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Work Pogramme Description	This deliverable is concerned with the production of publishable documents about the discussions maintained within the subnetwork on selected research topics relevant to the network's activities. These readings will serve as a guide for members of the subnetworks Pedagogic Activities and Participation. A yearly editions was available on-line on the OIKONET digital platform. These digital contents have been developed during the course of the project and represent the OIKONET Reader. This deliverable presents the collection of position papers from the subnetwork to form the first and second readers of the project.			
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V	Date	Author	Description
1	2014-02-28	Karim Hadjri (UCLan)	Document structure and first draft of Reader #1
2	2015-02-28	Karim Hadjri (UCLan)	Document structure and final draft of Reader #2
3	2015-04-19	Karim Hadjri (UCLan)	Document structure, addition of forum comments
4	2016-06-30	Karim Hadjri (UCLan)	Integrating the two issues of the Reader and including forum comments
5	2017-02-14	Leandro Madrazo (LA SALLE)	Final editing introductory sections

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1 EXECUTIVE SUMMARY

This document contains the two issues of "Readings on contemporary housing research", a selection of position papers written by partners involved in the project's sub-network Housing Research (WP2). They illustrate current issues related to contemporary housing policy and research and explore avenues that the OIKONET network can exploit to contribute to other sub-networks such as Community Participation (WP3) and Pedagogical Activities (WP4).

The two readers contained in this document summarize a large part of the work carried out by the members of the subnetwork Housing Research during the course of the project. It gives an overview of the issues that that the members of this subnetwork are dealing with in their own research. The texts presented in this document are complemented with the topics that research partners have summarized in Oikopedia. The contents of this document, together with the Oikopedia entries, contribute to fulfil one of the main purposes of the OIKONET project, namely, to interlink the activities of the three sub-networks: research, community participation and pedagogical activities.

The first issue of the Reader is structured into eight chapters. Chapter 1 discusses contemporary housing issues through a literature review and argues the need for environmentally sustainable, socially responsive and affordable housing. The chapter also highlights current tendencies in contemporary housing design. Chapter 2 summarises three concepts concerned with capacity building, codesign and interplace, and raises a number of questions on the relationship between these concepts and their potential contribution to OIKONET. Chapter 3 is a comprehensive summary of advanced concepts of energy efficient building design and planning. This chapter argues that successful planning for energy efficient building requires wider stakeholder participation, as well as a new knowledge base to be established and pedagogic programmes developed to enhance interdisciplinary collaboration. Chapter 4 presents the process of gentrification using the case study of Budapest, Hungary. Current work by the author of this chapter revolves around investigating the role of investors, policy makers and the creative industry in the process of inner city revitalisation. Chapter 5 discusses housing allowances within the context of socially oriented housing policy, and presents the research agenda at partner NOVA. Chapter 6 explains the public rental housing programme and associated social innovations in the field of housing in Zagreb, Croatia. Chapter 7 summarises research in the design studio at University of Cyprus, by focussing on types of knowledge in housing studies. It critically discusses the relationship between design and research, and how to construct knowledge and understanding from a design process. Chapter 8 presents housing research undertaken at the Housing and Urban Development Studies (IHS) partner in The Netherlands. It highlights current activities in housing research and postgraduate degrees, and collaboration with international agencies.

The second issue of the Reader is structured into ten chapters. Chapter 1 discusses urban brownfields regeneration in the UK by reviewing programmes that support and encourage the development of brownfield sites, namely Spatial Planning, Technical Support, Financial Support, and Direct Development. Chapter 2 examines the phenomenon of urban heat island and how this can be mitigated by the whitening and greening of urban settlement's outdoor surfaces. The study used CFD software to determine temperature, wind velocity, air pressure and humidity, heat transfer and boundary conditions. Chapter 3 reviews post-conflict regeneration programmes in the historic centre of Nicosia in Cyprus. It examines Nicosia's Master Plan by focussing on urban development, social characteristics, urban regeneration, and housing regeneration in two neighbourhoods: Chrysaliniotissa and Taht-el-Kale. Chapter 4 discusses briefly neighbourhood regeneration in Oslo, Norway, by criticizing the programme's approach for Inner City East and Groruddalen. Chapter 5 examines regeneration of multi-family

buildings in an old mining community in Zagorje ob Savi, Slovenia. The use of retrofitting measures to improve indoor living comfort is discussed through case studies. Chapter 6 discusses the challenge of privatised housing management across CEE and CIS countries through work conducted by the Housing and Urban Development Studies (IHS). The challenges facing Riga in Latvia are also reviewed. The chapter argues for an active role of residents in the management of their housing. Chapter 7 examines local community responses to urban planning proposals for housing regeneration. It argues there is a lack of citizen dialogue in planning processes. It presents feedback from a living lab in the suburb of Hammarkullen in Gothenborg, Sweden, that is focussed on sustainable property management and maintenance. Chapter 8 discusses development policies directed at community participation and empowerment. It asks if this could potentially lead to a systemic change, and a more responsive and accountable government is part of this effort. Community driven development approaches are used to explain these synergies. Chapter 9 reviews urban planning and the role of participation in housing using the case of Budapest, Hungary. It examines the models used for urban rehabilitation and the spontaneous changes taking place in Erzsébetváros. Chapter 10 discusses the concept of housing innovation as an instrument of integrated sustainable urban development. It also examines the requirements for a housing innovation in order to be considered sustainable and affordable. It uses the case of a housing programme for young academics in Zagreb, Croatia. It finally presents sustainability priorities that will support sustainable regeneration.

Finally, comments posted on the on-line discussion forums of both readers are collated to illustrate the ongoing debate on housing issues taking place between the contributors.

2 INTRODUCTION

Purpose and target group

The purpose of this work documented in this report has been to identify current contemporary research issues being investigated by members of the sub-network on Housing Research. The collection of issues offers a comprehensive overview of relevant topics in the current housing debate which can be useful to other researchers, as well as to teachers in architecture, planning, sociology, policy making, and other schools, who can integrate these topics in their learning and teaching programmes.

Contribution of partners

The subnetwork Housing Research is led by Prof. Karim Hadjri, from UCLan. As such, he has been responsible for structuring and editing the contents of the readers. The following partners have contributed to the writing of the chapters in the readers:

- P7 CHALMERS - University of Chalmers, Sweden (2 chapters)

- P8 IHS- Institute for Housing and Urban Development Studies, The Netherlands (3 chapters)

- P12 UL- Faculty of Mechanical Engineering, University of Ljubljana, Slovenia (3 chapters)

- P14 RTU - Faculty of Architecture and Urban Planning at Riga Technical University, Latvia (1 chapter)

- P15 UCY- Faculty of Architecture, University of Cyprus, Cyprus (2 chapters)

- P16 UCLAN- Grenfell-Baines Institute of Architecture, University of Central Lancashire, UK (2 chapters)

- P17 PFZ- Faculty of Law, University of Zagreb, Croatia (2 chapters)

- P19 NOVA- Norwegian Social Research, Norway (2 chapters)

- P28 ELTE- Faculty of Social Sciences, Eötvös Loránd University, Hungary (2 chapters)

The following partners – some of them from other sub-networks– have contributed to the discussions held in the on-line forums:

- P1 LA SALLE- School of Architecture La Salle, Barcelona, Spain (1 comment)

- P16 UCLAN- Grenfell-Baines Institute of Architecture, University of Central Lancashire, UK (5 comments)

- P7 CHALMERS - University of Chalmers, Sweden (6 comments)

- P8 IHS- Institute for Housing and Urban Development Studies, The Netherlands (8 comments)

- P12 UL- Faculty of Mechanical Engineering, University of Ljubljana, Slovenia (4 comments)

- P14 RTU - Faculty of Architecture and Urban Planning at Riga Technical University, Latvia (4 comments)

- P17 PFZ- Faculty of Law, University of Zagreb, Croatia (4 comments)

- P19 NOVA- Norwegian Social Research, Norway (5 comments)

- P23 HERISCAPE- Heriscape, Italy (1 comment)

- P34 UN Habitat, Kenya (2 comments)

Relations to other activities in the project

The work produced by this sub-network is informing the activities conducted by the two other sub-networks: Community Participation (WP3) and Pedagogical Activities (WP4). Some of the topics addressed in the readers have been further elaborated in joint publications (see Deliverable 7.4 "Journals and Conferences").

READER #1

CHAPTER 1: CONTEMPORARY HOUSING ISSUES

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Introduction

It is estimated that people in the developed world spend up to 90% of their time indoor (Simoni et al., 2003), including residential buildings, workplaces, schools and shopping centres. Houses impact greatly on human health and wellbeing (Matte and Jacobs, 2000) as much as it does on the environment (Woolley, 2013). It is thus paramount that the provision of modern housing, intended to fulfil the needs of our contemporary lifestyle, must be achieved in ways that human health and wellbeing are not only preserved, but actively supported; while the environmental impacts of housing are minimised (Balaras et al., 2007).

The purpose of this paper is twofold. First, it critically examines the current issues that affect the provision of contemporary housing in Europe; then it explores current design tendencies that may support the provision of contemporary housing within the European Union, however hypothetical and/or prematurely idealistic such propositions might seem. To start with, it is important to establish a common, if not uniform, understanding of what contemporary housing is. In the absence of a European Union level housing policy, defining contemporary housing is quite daunting. As opposed to vernacular architecture, which demonstrates uniqueness in "time and place" (Asquith and Vellinga, 2005), contemporary housing lends itself to currency and dynamism. Contemporary housing will exhibit generally acceptable design features and standards of its time and, as such, may not be place specific. Against this background, contemporary housing can be defined as modern residential dwelling that meets the ***needs of the present occupants***, while being ***environmentally sustainable***, ***socially responsive*** and, at the same time, ***affordable***. These four interrelated features are discussed in the paragraphs that follow.

People's Housing Needs

Firstly, the catalyst to the evolution of contemporary housing in Europe was the need for the construction of mass housing in post-war Europe in the 1950s. According to Cupers (2011), in France, for example, contemporary housing emerged from the increase in public awareness, fuelled by the demand for mass housing needs, whose notion went beyond the provision of basic shelter and whereas the modern housing was expected to be user-focused, delivered through public engagement and participation in urban housing schemes. Urbanisation and economic migration, only increased the demand for large-scale modern housing, as people moved from the rural parts of the country to the economic affluent cities due to better job prospects (Newsome, 2009), which gained a nationwide political support (Bullock, 2007).

The process started a few decades earlier in Britain, when during the 1920s and 1930s widespread supply of affordable mass housing not only encouraged home ownership, but also resulted in public participation in the forging of the characteristics of modern dwellings (Scott, 2008). It was during this period that the application of large-scale industrialised building methods like prefabrication became prevalent (White, 1965). White further suggested that technological advancement and the political drive to use mass production to reduce the cost of erecting new buildings, as well as resolve critical shortages in the availability of dwellings for the masses, paved way for the evolution of modern residential buildings after World War II.

Post-war West Germany, on the other hand, pursued the fulfilling of public housing needs in form of suburban development. With about 22% of its 1939 housing stock completely destroyed, post-war West Germany faced acute shortages of habitable residential dwellings (Diefendorf, 1993). This period saw the erection of nucleus family bungalows en masse (Ebert, 2008). (Figure 1).

Figure 1: Bungalow House in Post-war West Germany (Ebert, 2008)

While the origin of contemporary housing need can thus be traced back to post-war era in Europe, a series of events in the decades that followed were key to the development of contemporary housing, as it is known today (Chapman and Hockey, 2002). For example, the oil crisis of the early 1970s (U.S. Department of State, 2013) and the sustainability awareness of the 1980s (Brundtland, 1987) were important landmarks in the formation of contemporary housing needs and the evolution of an innovative climate to fulfil these needs.

It can be noted, however, that while **public participation** played a vital role in the formation of contemporary housing in post-war Europe; public mass housing expectation was only presented through a series of diverse individualism (Glendinning, 2010). Housing associations (and agencies), the relevant governmental bodies and architects and engineers had to harmonise emerging modernity of public needs into aesthetic architectural designs (Balchin, 1996). (Figure 2).

Figure 2: Post-War Mass Housing in Sheffield, UK (Thurley, 2013)

Environmentally Sustainable Housing

Secondly, there is a consensus among industry professionals, researchers and political elites, that buildings, especially space heating, are the largest single consumer of energy and natural resources in Europe. For example, it is presumed that more than 40% of total energy consumption across Europe can be attributed to buildings, while households in Europe are spending a greater proportion of their income on residential fuel consumption (Badescu, 2011, Brunklaus et al., 2010, Dodoo et al., 2010).

Furthermore, global warming and climate change are recurring issues that have dominated international political debates in the last two decades. Since the burning of fossil fuel, a major source of primary energy in Europe, is directly linked to greenhouse gas emissions and is a major contributor to climate change, it has become evident that alternative energy source or reduction in consumption levels must be sought.

The most recent and overarching driving force behind the reduction of greenhouse gas emissions in Europe is the Europe 2020 Strategy of the European Union. This strategy paper sets out concrete and ambitious plans that is expected to facilitate "…smart, sustainable and inclusive growth…" (EUROPEAN COMMISSION, 2010a). One of the flagship targets of the Europe 2020 Strategy is resource efficiency. It aims at "…decoupling economic growth from the use of resources and support the shift toward renewable energy sources, while promoting energy efficiency…" (European Commission, 2010b). Accordingly, the European Union plans to obtain 20% of its energy from renewable sources by 2020, which include, wind, solar, hydroelectric and tidal power, geothermal energy and biomass (European Commission, 2009).

In line with these goals is the recast of the Energy Performance in Buildings Directive (Directive 2010/31/EU), which requires all public and privately owned buildings to be of high-energy performance by 2018 and 2020, respectively, having nearly zero or very low energy requirement (European Commission, 2013a). Most of this energy need is expected to be covered "…to a very significant extent, by energy from renewable sources, including energy from renewable sources produced onsite or nearby" (European Commission, 2013b).

Energy efficiency in housing cuts across social, economic and environmental facets of the society. It affects households' income and the economy at large. With a legacy of old residential building stocks in most of Europe, the task of refurbishing these buildings to improve their energy performance can be demanding. For example, it is estimated that the UK housing stock is being replaced at a low-rate of less than 1% a year, with most of them overdue for upgrade, renovation or outright demolition (Roberts, 2008). At the current rate of regeneration, it is projected that about 75% of the UK's currently existing housing stock will still be in use by 2050 (Power, 2008). The refurbishment of its existing housing stock is thus inevitable in the provision of contemporary housing in the UK (Bell and Lowe, 2000). Refurbishment could provide an opportunity to rethink the design and energy performance of a building, which is key in the provision of contemporary housing.

Socially Responsive Housing

Thirdly, family structures, contemporary lifestyle and living arrangements in Europe are changing (Fokkema and Liefbroer, 2008). This is due to a number of socio-cultural factors that have developed over the last four decades. Decrease in the mean household size (Liefbroer, 2009), increasing number of single parents (Chambaz, 2001, González-González et al., 2011), delayed formation of 'formal' or 'informal' family union (Chiuri and Del Boca, 2010, Sobotka and Toulemon, 2008) and multigenerational cohabitation (de Jong Gierveld et al., 2012), are some of the prevailing factors that affect living arrangements in contemporary Europe. The European contemporary housing must thus be flexible and adaptive in responding to these new needs.

