. Stockholm. Available at: http://www.bokriskommitten.se/wp-content/uploads/2014/09/Bokriskommitten_eng_web.pdf.

Timperley, C. (2020) *Generation Rent*. Kingston upon Thames: Canbury Press. Available at: https://www.google.com/search?q=chloe+timperley+generation+rent&rlz=1C1CHZL_enIE808IE808&oq=chloe+timperley&aqs=chrome.2.69i57j46j0j0i22i30j69i60.5110j0j7&sourceid=chrome&ie=UTF-8 (Accessed: 3 February 2021).

U.N. (1948) *Universal Declaration of Human Rights*, *Universal Declaration of Human Rights*. Available at: https://www.un.org/en/universal-declaration-human-rights/ (Accessed: 10 July 2020).

U.N. (2015) *Cities – United Nations Sustainable Development*, *Sustainable Development Goals*. Available at: https://www.un.org/sustainabledevelopment/cities/ (Accessed: 10 July 2020).

Umfreville, P. and Sirr, L. (2020) 'Reform and Policymaking: theory and practice in the Irish housing context', *Administration*, 68(4), pp. 215–236. doi: 10.2478/admin-2020-0032.

UN (2009) *Fact Sheet No. 21/Rev.1, The Human Right to Adequate Housing*. New York. Available at: https://www.ohchr.org/Documents/Publications/FS21_rev_1_Housing_en.pdf.

Voigtländer, M. (2019) 'Homebuyers, Liquidity Constraints and Private Market Solutions – European Best Practices', *Intereconomics*. Springer Verlag, 54, pp. 53–58. doi: 10.1007/s10272-019-0792-5.

Waldron, R. (2021) 'Generation Rent and housing precarity in *"post crisis"* Ireland', *Housing Studies*, pp. 1–25. doi: 10.1080/02673037.2021.1879998.

Waldron, R. and Redmond, D. (2017) '"We're just existing, not living!" Mortgage stress and the concealed costs of coping with crisis', *Housing Studies*, 32(5), pp. 584–612. doi: 10.1080/02673037.2016.1224323.

Wetzstein, S. (2017) 'The global urban housing affordability crisis Introduction: A new global crisis in the making', *Urban Studies*, 54(14), pp. 3159–3177. doi: 10.1177/0042098017711649.

Whitehead, C., Scanlon, K. and Holman, N. (2016) *Rising to the Challenge: Londonž s Housing Crisis*. London. Available at: http://eprints.lse.ac.uk/87149/1/Rising-to-the-challenge-final-report.pdf (Accessed: 19 March 2021).

Williams, B. and Nedovic-Budic, Z. (2016) 'The real estate bubble in Ireland. Policy context and responses', *Urban Research & Practice*, 9(2), pp. 204–218. doi: 10.1080/17535069.2016.1174401.

APPENDIX
Table of sources

A range of academic and 'grey' literature sources from Irish and international settings were examined during the course of this literature review. A brief summary of each of these is set out in the following table. See in-text citations and list of references for further details.

Author	Key points
Peer-reviewed material – Irish housing	
Byrne (2019)	The process of financialisation, and the cyclical nature of credit markets, undermines homeownership. The ratio between house price growth and income growth creates an 'affordability gap' taking homeownership beyond the reaches of first-time buyers.
Byrne (2020a)	Theories of financialisation, which is linked to neoliberalism, enable understanding of 'generation rent' and the cyclical nature of credit markets which undermine homeownership over the medium term.
Byrne (2020b)	The difference between a house and a home is exemplified during times of pandemic and highlights the need for protections for renters in more normal times.
Byrne and Norris (2018)	Construction is cyclical, and public housing output slumped at a time when it was most needed. The delivery of social housing objectives through subsidy to the PRS sector has increased demand and fuelled rental prices increases in this market.
Byrne and McArdle (2020)	Evictions, poor quality dwellings, overcrowding and high rents have all become major issues in countries where homeownership is experiencing a decline, including Ireland. Policies introduced since 2016 have not been effective, with rents and homelessness increasing.
Corrigan et al. (2019)	Whilst households spending more than 30% of income are likely to be encountering housing stress, those in the bottom 25 per cent of the income distribution spend on average between 40% to over 50% of income on housing costs, depending on tenure.
Finnerty and O'Connell (2017)	Housing precarities are evident in respect of access, security and supply, a result of flawed policy assumptions and expectations, following the abandonment of state commitments to direct social housing provision and market intervention.
Healy and Goldrick-Kelly (2018)	The policy of relying on the private sector is wasteful and inefficient; sale of NAMA land to achieve highest price encourages vulture fund activity, with little regard to social or community need. State to take a leading role - not only providing quality social housing but setting the framework through planning and regulation to ensure a balance of provision (p.55). Public policy needs to take the lead by investing in cost rental, affordable and quality accommodation (p. 54).
Hearne and Murphy (2018)	Emphasis on the impact of marketisation on the right to access housing, and a reduced supply of social housing, on inequalities and insecurities, typified by a rise in homelessness (particularly since 2014). Deepening commodification and financialisation of social provision, leading to barriers to access, security of tenure. Suggest legislative provision for the right to housing; and significant increase in the direct provision of social housing (by local authorities and housing associations) to provide security and well-being.
Lennon and Waldron (2019)	Discourse coalitions (through agency and ideological synergy) have been able to employ mechanisms (including narrative) to embed a marketised view of the planning system (p. 1621), and thereby de-democratising that system.
Lima (2020)	The government's policy response to a crisis caused by financialisation, is to attract REITs, thereby encouraging greater involvement of financial actors, and thereby transforming the housing crisis into a financial opportunity.
Mcintyre (2021)	The power of media narrative in promoting lifestyle programming supports an ideological commitment to home ownership, despite wider anxieties of wealth and income disparities.
McWilliams (2021)	The cost of housing has no relation to median national household income. Put fair housing costs at the centre of housing policy, with house prices to be a function of income (rather than income plus availability of long-term debt). State promotion of cooperative housing, using state-owned land to facilitate the development of affordable homes as an alternative to open market e.g. Berlin with rents capped at 30% net income.

Murphy and Dukelow (2016)	Increasing provision of social housing through private sector mechanisms is facilitated by the state-led development of private markets, a form of 'corporate welfare, where social policy becomes a state-supported quasi- market for private profit' (p. 320).
Ní Fhloinn (2018)	De-regulation of building control provides a model of regulatory failure, with low levels of enforcement and resulting impacts on safety.
Norris (2016)	Crisis is a result of privatisation of mortgage lending; marketisation of home ownership.
Norris and Byrne (2018)	The dualist regime in Ireland provides social housing on a pro-cyclical basis, accelerating boom and intensifying bust, whilst it is counter-cyclical in Austria, providing stability during housing market fluctuations.
Sirr (2014)	Differential of policy between ownership and renting, with 'legislative (security of tenure) and financial (preference for home-buyers) forces standing against it' (p. 268). Therefore, recognise the potential for renting as a viable alternative to ownership. Policy must lead developments on the ground and not pursue them (p. 269). Align housing policy with other government policies (e.g. planning, transport, law) to develop an integrated approach. Recognise the differing strata within renting and address each on its own terms – a blanket policy will fail the sectors, the users and the deliverers (p.266).
Sirr (2018)	Low supply of housing, and that which is built is unaffordable, being out of financial reach to the majority of households aiming to purchase (p. 2).
Umfreville and Sirr (2020)	The conditions which define the limits to optimality include historical and cultural practice, social and economic policy, and political processes.
Van Hout and Staniewicz (2012)	For both mobile Irish Travellers and settled Roma societal disenfranchisement and marginalisation, unsafe and inadequate housing and sites exacerbate housing inequalities.
Waldron (2019)	There has been a wider financialisation of urban policy and governance to facilitate investment in the built environment, rather than to meet social needs.
Waldron (2021)	With the financialisation of rental housing, and an increasing involvement of REITs, housing precarity is recognisable in the expanded private rental sector through the crisis in housing affordability, security and accessibility.
Waldron and Redmond (2017)	Irish housing crisis, and the hidden impact of mortgage stress on quality of life, affects more people than was previously identified.
Williams and Nedovic-Budic (2016)	A proactive planning system, and taxation of vacant land, is suggested to bring land forward for development.

'Grey' material – Irish housing

Dukelow and Considine (2017)	If success is 'measured solely in terms of owner-occupation, [then the Irish system] has been very successful' (p. 271). 'Housing as a commodity and as a means of making money generates multiple inequalities and insecurities' (p. 271); 'housing policy... reflects tensions between treating housing as a commodity and a secure home' (p. 272). Weak regulation; residualisation of social housing. 'little affordable housing was provided in urban areas where the demand was highest' (293). The State has violated the rights of Travellers regarding the quantity and quality of accommodation (p. 359). Problems of residualisation, social segregation, lack of access and affordability are typical within a policy regime which treats housing as a commodity (p. 277).
Farha – UN OHCHR (2019)	Cuts to the public housing budget and land hoarding by investors, deliberately restricting supply to inflate rent and prices. Criticism of the Irish Residential Properties real estate investment trust (I-RES REIT), which has 'openly discussed policies of introducing the highest rents possible' to increase returns for shareholders. Three specific policies have caused the financialisation of housing: the establishment of NAMA; the promotion of real estate investment trusts (REITs) from 2013 onwards; and the sale by the state-controlled banks of non-performing loans to US vulture funds.
Finnerty et al. (2016)	The reliance on for-profit landlords 'is clearly inferior to the traditional local authority direct provision offer in relation to… 'security', posing troubling question in terms of 'availability''; highlights the negative effects of 'the dilution of housing security and the uncertainty of household access given the volatile nature of much of this private provision' (2016, p. 237).

Hearne (2020)	The financialisation of the housing system, the marketisation of the social housing sector, and an increasing role of global finance has promoted dysfunctionality, or 'housing dystopia' (p. 16) largely as a result of the government's pursuit of neoliberal policies. The private housing market model is 'inherently unreliable, dysfunctional and unequal' (p. 250).
	Connect the climate and housing crisis; provide a Constitutional right to housing; increase public provision through state-funded construction delivering 300,000 homes to cooperative principles on public land; take measures to curtail speculative investment (p. 240-241; 249)
Lewis (2019)	'The combination of low output and increased demand has resulted in homelessness, overcrowding, involuntary sharing and high prices' (p. 299). The integrity of the housing system has been compromised by a series of incremental adjustments, increased demand through a growing population, and changed household behaviour, highlights the importance of security of tenure, affordability, quality of life (p. 302).
	Devise housing policy capable of meeting the needs of a dynamic economy with a rapidly growing population. A strategic change in direction, through the introduction of a new funding model, based on cost-rental principles as a means of facilitating a unitary housing model, with HAP as a platform for universal support; enhanced choice within a life-cycle model. End the principle of social housing tenure for life, basing allocation instead on need.
Lyons (2017)	The effect of austerity on the housing market underlines the reciprocity between austerity and housing dysfunction. The crisis of the Irish housing system 'reflects very few of the attributes of best practice' (p. 134).
Murtagh (2020)	Traveller and Romani continue to be over-represented in homeless figures.
NESC (2018)	The housing system is broken, being speculative, volatile and expensive. The land system that underpins Irish housing is dysfunctional: land is not available in appropriate locations at a cost that allows affordable housing to be provided.
	Challenges of affordable housing provision and infrastructure investment. Change the system of urban development, land management and housing provision, promote active land management and use of compulsory purchase, use public land to increase housing supply. Use locational value mechanisms and promote cost rental housing.
Norris (2017)	Contributes to the debate on the relationship between home ownership and the welfare state by proposing that the legacy of Ireland's decommodified, socialised approach to home ownership society, with government subsidies promoting land distribution, suggests that the result is not entirely neoliberal, although there are path dependencies.
Ó Broin (2019)	Reliance on the private rental sector has increased prices, though that market has failed.
	Suggestions include a right to housing; separate land cost from housing, with Government adopting tenure neutrality – stop privileging owner-occupation; increase provision of public housing - if purchase of public housing is allowed, it must be sold back to the state at discounted rate; review the tax treatment of land and regulation of bank lending for land purchase - challenge the assumption that developers must receive 11% profit on their investment; improve Building Control and reform PRS; increase density of urban cores; change pre- and post- planning approvals to reduce time taken to under 6 months.
O'Callaghan and McGuirk (2020)	Housing markets and systems are shaped by financial actors, with the processes of financialisation, and the path dependency of neoliberalisation, impacting on affordability.