Housing and the physical environment are presumed to have the greatest effect in support of independent living for older people, as suggested, for instance, by Hillcoat-Nalletamby et al. (2010). However, the median age of most European countries is increasing, with overall life expectancy, which poses a design imperative on the built environment. In a recent study of the demographic structure within the EU it was found that whereas as recently as 1960 there were 3 youngsters (age 0-14 years) for every older person (age 65 and above), by 2060 there will be more than 2 older persons for every youngster. By this time, this reversed demographic trend will have resulted in an "inversed pyramid" shape of the continent's age distribution (Lanzieri, 2011). This is the result of decades of a combination of low fertility and mortality rates.

This shift in the demographic structure within the European Society will impact on the continent's older people's ability to maintain independent living, as the contemporary housing of today must incorporate design features that support healthy ageing (Bevan, 2009). Europe's contemporary housing must be durable and support the choice and ability of its occupants to age in place. Adaptability, flexibility and inclusiveness are key themes that will be of design and research interests in the study and development of contemporary housing in the coming decades in Europe.

Affordable Housing

Finally, of what use is an environmentally sustainable and socially responsive housing, if an average household cannot afford to buy or maintain it? Housing preferences will differ for people of various backgrounds, status, and circumstances. However, affordability in contemporary housing is not simply a financial capability for the individual, but a more complex question of *if and how* the society at large can embed these features into everyday architecture.

Most European countries have developed social housing systems that are intended to support low-income and/or working class households. Some are in the form of tax breaks and subsidies to support homeownership, while others offer rent support systems through solely public or public private partnerships. However, questions have been raised about how far-reaching these policies are (Amann, 2009). Even with government involvements, affordability is usually seen through the lens of return on investment and the balancing act of realigning social justice and market forces (Turner and Elsinga, 2005).

There are quite a number of innovative ideas that showcase sophisticated design solutions in modern architecture (Armstrong, 2010, Rossi et al., 2012). The challenge, however, is not just to design and construct prototypical innovative buildings with environmental and social benefits, but also to ensure these are within the reasonable reach of an average household and supported by the society as a whole. (Figure 3). It is interesting to note that only a few attempts have been made to replicate best practices and outstanding innovations and incorporate them into mainstream architectural designs and standards (www.dwelle.co.uk, 2013). Such initiatives and schemes, if appropriately designed and incentivised will, undoubtedly, encourage a wider community of stakeholders' participation.
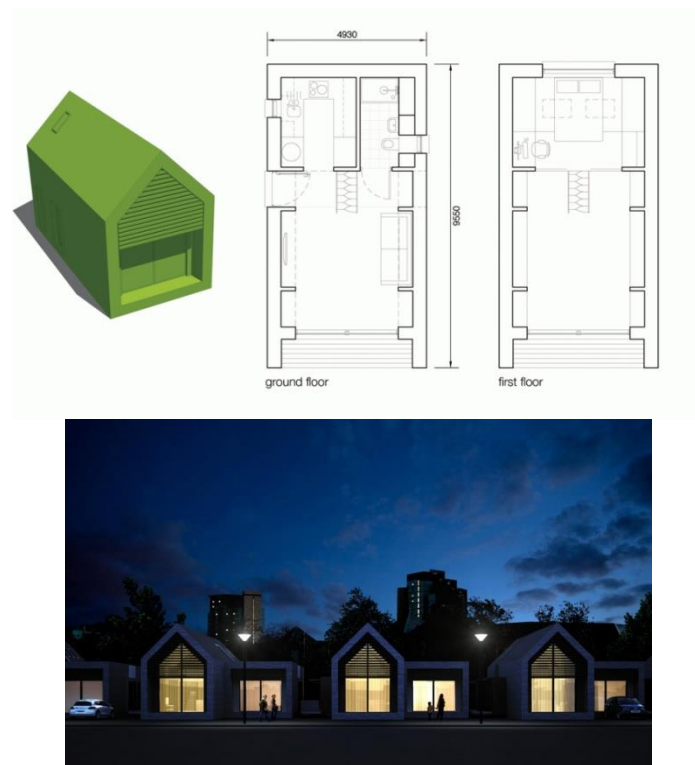
Figure 3: Dwelle Sustainable Homes (Dwelle, 2013a)

Design tendencies

An insurmountable amount of natural resources is used up during the construction of a building, as well as throughout its lifespan. Hence, it is important for the contemporary housing to give at least as much back to the environment as it has taken out of it. This notion goes beyond the design for zero carbon emission. **The contemporary housing must be able to reconcile, sometimes competing, social, economic and environmental factors.**

In the drive to design buildings that meet long-term needs of its occupants, the construction industry has seen an evolution from traditional or "active" buildings, to the more sustainable passive building construction (Badescu and Sicre, 2003). The active building is the traditional building that uses energy and resources without much regard for longevity and the environment.

The passive house (Feist et al., 2005), on the other hand, seeks to conserve energy, reduces its waste generation and vies to be environmentally equitable. The *Passivhaus* (passive house) concept originated from Germany in the early 1990s. This building concept vies to "…minimise heating energy requirement, through a highly insulating, airtight building shell, removal of thermal bridges, a heat recovering ventilation system, and the heating demand largely covered by internal sources…" (Dahlstrøm et al., 2012). The passive house uses green or renewable energy and is more cost-efficient to maintain. (Figure 4).
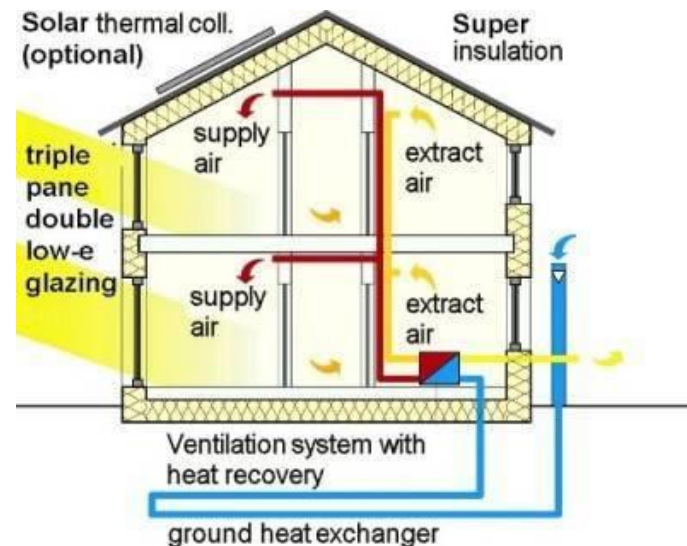
Figure 4: Passivhaus Mechanism (Passive House Institute, 2013)

A typical Passivhaus building is expected to fulfil the following minimum requirements (Passivhaus, 2013):

i) **Spatial Heating Energy Demand** of no more than 15kWh per square metre of treated floor area per year of net living space per annum;

ii) **Primary Energy Demand** not to exceed 120kWh per square metre of treated floor area per year;

iii) **Airtightness** requirements of a maximum of 0.6 air changes per hour at 50 Pascals pressure; and

iv) **Thermal Comfort** levels of no more than 10% fluctuations of the hours in a given year over 25^0C for both summer and winter.

There are accounts of up to 90% reduction in spatial heating requirements (Schnieders and Hermelink, 2006), overall improvement in thermal comfort and evidence based positive environmental impacts in passive houses compared to conventional houses (Thiers and Peuportier, 2008).

Despite these positive features of the Passivhaus, it is noteworthy that more recent research have raised concerns about the appropriateness of the passive house in face of future climate change (McLeod et al., 2013). Due to their *airtightness*, houses built up to the passive house standards are said to be at risk of "…air contamination and overheating…" (Hasselaar, 2008), as average overall external temperature increases. These shortcomings, however, should not deter developing this idea further, but must be addressed through further research into design innovations. Nevertheless, the passive house concept is the first housing 'innovation' in contemporary architecture that has markedly improved energy efficiency, supports an acceptable level of living standard and is simple enough to build (Schnieders and Hermelink, 2006).

A new innovative mode of building is emerging similar to the Passivhaus: the "autonomous house". The autonomous house is built on the basic principles of the Passivhaus and is a "self-sufficient" type of building (Chen et al., 2009). By mimicking nature, the autonomous house "…coexists with its ecological environment…" because it contributes as much to its natural environment as it consumes, in a symbiotic relationship (Coolen, 2006).

The autonomous house produces its own green (renewable) energy, converts its wastes into

resources for re-consumption, and disposes of its unwanted wastes without any environmental detriments. It is neither 'nomadic' (Kallipoliti, 2012) in its purpose nor novel in its profile (Gültekin and Alparslan, 2011), but adopts some of the characteristics of the passive house, and goes a little further. (Table 1). The autonomous house would use solar or wind energy sources, apply alternative sewage treatment and possess a layout fenestration that is oriented toward effective natural lighting and ventilation. Today, the autonomous house is still conceptual and idealistic, and operating it is still very demanding for the modern urban household. But as demand for innovative design and environmentally sustainable buildings grows, with zero carbon requirements, and as building technology advances, the autonomous house will gain more grounds, just as the passive house concept have in Germany and the Scandinavians over the years.

The *ideal contemporary housing* can be likened to the autonomous house, at least in terms of its energy and environmental characteristics. Resting on the premises of the natural environment and design innovation (Kotsopoulos et al., 2013), the ideal contemporary housing is a contributor, as well as a beneficiary in the ecological systems. It must relate to its environment with reverence, never consuming more resources than it can replace, nor than nature can replenish within a reasonable span of time and without irreversible damages.

During the construction phase, energy, water, materials and other resources are sourced as close to site as possible. The use of prefabricated modular structures will enhance the adaptability of the ideal contemporary housing. Over its entire lifetime, the building operates with minimal environmental impacts, by consuming minimal energy, generating low waste and is in harmony with its occupants. It is like going back to the basics of dwelling and shelter, but applying state of the art technological innovation. The materials that make up the ideal contemporary housing is very crucial for it to attain and maintain its status, so is the building construction process, and the eventual usage and maintenance stage. The ideal contemporary housing must also be responsive to new and emerging living arrangements, with the possibility to expand or downsize, as may be required by its current or future occupants.

Conclusion

Today, residential building users, developers, housing associations, financers, planning authorities and other stakeholders face various, sometimes mutually exclusive, challenges in their efforts to provide and maintain contemporary housing standards. These challenges have emerged predominantly in the last two decades, as current issues continue to shape their prevalence. It is evident that delivering the ideal contemporary housing model must be conceptualized at the design stage (ICE, 2008) – even in case of existing buildings that would require refurbishment in order to meet new requirements. On this premise, it can be safely presumed that energy efficiency, adaptability and flexibility to accommodate occupants of various needs will dominate contemporary housing discourses in the immediate and longer-term. Further research is required in order to develop this conceptual contemporary housing into feasible habitable houses.

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CHAPTER 2: INTERSPACE THINKING, CAPACITY-BUILDING AND CODESIGN

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Introduction

This text is directed to participants in OIKONET, to briefly describe research themes we believe have the potential to be developed by relating to you all in one way or the other. The research themes have a close relationship to these permanent structures:

- Centre for Urban Studies Hammarkullen. www.urban.gu.se || www.chalmers.se/urban

- Department of Social work, University of Gothenburg, Hammarkullen. www.socwork.gu.se

- Design and planning for social inclusion, Chalmers Architecture, Hammarkullen. suburbsdesign.wordpress.com

Three concepts are presented to shed light on some of the knowledge being developed and in connection with each concept there is presented ongoing and recently completed research projects.[1] Finally, potential issues or questions we may be interested in developing in collaboration with OIKONET participants are listed.

Capacity-building

In the right-to-the-city movements (Harvey 2006) the lack of citizens' rights has been highlighted, claiming inhabitants are generally not being taken advantage of in governance processes (Stewart and Taylor 1995). In research it has been stressed that inhabitants are key actors in governance processes aimed at developing the city (see e.g. Swyngedouw 2005) and "empowerment" is therefore considered to be of great value in planning (Andrews et al. 2006). The concept of empowerment, however, may be used to describe very different kind of processes. In one type, the focus is on the change of individuals and the possible benefit if a person be empowered to develop his or her knowledge, attitude and skills to fit what is requested in society. In another type, the focus is at process, culture, collective and team building. How may empowerment processes be facilitated that develop the cultures (the way we do things together) in different kinds of organisations and institutions, to better adapt their activities to the local and global challenges we face? This was the focus in a transdisciplinary research project in a stigmatized suburb in Gothenburg:

"We have regarded empowerment as a process where the inhabitants of the city become co-actors in urban governance and development, i.e. that they become producers rather than only consumers of the urban fabric. Empowerment thus releases and redirects energy, and to a certain extent it can also be considered as a source of new energy. Our main challenge has been *how to release, redirect and create* such energy in reality and further *how to learn* from these processes we have been initiated and involved in". (Stenberg et al. 2012: 3)

The capacity-building processes we developed implied empowerment actions that helped involved actors (all actors but our focus was to include inhabitants) to increase their common ability to contribute to change – both social and physical. What we learned from these actions was that empowerment is actually to develop *capacity-building cultures*, as the concept of

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[1] For more information about the research projects, see the paper *Oikonet – our research focus in Gothenburg* (2014-02-09).

culture (as used here) imply that empowerment is about raising awareness about, reflect upon, transform and possibly consolidate a common behaviour – i.e. empowerment (as we have made use of it) imply system change.

Research projects

- Urban Empowerment: Cultures of Participation and Learning, 2010-2011, www.urbanempower.se

- Reflections on culture-building, leadership and outreach in pedagogic in an urban school-context, 2013-2014

Interplace

When discussing urban development, there are plenty of concepts being developed to describe the problem of bridging over between different worlds, e.g. bridging between "abstract and concrete", or "space and place", or "system and lifeworld" (Habermas 1984), or "the world of control and the world of susceptibility" (Læssøe 1995). Planning researcher Ole Michael Jensen from Denmark used several expressions to capture this interspace: the "locality" (Jensen 1994: 355), the "face" (Jensen 2001: 3) or the "site" (Jensen 1995), while architecture researcher Claus Bech-Danielsen referred to it as the "locus" (Bech-Danielsen 1998: 19). Most likely, many of these concepts have been inspired by Aristotelian terminology of learning, arguing that "phronesis" (wisdom) presupposes amalgamation of systematic knowledge (make you ready to *act*) and technical expertise (prepare you to *produce*) (Aristotle 2002 [350 B.C.E]).

Also the concept of "interplace" (Stenberg 2004) (www.interplace.se) has Aristotelian roots. The concept of "interplace" was developed as a result of a collaboration between the Department of Architecture at Chalmers University of Technology and the department of Social Work at the University of Gothenburg, Sweden. At the University, two teachers with premises in a stigmatized suburb had developed a locally based "interspace thinking" education concerning first social work and then teaching (Forsén and Fryk 1999). The aim with the locally based education was to prepare the students for the global challenges and growing migration into the Swedish society. The idea was to facilitate for social workers and teachers to develop knowledge of how to open their professions for the position of "not knowing", which is *when man is capable of being in uncertainties, mysteries and doubts without any irritable reaching after fact and reason.* The English poet John Keats called that ability "negative capability" in a letter to his brother in 1817 (Dewey 1934). The idea with the locally based education was inspired by Keats and wanted to leave the safe "rooms" of the profession to meet inhabitants and other locally based professionals in rooms inbetween – in interspaces. In such rooms inbetween the traditional professional "rooms" their power hierarchy is not predetermined – nobody owns the room – which means that there is potential to set the agenda together and start developing something new. This opens for new possibilities regarding mutual knowledge production.

In 2008, design students from Chalmers Architecture came to this suburb to learn new design skills, through a pedagogics based on the same "interspace thinking". The design students were to learn not only renovation of large scale buildings from the 1960s and 70s in stigmatized environments, which was in focus in the master course, but also how to base the design proposals on wishes and needs of the inhabitants in the area – knowledge developed in dialogue – hence they sought tools for developing the dream of the *inhabitants* and not the designer. In this way, they were to become skilled "interspace workers" but with focus on changing the *physical* environment – the place. The concept of "interplace" was thus the result of an amalgamation of social and physical aspects.

One of the social aspects that has been highlighted strongly when design students learned these new skills, was power aspects. Even if architects had already discussed quite a lot how to handle

problems related to "who owns the city" in the commercialized society being developed, they were not really skilled in handling the problems and moreover not aware of how the actual appearance of a room for dialogue affected communication. Actually, a quite severe lack of knowledge for "making discipline" designers such as architects, engineers, planners, etc., aimed at shaping and reshaping the physical environment. When designers become skilled "interplace" planners and designers, they learn how to analyse the physical environment also in the design process due to power aspects, asking themselves questions like "gives the room power advantage to anyone?", "who sits where?", "can the furnishing be changed?", etc. Hence becoming an "interplace" designer is not just to develop collaboration between actors – to prioritize gutters for downpipes – but to develop the competence you need to really act in interspaces, but without losing the ability to also operate within your traditional professional "room". Developing these skill is not possible without personal development. You need an inner security to be able to stay open and susceptible to other ideas and concepts, letting them challenge the very base of your preconceptions. This is what "interplace" planning and design is about.

Research projects

- The interplay between citizen initiatives and invited participation in urban planning: An interaction research project, 2011-2013, www.mellanplats.se

- Compact Cities? Exploring qualities, drivers and strategies for promoting mixed-use urban development, 2014-2016

Codesign

The concept of "codesign" has been inspired by architect Christopher Alexander and his colleagues who in the 1970s developed a "pattern language" to facilitate for communication between designers and users (Alexander et al. 1977). Codesign is also closely related to other concepts applied in the 1960s and 70s, e.g. the concepts of "cohousing" (the homeowners movement) and "collective building" (the sharing of household movement) (Vestbro 2000). The relationship to "baugemeinschaften" which is common in Germany nowadays is also obvious. Baugemeinschaften is when a group of inhabitants together act as commissioner of a building project where they then will settle down (Ache and Fedrowitz 2012). What maybe distinguish the contemporary concept of codesign from these other concepts is the strong focus on aesthetics (Faga 2006) and "place-making" (Hamdi 2011) which is linked to culture (Sandercock 2003), not-for-profit-issues (Brenner et al. 2011) and a focus at public space and citizen power (Madanipour 2010).

When further developing the concept of codesign in a Swedish context in a stigmatized suburb in Gothenburg, we reinforced one central theme from the 1960s – "advocacy planning" (Davidoff 1965) – and by intertwining research, education and community outreach at a university centre in the suburb, we investigated the possibilities of using codesign of local public space as an engine for developing *professional roles* (Stenberg 2012; Stenberg and Fryk 2012) and potential of *system change* (Stenberg 2013). The approach was based on the idea that all actors – also citizens/inhabitants/tenants – are knowledge producers in academic research (Stenberg et al. 2012).

One concrete result of the process was a stage with locally designed mosaics. The construction company was tendered with the condition of employing local youth and interact with local artists. Photos: José Romero and Jenny Stenberg.

The research on this process showed that there is a great potential in such an approach. If implementation research in collaboration between academia, local government and civil society continue being developed, there are great opportunities for an interesting knowledge production to take place with potential to in the long run having an impact on local and municipal planning

and administration systems. Perhaps a totally new role for planners and other community workers will evolve, really integrating social and physical aspects and being place-based?

The concept of "codesign" in this context thus implied not only when architects and users collaborate in designing certain physical objects or urban space, but it also meant to facilitate for inhabitants and local professionals to become community builders. Hence, they were given power not just to change the city appearance at place, but also to modify the social structure and procedure of how to plan and change the city in the future.

Research projects

- The interplay between citizen initiatives and invited participation in urban planning: An interaction research project, 2011-2013, www.mellanplats.se
- Codesign in urban planning in Cuba, 2014-2015
- Bridging the Gap: Children and Planners Co-Creating the Urban Space, 2014
- National Transdisciplinary Centre of Excellence for Integrated Sustainable Renovation, 2014-2018.

Potential issues or questions

What these research projects have in common is:

- Focusing the local area level (the local community) in these cities, and furthermore taking an interest in social inclusion and integration issues in the city as a whole.
- Having an "outreach ambition", thus to encourage and learn from adding outreach to professional roles, e.g. the role of the teacher, the social worker, the designer, the planner.
- Considering research being a knowledge building process where all actors produce knowledge, not only academics.
- As collective knowledge building imply shared power, follows an interest in managing power aspects in planning and management of cities.
- An interest in "community building" as it may imply systemic changes, e.g. changing planning procedures, ways of teaching and ways of thinking about the role of higher education, which is a prerequisite for changes to be lasting independent of enthusiasts.
- Relating the community focus and the "outreach ambition" also to citizenship, puts the balance of power between citizens and systemic representatives high up on the agenda and opens an arena for community building to reflect and learn from.
- Recognizing the need for focusing on community building might change the way of thinking about and approaching social problems that exist in metropolitan urban areas.
- The outreach approach might also be a way to rebuild institutional as well as neighbourhood trust in areas where this sometimes is scarce.

Potential issues or questions interesting to developing in collaboration with OIKONET participants:

- Have OIKONET participants' experiences from outreach activities, related to research and/or education, that can be discussed?
- Is there experiences in OIKONET concerning power sharing through collective knowledge building processes (inhabitants, researchers, lecturers, local employees) that can be discussed and learnt from?

- ▪ Is community building a concept in use for OIKONET participants, and may these experiences be discussed?

- ▪ Have OIKONET participants any experiences of systemic changes coming as a result of community building processes or other kinds of local development work, and may these be compared and discussed?

- ▪ Can our studies in Barcelona and Rotterdam be compared with OIKONET participants' studies in these cities? Are there common interests also in Cuba?

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Chapter 3: Advanced concepts of energy efficient buildings' planning

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Introduction

The new Directive on Energy Performance of Buildings Directive foresees after 2012 (after 2018 in the case of public buildings) the construction and renovation of buildings in the "nearly zero energy" standard. The most important goal for every building still remains a healthy, pleasant and high-productive indoor environment. The building is a dynamic system that reacts to the state of the outdoor environment regarding to the properties of the boundary between the indoor and outdoor environment, the building envelope. In contemporary buildings an envelope not only has a damping function of the dynamic properties of the outdoor environment, but it has become sustainable generator of different forms of energy. The provision of living comfort and low energy consumption of a building is therefore influenced by adjusting the outdoor environment, multi-functional and flexible properties of the building envelope, application and optimal management of low-ex technologies of active natural heating and cooling and directing users to the efficient energy consumption. The planning process should be based on continuous cooperation of all planners and is highly multidisciplinary. This process is based on the ten concepts as shown in figure. Some of them are presented below.

Figure 1: The planning process concept

The concept of reducing energy use in buildings by adjusting the external environment

Properties of the urban environment building blocks and the shape and spatial arrangement of objects affect the microclimate in urban areas and, consequently, energy use in buildings. Often the specific microclimate evaluates the strength of the urban heat island, which is defined as

the difference in air temperature in the selected urban area and the air temperature in the suburbs. Researches on urban heat island intensity have shown that intensiveness depends on the density and the form of urban environment (Karatasou, 2006). Santamouris (2007) stated that the intensity of heat islands in Europe varies from 2.5°C (London) to 14°C (Paris). Special microclimate conditions result in street canyons. Due to the small gaps between buildings (W) and high altitude of buildings (H), the long-wave heat radiation is not transferred to the open environment, but is absorbed into the building blocks of the street canyon. The heat intensity of the street canyon is further increased through reduced street ventilation, while it is reducing the effect of buoyancy ventilation (Karatasou, 2006). The most common measures to mitigate those effects are urban neighbourhoods planning and placement of greened building blocks and greened areas, such as parks. Urban and street heat islands most impact on energy consumption and thermal comfort in hot periods in summer.

The concept of planning a healthy, pleasant and productive indoor environment for all residents

The main task of the buildings is to create a healthy, pleasant and productive indoor environment. This is important, because in modern societies 80% of the time is spent in the indoor environment. In response to local weather conditions, which are formed in cities, and due to expected global climate changes, we can expect that the heat oppressive periods will be more frequent and more distinctive. Parsons (2003) states that in the event of increased temperature of the ambient air, the body responds with high heart rate and low blood pressure, which increases the flow of blood to the surface of the body and so the cooling of the body. Studies of the cellular structures determined that temperature has a direct effect on tissue damage. Severity of injury is defined by the highest critical temperature of the body. For a man the critical maximum body temperature is 42°C for the time of up to 8 hours. Extreme temperature (50°C) results in necrosis of the cells in less than 5 min (Parsons, 2003). In addition, the heat load on the physiological variables also affects individual pollutants that pass through the respiratory system into the bloodstream. Heat load and air quality will also affect the occurrence of diseases, as amended physiological variables often lead to the emergence of diseases related to thermal load or worsen the condition of chronic diseases. Gaffin and Hubard (2001) found a significant frequency of heat stroke occurrence at physical exertion whit simultaneously heat load. Some authors even reported on the occurrence of heat edema due to intense vasodilatation, which is most common on the hands and ankles (Lugo-Amador, 2004 and Inaba, 2007).

Based on a review of standards in the field of indoor quality and living comfort, it can be concluded that current design concepts of the indoor environment is incomplete, because a) they are designed for healthy people and b) are not designed for synergistic effects of various loads, such as heat load, poor air quality and noise pollution.

It is therefore necessary to develop the concept of the indoor environment design that takes into account the specific characteristics of different user groups and the cumulative effect of stressors processes in buildings. For example, the Humideks defines the simultaneous effect of air temperature and relative humidity (Masterdon, 2009) and the CO_2 content can be use simultaneously as a reference indicator of air quality. As reference indicators of physiological parameters heartbeat (SU), blood pressure (SKT, DKT), mean arterial pressure (SAT = f (SKT, DKT)) and differences in physiological signs (ΔSU, ΔSKT, ΔDKT, vSAT) were taken (Fink, 2012). The final step in the modelling concept represents a risk for increased mortality in terms of physical indicators of the state of the indoor environment. The model that was proposed is based on the Cooney model (Cooney, 2010), which takes into account that for every 15 beats per minute or 25% relative changes in heart rate (ΔSU), the hazard ratio for cardiac vascular mortality (HR) increased by 1.28. This indicator is called the index of health risk (IZT).

The concept of design of building service systems based on weather forecasts

Nearly zero energy buildings (nZEB) concept involves the use of heating, cooling and ventilation systems that utilize natural resources, especially solar energy and heat/cold of the environment. In most of the cases these are so-called low exergy systems (low-ex). A common feature of low-ex systems is that they use natural energy sources that are time variable and that they utilize low exergy heat and cold for heating and cooling of the building. Meteorological conditions affect both the potential energy source (solar radiation, heat and cold environment), as well as the thermal response of systems and buildings. For this reason, the effect and the available power of energy source depend not only on the current potential of natural energy sources, but also from operation strategy of low-ex systems and the expected thermal response of the building in the near future.

The concept of multi-functional and flexible building blocks envelope

The building envelope is the boundary between the internal and external environment, which directly affects the energy consumption of a building. Façade cladding today are made up of elements with the function of thermal insulation, natural lighting, heating and ventilation of the building. These building blocks are generally not responsive to changes in the outdoor environment and cannot adapt to the needs of the buildings' users. Due to the large available surface area of a building envelope, multifunctional and flexible building blocks are important for energy self-sufficiency, control of thermal response and reduction of energy use in the building. Researches into transparent building blocks of the building envelope response are mainly directed towards the development of technologies to adapt their optical properties. For this purpose, a variety of glazing layers that change the properties of the glazing according to outdoor temperature and solar radiation or luminous flux are used. Such glasses may be thermo-tropic (activated depending on the temperature), gaso-tropic (gas in the glazing reacts depending on the temperature) and electro-tropic (activated depending on the electric current). Baetens (2010) in his study also gives an overview of commercially available glazing. Among multi-transparent building blocks glazing with integrated PV cells (natural light - electricity production) and double-glazed facade (natural lighting - purge), which are in practice the most commonly used solutions (Arte Charpentier Architects, 2009 and Mira, 2011). Multi-purpose non-transparent building blocks most often have one or two ventilated gaps to enable energy-efficient ventilation. Their flexible properties are based on selectivity (short/long wave radiation), the periodic process of water vapour transfer in tight building blocks (Leskovšek, 2012) and adding greened building blocks (Šuklje, 2013).

The concept of directing users towards efficient energy consumption

There are a number of researches presenting the differences between planned and actual energy use in buildings. From those researches it can be concluded that differences are caused by: a) the differences due to the variations in thermal technical properties of embedded materials, structural components or systems and b) tuning living conditions by the users. Polinder (2011) noted that the behaviour of the residents depends on the physical characteristics of the environment and the biological, psychological and social characteristics of residents. Andersen (2009) on the basis of the survey found a significant difference in the indoor temperature regarding the occupants' gender, T. de Meester (2013) notes the impact of family size and employment on temperature and internal heat sources in buildings. The Wall (2006) identifies influential parameters on energy consumption for heating and their values with simulations of twenty passive houses in Sweden. Liao and Chang (2001) present an analysis of energy use for domestic hot water. They found significant differences in the showers frequency and length depending on the occupants' age. Schuler (2000) noted that the annual household income has

the biggest impact on energy use for heating. Choi (2010) noted that gender and age of the users are the key influences for the assessment of thermal comfort.

Operation of the system in modern buildings is controlled by SCADA processes, among which the building control systems (BMS) are placed. Important systems that connect the BMS and users are users' interfaces (HMI Human Machine Interface). Those should be based on the theory of cognitive science that combines neuroscience, psychology, philosophy, linguistics, artificial intelligence, and social sciences (Karjalainen, 2007) and must be adapted to user experience and interest. Such HMI systems are common in passenger cars but they are slowly being introduced into buildings.