Peer-reviewed material – international housing

Alexandri and Janoschka (2018)	Housing crisis is intrinsically related to mechanisms of accumulation and capital expansion, debt and dispossession.
Clapham (2020)	Research to take a holistic approach that recognises diverse drivers of change, as well as interactions between different factors and levels of analysis (p. 550).
	Develop and update the welfare regimes approach to housing analysis to better understand the changes required – to include recognition of the role that globalisation, neoliberalism and financialisation each play within this.
Czishke, Carriou and Lang (2020)	European examples of collaborative forms of housing might provide the opportunity to compensate for the retreat of the state.
Elsinga (2020)	'it is about the underlying ideology of whether non-profit housing should be open to large parts of society... whether home ownership is the best housing tenure... whether housing is meant for making money or for supporting people's wellbeing' (p. 560).

Khare (2018)	Recognises the path dependency of public housing privatisation in U.S.by highlighting that even after significant market failure following the 2008 financial crash, producing disastrous impacts, political actors sought new strategies that were still dependent on the private market provision of affordable housing. Therefore, alternative policy options are needed.
Matznetter (2020)	Overcome the increase in housing costs and affordability issues brought about by the financialisation and commodification of housing markets (p. 562-563). Emphasises that research should focus at the regional or city level where integrated rental markets have survived. Examples Berlin's rent caps, and Vienna's separate but competing rental sub-markets, cost-rental.
Stephens (2020)	Focus theory on the higher-level forces of globalisation or financialisation, or downwards towards institutional details. Refocus from the mid-level, or the middle-range of the welfare system, to the significance of higher-level forces and downwards towards institutional details
Voigtlander (2019)	Encouraging and facilitating home ownership is a sound approach, since individually-owned homes are a major driver of individual wealth accumulation. Policies that facilitate schemes such as equity release options, housing saving plans and crowdlending are promising.
Wetztein (2017)	Affordability is the crisis – therefore focus on promoting housing affordability.

'Grey' material – international housing

Allen et al. (2020)	Overarching aim should be to end homelessness. Promote public housing through Housing First, which is successfully implemented in Finland as a stable, welfare -based policy response, inc. affordable public housing provision with political support.
Bowie (2017)	Core principles of a progressive housing policy: tenure neutrality; meet differing needs of full range of households; focus subsidy on investment for longer term public benefit; public investment in private provision to be based on equity retention and value appreciation by a public sector body.

Move from providing welfare benefits to households to using investment subsidies to make housing affordable ('from benefits to bricks'); LAs to be empowered to acquire development land at (or close to) existing use value to reduce land speculation; promote land acquisition and compulsory purchase. Stop right to buy; stop subsidies (including tax incentives and allowances) on home ownership; increase rates of taxation on the transfer of assets between generations; tax to be levied on value appreciation of properties – either annually or on disposal (possibly change stamp duty – a tax on purchase – to property tax which relates to appreciation); local authorities to take equity stake in future value appreciation. Disincentivise the underuse of existing housing stock; no household to pay more than 30% of net household income on housing costs; PRS to be regulated and subject to rent control; tenancies to be minimum of 5 years; except where surplus is identified, new housing should focus on provision that is affordable for lower – mid income households. |
| Clapham (2019) | Suggests a housing regime based on rights, equality, well-being and sustainability. The cycle of housebuilding is flattened; represented by low peaks and troughs (p. 205). Reinstatement of government intervention... with Government taking responsibility for housing outcomes (rather than hiding behind a belief in market supremacy); and the housing programme being accountable to residents and local communities.

To be achieved by increased direct provision by the state, or state agencies of properties for rent; support for the privatisation of public goods (e.g. right to buy) suspended; regulation of mortgage lending; removal of demand-side subsidies for owner-occupation; taxation of owner occupation and a land value tax. Also, regulation of PRS tenancies and promotion of energy efficiency in new and retrofitted existing homes; high standards of design; landlord accountability; change the narrative in the media. |
Henneberry (2016)	As private developers become significant providers of housing (U.K.) charging mechanisms are unable to reflect heterogeneity of development, leading to a central problem of how to levy sufficiently to meet costs without compromising the viability of individual schemes.
Minton (2017)	Promote a right to the city: only a paradigm shift will address housing crisis. Increase the role of civil society in democratic renewal; devolution of powers to local, city and regional level; and control foreign investment. Introduce a development land tax and promote Community Land Trusts and a proactive planning system – mediating land for the benefit of all. Incremental change through increasing the amount of affordable housing developers have to provide but this only has limited effect. Berlin as an exemplar: urban conservation areas ban expensive redevelopments; tax on second homes; and rent controls. Need a change of narrative – role of media.
Ryan-Collins et al. (2017)	Putting land back into economics and policy to break the positive feedback cycle between the financial system, land values and the wider economy. Public ownership of land (Singapore); land value capture, compulsory purchase; land pooling (Netherlands); Community land ownership and

	CLTs; Tax reform – land value tax (Australia, Denmark, Estonia, Barbados, Pennsylvania (part); Planning reform – proactive planning (Germany, Netherlands). Also, need to improve data on land value.
Timperley (2020)	Reinstate the rights of the commons. Social and other non-market housebuilding can counteract the volatility of private sector development (p. 261). Land value tax; and increase provision of social housing – for working people as well as the underprivileged; end right to buy and help to buy schemes; promote community-led housing & CLTs; and reform PRS.
Whitehead, Scanlon and Holman (2016)	To accelerate the production of new housing, make the planning process more certain and transparent, and in particular revise the viability rules. Government bodies to take a proactive role in bringing large sites forward.
Background sources - Irish housing	
Drudy and Punch (2002)	Housing fulfilling the functions as a 'home, shelter, security, neighbourhood, community'; 'Establish the difference between housing as a commodity, based on exchange value, as opposed to non-commodified housing based on its use value' (p. 661). Housing provision is overwhelmingly by the market, underpinned by tenure-biased policies and state subsidies.
Memery (2001)	The State's response to housing crisis led to an increase in unaffordability and fuelled the boom.

Ireland's Housing Crisis: How a Tenure Mixing Policy Orthodoxy is Contributing to the Social Segregation it Seeks to Address

Eleanor Mc Mahon

University College Dublin (UCD), School of Social Policy, Social Work and Social Justice, Dublin, Ireland

Email: eleanor.mcmahon@ucdconnect.ie

Abstract

Instead of understanding urban concentrations of poverty and disadvantage as spatial manifestations of inequality (Cheshire, 2006), housing policy in Ireland has viewed socio-spatial segregation as exacerbating existing social problems in mono-tenure estates, attributing a direct causal link to extremes of deprivation. As a result, tenure mixing has dominated Irish housing policy. Analysis of Irish housing policy since the 1990s shows that it falls foul of a number of criticisms in the tenure mixing literature, in particular, tenure mixing policy treats the symptom and not the cause of poverty, there is a lack of evidence of causation to support the policy, a tenure mixing orthodoxy limits the consideration of alternatives, and the importance of 'place-making' and local context have not been sufficiently incorporated into spatial planning. This paper argues that the tenure mixing policy orthodoxy in Ireland has unfairly problematised the social housing tenure, meaning that housing is seen as the solution to disadvantage rather than alternative or complementary measures, and that contradictory policies mediate housing policy outcomes and exacerbate socio-spatial segregation rather than address it. The paper goes on to argue that the political-economic factors influencing housing policy outcomes have not been given sufficient attention and that the housing policy debate needs to be widened to allow for greater understanding of the complex interrelated forces which mediate housing outcomes.

Introduction

Ireland is experiencing what has been termed a 'housing crisis': the number of people experiencing homelessness reached record levels in 2019, there has been a dramatic increase in family and child homelessness with numbers quadrupling between 2014 and 2019, and supply and affordability issues have meant that home-ownership rates have fallen and a generation of young people, 'generation rent', are paying unaffordable rents and are locked out of owning their own home (O'Broin, 2019; Hearne, 2020). The housing challenge has been a priority for recent governments but improvements in supply and affordability remain elusive. In 2016, a comprehensive *Action Plan for Housing and Homelessness* was published, and this will be followed by the *Housing for All* strategy in 2021. Building sustainable mixed tenure communities has been a central theme of housing policy in Ireland since the early 1990s and the emphasis on mixing tenures continues today.

This paper explores mixed tenure housing policy in Ireland and sets it in the context of the international literature on tenure mixing. It is argued that a tenure mixing policy orthodoxy unfairly problematises social housing and so housing is seen as the solution to disadvantage rather than alternative or complementary measures. Furthermore, contradictory policies mediate housing policy outcomes and exacerbate socio-spatial segregation rather than address it. As such, tenure mixing policy in Ireland falls foul of a number of the criticisms in the international literature. This paper argues that housing policy has been formed in isolation because of systemic reasons and that the political-economic factors

ENHR

OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

influencing housing policy outcomes have not been given sufficient attention and, conversely, macro-economic policy has not considered the importance of the role of housing in the economy. The arguments set out in this paper show that the housing policy debate needs to be widened to allow for greater understanding of the complex interrelated forces which mediate housing outcomes. Until the factors which are contributing to Ireland's 'housing crisis' are acknowledged and incorporated into housing policy, the tenure mixing orthodoxy will continue to fall short of meeting housing need.

Tenure Mixing Policy in Ireland

A review of housing policy in Ireland since the 1990s shows how mono-tenure social housing estates and social segregation were problematised, leading to the establishment of mixed tenure housing estates as the policy solution. The origins of the mixed tenure approach are explicit in *A Plan for Social Housing*, 1991 which sought to mitigate the "extent and effects" of social segregation and marked a move away from construction of large social housing estates (Department of the Environment, 1995: 11; Norris, 2006; Lewis, 2019). Ireland had a relatively mono-ethnic population until recent years (Norris, Byrne and Carnegie, 2019) and so the social segregation referred to segregation based on income or class rather than ethnicity. The move away from large social housing estates was further developed with the *Housing Miscellaneous Act*, 1992, which required local authorities to adopt written statements avoiding undue segregation of households, and *Social Housing the Way Ahead*, 1995, which reiterated the 1991 policy objective, and expressed a preference for smaller developments (Lewis, 2019).