Conclusion

Successful implementation of the advanced concepts of energy efficient buildings' planning requires involving and participation of building designers, professional associations and engagement of community representatives, social organisations and citizens. New knowledge database must be established and pedagogic programmes must be adopted to provide advanced interdisciplinary skills among the professionals. This can be established with adopted pedagogic tools, methods and teaching materials.

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CHAPTER 4: THE PROCESS OF GENTRIFICATION

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Introduction

Inner city areas that went through disinvestment in the past are often treated by renewal efforts of the state or the local authorities. Market-led new investment often occurred in these areas as well to realise the potential profit. These new investments also change the social status of inner cities causing social conflicts. This reinvestment in the inner city is often labelled as gentrification. The colleagues of the Institute of Urban and Regional Studies at ELTE University, Budapest examined during the last couple of years the dynamics of changes[2]. The main question is: who pays the price of these changes and are the outcomes of this social process sustainable?

In this paper we introduce the problem and the further directions of research.

What Gentrification Means?

The increasing importance and status of European inner city neighbourhoods after decades of disinvestment and impairment of the physical environment was a much debated process in the last decades of the 20th century. The "movement of capital" (Smith, 1979) towards these areas can have different results. The most debated and spectacular change was the increasing status of the inner city population and the reurbanisation of the core metropolitan areas. This process is often termed as "gentrification". Many local authorities would like to encourage or induce the economic growth and reinvestment that occurred during spontaneous renewal processes of some inner city neighbourhoods in the world cities, although state led reinvestment processes in less central and developed regions can have similar disadvantages as market led gentrification. Besides the displacement and exclusion of the poor, other negative externalities can occur because of these development and regeneration processes like the conflicts of different functions within a city area. Managing the conflicts of these changing inner city neighbourhoods is a complex challenge.

Ruth Glass describing the process of middle class occupation of working class inner city districts first used the term gentrification in 1964, but the explanation of gentrification is still being debated. Some researchers think the roots of this process lie in the accumulation of capital and the revaluation of real estate in the city centre (Smith, 1979, 1987), or in the role of demand (e.g. in global cities like New York) (Smith, 1996). Other researchers suggest that cultural changes are the most important factors in gentrification. They assume that more highly educated middle-class consumers have demands that they can satisfy only in the city centre and not in the characterless malls and hypermarkets of the suburbs (Ley, 1980, 1986). Some explanations attribute a central role to the changes in proportions among employment sectors. The ever-increasing importance of the tertiary sector has resulted in a growing number of professional occupations in the inner city followed by changing allocation of the workforce (Hamnett, 1991). In this sense changing occupational class structure is the reason for changing urban population and the process is explained by the increasing demand for housing in the inner city generated by middleclass professionals (Hamnett, 2003a, b).

Gentrification is a global process, and in many cases it resembles colonial-era enclaves that were segregated from other areas of the city. Because of the expansion of multinational companies, their employees have become residents in various cities all around the globe with the same demands for consumption and amenities that are typical in western city centres. A new

service class has emerged in these cities to satisfy their needs (Sassen, 2000). These processes are forming neighbourhoods in city centres worldwide, making them like the colonial enclaves of global capitalism (Atkinson-Bridge, 2005).

The reinvestment process in the inner city not always takes the form of residential development. The empty retail or industrial places of the inner cities can be sites of new production and consumption places. These new enterprises are often connected with artistic and creative ways of production. The knowledge based "new economy" (Hutton, 2004, 2009) The connection and conflict of creative scenes with real estate development and gentrification and commercialisation was described by Zukin (1987) earlier and by Indergaard (2009) and Pratt (2009) more recently.

According to the examples shown by Hutton (2004) new economy enterprises can flourish in inner city areas and change the production and consumption patterns of the cities in general. This branch of production mostly creates creative intellectual products (from computer programmes to alternative marketing campaigns) and non-standardised material products (like fashion, other design products, and art pieces). These industries can operate in the inner city environment, while also changing it, and amenities and clustering of different types of production create a new urban landscape. These changes can also generate social conflicts, as high demand results in growing rents and the new use of space that can force out former residents.

Scott (2006) stresses, that creative production needs an already existing cultural heritage and strong enough urban economic agglomeration to produce workplaces in the creative field. He notes that suggestions by Florida (2002) actually reverse the logic of creative production, and simplifies this complex process too much. Florida states that amenities and advanced consumption possibilities can attract members of the creative class, and their simple presence could generate economic growth. Many authors think this argumentation confuses production and consumption, but gives very concrete advice to urban politicians: build attractive spectacles, and improve the tourism and hospitality industry. Creative energies using the derelict and cheap inner city retail places can undermine their own business with the "cultural milieu" they create, since real estate investors can exploit the recent popularity of these areas. Ever increasing rents and the interests of the real estate developers in New York caused the displacement of creative production from many neighbourhoods (Zukin, 1987, Indergaard, 2009), and a similar process can be described in the London city fringe in Hoxton (Pratt, 2009). In many cases, the "cultural quarter" becomes rather an entertainment district with extreme concentration of pubs and other night time venues (Roberts et al., 2006; Roberts, 2009). The "night time economy" became an important player of the production in the inner city and increase in tourism and the emergence of low cost airlines can make this process even more prevalent.

Budapest – The Context of Gentrification

In this frame Budapest is an interesting example of the post socialist cities. After the collapse of communism, higher-status residents of the city centre moved to the suburbs of Budapest. (Csanádi-Csizmady, 2002) No significant efforts were made regarding urban renewal in order to prevent suburbanization, nor were any plans made to counterbalance the rapid decrease of the population. By the early years of the new millennium it had become clear to city and district councillors that the only way to keep higher status residents within the inner city was to provide them with dwellings matching their social status. Several proposed solutions can be found: large scale reconstruction in the ninth district, reconstruction in scattered spots (as in the seventh district), gated community developments on the outskirts of the city, and the purchase and renovation of old nineteenth century housing stock by young, middle class residents on a flat by flat basis. This offers the potential to improve the physical environment of the area and

change the social composition of the population. The demolitions and new projects typically did not affect the most run-down and lowest social-status areas of the four districts of central Pest. (Csanádi at al, 2010, 2011)

In the physically dilapidated environment of one part of the old city centre (where the Old Jewish Quarter is situated) a new kind of cultural production arose at the end of the 90s similar to the Post-it City movements elsewhere. Since the institutions (above all the local authority) that can influence the development of the area seem to be unable to control the situation here the milieu of the neighbourhood was shaped by bottom up initiatives. This is similar to the situation described in Wild City Theory (Louekari, 2006). When the whole so called „ruin bar" scene started to emerge about 10-15 years ago it was a really different neighbourhood, mostly a residential area for lower status and middle class residents. For a more detailed description of the history of the „ruin bars" see Lugosi et al. (2008; 2010). The emergence of a new hospitality and entertainment quarter in this area is still going on in 2012, with new, bigger venues started for this summer (Csanádi et al, 2012).

Conclusion

In Budapest and some Central-Eastern-European cities we can see some similar scenarios as in the western cities. Development often goes against the interests of local residents. Increasing status of these areas can lead to displacement or exclusion of the least affluent residents. Public support for the changing status and growing popularity of these neighbourhoods can lead to serious conflicts.

In these frames our aim is to analyse the role of investors, policy makers and the "creative industry" in the process of inner city revitalisation and its effect on the whole city. Our main questions are:

How to describe the typical conflicts: the dimensions would be the social character of the groups playing roles in the conflicts, and the other would be the urban character of the conflict.

What types of activities of "creative industry" and which pattern of spatial distribution results social problems and conflicts.

How authorities and planning bodies handle (control) the growing problems?

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CHAPTER 5: HOUSING ALLOWANCES – HOUSING POLICY AND SOCIAL POLICY

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Introduction

Most of us regard decent housing as crucial for the quality of life. Even more, we regard decent and dignified housing as a prerequisite for our ability to cope with other aspects of our life, such as family, work and education. We will claim that this is true not only at the individual level, but also at a societal level. Most of us also regard it as important that our fellow citizens should also have access to decent housing, because not only do we care for the well-being of our fellow citizens but also because many believe that participation and contribution to a well-functioning society is hampered by bad housing situations. Hence, the capacity of a society to provide decent housing, also to those worse off, could reasonably be seen as a litmus test of the welfare society. Housing should be regarded as a pillar, of a well-functioning welfare state, Torgersen (1987) and Malpass (2004).

A striking example of the importance of decent housing for all can be seen in studies of support different types of redistributive measures. For example, Hills (2001) argue that hardly anyone in surveys wants less spending on specific social benefits, even if these spending must be funded by increased taxes. The *British Social Attitudes* survey from 1998 revealed that people clearly were less supportive towards increased money transfers for unemployed than they were towards specific support to consumption of social benefits, such as housing. Some of the same type of arguments can be found in Quigley (1999). In general welfare theory, this type of arguments is often termed the merit good argument. Many are willing to support those worse off as long as the support is spent in a sensible way. Obviously, there is a strong element of paternalism at work here.

One could see support for housing to vulnerable individuals and families as an expression of pure preferences for the well-being of others, a kind of altruism. Alternatively, one could regard it as an expression of a belief that society becomes better for all if those worse off through a kind of social insurance arguments. It is interesting to note that a third type of argument was prominent in Sweden in the 1930's. The housing policy targeted towards the most vulnerable should benefit everybody, for example by reducing contagion risks (e.g. for tuberculosis), G. Myrdal and Åhrén (1933). I.e. an activist housing policy was supported by a kind of social investment argument, A. Myrdal and Myrdal (1934) and Morel, Palier, and Palme (2012).

Housing allowances are one particular instrument that is used in a socially oriented housing policy.

Housing allowances – a widespread policy instrument

Most (western) countries have some kind of housing allowances on the repertoire of the housing policy. The names of the schemes vary with Rent Assistance in the Netherlands, Housing benefits in the UK and Section 8 vouchers in the US. However, for most countries Housing Allowances is a fair translation. There are some variations in design and quantitative importance of the housing allowance schemes, but still quite obvious similarities, for an overview see Kemp (2007) and Agiro and Matusitz (2011).

As an instrument of the housing and social policy, the housing allowances are intended to serve two main policy objectives. It should induce people to choose better quality housing than they

otherwise would have done. Either the argument for this could be presence of positive externalities, or it can be rooted in pure paternalism. The second objective of the allowances is that they should contribute towards a societally more desirable distribution of post-housing-expenses income. In the introduction to an edited volume, Kemp (2007) formulates it in this way: Income related housing allowances can *have housing policy or social security objectives. In practise, however, schemes invariably have both functions, though one or the other is usually dominant.* When evaluating or redesigning the housing allowance schemes, the system's ability to deliver on both these two objectives should be taken into account.

Over the last 10-15 years, the popularity of the housing allowances has grown very strongly in Norway. From the start in the 1960's the scheme was mainly initiated and cherished among bureaucrats and administrators of the housing policy, while nowadays politicians across the political landscape praise the housing allowances, Nordvik and Sørvoll (2014). It is, however, fair to say that the popularity of the housing allowances has more to do with its impact on distribution than with its impact on housing quality. One could e.g. hear that the housing allowances are a very important tool in the combat on poverty. A similar development has been noted also in other countries, Koning and Ridder (1997). In short, housing allowances are both a tool of the housing policy and of the social policy.

Housing allowances should be targeted towards households with low incomes as compared to their housing expenses. There is a variety of how this criterion is applied but most apply a kind of gap formula, Gibb (1995), Fallis (1990) and Nordvik and Åhrén (2005). The basic design does, however, build on a so-called gap formula, i.e. based on the income and type of family, a reasonable housing expense to be covered by the household itself is defined. The house allowances should then cover a given share of the difference between the calculated reasonable and the actual housing expenses. Housing expenses in excess of an upper limit (a ceiling) do not usually enter the calculation of housing allowances. In some countries, there is also a requirement that the housing units should satisfy some minimum quality criteria in order for the household to be eligible for the allowances, and only certain types of households are eligible, e.g. pensioners and families with children.

The basic idea of the gap-formulation of housing allowance system is quite simple and transparent. It is; however, right to say that most housing allowance systems contain such a multitude of complex operationalization of concepts and exceptions, that the end result is quite far away from any ideal of transparency. Transparency is a prerequisite for housing allowances to have an impact on housing choices of vulnerable household. If receivers do not understand the positive consequences, in terms of housing allowances, of their choices it hardly works as an efficient incentive. Another aspect of the lack of transparency is discussed by Lindbom (2007). In a political game, elements that are less transparent are more vulnerable to retrenchment, than instruments that are more transparent..

Two important differences in housing allowance systems across countries are worthwhile to mention. In most European countries house allowances are a kind of entitlement, if a household satisfy the criteria, they will get a certain amount of housing allowances. Firstly, countries differ in whether the housing allowance systems are pure rent supplement schemes[2] or also owner-occupiers can be granted housing allowances, see e.g. Åhrén (2007). Those who include also owner-occupiers differs quite much, in how eligible housing expenses are calculated. Secondly, in the US, the section 8 vouchers on the other hand, are not an entitlement. If you satisfy the criteria, you have to queue up for the vouchers. In this regard, the US voucher type of housing allowances are more like social housing in Europe.

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[2] In some countries, public and private renters are treated differently, while other systems do not make this distinction.

Housing allowances – a research agenda

As a part of the research on housing and opportunities for vulnerable households housing allowances are a more or less permanent part of the research agenda at NOVA. Needless to say, studies of housing allowances and their impact also is the subject of a much wider international research agenda. One strand of the literature is studies done in collaboration or funded by welfare agencies who operate and develop national housing allowance systems, while another part is more academic in approach, and perhaps also in which questions receive attention.

Quite a few studies ask what probable effect housing allowances have on labour market activity. As income (e.g. from work) increases, housing allowances are withdrawn. In effect, housing allowance receivers face an additional tax that gives a disincentive to take up work. The empirical evidence on this question is mixed. However, one can note that Shroder (2002) conclude that there is no convincing evidence that housing support have strong effects on labour market participation. In Nordvik and Sørvoll (2014) we argue that there might be positive impacts on self-sufficiency of housing allowances because they may enable households to build a base in a home from which they can erect participation in other arenas. Empirical support for claim is found in e.g. Harkness and Newman (2006).

Housing allowances increase the ability to pay for housing, and consequently the demand. Increased demand can be expected to increase rents. This again, could lead to increased supply of (low-income) housing. In a US-study Susin (2002) find that aggregate rent increases outnumber the amount of housing assistance provided. Studies from France and Finland indicate that 50-70 percent of the housing allowances leak out in higher rents, Kangasharju (2010) and Fack (2006). The extent to which either of these effects dominates is an empirical question. Here again we will conclude that even more empirical research is needed.

Future work on the impact of housing allowances should probably pay very much more attention to the question of which impact housing allowances have on income distribution, both in the longer and the shorter run. For example, does receiving housing allowances work like a poverty trap by producing welfare dependency, evidence in Chen (2008) and Nordvik and Åhrén (2005) suggest not, but the evidence is not conclusive.

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CHAPTER 6: PUBLIC RENTAL HOUSING PROGRAMME AS INNOVATION

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Introduction

As in other transitional countries, despite the obvious problem and long-lasting economic crisis, housing in Croatia is relatively neglected as a policy field (Lowe, 2003). Constant challenges in the region are still related to polarized tenure structure, less investment in social housing, inefficient subsidies and growing affordability constrains (Tsenkova, 2003). In the period of transition income inequalities has increased, unemployment is high, and insecurity is a part of everyday life (Hegedüs, 2013). Massive support for homeowners in the form of mortgage subsidies and housing contract saving schemes, according to empirical evidence of J. Hegedüs, often has a regressive redistributive effect. With the problem of sustainability of social rental housing private rental become a crucial area for housing policy. Having examples from western countries Hegedüs (2013:17) see that private sector, which is still part of informal economy, as one which can be used for social purpose. The comprehensive recent study of housing policy in transitional countries (Hegedüs, Lux, Teller, 2013) show that governments are under influence of private interests interlocked with the banks, entrepreneurs and other stakeholders. In such circumstances it is a hard task to deal with housing affordability issue as a crucial fact, which dominates housing policy in transitional countries.

A recent study gives the evidence how it is clear that an emphasis on housing as capital has led to a great rise in ownership levels and rising prices and, following the crisis, to a slump in investment in 20 European cities (Costa, Bežovan, Plavarini, Brandsen, 2014)[3]. Housing consumption of certain groups has suffered, leading to deterioration in quality and sometimes even the loss of homes. Increasing shares of low-income households and precarious workers face barriers to home ownership, higher than ever in the context of limited investments in new social rental housing and of privatisations of part of that stock.

The aforementioned study has demonstrated that the extent to which different groups are affected mirrors the welfare regime typology. Implemented housing measures in cites from the study only have limited effects when there is a major mismatch between supply and demand. The problems are especially evident in the Mediterranean and transitional regime cities. The problems therefore appear hard to solve with existing policy instruments. This is why there is a need to focus on social innovation and policy learning, utilizing the links of housing to other fields of welfare more systematically. This requires less emphasis on financial investment and more on housing as a lever for social investment. It might be expected that the increased pressures on vulnerable groups will contribute to self-organisation and a stronger push for local housing innovations. This will be more effective than tinkering with a housing supply that is likely to be structurally inadequate.

Social innovations in the field of housing are determinate and conditioned with very complex context related to the historical, cultural, political and economic development of certain cities.

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[3] More on this FP7 EU project on http://www.wilcoproject.eu/

Zagreb – Context of Social Innovation

Although housing is one of the important issues in a city's development plan[4] unfortunately it is not sufficiently researched. Statistical data have limited coverage and due to a lack of information, such as trends of housing prices or housing market demand and supply, a lot remains unknown about the functioning of the housing market.

During the 1990s the privatisation of the public housing stock which lasted until the beginning of the 2000s, was the dominant topic in the field of housing. As a result of that reform, the housing tenure structure underwent major changes. In 1991, public housing accounted for 45.4[5] percent of the housing stock while in 2011, 85.6 percent of households are homeowners. Public housing sale meant a reduction of municipal housing which catered for the needs of the low income population. Only 2.1 percent of households live in houses which can be regarded as social housing. Tenants paying market rents, 10 percent of them, are one of the most marginalised groups in the housing market.

Data from the 2011 Census show an impressive increase in the housing stock and it is evident that wealth accumulation through investment in housing is concentrated in the capital. Overcrowded housing appears as one of the greatest problems in terms of quality of life and is, general speaking, a restricting factor in the development of Zagreb. Citizens who live in crowded units are exposed to serious mental health risks.

Homelessness is a new and growing social problem visible in the streets and is becoming increasingly relevant for a broad section of the urban population (Šikić-Mićanović, 2010). Recent investments in the city of Zagreb increased the capacities for the homeless. Media and civil society organisations increase public awareness of homelessness and social exclusion. The housing allowance programme, which is part of the social care policy, provides support to a very limited number of families in need, despite a visible increase in the number of beneficiaries over the last ten years.

As housing was one of the most profitable businesses increased investments were largely made by speculative developers. One governmental, top-down programme, for first-time buyers known as the POS Programme, offering affordable housing loans and targeted prices, but with a lower urban standard, provided approximately 4,000 housing units. The main objective of the Strategy was that the City of Zagreb should develop an active housing policy, with the priority to meet the needs of low-income families from the five years old waiting list by providing roughly 900 social housing units. The objective of the Strategy was to increase the social housing stock, i.e. to serve the concept of social integration and sustainable development of the city. Between 2006 and 2009 the city got 869 newly built social housing units, increasing the social housing stock by 16%. There are 2,127 households on the current waiting list for social housing, while in 2003 the number was 1,900. This is not to suggest that all households from the previous list obtained social housing.

What are Social Innovations?

The term 'social innovation' has entered the discourse of social scientists with particular speed, but there is no consensus regarding its relevance or specific meaning in the social sciences and humanities. Some analysts consider social innovation no more than a buzz word or passing fad that is too imprecise to be usefully applied to academic scholarship. Some social scientists, however, see significant value in the concept of social innovation because it identifies a critical type of innovation (Vale, 2009). The first question is why we talk today about social innovation. Social needs are now more pressing: The global crisis has made it clear that most of the

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[4] Zagreb plan, Razvojna strategija Grada Zagreba, 2011-2013.

[5] On the level of the country share of public housing was 25 percent.

challenges we face today have taken on an increasingly social dimension. At a time when resources are limited, new solutions must be found. Government responses to the crisis have involved major fiscal stimulus packages but at the same time they are confronted with budgetary constraints (BEPA, 2010). The notion of social innovation is particularly appealing in light of the difficulties facing traditional welfare systems and, more broadly, a development model essentially based on only two actors (the market and the state) that is finding it increasingly difficult to meet the growing and diversified needs of society (Brozaga, Bodini, 2012). Traditional solutions are shown often to be inadequate. Also there are clear tendencies towards participation of the people and their involvement in developing various types of programs and initiatives they can address some social issues or problems. Bearing that in mind Vale (2009:7) states that solutions must focus on the beneficiaries, and be created with them, preferably by them, and never without them. Social innovations are held as one of the key elements to uphold sustainable, smart and inclusive growth. Social innovation is necessary to address poverty, create employment, develop capabilities and participation, and promote changes in production and consumption habits (BEPA, 2010).

The field of social innovation is broad and varied. Social innovation is a practice-led field; it is contextual and as such has developed with ill-defined boundaries, meanings and definitions. Social innovations can be defined as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations. In other words they are innovations that are not only good for society but also enhance society's capacity to act. (BEPA, 2010). They are some sort of ideas, turned into practical approaches that are new in the context where they appear. Stanford Social Innovation Review (Phills et al., 2008) defines social innovation as "a novel solution to a social problem that is more effective, efficient, sustainable, or just, than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals". A social innovation can be a product, production process, or technology (much like innovation in general), but it can also be a principle, an idea, a piece of legislation, a social movement, an intervention, or some combination of them.

BEPA (2010:53) gives framework for the process of social innovation. First the idea emerges, the problem is diagnosed and the question is framed in such a way that not only symptoms but root causes are tackled. The second stage is to generate ideas on ways to deal with the identified problem. The third stage involves trialling the ideas through pilot projects with feedback from users and experts. The fourth stage is about moving from the pilot to a securely established social innovation by identifying a legal and fiscal form and income streams to ensure the long-term sustainability that will carry the innovation forward. The fifth stage concerns the spreading of the social innovation with documented results to a larger group or to other communities or countries. The sixth and last stage is when entirely new ways of thinking and doing things are put in place. It usually involves many elements (social movements, business models, laws and regulations, data, research and infrastructures) and actors from all sectors (public, private, profit and non-profit, informal)

Also sustainability, financing and recognition are key challenges for establishing social innovations. Social innovation should provide stable financing structure in order for initiatives to be launched and developed. In that they need to be very resourceful and rely on different stakeholders.

Framework of Housing Innovation

Public policies and reforms in public sector, on the different level of state administration, are dominantly made into top-down approach very often with political connotations (political will) and with the lack of respect for empirical evidence or respective analyses related to the topic (Bežovan, 2009). During the last 20 years the practice is that the new governments or the new

mayors are not respecting achievements of previous governments[6]. When they come to office they change professional staff, they change policy programmes without debates or analysis. In such circumstances there is "policy with thousand new starts", and creative professionals are very often forced to leave offices of public administration and to set up civil society organisation to confirm their creativity and innovative skills. Public policies as such in fact are not a place for real innovations, because of cognitive barriers, everything should be written in regulations or in policy programmes, before someone starts with new initiative.

A recent survey[7] carried out among relevant stakeholders for local social welfare programs implementation found that officials from public administration understand less and trust less to the importance of social innovations. Civil society organisations are more aware of importance of social innovations and they produced more such projects and ideas. However, public officials often are suspicious on the range and usefulness of such innovations. It means that it is rather hard task for civil society organisations to produce visible innovation what might get status of good practice in relevant policy area. But, besides that, for the time being, concept of good practice is not recognised as a part of possible policy agenda.

Housing policy, as a space for social innovations, is decentralised, fragmented and left to local politicians' will. Although housing crisis is evident in larger urban areas and empirically documented as results of different surveys, vulnerable social groups (young families, single households, internal migrants, elderly, divorced people) are not organised in civil society organisations[8]. Besides that, there are no advocacy organisations addressing priority of housing needs and needs for affordable rental housing[9]. Recently, some civic organisations addressing family violence influenced by-law regulation, in fact, the eligibility criteria for social housing and now victims of family violence are on the priority list for social housing. However, lack of affordable renting housing is ceterum censeo of very rear public debates. Majority of these debates are in different internet forums[10].

Publicly debated *Strategy of housing policy in City of Zagreb* (2006) with well documented issue of the lack of affordable rental housing for the people from young generation, with the needed level of political will, supported by professionals outside the city administration and capacity of administration in the city were driving forces of this innovation. This social innovation originates from pressing social needs and its potential is in idea that are implemented and driven by housing needs recognised by different stakeholders.

Recent housing needs assessment for the city of Zagreb (Bežovan, 2012) again made evidence on the vulnerability of young families and population of singles. These populations are not eligible to get housing loans and they are exposed to uncontrolled housing rental market where they can't afford decent housing.

Processes of drafting and putting the innovation on the agenda of decision process were example of transparent policy making process. Draft of public rental programme has been presented to the public through press conference and additional explanation in radio programme

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[6] The problems of limitations of state administration are recognised, for Croatia and other transitional countries, as serious obstacles for further modernisation and development.

[7] Bežovan, G. (2010) Achievements and challenges of welfare mix development, (in Croatian) Zagreb: CERANEO.

[8] In the survey of WILCO project member of civil society organisations Roda documented how their member live in terrible housing conditions, four member family of young generations live in flat of 26 m^2. Affordability is a crucial problem for young families and it is serious obstacle for them to have more children.

[9] As curiosity one major recently started that civil society organisations made to the pressure to him to invest money in shelter for the abandoned dogs and cuts. But, he is wondering that there is no such pressure from civil organisations to invest money in affordable rental housing, as a real priority.

[10] An example of this debate addressing pressing housing needs says about housing deprivation "I live with my folks in 40 square meters and my younger teenage brother and I have had it! On top of it all, a cousin from Dalmatia came to stay with us for a month to attend college preparation course… we all almost ended up killing each other…" http://www.kupiprodaj.net/forum/showthread.php?t=838

with the contact of possible users. Public debate lasted for 15 days and interested citizens were in position to give comments, to ask questions or to give proposal for improvement of the draft of the programme. All inputs have been analysed and publicly commented by the policy makers and it gave additional legitimacy to this innovative housing programme. The parts of comments made by citizens have been built in the final version of the programme which was framed in proposal to City Assembly.

Process of decision making of the programme in City Assembly was followed by lively debate. Representatives of different parties agreed about importance of the programme to finally address housing issue and to meet the needs of young households. Remarks of oppositional party were more formal and directed to some legal issues related to the ownership of flats which will be distributed in this programme.

Conceptions of and ways of addressing users

This innovation is entitled to young households, age up to 35, with more kids who are sub-tenant on the private rental market (that market is mostly not regulated at all) or living together with larger family but in unfavourable housing conditions. In different ways users suffered because of housing conditions. In case of sub-tenant status, they are in position to rent small and often flats of bad quality for very high price. For a flat of 30-40m^2 they pay rent of about 240 euro, and for 80m^2 flat of this innovation also 240 euro[11]. As they do not have the contract they can't register their permanent residence. Permanent residence on certain address is prerequisite to get places for kids in kindergarten. Households with such unstable tenure are in risk to move and, so, if they can't find other affordable flats in the neighbourhoods, they are forced to change the school for kinds. These households are in trouble of not being in a position to plan their lives. In different aspects mentioned experiences in meeting housing needs made these families in position to be proto type of socially excluded peoples.

Young families living with the parents or with other members of families, often three generation of family living together sharing space of small flats, are in risks of conflicts in such large households. All family members suffer from the lack of space and needed privacy.

Within this innovation users, selected through public call for application, getting contract for five years, with possibilities to extend it. They pay less for the rent then on the private rental market and they have very decent, big enough flat in newly built neighbourhood. In these cases, quality of life of the users are visibly improved and they are in position to plan their lives. In meeting the needs of such users it is visible how housing, as the fundamental determinant of people's welfare, plays a crucial role in the strengthening of social integration and social cohesion. Here decent houses can ensure participation of people in community life.

This type of services is a new one and it bridge the gap between the residual social rental housing and unregulated housing market with the solution to pay unaffordable flats. This service empowers young families and gives them more opportunities to take active citizenship and to create life carrier.

This innovation produces different type of tangible services, visibly serving earlier politically unrecognised needs, where, instead of social rights there are contractual relationships with the potential to develop new culture of responsible tenants.

Internal organisation and mode of working

Internal organisation of the innovation is a part of responsibilities in office of local government and local city company responsible to manage housing stock. Process of getting status of tenants

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[11] Recently in the crisis level of rent has been reduced.

in public rental housing programme is a very transparent one and all families who do see that they are eligible according to mentioned criteria can apply. Tenants make a contract and they make down payment as guaranty to pay rents regularly and to keep the flat in proper way. Such down payment, as pedagogical measure, is a kind of innovation in local social welfare system[12].

One important criteria for applicants to be eligible for this rental programme is that applying households must give evidence that they have reasonable amount of income per households members. Level of income per households must be at least 30% of average income in Zagreb. This criterion gives advantage to families where mother and father are employed and, in fact, guaranty regular payment of rent[13].

Here social innovation involves vulnerable social groups, boundary between "social" and "economic" blurs and learning from this innovation should be crucial for reapplication of the programme to other cities. Empirical evidence on social return: contribution of this innovation to social integration and social cohesion should be the topic of future research. Also, empirical evidence says that this innovation is sustainable and economically efficient.

There are several reasons to make evaluation of this innovation and to see ways of its improvements.

Lack of coordination between activities of local government office responsible for making call of applications for this programme and local city company responsible to manage that housing stock makes this program less visible to interested public. In such circumstances, marked with political conflicts in governance of the city, publicity strategy or social marketing of this innovation, unfortunately, are not parts of agenda.