A report published by the Dublin Corporation in 1993, the *Lord Mayor's Commission on Housing* (Dublin Corporation, 1993) aligned with this approach. The report was summarised in an article by one of the contributors, Owen Keegan, and stated that:

> "The provision of local authority accommodation to low-income households either in flat complexes or in housing estates has resulted in a concentration of these households in particular locations. *There is evidence that this has exacerbated existing social problems* and has given rise to social costs which must be borne by the residents of these estates and also of neighbouring, often low-income, private estates. These costs would not have arisen on the same scale if low-income households had been more widely dispersed throughout the entire housing stock. *The social costs associated with other forms of social housing provision are likely to be significantly lower than the social costs associated with local authority provision*" (Keegan, 1993: 281, *emphasis added*).

Interestingly, the final sentence was not in the report of the *Lord Mayor's Commission on Housing*. Neither the report nor the article expanded on the evidence that the concentration of local authority housing had exacerbated existing social problems.

Sustainable Development – A Strategy for Ireland, 1997, reiterated *A Plan for Social Housing*, 1991, and stated "in order to mitigate the extent and effects of social segregation in housing and to improve social mix, local authorities are encouraged to provide new housing in smaller developments and, where possible, to avoid adding to existing large scale local authority housing estates" (Department of the Environment, 1997: 155). The Department of the Environment's *Social Housing Guidelines: Site Selection*, 1997, stated that smaller schemes "are conducive to the development of integrated communities", in-fill sites can "facilitate a mix of residential tenure within an area, thereby helping to lessen social segregation" and gave guidelines for the maximum number of units per scheme (Department of the Environment, 1997a: 3,5,6). The *Urban Renewal Scheme Guidelines*, 1998, stated that "a good social mix is desirable in new residential developments including a mix of tenure (incorporating affordable housing), household types, age groups etc" (Department of the Environment and Local Government, 1998: 13) but, interestingly, tenure mix was not mentioned in the KMPG (1996) evaluation of the Urban Renewal Scheme. The *Social Housing Guidelines*, 1999, asserted that "there has been a growing emphasis on the role of social housing policy in counteracting social exclusion and in promoting the development of viable communities" (Department of the Environment and Local Government, 1999: 2).

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

As has been summarised above, the 1990s marked a turning point in the move away from the construction of large social housing estates to addressing the problems associated with social segregation. It is worth noting that *A Strategy for the Nineties*, which was cited as rationale for the approach in 1991, stated that "spatial and tenure divisions in the housing system…were creating social class polarisation" and that this polarisation was made worse by policies promoting homeownership (NESC, 1990: 84), however, the promotion of homeownership continued despite this observation. *A Review of Housing Policy* which fed *into A Strategy for the Nineties*, raised the problem of 'residualised' social housing in Ireland (catering increasingly only for households with most need) and made the comparison with continental Europe where "social housing caters for a healthy mix of household types" (NESC, 1989: 89) yet it was not this was not taken up in subsequent policies.

Furthermore, other reports and policy documents at this time emphasised solutions other than just tenure mix to address poverty and disadvantage. A *Study on Urban Renewal Schemes*, 1996, did not mention mixed tenure for urban renewal but stated that inner city communities "believe that urban renewal…has not addressed issues which are central to the regeneration and sustainable redevelopment of these areas such as unemployment, the lack of public amenities, education, training and youth development" (KPMG, 1996: x). The *National Anti-Poverty Strategy: Sharing in Progress*, 1997, spoke of the spatial dimension of poverty but strategies to address it included tenant participation; drugs programmes, facilities and supports; community development; urban renewal; physical condition of the environment; local information; community and enterprise groups; and services (Government of Ireland, 1997). A Combat Poverty report *Where Poor Households Live: Spatial Distribution of Poverty and Deprivation in Ireland*, 1998, talked about the problems of the "worsening physical environment… ineffective housing management… [and] unmet social needs among children, elderly, lone parents and people with disabilities" (Nolan, Whelan and Williams, 1998: xxv). The *Residential Density - Guidelines for Planning Authorities*, 1999, stated that "Local Area Plans should play an important role in setting the framework for the achievement of integrated and balanced communities in development areas, providing for schools, social and recreational facilities, local shopping and appropriate employment uses, integrated with housing, roads and the public transport network" (Government of Ireland, 1999: 13-14). However, subsequent policies continue to emphasise the role of housing tenure in addressing social segregation and it was an emphasis on tenure mixing that took hold.

The *Planning and Development Act*, 2000, required local authorities "to prepare a housing strategy which… must encourage mixed and balanced communities to counteract undue social segregation" (Department of Environment Heritage and Local Government, 2003: 51-52). The *National Spatial Policy*, 2002, stated that "[s]ocially diverse local communities located in well-planned development can foster a sense of place, pride, security and neighbourliness. It is important that new housing development secures a good social mix" (Government of Ireland, 2002: 104). The *Housing Policy Framework: Building Sustainable Communities*, 2005, introduced the promotion of sustainable communities but does not elaborate on what these were (Department of Environment Heritage and Local Government, 2005). *Delivering Homes, Sustaining Communities*, 2007, expressed that "local authorities have been encouraged to provide new housing in smaller developments and to avoid, where possible, adding to existing large scale local authority housing estates, in order to mitigate the extent and effects of social segregation in housing and to improve the social mix in housing areas" (Department of Environment Heritage and Local Government, 2007: 51). The *Housing Policy Statement*, 2011, goes further and states that "[t]here is a direct causal link between the mono-tenure approaches adopted in the past and the extremes of deprivation found now in some social housing estates" (Department of Environment Heritage and Local Government, 2011: 3), although evidence of causation was not provided. The *Social Housing Strategy*, 2014, uses the NESC (2004: 4) description of sustainable neighbourhoods but adds in tenure mix, which did not feature in the NESC description (Department of Environment Community and Local Government, 2014: 5).

The emphasis on mixing communities continues in *the Action Plan for Housing and Homelessness*, 2016, which states "our citizens deserve to live in sustainable communities with an appropriate tenure mix…Building a mix of smaller scale and infill developments is essential, if we are to deliver on our commitment to create long-term sustainable communities and avoid repeating the mistakes of the past"

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

(Rebuilding Ireland, 2016: 46). The 2020 *Programme for Government* reaffirms the commitment to "developing sustainable mixed-tenure communities" (Government of Ireland, 2020: 55).

Tenure Mixing International Literature

It is important to set Ireland's tenure mixing policy within the context of the international literature. Tenure mixing, social mixing, income mixing and deconcentrating poverty policies are commonplace in North America, UK, Western Europe and Australia (Musterd and Andersson, 2005; Norris, 2006; Bailey and Manzi, 2008; Arthurson, 2010; Joseph and Chaskin, 2010; Galster, 2013). Broadly speaking, the terminology used in the US refers to income mixing and deconcentrating poverty whereas in Western Europe social mixing or tenure mixing dominate (Galster, 2013). What is being referred to is difficult to define: what composition of ethnicity, race, religion, immigration status, income or housing tenure is being talked about; what concentration or amount and of which groups; and, over what geographical scale and micro-scale (Galster, 2013). Despite this, what these approaches have in common is that they seek to combat socio-spatial segregation in one manner or another, for one reason or another.

There are many studies which support mixing communities. A Joseph Roundtree Foundation review of seven research studies encompassing twenty case studies in the UK found that mixed communities had been successful and did not experience the problems associated with low-income areas (Holmes, 2006). Bailey and Manzi (2008) also find in their review of successful features of long-established mixed communities that social interaction between tenures does occur but there needs to be careful management and monitoring of public spaces. McKee *et al.* (2013) found that tenure mixing in three communities in Glasgow in Scotland had contributed to improvements in housing, environmental conditions, area reputations and sustainable communities, but that these outcomes were not experienced equally by the three communities. Gaster (2013) in a comprehensive review of studies in the US argued that there is empirical support that there is negative role modelling in disadvantaged communities, especially among youths, which might be helped by the presence of more advantaged groups but that this was highly contingent on context such as income differences, spatial scale and the concentration of disadvantage. In Ireland, Norris (2005: ix) found in a study of five mixed tenure developments that they "have some significant social, economic and community development advantages over single tenure social housing estates" but that mixing tenure is not a panacea for disadvantaged communities in Ireland, largely because some of the contextual factors in the international research are less relevant, for example, the Irish population and social housing is more dispersed than in other Western European countries.

Whilst there are positive studies of tenure mixing, albeit with strong caveats, there are also criticisms of tenure mixing in the literature. Here, three criticisms will be concentrated upon: questioning the assumptions on which the tenure mixing rationale is based; highlighting that social interaction is not an automatic result of tenure mixing and requires careful consideration of 'place-making'; and that a tenure mixing 'orthodoxy' limits the consideration of alternative solutions to addressing poverty and disadvantage.

Neighbourhood Effects

The rationale for tenure mixing policies rests either explicitly or implicitly on the vast 'neighbourhood effects' literature. This literature argues that poor people living in close proximity to poor people limits their opportunities to escape poverty and deprivation. Tunstall (2003) argues that there is limited empirical evidence for positive neighbourhood effects in mixed tenure estates and, as such, policies are largely based on conviction. Galster (2007: 35) uses a theoretical analysis of mechanisms of neighbourhood effects to argue that there must be examination of what sort of neighbourhood effects are operating to ascertain what the optimal mix of households will be and until this analysis is undertaken then social mixing policies will be "based more on faith than fact". Van Ham *et al.* (2012: 3) state that "[t]here is little doubt that these effects exist, but we do not know enough about the causal mechanisms which produce them, their relative importance compared to individual characteristics such as education, and under which circumstances and where these effects are important" and for this reason they call for more research into neighbourhood effects.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

For Cheshire (2012) the key question is about causation: is living in a poor neighbourhood an additional cause of poverty over and above the effect of the individual's characteristics? Cheshire (*ibid.*) argues that the empirical evidence for causation is unconvincing, and that similar people living in non-deprived areas might experience the same outcomes in terms of employment and life expectancy as those living in deprived areas. Cheshire (2006, 2012) argues that concentrations of poverty and disadvantage are instead spatial manifestations of income inequality; that it is the processes that cause individuals to have different incomes that constrain where they live, and so mixing tenure is treating the symptom of inequality and not the cause of it. Lees (2008: 2463) supports this argument and concludes that social mix strategies "are cosmetic policies rather than ones prepared to deal with the whole host of complex social, economic and cultural reasons as to why there are concentrations of poor, economically inactive people in our central cities". Slater (2013) also questions causation and argues that we need to invert the neighbourhood effects thesis from 'where you live affects your life chances' to 'your life chances affect where you live'. If people are bound by resource constraints in choosing where they live, the important question, Slater argues, is how these resource constraints come about.

Social Interaction

Another key question in the international literature concerns whether tenure mixing leads to social interaction across different tenures. Joseph and Chaskin (2010) in their study of two mixed-income developments in Chicago, US, found that whilst there were improved physical surroundings, social networks across tenures had not materialised and the relocated social housing tenants were experiencing stigma and increased monitoring of their lives. Arthurson (2010: 62) argued in a study of three suburbs in Adelaide, Australia, that the residualised nature of social housing, owing to allocations going to those with high and complex needs, "makes social interaction across housing tenures appear more of a dream than a reality". In the Netherlands, Tersteeg and Pinkster's (2016) study of a newly built fine-grained mixed tenure development in Amsterdam posited that the design of the building exacerbated tensions between owner-occupiers and social renters on the one hand and large families with non-Western European ethnicity on the other. They found little social interaction between tenure groups despite relatively similar socio-economic backgrounds. Atkinson and Kintrea (2000: 93) reported from their study of three estates in central Scotland, that although the areas had changed for the better "owners and renters in regeneration areas largely inhabit different social worlds". Musterd and Andersson (2005) found in Sweden that the relationship between housing mix and social mix was not very strong despite it being a policy objective since the 1970s. The lack of social interaction between groups is found in arguments against gentrification of urban areas. Butler (2003: 2484) found that middle-class respondents in gentrified Barnsbury, London, valued the existing community "as a kind of social wallpaper, but no more".