Interaction with the local welfare system

Public rental programme brought new spirit into local welfare system where officials used to deal with only poor people as vulnerable population. Here, in this social innovation, there is a sense of social investment programme with very viable return in near future. For the time being tenants, sharing the newly build settlement with social renters and with homeowners, do not have any form of influence on the programme or participation in its development.

Public rental housing programme is case of path-breaking in fragmented housing sector and the new role of local government addressing visible social needs of vulnerable population. This programme, as a visible innovation, gave the new face to local welfare system and has made them more modern and responsive. Definitely, this project might be a milestone in process of reforming local welfare system and give more space to social innovation and experimentation.

Also, this innovation puts the issues of planning and cooperation of different local stakeholders on the agenda of local social policy. Besides that, this innovation shows its capacity to become the model for other cities. Mayors and officials of other cities perceive public rental housing as an investment in competent labour force, and with such a programme they see possibilities to attract young professionals who should be employed in public services (schools, health and social services, police, local administration). Economic crisis influenced very much fiscal capacities of Croatian cities and, for the time being, stopped re-implementation of this innovation in other cities.

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[12] Tenants in social housing programme very often are not willing to pay rent and others costs related to housing (electricity, gas, heating, water, communal fee). Besides that, maintenance of the social flats is a problem for owners.

[13] Now there are 558 families as tenants in his programme and local government official see that for some of families threaten with the recent crisis might be a problem, as they are not eligible for housing allowance, to cover increasing housing costs. In case of worsening of economic situation this issue might be critical for sustainability of innovation or scaling-up it, as a part of learning process, making housing allowance programme eligible for public rental housing tenants.

Conclusion

The critical issue with development and scaling up of this innovation is a level of social capital inside of city administration and level of openness to respective stakeholder. Here a relevant question is the ownership of this innovation. Does it belong to mayor, to city or to different group of stakeholders? Anyhow critical issues for making such innovations inside public administration are institutional capacity and level of accountability.

Example of this innovation was a solution for the part of unsold housing stock from the state run POS programme.

Real and broader justification of this innovation will come after result of on-going survey among population of tenants in public rental housing programme.

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CHAPTER 7: RESEARCH IN THE DESIGN STUDIO: TYPES OF KNOWLEDGE IN HOUSING STUDIES

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Introduction

Since the connection between research and design gradually becomes established, the question on how to construct knowledge and understanding out of a design or a design process increases in significance. Architectural research is often described as a complex and diverse subject area which on one hand draws on a number of disciplinary procedures while on the other it has the potential to maintain a specificity of its own through the practice of architectural design. Owing to its potential to gather a heterogeneous set of discourses and types of knowledge, design through a cyclical, explorative method of learning-by-doing, has a high potential to offer an alternative research methodology that combines scientific rigor with innovation and intuition. During the design practice, cross disciplinary knowledge may be transferred through the decision making process, while each intermediate design result may lead to new forms of knowledge inquiry and production. Furthermore, the design studio within the structure of OIKONET provides possibilities for inter-, multi- or trans-disciplinary collaborations in housing studies which aim at crossing traditional disciplinary and research boundaries and effectively address the increasingly divided, complex and differentiated experiences of contemporary domestic life.

Housing Research and pedagogy at UCY

Central to UCY's architecture department's philosophy and reflected both in the program of studies and in the work of the housing research group is the concept of integrated design which stresses the necessity of a balanced focus on the various aspects of architecture which make it the complex and fascinating field that it is. The challenges for both the discipline and the profession are many and diverse but they could perhaps be summed up thus: to preserve the past, accommodate the present and plan for the future; to allow for the cultural while respecting the natural, to identify the local within the global, to allow for differences and bring out the similarities, to be innovative, to create. The Department of Architecture consequently has an important role to play in producing architectural skills and knowledge through research, in providing high quality education and in helping the much needed dialogue among the parties, directly or indirectly involved in its production; academia, the architectural community, other professionals and the community. This is in line with the structure proposed by OIKONET, which will aim at the exchange of knowledge among research and educational institutions and at embedding this into the socio cultural context.

The acknowledgement that architecture encompasses a number of disciplines, bringing together a number of distinct modes of research and types of knowledge that are often kept apart, is a major challenge that we, amongst others, face as educators. The teaching methodology underpinning the courses that our group is directly responsible for stems from our attempt to address such a challenge. A strong theoretical approach, active research and research findings (mainly about domestic architecture and ethnic/social patterns of urban configuration) and professional design practice (mainly houses) translate naturally into the educational setting and above all to the design studio as the main forum for creative exploration, assimilation and application of multi-dimensional knowledge transfer into the design process.

In this paper we propose that the design of a **house** and thus the design process in the studio is undoubtedly one of the most important vehicles of exploring the social and experiential dimensions of architecture and thus facilitate the merging of different types of knowledge produced through research, the profession and the community. Owing to its potential to gather a heterogeneous set of discourses and types of knowledge, we believe that the design process through a cyclical, explorative method of learning-by-doing, provides the possibilities to offer an alternative research methodology in architectural education that combines scientific rigor with innovation and intuition. An explorative design methodology is proposed (as opposed to either linear or reflexive design methodologies) which employs experimentation through the design process and adopts an **open process** or open loop structure into research throughout the design process. Different types of knowledge may be transferred through the decisions making design process (research based knowledge) while each intermediate design result may as well lead to new knowledge inquiry and acquisition (research by design or design driven knowledge).

Research in Architecture

▪ **Research-based and research-by design**

The design studio has undoubtedly been at the core of architectural design education since its inception in the 19th century. In most situations, although studio teaching is still based on the traditional models of design process, the mid-century "search for form" has been replaced by the development of new forms of research aiming at a redefinition of the landscape of architectural education and practice within the design studio. Rationale for this change is based on widely recognized transitions from industrial societies and their linear, hierarchical thinking to the emerging postindustrial era of deeply interrelated types of knowledge and complex system thinking. Advances of disciplines, specialization, material- and systems-science and digital data driven computation have brought a radical change in the contextual frameworks within which architectural design and production are normally placed. Such advances have been paving the way to achieve what is usually termed as integrated, inter-, multi- or even trans-disciplinary design, in all cases a type of practice that covers a mindset of collaboration and cross-disciplinary communication, experimentation, visualization, knowledge transfer and research, at all or possibly at different stages of the design process.

Over the last decades, cross-disciplinary research-based processes and knowledge production and transfer in the so-called "research-based studios" have become common in schools of architecture. The notion that architectural experimentation requires a rigorous feedback between design and research can be traced in design pedagogy since the 1960s, including the research-based studio by Robert Venturi, Denise Scott Brown and Steven Izenour or Rem Koolhaas's Harvard project on the city.

A perennial concern for architecture educators has since been the relationship of research as well as different types of given knowledge to the design process. The concern may be because as Cunningham notes "architecture is not a discipline in the traditional sense since it is not served by a definable body of knowledge" (Cunningham, 2005). Design is an activity not a subject and its practice many times necessitates borrowing given knowledge, theories, techniques and research methodologies from other disciplines.

Contemporary approaches to the design studio acknowledge the fact that architecture encompasses a number of disciplines, bringing together a number of distinct modes of research and types of knowledge such as historical analysis, environmental analysis and material science. Research into architecture is becoming conscious of these interactions and of the particular need for architectural knowledge and practice to be integrative across disciplinary boundaries (Rendell, 2004). The design studio provides such possibilities for cross disciplinary research, through an integrative approach to education which aims at crossing traditional research areas.

In a recent paper which takes as a starting point the essential tenet that architecture is a form of knowledge that can and should be developed through research, Till suggested that beyond borrowing given knowledge from other disciplines, architecture also "has its own particular knowledge base and procedures, which demand a definition of research appropriate to architecture" (Till, 2005) and so provides possibilities "for multi-and interdisciplinary research". Research into architecture thus has to be conscious of these interactions across traditionally separate intellectual fields, which according to Lawson can be divided into three stages: architectural processes, architectural products and architectural performance (Lawson, 2003). The advantage of this proposal, according to Till, is that it avoids the science/art and quantitative/qualitative splits, allowing thematic approaches to emerge as well as interdisciplinary research into any of the three stages.

Rendell supported this argument and suggested that architectural research is best understood as a complex subject area that involves a number of disciplinary procedures, including though the specific practice of architectural design (Rendell, 2004). The disciplinary specificity of the particular mode of practice-led research in architectural design cannot be found in other types of practice or design.
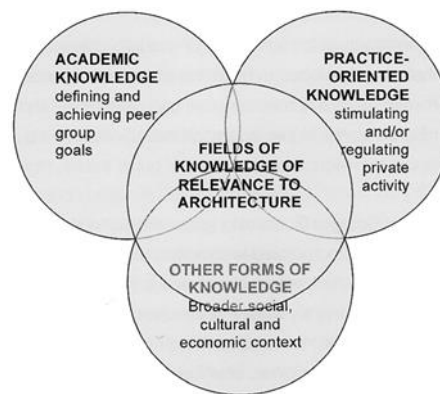
Figure 1. Architectural research related knowledge fields

We are thus today in the process of defining and refining the idea of architectural research as a mode of scholarship and inquiry that is special to architecture and may not be adequately described in terms of the "scientific" method; instead of trying to conform to a scientific paradigm, architecture could provide a new model for research practice that carries academic and social mandates, that is intellectually coherent, capacious and integrative (Wortham, 2007). In other words, there is also knowledge to be discovered and creatively employed during the design process, not always as a finite package to be learned (Cunningham, 2005). Through research-by design, as it is often referred to, the architectural design process in the studio may form a pathway through which new insights, knowledge, or practices come into being (EAAE, 2011).

As already mentioned during the design process knowledge produced from various disciplines and research modes may be transferred through the decision making phases (research based knowledge), while each intermediate design result may as well lead to new knowledge inquiry and acquisition (design driven knowledge).

- **Design Process: research based and design driven knowledge**

Architectural design involves the generation and gradual transformation of ideas into concrete spatial formations. Such ideas, although described in a variety of terms – as image by Alexander, primary generator by Darke or concept by Lawson – all refer to the individual

unique idea that distinguishes each architectural design and view design as a sophisticated cognitive activity. Through the design process, students search for satisfactory ways through which their ideas may be formulated into spatial layouts to be inhabited and experienced. This process in its broader sense involves complexity and synthesis. Designers put things together and bring new things into being, dealing in the process with many variables and constraints, some initially known and some discovered and evaluated through designing.

The "design project", as the vehicle for project based learning, has been adopted on the assumption that the expertise needed by architects could only partially be learned through the traditional methods of knowledge and experience transmissions. The perceived benefits of the design project were that it simulated, albeit in a simplified and directed way, the actual processes of professional action by requiring students to apply their accumulated knowledge and skills in an integrated way to a design problem. Designers put things together and bring new things into being, dealing in the process with many variables and constraints, some initially known and some discovered and evaluated through designing.
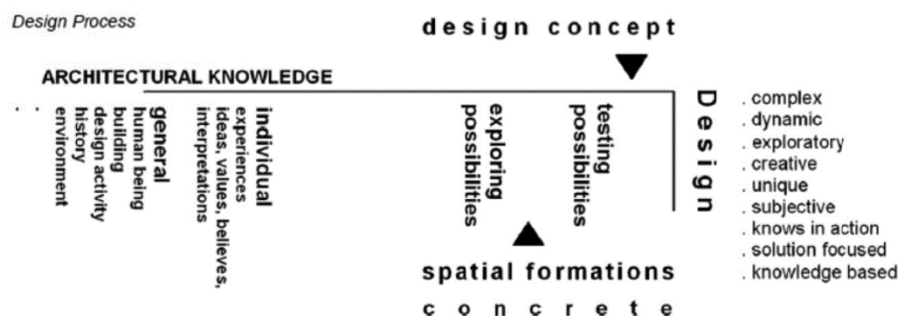

Figure 2. A comprehensive architectural knowledge base needed to help architects through the explorative nature of the design process (Simon)

The design process is thus no-longer viewed as a linear problem-solving activity, where sequential activities are carried out. An alternative to linear design methodologies, upon which universities have historically based their expectations, is what Schon has termed a "reflective conversation", where variables of solutions are generated, tested, abandoned or optimized, in pursuit of design versions and adaptation (Schon, 2007). An open structure in the synthetic process, which forms the core of the design process, is proposed, in which phases are grouped in a circular arrangement, yet the process itself does not develop in a linear manner (Moggrridge, 2007). Each phase of this process "employs any information, knowledge, theory or technique from other disciplines, which the designer may select as being relevant to the task on hand" (Cunningham, 2007). The acquisition of given knowledge then, is not viewed as an educational end in itself, but rather as the learning process itself.

Design process is also about experimentation and probing: experimentation allows discovery, which in turn allows evaluation and redefinition of initial ideas and concept (Reinhardt 2008). In explorative design methodologies which adopt an open process structure into research throughout the design process, knowledge may on one hand be transferred through decision making stages (research based knowledge); in other words, designers employ knowledge at various stages of the design process from research that seeks to understand the future through a better understanding of the past. At the same time, each intermediate design result in each phase may as well lead to new knowledge production (design driven knowledge or research by design). Such an approach addresses the challenge we face as educators in the studio, to take the students from their existing intuitive understanding of built form towards an understanding of scientific research, so that they can become reflective practitioners and active researchers

able to apply but also discover knowledge through the process.

Additionally, a challenge we also face is to understand people's tendency to assimilate knowledge in different ways, a factor Kolb calls their 'learning style'. We need to be able to develop ways of transmitting knowledge and different learning strategies, in order to accommodate these different learning styles and individual knowledge.

■ **Individual Knowledge**

The proposed explorative open structure design process also enables us as educators to accommodate individual needs and learning modes; to acknowledge that architecture students will also rely on individual knowledge highly influenced by their personal experiences, cultural background and acquired social knowledge. This type of knowledge is probably one of the most important issues in relation to the design process and raises a fundamental question in relation to the pedagogical approach to the studio. The exclusive use of a method or a medium through a linear methodology renders the design process only partially effective. A controlled phasing seems to dismiss intuitive passages and individual interpretations. Though architectural education seeks to induct young architects into a set of shared values and practices, these may still bear the imprint of 'social knowledge' and it may be quite hard to break free of "prestructures", to create a totally original design solution (Vaughan et al, 2007).

The student/designer's individual knowledge, or "prestructures", may not only be the basis for creative action, but also the basis for understanding and interpretation. Design informed and enriched at every stage by the knowledge previously acquired through a research based process, might well be the transmission and transformation of individual knowledge, a process of elaboration and discovery, which facilitates and enhances design creativity and may potentially lead to new knowledge production. The design studio thus provides possibilities for an integrated approach from the early stages of the design process, facilitating merging of individual knowledge and research based knowledge, while enabling new knowledge production at various design stages.

Furthermore, such an open process structure can involve stakeholders beyond any disciplinary, research and/or academic boundaries bringing together both producers and users of knowledge, traditionally kept apart. The next section acknowledges the need to take into consideration a transformation which is occurring in the relationship between academia and society and a new mode of knowledge production which is at the heart of this transformation through a **transdisciplinary** open process approach.

Transdisciplinary design studios

The transdisciplinary aspect in case such an explorative, open process methodology is adopted, constitutes in broader sense an academic and professional field of growing complexity[14] as it involves a new mode of knowledge production. Much of the thrust of innovation is coming from new links between traditionally segmented producers and users of knowledge. Contextualization of research around the interests of stakeholders fosters a more "socially robust" knowledge that transgresses disciplinary and institutional boundaries. Often referred to

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[14] The following distinctions of discipline interrelations are considered in the present argumentation:
   ■ Multidisciplinarity: A variety of disciplines occurring simultaneously without making explicit possible relationships or cooperation between them.
   ■ Pluridisciplinarity: Various disciplines grouped in such a way as to enhance the cooperative relationships between them.
   ■ Crossdisciplinarity: Various disciplines where the concepts or goals of one are imposed upon other disciplines, thereby creating a rigid control from one disciplinary goal.
   ■ Interdisciplinarity: A group of related disciplines having a set of common purposes and coordinated from a higher purposive level.
   ■ Transdisciplinarity: The coordination of disciplines and interdisciplines with a set of common goals towards a common system purpose.

as a trans-disciplinary approach, it focuses on '…that which is at once between the disciplines, across the disciplines, and beyond all disciplines. Its goal is the understanding of the present world, of which one of the imperatives is the unity of knowledge' (Nicolescu, 1997, p. 2).

As noted by Nicolescu (1997), 'interdisciplinarity' 'concerns the transfer of methods from one discipline to another' (p. 1), or as described by Geisler (2002), the 'borrowing [of] … techniques, values, or mandates of a nearby discipline in order to address pressing problems' (p. 9). As an alternative, a 'multidisciplinary' approach is characterised by a co-contribution to a project by various disciplines. Sometimes, this is nothing more than a sequential process where 'one discipline accepts the product of the first as a given and works with it from there' (Geisler, 2002, p. 12). By its very definition, there is an acceptance that project members cannot have mutual understanding of the specialized knowledge, skills and cultural values of all disciplines. Collaboration in this sense means trying to make this interrelationship work, '…of always assuming a fundamental respect for each other and each other's disciplinary bases; of taking up the burden of making or explaining and persuading others of one's disciplinary conclusions; of forgoing the opportunity for disciplinary silence and retreat when asked to explain ourselves' (Geisler, 2002, p. 12). While different in the sense described, interdisciplinarity and multidisciplinarity are similar in that their goals always remain within the framework of the discipline (Nicolescu, 1997), that is, the autonomy of each discipline usually remains intact.

As Klein points out, some disciplines already have strong cross-disciplinary character. Given the particular characteristics of architecture as an explorative and transformative knowledge field that inherently relates to the humanities, empirical, interdisciplinary, applied and formal sciences, it may be argued that architecture is intrinsically trans-disciplinary and in extend multireferential and multidimensional. Despite designers recognizing the holistic nature of the issues they deal with, cross-disciplinarity where it occurs, remains at the interdisciplinary and multidisciplinary levels. In this context the requirement for reintegration of various types of knowledge, as stated in articles 3 and 5 of the 'Charter of Transdisciplinarity', is of particular significance.

   ▪ **Transdisciplinary open process approach at UCY**

Diploma projects led by the author and colleagues during the final fifth year of architectural studies at the Department of Architecture of the University of Cyprus, adopt such an explorative and integrative design process. Our first aim is to understand students' tendency to assimilate knowledge in different ways and accommodate different learning styles and individual knowledge. The frame conditions of the general development route of the projects are defined by the students themselves through formulation of a general topic of interest and selection at a first stage of a team of supervisors from the Department of Architecture. As the projects unfold, a diverse team of supervisors is gradually formed, including "specialists" from other Departments of the University, the industry, other research institutions or relevant social stakeholders including potential users and community members. In this way, different groups of students, supervisors and additional advisors with varied specializations, from various backgrounds many times crossing the boundaries between academia and society, are formed.

The intention here is to provide a communal and 'co-operative' (Wright & Lander, 2003) as opposed to 'collaborative' environment; the latter commonly being associated with team work. While we recognize the need for students to learn how to work in a team, we were more concerned in this case with challenging them to move conceptually beyond their discipline boundary to a situation reflecting the 'holistic reality of the world' (Klein, date unknown) and the limitations of discipline compartmentalized knowledge. As previous discussions highlighted, a trans-disciplinary approach demands that the issue of focus be related to the world rather than to a specific discipline or even collaborative effort by several disciplines.
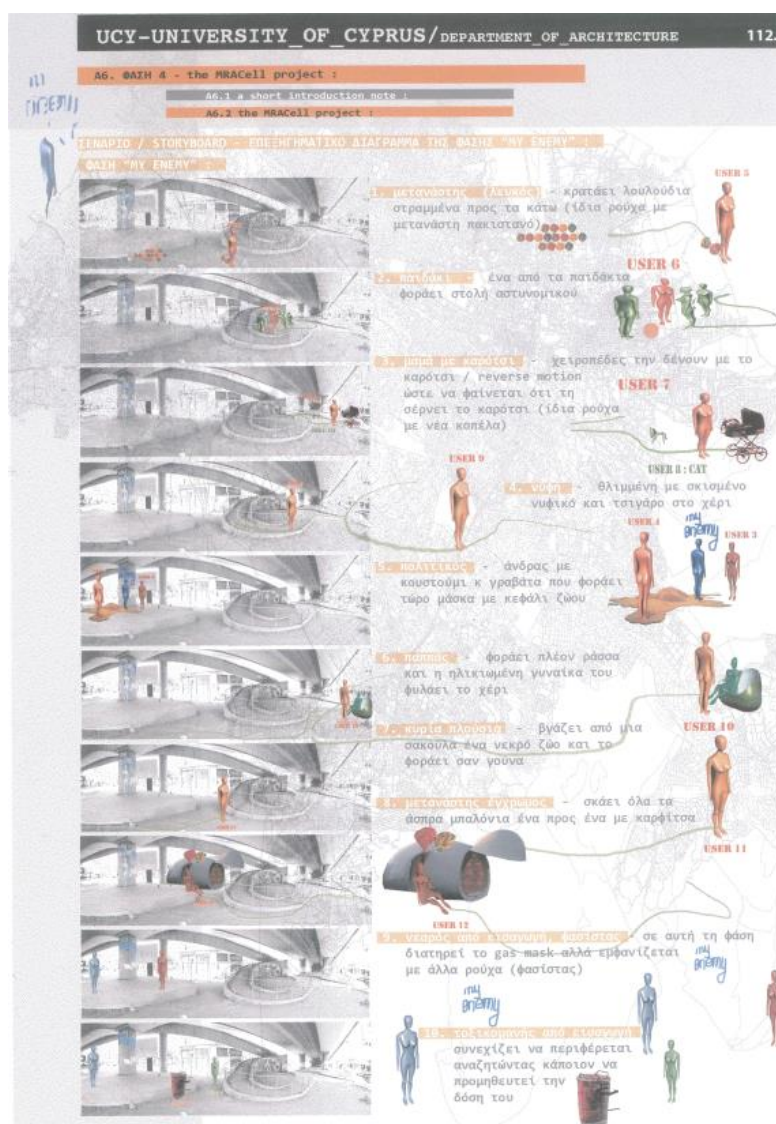
Figure 3: Architecture and Cinema: exploring the boundaries between the real and the virtual (Assimakopoulou 2010)

A recent example is an exploration of the boundaries between the physical and the virtual at a number of levels. This design proposal evolved from the student's personal experiences in key places she inhabited throughout her life and aimed to explore the concept of "place" both physically and virtually through the cognitive aspects of human experience. The subjective and multiple interpretations of "place" by each individual, the "socio-spatial narratives" created as a result of these interpretations and the role of both the architect and potential users in the design process, lied at the heart of this project. The student's concerns were initially explored through the broad umbrella of architecture and cinema- a medium, which deals with similar concepts- and raised further issues in relation to the nature of the role of both the architect and the user as "narrators". The project set out to explore the possibilities of redefining these roles through the use of both analogue and digital technologies.

A diverse group of advisors was formed from the outset of the project drawing expertise from the fields of architecture, cinema, cognitive psychology and information technology. Research based knowledge and methodologies from a number of parallel themes across the disciplines mentioned, were analysed and reflected on from the initial phases of the projects and at distinct phases of the project development[15].

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[15] The project gradually formulated as an experimental space – a mixed reality architectural cell which would have a dual

This framework enhances trans-disciplinarity in two ways: in the development of the designs from the students' perspective, in terms of forming sub-groups with similar general topics reflecting common concerns related to the real world but leading to different design aims, and in the process of guidance, cooperation and evaluation of the designs by the supervising teams which include both academics, professionals and community representatives. The integrative formation of diverse teams of both supervisors and students facilitates an explorative research based process, which accommodates at the same time individual knowledge. Students can employ at each phase of their design process any information, research based knowledge, or technique from other disciplines drawing on the expertise of their interdisciplinary supervising teams. Teams may be continually formed in a cyclical process of different design stages, whereas new technologies can be employed to assemble the expertise and perspectives arising from the members and disciplines. Thus, students can rely on their individual knowledge, brought together with research-based knowledge, through a cyclical process of experimentation, evaluation, self-reflection and redefinition.

Conclusion

Different types of knowledge need to be an inherent part of the design process, which we believe include individual (intuition, personal experiences, values, believes), rational (research based theoretical and scientific knowledge related to human beings, the environment, history, society) and design driven (new knowledge inquiry and acquisition at each intermediate design stage) ways of thinking and knowledge production within a trans-disciplinary context of collaboration. This mode of inquiry offers the possibility to overcome the limitations of discipline compartmentalized knowledge.

The design process through a cyclical, explorative method of learning-by-doing has a great possibility to offer an alternative research methodology. A trans-disciplinary, integrated research by design studio could undertake an experimental paradigm in which students and professors alike collaborate to push the boundaries of the discipline, allowing the pedagogical context to become a central stage in the development of new analyses, new techniques, and new theories. Architecture is thus positioned to lead in the redefinition of research as action, following a methodology that bridges across epistemological, disciplinary and academic boundaries and combines scientific rigor with innovation and intuition.

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function: on one hand it would give the user the opportunity to virtually experience and transform a familiar environment through digital technologies, while at the same time it would provide the opportunity to the architect to retrieve this data and gain new knowledge about the users' needs and perceptual skills. The project explored the role of the architect as the creator of an infrastructure, a dynamic cyclical process, which could be continuously informed by the user; the latter would then have a different role as a potential creator, providing useful information, which could then feed back into the design process.

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CHAPTER 8: HOUSING RESEARCH: INSTITUTE FOR HOUSING AND URBAN DEVELOPMENT STUDIES (IHS)

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IHS activities

IHS is the international Institute of Urban Management associated with the Erasmus University Rotterdam. Operating on a global scale, IHS offers specialized post graduate education, training, advisory services and applied research in the fields of urban management, housing and urban environment, with the mission to develop human and institutional capacities, to reduce poverty and improve the quality of life in cities. In 2007, IHS won the UN-Habitat Scroll of Honour Award for leading the way as a global centre of excellence and knowledge.

▪ **Urban management, housing and urban environment**

IHS believes that cities are the engines of economic growth. Cities are, however, in great need of innovative urban professionals to ensure that growth is sustainable and inclusive. In order to remain updated about trends, challenges and practices in the field, IHS academic staff actively develops knowledge in the fields of social, economic, environmental and spatial dimensions of urban development and link this to governance and management approaches as well as various finance, policy and planning tools. The topics of study offered at IHS include: urban dynamics; urban governance; urban policy and planning; urban finance and economics; urban land development; housing strategies; urban social development and livelihood strategy; informal settlements (slums); attracting and mapping foreign direct investment in cities; urban environment and climate change and city development strategies.

▪ **Linking theory to practice**

IHS's approach to the problems faced in reducing poverty and improving the quality of life in cities is based on cross fertilization of three activities: education, advisory services and research. IHS delivers post-graduate educational programmes, an MSc programme in Urban Management and Development, various short courses and a PhD programme. In addition to that, IHS delivers tailor made training for clients in various countries around the world. Apart from education, IHS carries out advisory projects such as feasibility studies, policy advice and evaluations for clients like governments and multi-lateral or bilateral organizations. Finally, IHS conducts applied research in the areas described above, which is increasingly carried out jointly with partners
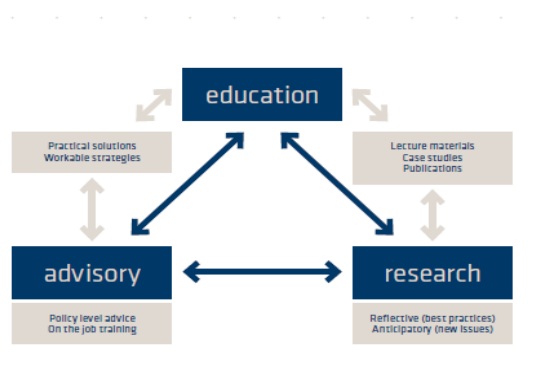
▪ **International perspective**

With its roots in development cooperation, today IHS has grown to become a truly international institute. IHS teaches and trains mid-career professionals and has established a broad alumni network of more than 7.500 alumni around the world. From 2007 to 2011, 40% of the IHS alumni came from Asia, 32% from Africa, 13% from Europe, 13% from Latin America and 1% from North America and similarly 1% from Oceania.

IHS activities in the field of housing in the MSc course

The curriculum of the specialisation Housing and Livelihoods consists of three modules:

1. Housing is more than houses. Housing Theories and Livelihood theory

2. From the Welfare State to a Participatory Society. Implications for Housing Policies and Social Policies

3. Creating Liveable Neighbourhoods. Research and Policy Approaches to Housing Policies and Social Policies

The livelihood theory (Moser) is introduced in the core period of the MSc course. This theory is the main conceptual foundation of the specialisation Urban Housing and Livelihoods and the research workshop Dynamic Urban Neighbourhoods.

During the first module we will focus on housing theory and the functioning of the housing sector. Later on we will look into the livelihood theory in more detail (already discussed in the core period). We will gain more in-depth understanding on each of the assets available to poor households and on their relation with the vulnerability context and the policy-institutional context. Special attention will be paid to the complexity of housing as physical, financial and social capital; to human capital and informal income-generating activities; to social capital as a means of access to finance, and to the lack of safety and security as an obstacle to asset accumulation.

The second module of the course deals with the overall trends and paradigm changes in housing and social policies. We will discuss the change from the welfare state model to the neoliberal model as dominant paradigm for policies. We will discuss how the neoliberal model evolved over time and how concepts like participation, enablement and empowerment have been incorporated. Finally, we will discuss approaches critical to the neoliberal model, like the 'right to the city' approach.

In the last module we will first study current policy approaches in different areas of housing and social policies, including:

▪ Housing policies: human settlement planning, public housing, informal settlement upgrading and resettlement policies;

▪ Financial services: housing finance and micro finance for housing and income generating activities;

▪ Social policies: empowerment, civil society participation and the role of social capital in development.

After these 3 modules the participants work around a case study in Rotterdam in order to research and experience some of the policy approaches in housing and social policies studied in the previous sections. We will look at some useful methodologies and techniques for conducting housing and social research at the neighbourhood level. Participants will have first-hand experience on how theory translates into practice, by looking and expanding their knowledge on relevant issues such as social housing plans, neighbourhood regeneration (physical and socio-economic components), gentrification and resettlement.