There has for some time been a strong theme in the literature that social interaction can be enhanced by design and 'place-making'. Jupp's (1999) study found that schools were by far the most important site for contact between tenures but stressed the significance of the length of time that people live in estates and the importance of information resources so that people are aware of their common interests. In a review of seven studies with twenty case studies Holmes (2006: 11) found that there was no evidence that the spatial configuration of tenures itself affected the sense of community provided that the estates were well designed concluding that "'[p]lace-making' rather than just 'house building' needs to be the vision".

In a study of three mature mixed tenure communities in England Casey *et al.* (2007) found that a carefully planned layout with quality neighbourhood facilities was important for encouraging social interaction. Small, walkable distances with a shopping centre at the heart of each development, bound by open space and green areas was key to encouraging interaction. Different tenures also shared roads and parking areas to facilitate interaction. Roberts' (2007) study of three cases studies argued the importance of the importance of the public realm for facilitating social interaction and tolerance of difference. The study argues that "a more flexible approach to design and layout can be taken" as long as visible signs of potential stigma are avoided; there is a high-quality public realm; the edges of clusters have shared

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

common spaces, such as informal play areas and courtyards; and that there are no high-rise apartments as those living in high-rise would not closely share the public realm (*ibid.*: 201).

Bailey and Manzi (2008: 9) state that "[m]ix is a necessary but not a sufficient precondition for sustainable communities" and that "careful attention needs to be paid to the design and layout of homes and their surroundings, the provision of the full range of facilities, as well as accessibility and integration into the wider locality". They argue that schools, community centres and other facilities might be more productive for social interaction than the street. Camina and Wood's (2009) study of three mature mixed tenure estates in the UK stresses the importance of the physical and social environment as well as tenure mixing. A more recent study in the UK found that respondents valued practices which enabled "real social mix rather than people simply living alongside one another", including identifying common interests, shared spaces and promoting interaction through schools, libraries and community settings (Mullins and Sacranie, 2016: 5). In a study of stigma in social housing in Ireland it was found that community buildings which incorporate gyms and creches were more successful in encouraging interaction than traditional community centres in mixed communities because they catered for more diverse groups (Carnegie, Byrne and Norris, 2017). Arguably, what is important for mixed tenure estates is the same as for any residential area: quality public space, open green space, walkable distances, schools, health centres, leisure facilities, shops, creches, gyms, libraries, community halls, diversity of house size and type, employment opportunities and access to public transport are all important components of place-making for integrated communities.

Tenure Mixing Orthodoxy

Another criticism in the international literature is that a tenure mixing orthodoxy limits consideration of alternatives to addressing poverty and disadvantage. As stated by Goetz (2013: 342) "[p]roblem narratives privilege certain policy interventions while simultaneously devaluing others. Narratives thus limit options by obscuring alternative understandings". The social mix narrative treats disadvantaged neighbourhoods and the people living in them as the problem, and terms such as 'ghettos' and 'segregation' lead to the solution of spatial reordering rather than recognising the structural causes of poverty and disadvantage (Lupton and Tunstall, 2008; Kallin and Slater, 2014). Darcy (2010) argues that by shifting the focus to the behaviour of those living in concentrated poverty a "moral underclass" approach to poverty is reinforced, and this pathologising and marginalising of social housing residents distracts from alternative policy solutions (Doney, McGuirk and Mee, 2013). Kearns *et al.* (2013: 56) found a belief among practitioners that tenure mixing was "the only game in town" and did not question what might have been done instead.

It is argued by some authors that focusing on spatial reordering does not acknowledge the positive aspects of existing communities. Goetz (2013) argues that by problematising disadvantaged areas and social housing residents, tenure mixing does not acknowledge the positive and supportive nature of social housing and Lees (2008: 2461) states that "it destroys one kind of social capital to try and create another". Integration strategies have been criticised for being at odds with the desire of some people to live in similar groups or what is termed 'affinity clustering', and for requiring the disruption of the disadvantaged rather than the privileged (Markovich, 2015). Markovich's (*ibid.*) study found that some residents valued affinity clustering and others did not, highlighting positive aspects including care and support networks versus negative aspects such as behaviour, harassment and allocations to households with complex needs, and concludes that whether integration strategies are harmful or harmless depends on the context.

The Tenure Mixing Policy Orthodoxy In Ireland

The above has argued that tenure mixing became a dominant component of housing policy in Ireland in the 1990s and that this continues today. A review of the international literature shows that there are questions over the assumption that concentrations of disadvantage are an additional cause of poverty over and above individuals' characteristics; that social interaction is not an automatic result of tenure mixing and instead careful design and place-making are required for integrated communities; and that a tenure

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

mixing policy orthodoxy limits the consideration of alternative solutions to concentrated poverty. The following section argues that a tenure mixing policy orthodoxy in Ireland has unfairly problematised the social housing tenure, means that housing is seen as the solution to disadvantage rather than alternative or complementary measures, and that contradictory policies mediate housing policy outcomes and exacerbate socio-spatial segregation rather than address it. As such, tenure mixing policy falls foul of a number of the criticisms in the international literature. This section concludes by arguing that housing policy has been formed in isolation and that the political-economic factors influencing housing policy outcomes have not been given sufficient attention, and conversely, macro-economic policy has not considered the importance of the role of housing in the economy.

Problematising Mono-Tenure Estates

Mono-tenure social housing estates have been seen as a mistake not to be repeated and this has led to the embedding of mixed tenure policy. However, the below argues that the issue is not with the tenure *per se* but due to poor quality, design and management of estates, insufficient funding and the residualisation of social housing.

The problems of some social housing estates were sewn from the outset when planned and constructed. This is particularly evident with the Ballymun development in Dublin in the 1960s, which was seen as a new modern Ireland, using high-rise balancy construction methods not used in Ireland before, but by the time that the plans for the Ballymun Housing Scheme were finished in 1964, these type of high-rise developments were being abandoned in the UK and Europe, being attributed to becoming vertical slums (Somerville-Woodward, 2002). The development also had a limited budget which meant that the original plans did not come to fruition, there was a complete lack of shopping and amenities in the area for many years, and there was no plan for how the development would be managed, which was exacerbated by the economic downturn of the 1970s and 1980s (*ibid.*).

Similar quality and design issues were a feature of some suburban estates constructed in the 1970s and 1980s in response to rapid population growth and overcrowding in Dublin. Ireland's planning system was still in infancy and scarcity of resources meant that the Inner City residents who moved to the new social housing estates in Ballymun, Coolock, Darndale and Finglas with hope of a brighter future soon found similar problems experienced in Dublin's Inner City due to the segregated nature of public and private developments, poor physical layouts and design, poorly maintained public open space, and the lack of amenities and facilities (Haase, 2008).

At this time, Dublin's Inner City had "a preponderance of [social] housing" and "problems relating to lack of job opportunities, social educational and recreational facilities exist[ed]" (Government of Ireland, 1987: 19). The fall in industrial employment, and population decline resulting from suburbanisation, meant that there were high levels of unemployment, closure of schools and services, and the loss of community leaders (Haase, 2008). *The Inner City: Draft Review – Dublin Development Plan*, 1986, notes particularly high job losses and "socio/economic problems associated with high male unemployment, low educational attainment, a concentration of single-parent families and the effects of crime and drug abuse" and stated that "largescale resources" and "locating industry within the inner city" due to the significant loss of jobs would be necessary (Dublin Corporation, 1986: 29). For a long time however, nothing was done to address the decay and dereliction of the Inner City (Haase, 2008).

The problems on social housing estates were added to with the introduction of the Surrender Grant in 1984 to 1987, which paid €5,000 to local authority tenants who purchased in the private sector and relinquished their social housing. A report by Threshold outlines how in the first fourteen months of the grant, 75% of claims were in three areas: Darndale; Ballymun, Poppintree and Santry Avenue; and Blanchardstown, Tallaght and Clondalkin, and in the case of Darndale, led to an increase in the vacancy rate of 0.5% to 18% (Threshold, 1987). The affected communities suffered the loss of those who were employed, income levels dropped, services deteriorated, vacant houses were vandalised, community leaders moved out, vacancies were filled with those who were unemployed, community spirit was demoralised, stigma provided motivation for those who could to move elsewhere, and as more people

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

left more wanted to leave (*ibid.*). In Ballymun, the Surrender Grant caused a radical change in the social composition of the estate, with tenant turnover reaching 50% per annum, leading to the departure of "some of the most able and active members of the community" and "a year of crisis in Ballymun" as vacancies were let to those who had no other choice (Somerville-Woodward, 2002: 52). The Surrender Grant also impacted on Inner City Dublin where the price range was out of reach for those wishing to purchase in the private market, meaning that those availing of the grant had to move out to the suburbs rather than encouraging mixed tenure in the Inner City (Dublin Corporation, 1986).

The Surrender Grant fed into the process of residualisation of social housing in Ireland. *A Plan for Social Housing*, 1991, promoted homeownership whilst seeking to address social segregation, which as pointed out by O'Connell (1993), is contradictory because you cannot relocate social housing tenants to private housing without leading to residualisation and social segregation. Ireland had long allowed social housing tenants to purchase their dwellings during the development of a 'property-based welfare system' (Norris, 2016) and by the end of the twentieth century two-thirds of the social housing stock had been sold to tenants (Redmond and Norris, 2014). Tenant purchase was compounded by the reduction in social housing provision by the State following a change to how it was funded in 1987 that made it vulnerable to budgetary cuts in times of fiscal crisis (Byrne and Norris, 2019; Lewis, 2019). The reduction of the social housing stock led to social housing being targeted at the poorest households and becoming 'residualised' (Redmond and Norris, 2014).

The problem came to be seen as the social housing tenure itself rather than the residualisation of social housing and the poor design and lack of amenities and employment opportunities in social housing estates. As outlined earlier, various reports in the 1990s had advocated what was needed to address poverty and disadvantage including education, training and employment opportunities; youth development; drugs programmes; urban renewal; services and amenities; and access to infrastructure. Instead, the social housing tenure was seen as the problem and dispersed social housing as the solution.

Policies Exacerbating Socio-Spatial Segregation

Whilst housing policy sought to address socio-spatial segregation, a number of other factors worked against this policy objective, including the promotion of in-fill developments without a commitment to 'place-making', the increasing use of rent supplement and the private rented sector to meet social housing need, and more recent policies which limit the financial feasibility of dispersing social housing in new mixed developments.

In-fill developments have been advocated in housing policy since the 1990s and in some instances have exacerbated social segregation rather than alleviate it. A study of the Inner City in Dublin by Haase (2008) shows that whilst in-fill development has raised the average level of income and educational attainment in Dublin's Inner City, analysis at Electoral Divisions (ED) level masks a patchwork of highly affluent and disadvantaged estates, and for this reason new development has led to segregation and marginalisation in the city. The study shows that when you look at the data at Enumerative Area (EA) level a high degree of spatial separation is evident. Haase (*ibid.*) gives the example of five major gated communities at Custom House Harbour, Lower Mayor Street and North Wall Quay, "which are amongst the most secluded gated complexes in the city, and which are occupied by tenants from the upper end of the affluence spectrum. Not only are these complexes completely shielded from the wider area surrounding them, but they are literally segregated from their neighbouring constituencies through a Berlin-like wall which is unrivalled anywhere in the country" (Haase, 2008: 26). As stated by Moore (2008: 67) spatial planning is inherently political because "the redistribution of people, wealth and resources at its heart" and developers were able to change the specification of Inner City regeneration to reduce public open space and create physical divisions between public and private housing. Mixing tenure does not automatically lead to less segregation and by focusing on in-fill developments to facilitate mixed tenure in the Inner City the importance of 'place-making' for integrated communities has been neglected.

Another factor working against addressing socio-spatial segregation is the marketisation of social

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

housing. As described by Byrne and Norris (2018) the reduction of social housing as a proportion of total housing stock pushed larger numbers of low-income households into supported homeownership or the private rented sector, and as a result there was a dramatic increase in rental subsidy claimants in the 1990s. Over time the reliance on rental subsidies in the private rented sector for providing social housing has increased, culminating in the social housing provision forecast under the *Action Plan on Housing and Homelessness*, which shows that between 2016 and 2021 it was projected that 26,000 units would be provided through construction and 11,000 through acquisition compared to 10,000 via leasing and 83,000 by the Housing Assistance Payment (HAP) rental subsidy (IGEES, 2017: 32). This represents a reduction in the proportion of social housing provided by local authorities or Approved Housing Bodies from 63% of projected delivery in *Delivering Homes Sustaining Communities* in 2007, to 35% in the *Social Housing Strategy* in 2014, to 27% in the *Action Plan on Housing and Homelessness* (O'Broin, 2019: 108-109). However, rather than addressing socio-spatial segregation, Norris and Coates's (2007: 435) analysis of the uneven geography of rental subsidy recipients shows that "[a]s a result of funding constraints and discrimination by landlords their locational choices are severely constrained which in turn means that the socio-spatial segregation associated with housing allowances is as significant as that effected by social housing provision". This is because many electoral districts with large number of rental subsidy claimants are adjacent to one another, or adjacent to electoral districts with concentrations of social housing, creating larger areas of social housing.

Recent research by Norris and Hayden (forthcoming) in Ireland highlights how unintended consequences of seemingly small changes to housing policy have collectively contributed to exacerbating socio-spatial segregation and worked against mixed tenure policy objectives. Density guidelines seeking to minimise urban sprawl and limits to finance for small to medium sized developers following the global financial crash combine to reduce the financial feasibility of new developments unless clustered apartment blocks of social housing are sold to Approved Housing Bodies (housing associations) surrounded by private houses for sale. Different space standards for build-to-rent versus build-to-buy mean that developers are encouraged to add to the rental stock rather than homes for purchase. Therefore, as set out above, tenure mixing policies do not automatically result in less segregation and other housing policies have exacerbated segregation.

Housing Within Its Political-Economic Context

The focus on mixed tenure to address socio-spatial segregation rather than the other causes of poverty and disadvantage is because of the systemic isolation of housing policy from broader debates and economic theories. Lewis (2019) argues that the separation of the delivery of social services and housing between the Department of Social Protection and Department of Housing in Ireland, has meant that wider debate about social policy and underlying housing issues have been pushed to the margins. Instead, there is a focus on supply and investment in social housing and a pattern has emerged of disappointing outcomes followed by new commitments and higher targets, which when not met a new plan emerges with even higher targets without the time allowed for consideration of why the expected outcomes were not achieved (*ibid.*).

Housing studies has been criticised for being isolated from debates in the other social sciences and being "unnecessarily theoretically impoverished" (Kemeny, 1992: xvii). Whilst subfields such as housing economics and urban studies have long researched housing issues, housing has not been given sufficient consideration in macroeconomics and political economy (Stockhammer and Wolf, 2019). Instead, housing in Ireland, as in other countries, has been treated as the "poor relation to wider macroeconomic policies" (Meen and Whitehead, 2020: 5) meaning that housing policies have been implemented in a way to not undermine the state's overarching economic goals (Lewis, 2019). However, the importance of housing in affecting and being affected by wider policy has been underestimated (Meen and Whitehead, 2020).

Housing is enormously complex which creates a challenge for anticipating housing policy outcomes. Lewis (2019: 8) succinctly summarises outcomes being impacted by: "actions taken by public bodies to control planning and land management, by fiscal measures, especially those governing the taxation of

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

property and transactions in the housing market, through the development of public infrastructure, the direct provision of housing and the indirect subsidisation of social and affordable housing, by means of the regulation of mortgages and lending for construction purposes and of the housing market itself, and by providing emergency services (either directly or through third parties) for homeless persons. Public policy in related areas such as student accommodation, residential care-homes and provision for refugees can also have a major impact on the demand for housing". Furthermore, Meen and Whitehead (2020: ix) argue that "housing market outcomes are far more heavily influenced by broader developments in the macroeconomy and longer-term pressures on income inequality than by most housing specific measures" and that "explicit housing policies alone will have only limited effects".

A political economy analysis is required, which sets housing policy within its political, economic and social context to allow a deeper understanding of the dynamics which mediate housing policy outcomes. A political-economic analysis will allow consideration of the fundamentals of land as a commodity unlike others, which encourages rent seeking behaviour impacting on housing prices, affordability and economic efficiency. It allows recognition that the commodification of housing and financialisation of housing contribute to this increase in housing costs, making affordable housing ever more out of reach for greater swathes of the population. This ultimately reduces the level of homeownership and increases the number of households experiencing or vulnerable to homelessness. Not only do these factors lead to ever increasing housing costs, the use of the private rented sector to meet social housing need, central to current housing policy, feed into this cycle of increasing housing costs. Therefore, rather than addressing housing need, a political-economy analysis can show that housing policy is *adding* to housing need.

Conclusion

The above has argued that tenure mixing became a dominant component of housing policy in Ireland in the 1990s and this dominance continues today. A review of the international literature shows that there are questions over the assumption that concentrations of disadvantage are an additional cause of poverty over and above individuals' characteristics; that social interaction is not an automatic result of tenure mixing and instead careful design and place-making are required for integrated communities; and that a tenure mixing policy orthodoxy limits the consideration of alternative solutions to concentrated poverty. The tenure mixing policy orthodoxy in Ireland has unfairly problematised the social housing tenure, meaning that housing is seen as the solution to disadvantage rather than alternative or complementary measures, and that contradictory policies mediate housing policy outcomes and exacerbate socio-spatial segregation rather than address it. As such, tenure mixing policy in Ireland falls foul of a number of the criticisms in the international literature. It has been argued that housing policy has been formed in isolation and that the political-economic factors influencing housing policy outcomes have not been given sufficient attention, and conversely, macro-economic policy has not considered the importance of the role of housing in the economy. The arguments set out in this paper show that the housing policy debate needs to be widened to allow for greater understanding of the complex interrelated forces which mediate housing outcomes. Until the factors which are contributing to Ireland's 'housing crisis' are acknowledged and incorporated into housing policy, the tenure mixing orthodoxy will continue to fall short of meeting housing need.

References

Arthurson, K. (2010) 'Operationalising social mix: Spatial scale, lifestyle and stigma as mediating points in resident interaction', *Urban Policy and Research*, 28(1), pp. 49–63. doi: 10.1080/08111140903552696.

Atkinson, R. and Kintrea, K. (2000) 'Owner-occupation, social mix and neighbourhood impacts', *Policy and Politics*, 28(1), pp. 93–108. doi: 10.1332/0305573002500857.

Bailey, N. and Manzi, T. (2008) *Developing and sustaining mixed housing developments: reviewing the evidence*. Available at: http://westminsterresearch.wmin.ac.uk/6325/.

ENHR
OTB – Research for the Built Environment // Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 // Fax +31 15 278 44 22 // E-mail: enhr@tudelft.nl

Butler, T. (2003) 'Living in the bubble: Gentrification and its "others" in North London', *Urban Studies*, 40(12), pp. 2469–2486. doi: 10.1080/0042098032000136165.

Byrne, M. and Norris, M. (2018) 'Procyclical Social Housing and the Crisis of Irish Housing Policy: Marketization, Social Housing, and the Property Boom and Bust', *Housing Policy Debate*. Routledge, 28(1), pp. 50–63. doi: 10.1080/10511482.2016.1257999.

Byrne, M. and Norris, M. (2019) 'Housing market financialization, neoliberalism and everyday retrenchment of social housing', *Environment and Planning A*, 0(0), pp. 1–17. doi: 10.1177/0308518X19832614.

Camina, M. M. and Wood, M. J. (2009) 'Parallel lives: Towards a greater understanding of what mixed communities can offer', *Urban Studies*, 46(2), pp. 459–480. doi: 10.1177/0042098008099363.

Carnegie, A., Byrne, M. and Norris, M. (2017) *Changing Perceptions: Stigma and Social Housing in Ireland*. doi: 10.1921/0951824x.16.2.25.

Casey, R. *et al.* (2007) 'On the planned environment and neighbourhood life: Evidence from mixed-tenure housing developments twenty years on', *Town Planning Review*, 78(3), pp. 311–334. doi: 10.3828/tpr.78.3.4.

Cheshire, P. (2012) 'Are Mixed Community Policies Evidence Based? A Review of Research on Neighbourhood Effects', in van Ham, M. et al. (eds) *Neighbourhood Effects Research: New Perspectives*. London: Springer.

Cheshire, P. C. (2006) 'Resurgent Cities , Urban Myths and Policy Hubris : What We Need to Know', 43(8), pp. 1231–1246.

Darcy, M. (2010) 'De-concentration of disadvantage and mixed income housing: A critical discourse approach', *Housing, Theory and Society*, 27(1), pp. 1–22. doi: 10.1080/14036090902767516.

Department of Environment Community and Local Government (2014) *Social Housing Strategy 2020*. Dublin.

Department of Environment Heritage and Local Government (2005) *Housing Policy Framework: Building Sustainable Communities*. Dublin.

Department of Environment Heritage and Local Government (2007) *Delivering Homes, Sustaining Communities: Statement on Housing Policy*. Dublin.

Department of Environment Heritage and Local Government (2011) *Housing Policy Statement*. Dublin.

Department of the Environment (1991) *A Plan for Social Housing*. Dublin.

Department of the Environment (1995) *Social Housing: The Way Ahead*. Dublin.

Department of the Environment (1997a) *Social Housing Guidelines: Site Selection*. Dublin.

Department of the Environment (1997b) *Sustainable Development: A Strategy for Ireland*. Dublin.

Department of the Environment and Local Government (1998) *Urban Renewal Sheme Guidelines*. Dublin.

Department of the Environment and Local Government (1999) *Social Housing Guidelines: Design Guidelines*. Dublin.

Doney, R. H., McGuirk, P. M. and Mee, K. J. (2013) 'Social Mix and the Problematisation of Social Housing', *Australian Geographer*. Taylor & Francis, 44(4), pp. 401–418. doi: 10.1080/00049182.2013.852500.

Dublin Corporation (1986) *The Inner City: Draft Review - Dublin Development Plan*. Dublin.

Dublin Corporation (1993) *Lord Mayor's Commission on Housing*. Dublin.

Galster, G. (2007) 'Neighbourhood social mix as a goal of housing policy: A theoretical analysis', *European Journal of Housing Policy*, 7(1), pp. 19–43. doi: 10.1080/14616710601132526.

ENHR
OTB – Research for the Built Environment **//** Faculty of Architecture and the Built Environment
Delft University of Technology, P.O. Box 5043, 2600 GA Delft, The Netherlands
Tel. +31 15 278 76 18 **//** Fax +31 15 278 44 22 **//** E-mail: enhr@tudelft.nl

Galster, G. C. (2013) 'Neighborhood Social Mix: Theory, Evidence, and Implications for Policy and Planning', in Carmen, N. and Fainstein, S. S. (eds) *Policy, Planning, and People: Promoting Justice in Urban Development (The City in the Twenty-First Century)*. University of Pennsylvania Press.

Goetz, E. G. (2013) 'The audacity of HOPE VI : Discourse and the dismantling of public housing', *Cities*. Elsevier Ltd, 35, pp. 342–348. doi: 10.1016/j.cities.2012.07.008.

Government of Ireland (1987) *The Human Settlements Situation and Related Trends and Policies*.

Government of Ireland (1997) *Sharing in Progress: National Anti-Poverty Strategy*. Available at: http://www.socialinclusion.ie/NationalAnti-PovertyStrategy-SharinginProgress1997.pdf.pdf.

Government of Ireland (1999) *Residential Guidelines: Guidelines for Planning Authorities*. Dublin.

Government of Ireland (2002) *National Spatial Strategy for Ireland 2002-2020: People, Places and Potential*. Dublin. Available at: http://nss.ie/pdfs/Completea.pdf.

Government of Ireland (2020) *Programme for Government: Our Shared Future*. Dublin.

Haase, T. (2008) *Divided City: The changing face of Dublin's Inner City*. Available at: http://trutzhaase.eu/wp/wp-content/uploads/R_2009_Divided-City.pdf.

van Ham, M. *et al.* (2012) 'Neighbourhood Effects Research: New Perspectives', in van Ham, M. et al. (eds) *Neighbourhood Effects Research: New Perspectives*. London: Springer.

Hearne, R. (2020) *Housing Shock: The Irish Housing Crisis and How To Solve It*. Bristol: Policy Press.

Holmes, C. (2006) *Mixed communities*, *Foundations*. doi: 10.2307/j.ctt9qgkp2.

IGEES (2017) *Spending Review 2017 Analysis of Current Expenditure on Housing Supports*. Dublin.

Joseph, M. and Chaskin, R. (2010) 'Living in a mixed-income development: Resident perceptions of the benefits and disadvantages of two developments in Chicago', *Urban Studies*, 47(11), pp. 2347–2366. doi: 10.1177/0042098009357959.

Jupp, B. (1999) *Living together: Community Life on Mixed Tenure Estates*, *Demos*. London.

Kallin, H. and Slater, T. (2014) 'Activating territorial stigma: Gentrifying marginality on Edinburgh's periphery', *Environment and Planning A*, 46(6), pp. 1351–1368. doi: 10.1068/a45634.

Kearns, A. *et al.* (2013) 'Mixed-Tenure Orthodoxy : Practitioner Reflections on Policy Effects', *Cityscape: A Journal of Policy Development and …*, 15(2), pp. 47–68. Available at: http://www.huduser.org/portal/periodicals/cityscape.html.

Keegan, O. (1993) 'Social housing: the role of housing authorities. The view of the lord Mayar's Commission on Housing', *Administration*, 41(3), pp. 276–289.

Kemeny, J. (1992) *Housing and Social Theory*. Abingdon, Oxfordshire: Routledge.

KPMG (1996) *Study on the Urban Renewal Schemes*. Dublin.

Lees, L. (2008) 'Gentrification and Social Mixing : Towards an Inclusive Urban Renaissance ?', 45(November), pp. 2449–2470. doi: 10.1177/0042098008097099.

Lewis, E. (2019) *Social Housing Policy in Ireland*. Dublin: Institute of Public Administration.

Lupton, R. and Tunstall, R. (2008) 'Neighbourhood regeneration through mixed communities: A "social justice dilemma"?', *Journal of Education Policy*, 23(2), pp. 105–117. doi: 10.1080/02680930701853013.

Markovich, J. (2015) '"They Seem to Divide Us": Social Mix and Inclusion in Two Traditional Urbanist Communities', *Housing Studies*. Taylor & Francis, 30(1), pp. 139–168. doi: 10.1080/02673037.2014.935707.

Meen, G. and Whitehead, C. (2020) *Understanding Affordability: The Economics of Housing Markets*. Bristol: Bristol University Press.

Moore, N. (2008) *Dublin Docklands Reinvented: The Post-Industrial Regeneration of a European City Quarter*. Dublin: Four Courts Press.

Mullins, D. and Sacranie, H. (2016) *Social Mix: Values, Purposes, Policies*. Birmingham.

Musterd, S. and Andersson, R. (2005) 'Housing mix, social mix, and social opportunities', *Urban Affairs Review*, 40(6), pp. 761–790. doi: 10.1177/1078087405276006.

NESC (1989) *Review of Housing Policy*. Dublin.

NESC (1990) *A Strategy for the Nineties*. Dublin.

NESC (2004) *Housing in Ireland: Performance and Policy*. Dublin.

Nolan, B., Whelan, C. T. and Williams, J. (1998) *Where Are Poor Households? The Spatial Distribution of Poverty and Deprivation in Ireland*. Dublin.

Norris, M. (2006) 'Developing, designing and managing mixed tenure estates: Implementing planning gain legislation in the Republic of Ireland', *European Planning Studies*, 14(2), pp. 199–218. doi: 10.1080/09654310500418085.

Norris, M. (2016) *Property, Family and the Irish Welfare State*. Palgrave Macmillan.

Norris, M., Byrne, M. and Carnegie, A. (2019) 'Combatting stigmatisation of social housing neighbourhoods in Dublin , Ireland'. Routledge, 1247. doi: 10.1080/19491247.2018.1532673.

Norris, M. and Coates, D. (2007) 'The uneven geography of housing allowance claims in Ireland: Administrative, financial and social implications', *European Journal of Housing Policy*, 7(4), pp. 435–458. doi: 10.1080/14616710701650468.

Norris, M. and Winston, N. (2003) *Housing Policy Review 1990-2002*. Dublin.

O'Broin, E. (2019) *Home: Why Public Housing is the Answer*. Newbridge, Co. Kildare, Ireland: Merrion Press.

O'Connell, C. (1993) 'Housing trends and issues: the tole of the social housing', *Administration*, 41(3), pp. 249–261.

Rebuilding Ireland (2016) *Rebuilding Ireland: Action Plan for Housing and Homelessness*.

Redmond, D. and Norris, M. (2014) 'Social Housing in the Republic of Ireland', in Scanlon, K., Whitehead, C., and Fernández Arrigoiti, M. (eds) *Social Housing in Europe*. John Wiley & Sons, Ltd., pp. 143–162. doi: 10.1002/9781118412367.ch9.

Roberts, M. (2007) 'Sharing space: Urban design and social mixing in mixed income new communities', *Planning Theory and Practice*, 8(2), pp. 183–204. doi: 10.1080/14649350701324417.

Slater, T. (2013) 'Your Life Chances Affect Where You Live : A Critique of the " Cottage Industry " of Neighbourhood Effects Research', *International Journal of Urban and Regional Research*, 37(2), pp. 367–87. doi: 10.1111/j.1468-2427.2013.01215.x.

Somerville-Woodward, R. (2002) *Ballymun: A History Volumes I & II c.1600 - 1997*. Dublin: BRL (Ballymun Regeneration Limited).

Stockhammer, E. and Wolf, C. (2019) 'Building blocks for the macroeconomics and political economy of housing', *The Japanese Political Economy*. Routledge, 45(1–2), pp. 43–67. doi: 10.1080/2329194x.2019.1611376.

Threshold (1987) *Policy Consequences: A Study of the £5,000 Surrender Grant in the Dublin Housing Area*.

Tunstall, R. (2003) '"Mixed tenure" policy in the UK: Privatisation, pluralism or euphemism?', *Housing, Theory and Society*, 20(3), pp. 153–159. doi: 10.1080/14036090310019445.

Informal Housing Through Financialization: A Dublin Case Study

Alexia O'Brien

Trinity College Dublin, Department of Geography, College Green, Dublin 2, Dublin, Ireland.
email: obriea57@tcd.ie

Abstract

This presentation explores the contributing factors to the rise of informal housing strategies in Dublin, Ireland. In response to increasing rents and a growing demand for housing, a range of "solutions" are being rolled out within the city. In this paper, I focus on a comparison of two emerging housing types: co-living developments and overcrowded rental accommodation. Combining housing financialization with informality, and drawing on analysis of policy and market trends, I offer a critical comparison of the factors that have contributed to the emergence of these two tenure forms in Dublin. It is found thus far through shifts in policy and the increasing dependence on foreign investment that degrees of informal strategies are being employed on government- and individual-based levels.

Keywords: financialization, informal housing, overcrowding, co-living

Introduction

Housing is a contentious issue in Ireland. Marked by unaffordability for many, a growing private rental sector (PRS), low PRS stock, and rapidly increasing homelessness, Dublin has been the epicentre of the country's housing struggle. In order to address the growing needs of the city, alternative measures have been taken through legislation as well as under-the-radar techniques. Two glaring examples of these alternative measures is co-living (supported by the government) and overcrowded accommodation (done by individual landlords). Throughout the research, the commonalities of these two tenure forms through the lens of informality and financialization will show how each has emerged—separately and alongside the other—within the Irish rental market and have grown in popularity throughout Ireland's capital city.

Prior to the financial crash of 2008, the booming Irish economy was tied to the prospect of homeownership, and more specifically, credit. When the crash hit Ireland, the country was devastated by the reckless lending habits and the ease of access to credit through mortgages, emerging as one of the worst hit economies of a developed country and continuing to be in an "overall recession position" until 2013 (Downey, 2014, p.121). Despite the apparent connections between the overemphasis of homeownership and the economic crash, the government's solution to bring the country out of the recession was to double-down on their neoliberal practices, continuing to push the idea of homeownership while simultaneously cutting funding for social housing programs. However, new lending rules introduced by the Irish Central Bank in 2015 has meant that access to mortgage credit is becoming increasingly difficult through tight eligibility requirements and capped loan amounts (O'Callaghan et al., 2015; Kitchin et al., 2012; O'Callaghan, Di Feliciantonio & Byrne, 2017). This, in addition to limited social housing opportunities, have meant the private rental sector (PRS) has played an increasingly important role in the Irish housing market. In Dublin, this has been felt the most strongly. Faltering regulation by a means of dwindling tenure security and non-existent rent caps (Byrne, 2020) has resulted in a severe shortage in supply, rent prices increasing over 40% nationally since 2011, and 50% of properties with illegal standards and high eviction rates (O'Callaghan, Di Feliciantonio & Byrne, 2017, p.876). It has also allowed for investment to rapidly flow into the PRS by institutional

investors like REITs (Real Estate Investment Trust) or vulture funds (Byrne, 2019; Kitchin, Hearne & O'Callaghan, 2015), creating a finance-led approach and dominance to housing (Hearne, 2020) which we know as the financialization of housing.

Housing financialization has dominated the PRS in Dublin since the crash, much in part through government bodies, incentive programs, and planning policies brought in nearly immediately in the wake of recovery. The National Asset Management Agency (NAMA) was one of the first recovery programs initiated by the Irish government in 2009, which was to act as a "bad bank", providing Irish banks the opportunity to transfer their loan debt to the Agency and thus allow for lending again (Hearne, 2020). The acquisition of these loans created a property stock within NAMA, whose goals shifted from getting developers to repay their loans to selling their assets as fast as possible. Apart of this shift meant NAMA created discounted portfolios of its land and residential assets that were sold to international investors. NAMA's offloading of large portfolios was seen as a necessity in order to "drive market recovery and to attract international capital willing to invest in Ireland" (Hearne, 2020, p.133, quoting Daly, 2014). These portfolios have been bought by REITs and vulture funds for low costs with high yield potential, who then historically evict tenants and raise rents to unaffordable levels, resulting in a contribution to the growing housing inequalities (Hearne, 2020; Hearne, 2017; Kitchin, Hearne & O'Callaghan, 2015). REITs and vulture funds continue to be incentivized, not just through discounted properties, but through corporate tax waivers and receiving government subsides as a means to continue attracting foreign investment into the country (Hearne, 2020). The build-to-rent sector has propped these investors up even further in Dublin where the PRS is seen as an appealing investment opportunity due to its high demand and high return (Hearne, 2017; 2020).

In order to combat the issue of stock, the then-Housing Minister, Eoghan Murphy, created new regulations in 2018 to introduce co-living complexes into the rental market. From the beginning of its introduction, developers have jumped on the opportunity by designing these facilities in or around Dublin's city centre. The Irish government have outlined co-living as a "residential format [comprised of] professionally managed rental accommodation, where individual rooms are rented within a centrally managed development that includes access to shared or communal facilities and amenities" that are "generally intended for occupation for short lease periods of up to a year in duration" (Department of Housing, Local Government and Heritage, 2020, p.3). These complexes are typically done in large capacities, which this research refers to as "high-volume", and on flexible stay-lengths. The original argument for ushering co-living into the city from the government was the idea that it would help provide more alternative options to rental accommodations, particularly for short-term residents, and posing as a more affordable option for living in the city. The proposed layout in the 2018 Design Standards Guidelines is similar to that of student accommodation in Ireland, where each apartment would be comprised of six to eight bedrooms, each ensuite, while sharing a communal kitchen and living space; it is noted, however, that this is only a suggested layout and that developers may design the apartment blocks as they see fit, and none of the applications to the local planning boards or national planning board have followed this layout (ibid). From a developer and/or investment standpoint, co-living has the potential to provide affordable housing while optimizing urban space and density (Common, 2018). On the flip side of this, the deregulation of minimum size requirements for build-to-rent apartments, the planning scheme co-living falls under, has meant there is a significant opportunity for developers to pack more units in, yielding higher returns, verses building a one- or two-bedroom apartment. This has sparked further controversy surrounding co-living and its ethics and sustainability within a city. In the Dublin context, residents of the city, as well as members of Irish government bodies, have expressed concerns that the complexes are eliminating "real homes", will not meet local demand, and could turn into "modern bedsits" (Finn, 2019). Additionally, there are fears that these complexes would drive up land value and in turn increase rents in the surrounding areas (Thomas, 2021). While no co-living sites are operational as of yet in the city, it is estimated that rent would approximately €1300; this is less than an average one-bedroom apartment in the city at €1598, but substantially more than a double bedroom in a shared house which averages at €785 (Lyons, 2019). Due to its parallels in nature

with student accommodation, which have even been drawn by the Department of Housing themselves (Department of Housing, Local Government and Heritage, 2020, p.4), debates on whether to treat co-living under similar manners of student accommodation have arisen, namely the debates on whether co-living tenants will receive leases or licenses. As of the current moment, but while acknowledging a decision has not been made in full yet, it appears it will follow the same trajectory and licenses will be issued (Bowers, 2019). In a city of already low tenure security rights, the flexi-stay, lease-free ideals of co-living being a potential solution to the housing crisis (Murphy, 2019) have been seen as tone-deaf by locals, and as further eroding at tenure security.

While co-living is discussed as having the potential to be a modern-day tenement, arguably this is already seen and is present in the Dublin private rental sector through overcrowded accommodation. As it stands in the Irish context, the only policy to address overcrowding is the Housing Act of 1966. In this, a dwelling is deemed to be overcrowded if the number of people who ordinarily sleeping in the house consists of two or more people over the age of 10, opposite sexes, and are not married, sharing a room or if there is less than 400 cubic feet of free air space per person. It goes on to say that a maximum fine of 100 pounds shall be given if a landlord does not comply with any written notice of violations given to them (Ireland. *Housing Act 1966*). While this definition is outdated in multiple senses, penalizing landlords who operate overcrowded accommodations is seen as "cumbersome, slow" and gives only "minimal penalties" by Dublin City Council, and therefore, the council relies on fire safety laws to handle overcrowded living spaces (O'Kelly, 2020). An attempt to bring a more modern definition and set of regulations was attempted in 2018, however, the proposed bill is stalled on the government floor and has been since its inception. Public dialog has begun re-examining overcrowding in recent years, highlighting those who often fall victim and the underlying reasons that overcrowding continues to be relevant. Affordability pressures in cities have been identified as the main culprit in the increase of overcrowded accommodation (Herath and Bentley 2018). Additionally, a growing concern is the rise of landlords subletting properties at higher tents, much of the time leading to more tenants being required in the accommodation to meet the increased prices (Gurran et al, 2019). Academic literature (Gilmartin, Coppari & Phelan, 2020; Gurran et al, 2019) and investigative documentaries on the Irish context (O'Kelly, 2020) have showed that migrants and international students are disproportionately affected by market barriers—rental references, funds, and lack of knowledge on local renting conditions—and are led into these types of informal accommodations.

Informal housing as a lens is useful when comparing the two unconventional tenure forms in the Irish context. When discussing informal housing, it is often assumed that the dwelling is illegal. While in some instances this is the case, in others it is not. An accepted definition (Harris, 2017; Portes and Haller, 2005; Gurran et al, 2019) within the scope of informality—both in its original application in economies and now within housing—originates by Feige (1990) wherein he defines informality as "those actions of economic agents that fail to adhere to the established institutional rules or are denied their protection". Through the application of urban development, and more specifically within housing, this definition remains strong as institutional rules would pertain to compliance of regulations, zoning, and planning policies and denial of protection would take form in lack of tenure security via non-lease agreements or registration with a tenancy board (Gurran, Maalsen, and Shrestha 2020). Informal housing has come to the forefront in the Global North from an affordability problem within cities which has forced many low-income individuals (or even families) into substandard and/or precarious accommodation forms (Gurran, Maalsen, and Shrestha 2020; Harris, 2017). This feeds into the argument that informality arises from economic, political, and cultural pressures, and how urban informality relates to the state, whether through "austerity urbanism", a failure of welfare safety nets, or creating an environment for informality to flourish through deregulation (Dekel, 2020; Gurran, Pill & Maalsen, 2020; Harris, 2017; Tonkiss, 2013; Roy, 2005). Despite primarily being associated with the Global South, informal housing is a global phenomenon that works within, as well as separate to, formal institutions and systems (Gurran, Maalsen, and Shrestha 2020). Moreover, the matter should not be viewed as formal verses informal, but rather how the two relate to and exist with one another

(Roy, 2005; Harris, 2017; Porter, 2011). Within Dublin, the pretences for informality can be seen through the changing post-crash housing landscape. The cuts to social housing, little regulation or the deregulation of the PRS, and political influences have all provided a means for informality to grow within the city. The basis for informal housing has led us into seeing the creations of new housing tenures emerge, such as co-living and overcrowded accommodation. This research explores how informality is emerging within Ireland through the distinct tenures of co-living and overcrowding. Co-living developers flaunt the notion of flexi-stay lengths, with a "come and go" mentality, fitting with latter part of Feige's definition on lack of security in a form of a lease. With overcrowded accommodation, a more "traditional" idea of informality, lack of tenure security is high due to non-existent leases and the possibility of being evicted whenever the landlord sees fit, coupled with illegal subdivisions and non-reporting of rental properties (O'Kelly, 2018), informality by a means of Feige's definition appear to hold true. Both tenure forms have been of growing concern in the city and smaller communities, and it is for this reason an examination of the production and consumption of informal housing typologies in Dublin must be conducted.

Methods

The aim of this research is to explore the production and consumption of informal housing in the Irish private rental sector by examining co-living and overcrowded accommodation. By exploring these two tenure types with the lens of informal housing and financialization, this research seeks to undercover and highlight the political and economic backdrop that these two have emerged from while comparing the tenant experiences. As such, the key research question being asked is "How have the private rental market conditions post-2008 expanded the use of informal housing strategies in Dublin, Ireland?" by comparing co-living and overcrowded accommodation. This question will be answered though three research objectives:

1. Critically analyse the Dublin private rented sector and its market conditions through policy analysis and aided by interviews
2. Explore the tenant experiences in co-living and overcrowded accommodation through interviews and discourse analysis
3. Analyse how digital platforms and technologies play a role in the promotion of co-living and overcrowded accommodation while contributing to tenant experience through the means of interviews, discourse analysis, and content analysis

A mixed method approach will be taken using various qualitative methods. To date, three methods have been undertaken or are in the process—a database on co-living, co-living site visits, and policy analysis—and three—interviews, discourse analysis, and content analysis—set to commence shortly.

A database was created to document all planning applications for co-living developments in Dublin, organized and split by each local authority (four in total) and the national planning authority. The database is comprised of information relating to the planning applications submitted, such as the developer associated to the project, the location, the number of proposed rooms, a description of the apartment block, and other attributes. From there, this information was accumulated and put into a colour-coordinated map on approved or rejected sites to visualize where proposed sites were located and determine if there are any concentrations in certain areas. Due to a ban on new applications for co-living in December of 2020, this database is complete, although continuous monitoring of past applications is being conducted to see if any appeals are made on a development.

In conjuncture with the database, once locations had been identified, initial site visits were conducted to gain a better understanding of the surrounding area and why developers may have chosen the location they

did. Notes were taken to document the types of tenure forms around the chosen site, while also making note of its proximation to services and what hinderances may arise and compromise its goal in attracting tenants. These notes are accompanied by pictures of the chosen site. Due to COVID-19 restrictions within the city, not all locations were able to be visited before levelling of sites or the breaking ground of construction, however, this is not believed to pose any significant changes in analysing its location or the surrounding area. These site visits have been intended to aid in the identification any geographic significances to developers.

The final method that has begun is policy analysis, chosen in part to understand the current legislative bearings of co-living and overcrowded accommodation, while also understanding the evolution of housing policy since the 2008 financial crash. Through initial stages of policy analysis, working definitions have been established to align with State definitions and standpoints. It has also begun to provide an understanding of how elements of informality may have emerged through the policy and if the Irish government has done anything to facilitate its emergence.

Interviews will be conducted through a semi-structured format and will operate in two ways. The first will be to understand the production of co-living through interviews with institutional actors, namely developers of the apartment complexes identified through the database and members of the planning boards, both local and national, to understand the impact and influence the local housing policies have on approving co-living applications. The second side of interviews will be focused on the consumption of informality through interviews with tenants of co-living and overcrowded accommodations and with tenant advocacy groups to understand the factors that influence tenants into living in these two tenure forms and what their experiences have been. With overcrowded accommodation, it is hoped that interviews will aid in also answering the production side of the question, although this will be unknown until interviews are conducted and analysed.

Discourse analysis will be employed to understand the chosen words or phrases used in policies and advertisements in hopes of providing insight on target audiences and the significance of Dublin for investment opportunities. It will also be used to understand public perception of both tenure forms through social media.

Finally, content analysis will be used to further set the scene separately from policy analysis, focusing on a comparison of what the policies indicate their hopes are and what is happening in practice. This will be done through podcasts from experts in the field, as well as investigative documentaries conducted by the local news station, RTE, on overcrowded accommodation on the island.

Financialization as a lens is important when understanding the reliance Dublin has on foreign investment in the PRS and how it shapes the landscape dramatically. As discussed previously, the discounted sales of land and property, and the growing build-to-rent (BTR) sector have given clear avenues for investment companies to capitalise on the instability in the Irish market. BTR in particular has played a key role in the financialization of the city, where it is expected that BTR properties will be owned and managed by institutional landlords (Department of Housing, Local Government and Heritage, 2018).

Results/Discussion

While preliminary results are limited due to this being new and ongoing research, trends are beginning to emerge, primarily from the co-living portion of the project. From the map created off the database, we are seeing a concentration of co-living sites in two areas of Dublin (Fig.1) apart from a few outliers. This pattern raises questions on the geographic significance of this area, which the planned interviews with institutional actors aims to answer. Additionally, the database has aided in discovering patterns amongst the rejected

applications. Through the database, it has been found that of the six total applications that were rejected (and that did not seek an appeal or win their appeal), the two most common reasons for rejection were substandard living conditions and the buildings potential to "seriously injure the visual amenities" of the surrounding area. Other causes for refusal include—but are not limited to—being seen as overdevelopment of the area resulting in an overbearing effect, visually hurting the area and character of the neighborhood, and concerns over damage to a protected building. In total, there have been 27 applications for co-living developments, which includes repeat applications for a location, and five appeals. An interesting note that was discovered through the database as well was the application for the northern most location (refer to Fig. 1) has been its back and forth between permission and refusal. It was initially approved through the local level planning, but after appeals by residents of the area had been taken up to the High Courts of Ireland, the permission was revoked. The developers then reapplied for the location, this time through the national planning authorities with omission of 14 bed spaces, where it was once again given permission.

Figure 1: co-living applications in Dublin, colour-coordinated with red representing a failed application and green representing a successful application

While little research to date has been done analysing how co-living fits into the informal model, the work of Gurran et al. (2019) in Sydney have highlighted how the "new generational boarding houses", akin to what is known as co-living in Europe and North America, have received special planning provisions that overrode local zoning and planning. Early-stage policy analysis in the Dublin context is showing evidence of a similar pattern, where it was found that height and density requirements for new apartments were all deregulated at the same time co-living was brought into the housing development plans, trumping city- and county-council planning regulations (Department of Housing, Local Government and Heritage, 2018; 2020). Further research will need to be conducted to examine the extent in which this influenced the introduction of co-living. Additionally, through the definition laid out by the Planning Division of the Department of Housing in their co-living report, we know the targeted demographics for co-living renters are young, mobile workers who are "willing to relocate nationally or internationally for personal and/or professional development, but may not have established family, friend or colleague networks in the city or place to which they relocate" and will do so on a short-term basis (Department of Housing, Local Government and Heritage, 2020, p.4). Interviews with tenants and property managers will determine if this is indeed the demographics present within the apartment complex. To fit the targeted audience's lifestyle, the lack of tenure security that comes with the nature of licenses and not leases shows strong evidence of informal strategies being undertaken. Regarding the management and creation of co-living, the *Sustainable Design Standards for New Apartments,* where co-living is outlined as a Build-to-Rent model, has specifically said that these are expected to be managed by an investment institution, feeding the notion on financialization's influence on informality within the city.

Conclusion

When discussing informality in housing, Dublin, Ireland is often not the first city to come to the mind. It is within this position, however, that Dublin proves to be an ideal case study as it shows the emerging trends of informality within a Global North context and similar trends that can be found throughout it. It is often falsely believed that if a city does not fit the traditional beliefs of informality—such as the slums of India or the overcrowding in Hong Kong—that informality cannot exist. Our understanding of informality has historically been fixed in a black-and-white positionality, despite literature on informality (Roy, 2005; Porter, 2011; Harris, 2017; Gurran, Maalsen, and Shrestha 2020) showing discrepancies in this belief. Informality is used as a tool to work around housing insecurities, as we see in Dublin and its housing crisis. Neither co-living nor overcrowded accommodations are dominate housing tenures, however, they do represent the tactics being employed both through government intervention and non-government intervention as a means to cope with diminishing stock and unaffordable rents. It is within this space that this research is situated, with the ultimate outcome being an understanding of how informal housing strategies have navigated through the Dublin rental market by examining co-living and overcrowded accommodation. Throughout the research, the commonalities of these two tenure forms through the lens of informality and financialization will show how each has emerged within the Irish rental market, while also understanding the factors that lead to the consumption of such tenure forms. This research will contribute to the growing literature on housing informality in the Global North and how we understand its production and use within a Western European context.

Acknowledgements

References

Bowers, S (2019) "Co-living residents may fall outside rental protections", The Irish Times, 19 Aug. Available at: https://www.irishtimes.com/news/social-affairs/co-living-residents-may-fall-outside-rental-protections-1.3990143?mode=sample&auth-failed=1&pw-origin=https%3A%2F%2Fwww.irishtimes.com%2Fnews%2Fsocial-affairs%2Fco-living-residents-may-fall-outside-rental-protections-1.3990143 [Accessed 2 March 2020]

Byrne, M. (2019) The political economy of the 'residential rent relation': antagonism and tenant organising in the Irish rental sector. *Radical Housing Journal*. 1(2), p.9-26

Dekel, T. (2020) The institutional perspective on informal housing. Habitat International. 106, p.1-8. DOI: 10.1016/j.habitatint.2020.102287

Department of Housing, Local Government and Heritage (2018) Sustainable Urban Housing: Design Standards for New Apartments. Dublin: Stationary Office. Available at: https://www.gov.ie/en/publication/15f0b-design-standards-for-new-apartments-dsfna-2018/

Department of Housing, Local Government and Heritage (2020) Co-Living/Shared Accommodation. Dublin: Stationary Office. Available at: https://www.gov.ie/en/publication/92b06-co-living-shared-accommodation-report/

Downey, D. (2014) "The Financialisation of Irish Homeownership and the Impact of the Global Financial Crisis", in MacLaran, A & Kelly, S. (ed.) Neoliberal Urban Policy and the Transformation of the City: Reshaping Dublin. Hampshire: Palgrave MacMillan, p.120-138

Finn, C. (2019) "Bedsits of the future or part of the solution?: Minister says co-living flats are just another option for people", The Journal.ie, 17 May. Available at: https://www.thejournal.ie/co-living-eoghan-murphy-4639912-May2019/

Feige, E. (1990) Defining and Estimating Underground and Informal Economies: The New Institutional Economics Approach. World Development 18, p.989– 1002.

Gilmartin, M., Coppari, P.R. & Phelan, D. (2020): Promising precarity: the lives of Dublin's international students. *Journal of Ethnic and Migration Studies*. DOI: 10.1080/1369183X.2020.1732617

Government of Ireland. Housing Act (1966) Dublin: Stationary Office

Gurran, N., Maalsen, S. & Shrestha, P. (2020) Is "informal" housing an affordability solution for expensive cities? Evidence from Sydney, Australia. International Journal of Housing Policy. DOI: 10.1080/19491247.2020.1805147

Gurran, N., Pill, M. & Maalsen, S. (2020) Hidden homes? Uncovering Sydney's informal housing market. Urban Studies. 00(0), p.1-20. DOI: 10.1177/0042098020915822

Gurran, N., Pill, M., Maalsen, S., Alizadah, T. & Shrestha, P. (2019) Informal accommodation and vulnerable households. Sydney: University of Sydney

Harris, R. (2017) Modes of Informal Urban Development: A Global Phenomenon. Journal of Planning Literature. 33(3), p.267-286. DOI: 10.1177/0885412217737340

Hearne, R. (2017) A home or a wealth generator? Inequality, financialization and the Irish housing crisis. TASC: Dublin

Hearne, R. (2020) *Housing Shock: The Irish Housing Crisis and How to Solve it*. Bristol: Policy Press

Herath, S. and Bentley, R., 2018. Overcrowded housing looms as a challenge for our cities. [online] The Conversation. Available at: <https://theconversation.com/overcrowded-housing-looms-as-a-challenge-for-our-cities-96110> [Accessed 18 March 2021].

Kitchin, R., Hearne, R., O'Callaghan, C. (2015) Housing in Ireland: From Crisis to Crisis. NIRSA Working Paper Series. Available at: http://www.maynoothuniversity.ie/nirsa [Accessed 11 Feb 2021]

Kitchin, R., O'Callaghan, C., Boyle, M., Gleeson, J. & Keaveney, K. (2012) Placing neoliberalism: the rise and fall of Ireland's Celtic Tiger. *Environment and Planning A*. 44, p.1302-1326. DOI: 10.1068/a44349

Lyons, R (2019) The Daft.ie Rental Price Report: An analysis of recent trends in the Irish rental market 2019 Q1. Dublin: Daft Report

Murphy, E. (2019) "The Pay Kenny Show". Interview with Pat Kenny [radio show] 17 May

O'Callaghan, C., Kelly, S., Boyle, M., & Kitchin, R. (2015) Topologies and topographies of Ireland's neoliberal crisis. Space and Polity. 19 (1), p.31-46. DOI: 10.1080/13562576.2014.991120

O'Callaghan, C., Di Feliciantonio, C., Byrne, M. (2017) Governing urban vacancy in post-crash Dublin: contested property and alternative social projects. *Urban Geography*. 39(6), p.868-891. DOI: 10.1080/02723638.2017.1405688

O'Kelly (2018) "Nightmare to Let", RTE, 1 February. Available at: https://www.rte.ie/news/investigations-unit/2017/1107/918221-rte-investigates-nightmare-to-let/

O'Kelly, B. (2020) "Crowded house: 11 people crammed into one apartment during Covid-19", RTE, 4 December. Available at: https://www.rte.ie/news/investigations-unit/2020/1203/1182221-accommodating-covid-overcrowded-accommodation-dublin/#:~:text=RTÉ%20Investigates%20went%20undercover%20to,live%20in%20a%20single%20room.&text=And%20on%20the%20other%20side,are%20crammed%20into%20the%20corners .

Portes and Haller (2005) The Informal Economy, in Smelser, N. and Swedberg, R. (ed.) *Handbook of Economic Sociology*. New York: Russell Sage Foundation Editors, p.403-425

Roy, A (2005) Urban Informality: Toward an Epistemology of Planning. Journal of American Planning Association. 71(2), p.147-158

The Coliving Blog by Common | Resources for Shared Living. 2018. What is coliving? Common's Complete Guide to Coliving. [online] Available at: <https://www.common.com/blog/2019/05/what-is-coliving/> [Accessed 19 January 2020].

Thomas, C. (2021) "'It's not suitable housing for anyone, anywhere': Green light for another co-living development in Dublin despite ban", The Journal.ie, 12 June. Available at: https://www.thejournal.ie/co-living-developments-approved-dublin-5462595-Jun2021/

Tonkiss, F (2013) Austerity urbanism and the makeshift city. City. 17(3), p.312-324. DOI: 10.1080/13604813.2013.795332