Housing research

Within the Housing specialisation we are involved in different type of research. We conduct field and desk research for organisations like UN-Habitat, the EU, World Bank, OSCE and Nuffic. Also in the housing and livelihood specialisation of the MSc course we organise a research workshop to guide the participants in developing their research proposal

- **Research workshop 'Dynamic Urban Neighbourhoods'**

Within the IHS specialisation Housing and Livelihoods the research workshop 'Dynamic Urban Neighbourhoods' is part of the curriculum.

- **Research Area**

Since the 1960s, most of the cities in developing (and to some extent transitional) countries have experienced unprecedented rates of urbanization compounded with increasing poverty and slum growth. This phenomenon, also known as the urbanization of poverty, dictates to a large extent the housing problem. The housing problem has been understood as a simple equation in which a significant number of shelter units were needed to be produced in order to close 'the gap', and therefore all efforts were conceived within a centralized government structure aimed at providing finished shelter structures, an end product, a commodity with a value similar to a car or any other material asset.

Throughout the years the understanding of concepts such as housing poverty and the relationship between housing and livelihoods outcomes, especially among the urban poor, has increasingly manifested itself through policy approaches to deal with urban poverty. This translates into the importance of looking at the housing problem from a holistic standpoint. Physical, political, social, economic and environmental issues interrelate with each other to produce urban environments which should ultimately accrue to poverty reduction, quality of life and acceptance of housing outcomes by people and their quest for livelihoods. Both housing and social policies, strategies and instruments need to be designed with a clear understanding of these aspects if they are ever to efficiently address the problem of urbanization of poverty.

The combination of the theoretical underpinnings of housing and livelihoods theories and what do they mean for the creation of urban neighbourhoods are central to this research workshop. Our research focus is mostly concerned with local level processes where people's housing and livelihoods play a central role.

In this research workshop "Dynamic Urban Neighbourhoods" refer to the creation of urban environments where individuals, families and communities can thrive. The combination of the theoretical underpinnings of housing and livelihoods theories and what they mean for the creation of urban neighbourhoods are central to this research workshop. The relationship between housing, understood as more than houses, and the quest of the urban poor for livelihoods constitutes the main research topic of the research workshop. This theoretical standpoint opens up the possibility of exploring a wide variety of urban management and development issues related to urban housing and livelihoods.

Our main areas of research are neighbourhood regeneration (which include brown field development, gentrification, eviction, clearance and relocation), green field development (which includes social housing and mixed-used neighbourhood development) and informal settlement dynamics (which include integrated urban upgrading, land tenure regularization, infrastructure provision and resettlement).

The general approach to housing and social policies implies that the affected population is involved in the planning and implementation of programmes and projects through participatory processes. This with the objective to achieve a highly effective and inclusive result. However, practice shows that the reality of implementation is more complex than the theory. For example,

conflicts may arise over the expropriation and relocation of (part of) the settlement for safety and upgrading requirements. Participatory processes are seldom as inclusive as designed and elite capture may deviate the benefits of the project towards the more powerful stakeholders. Livelihoods of the poor might be disrupted exacerbating their poverty conditions. Finally, new developments and upgrading programmes and projects, however participatory, may overlook initiatives taken by the affected population themselves, thereby duplicating efforts or even posing obstacles to local livelihood strategies.

Research workshop objective:

- ▪ To understand processes of neighbourhood development (green and brown field development, slum upgrading), including policy design, implementation and impact on local initiatives and livelihoods.

Research workshop questions:

1. What type of initiatives do the urban poor (low income families, slum dwellers) take, individually or collectively, to improve the liveability of their settlement?

2. How are the urban poor involved, in theory and in practice, in the design and implementation of neighbourhood development policies, programmes and projects?

3. What is the impact of neighbourhood development programmes and projects on the local initiatives and livelihoods of the urban poor?

Focus topics of the housing academics

The core team of housing specialists at IHS consists of 4 academic staff members. In the curriculum, as well as in research we work in broader cooperation with colleagues from other specialisations within IHS, the Erasmus University but also beyond that. The following 4 topics are the key expertise areas of our 4 core staff members.

- ▪ **Zooming into the concept of resettlement**

Resettlement is a concept that is heavily studied. There is a lot of empirical evidence that shows that resettlement often increases risks, leads to more insecurity, an erosion of assets and more impoverishment. For the concept of resettlement, we have selected articles that low within three main perspectives (Dwivedi, 2002). Students will deepen their understanding of the impact of resettlement on livelihoods of the poor, different perspectives on resettlement and strategies how to reduce the negative impacts.

Literature packages have been developed focusing the on: 1. the gender impact of resettlement and the extent to which it increases vulnerability and decreases assets, 2. The concept of resettlement, presenting different perspectives. Within the debate on resettlement we can find different positions: there is the more (pragmatic) planning perspective which identifies the impoverishment risks but also tries to come up with suggestions for overcoming these risks so that it becomes an opportunity to improve livelihoods. An alternative approach to resettlement takes the rights based angle as a starting point, includes the role of full participation and consent of affected communities and tries to come up with solutions and recommendations for making resettlement an opportunity for livelihood improvement. It also emphasizes gender aspects and the rights of indigenous populations. The third approach very much questions resettlement as such and questions the right of governments and others to displace and resettle in the name of development.

- **Zooming into social housing**

The neo-liberal model as a dominant paradigm strongly advocates an 'enablement' approach for government housing policies. In most European countries, there is indeed a strong tendency for government to withdraw from their large-scale public housing interventions. Privatisation of public housing schemes has evolved from the local authority stock transfer advocated by Thatcher since the 1980's in the UK, towards further privatisation of social housing in countries like the Netherlands, Germany and Scandinavian countries were public housing used to dominate. At the other side of the spectrum, large-scale public housing programme has in fact increased in parts of the developing world. In Africa, the South African government has for over 2 decades delivered more than 2,8 million houses; in Ethiopia an ambitious 125,000 units are to be delivered yearly through public housing programmes. In Asia, Singapore, China but also to a lesser extent, Indonesia and the Philippines have large public-housing programme. Whereas in Latin America, the slow-down in urbanisation has elevated the pressure to some extents, most countries still have programmes with Brazil having one of the largest.

Public housing has devolved from the national to the local government sphere in tandem with the decentralisation efforts of the last 2 decades. The interest in achieving public housing successfully has never diminished; what success means is however re-defined. Hence, most research around public housing focus on assessments of availability of public housing, but even more so on affordability of social housing. Public housing is often found to be unaffordable or increases pressure on livelihood because of costs, but also because of location and design characteristics of these schemes. Accessibility of public housing is another topic often researched. The neo-liberal paradigm has influenced the financing model of public housing strongly and models of co-funding, government-backed mortgages and cooperative housing are gaining interest.

- **Zooming into upgrading**

The notion of eradication of slums has turned into a long-term wish rather than a short-term reality. Efforts to eradicate slums have evolved into efforts of upgrading and formalisation of informal settlements. Urban upgrading programmes have now been developed by the international agencies and national governments. There is a wide variety in the way these programmes are designed, implemented and sustained. Understanding these different processes has been researched from many dimensions: amongst which participation, planning and transformation of housing.

Other research in the field of housing

- **Post-doc research**

Linked to the research workshop living in slums a post doc research is going to start by the end of 2014 focusing on boundary spanning for community driven co-production in dealing with poverty reduction and urban regeneration. This is an international comparative research focusing on community initiatives in the field of poverty reduction and urban regeneration in the Netherlands, United Kingdom and India, including resettlement.

- **UN-Habitat: scoping paper on eviction practices**

The scoping study reviewed existing guidelines and practices on evictions, acquisition, expropriation and compensation. The research has a particular focus on how the existing guidelines have been applied in different contexts and to what effect. The paper took account of the social, economic and environmental aspects of forced evictions, acquisition, expropriation and compensation. In addition to existing guidelines, the scoping paper evaluated good/bad practices, lessons learnt and relevant instruments.

The scoping paper also makes a set of recommendations for the implementation of existing

instruments or the need for developing a new set of guidelines or instruments. Also the usefulness was evaluated as well as the need for developing generic voluntary guidelines on evictions, acquisition, expropriation and/or compensation.

- ▪ **OSCE Best Practices for Roma integration**

The OSCE commissioned IHS to conduct a study of 'best practices' for Roma integration in the Balkans. In this study the status of social housing programmes, as well as the housing conditions and opportunities for Roma populations were documented and evaluated. Although efforts are made for social housing in most of these countries, and projects are dedicated for Roma populations, there is still a lack of adequate housing for the Roma population in these countries. The issue however is not limited for housing only and success of projects seems to be related to the integrated manner in which housing and other livelihood opportunities are combined and targeted towards the Roma population.

- ▪ **Guatemala City – establishing a social housing agency**

Through the Inter-American Development Bank, IHS started to engage with the Municipality of Guatemala. In Guatemala City an ambitious social 'housing agency' called Urbanística has been established to implement the so-called Productive Housing Programme. IHS has developed several strategies and projects with Urbanística through both consultancy work and training as well as on-the-job learning through an exchange with Dutch social housing providers.

- ▪ **National Association of Social Housing (NASHO) in South Africa**

In cooperation with the NASHO, the IHS has supported the social housing sector in South Africa with training activities. The focus has been on improvement of social housing policy-making at the municipal level.

Reference

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DISCUSSION FORUM ON READER #1

The following comments have been posted by OIKONET partners in the online forum of [Reader #1](#).

KHADJRI SAYS:

DECEMBER 17, 2014 AT 3:36 PM EDIT

This is the first Reader produced by the Subnetwork Research of OIKONET. Please feel free to comment on content. Thanks.

GREGOR HERDA SAYS:

MARCH 23, 2015 AT 6:17 AM

Regarding the section on 'Affordable Housing': 'It is interesting to note that only a few attempts have been made to replicate best practices and outstanding innovations and incorporate them into mainstream architectural designs and standards (www.dwelle.co.uk, 2013).' It is unclear how the reference given here is an example of 'replication' of affordable housing practices. Also the link should be stronger between how this design makes it more affordable, otherwise this and the previous sentence do not logically connect. I would also be hesitant to call this design approach 'mainstream'.

IODUROSAIYE SAYS:

MARCH 23, 2015 AT 2:10 PM

Thank you for your observation. Please note that the intent of this article is to identify and explore existing practices or traces of contemporary housing provision in Europe today. It was therefore necessary to define contemporary housing in context, so that the scene is set for further discussion. Also, affordability here should be understood as subset to the definition of contemporary housing, which is defined in this article as: '…Against this background, contemporary housing can be defined as modern residential dwelling that meets the needs of the present occupants, while being environmentally sustainable, socially responsive and, at the same time, affordable.' It is important to note that this definition suggests that contemporary housing must do much more than being environmentally friendly and socially acceptable alone. 'Affordable' is an inevitable component in the definition of contemporary housing because there are quite a number of innovative designs (some are even built as prototypes and then demolished), that are either not affordable by an average family or are not feasible to be built on a stand-alone basis, on a small-scale and by a mainstream builder. Dwelle is one of the few design studios (the only one I know of) that offer such homes to an average family at affordable prices in the UK.

The following is an excerpt from the company's website about their homes (http://www.dwelle.co.uk/):

'A range of carefully designed buildings that are highly sustainable, fast to erect and extremely adaptable. The award winning "dwelle.ing" can achieve zero carbon status, potentially meet Passivhaus standards and if doubled-up (which can be done at a later date), will meet Lifetime Homes Standards.

The building concept responds effortlessly to the occupants' requirements, however varied. It can be personalised from the outset, but can easily change to meet individual tastes and

preferences over time. The simplicity of the system will support different internal configurations and will allow it to be easily extended, either extruded along the length, or doubled-up.

It can be a small one-bedroom home, a family home, a holiday home, an office, a classroom, a gym, or even a church!'

The reason why home designs are a replication of affordable housing practices is not just their prices, but also because they incorporate the other two elements (environmental sustainable and social responsive) of contemporary housing. For example, In the UK, you could pay as much as £350,000 for a two-bedroom home, whereas the entering level for a dwelle.ing home is £120,000.

I think a short browsing through their website will explain these better.

I hope this clarification helps to better understand the argument.

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:09 PM

The reader shows a wide variety of research on the topic of housing as conducted by all of us OIKONET members. This wide variety also shows the complexities of housing as well as the many dimensions and research domains that relate to this topic. In this sense the reader provides a 'rich' overview of current day topics in the field of housing research – yet at the same time it also illustrates that the different domains in which is housing researched view the concept of 'contemporary housing' in its own and diverse ways.

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:15 PM

Chapter 1 provides such a difference in interpretation as outlined in the comment above. In the section where it talks about People's Housing Needs it in fact refers to a period (post-war period in Europe) during which in fact housing was delivered in a rather supply-driven manner. The focus was on quality and although it responded to the housing backlog at the time, in our understanding of housing needs studies, we would certainly not refer to this period as responding to housing needs. Within the IHS we look at the dimension of housing needs, as truly understanding what is needed by people to house themselves and beyond that to sustain their livelihoods. Housing supply is informed by this understanding of housing needs (which can be assessed through broad and multi-faceted housing needs assessment. This is not a matter of agreement but rather one of different insight on how housing is perceived. Within the IHS, we make a strong connection between livelihood theory and housing – hence this topic of understanding housing needs in a broad sense is important to us.

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:18 PM

The topic of chapter 2 is not so known to me or to us professionals within the IHS. I remember however attending a conference with a brilliant presentation around community participation and co-design among Aboriginal communities in Australia. The presentation was delivered by Jane Stanley who refers to this as Gnarly Planning. http://gnarlyplanning.com/jane-stanley/.

I would suggest Jenny and Lasse to look into this.

When it comes to community participation in housing processes, we can share more research on this. Our focus is however not so much on design.

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:25 PM

Chapter 3 shows us a more 'technical' understanding of housing, more particular energy efficient housing. A very relevant topic at this time in particular for the European context. There is increasingly an interest from the developing world too in energy efficient (cooling rather than heating ;-)) and green building. At the IHS we mainly look at greening issues at the city level and not so much on the building level. Tools for cities to address climate change is a topic widely studied at IHS by other research groups. Suzana and Saso might want to follow our webinars around this:

http://www.ihs.nl/research/research_projects/sustain/

http://www.ihs.nl/news_events/news/news_detail/article/71916-sustain-e-learning-course-kickoff/

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:31 PM

Chapter 4 on gentrification as well as the excursion we had in Budapest gave us an interesting insight on this topic in the local context. IHS is located in the city of Rotterdam where gentrification is also one of the key priorities for urban development. One of the key premises on the housing agenda however has been a policy of 'mirrored supply'. Social housing organisations which have inner-city neighbourhood in which gentrification processes are stimulated have to, by performance agreement with the city council, ensure that sufficient social housing is provided in adjacent municipalities to Rotterdam, which is within the great Rijnmond area. In the case of the Netherlands, Amsterdam is a city where gentrification and reliance to the ideas of Richard Florida of attracting the creative class has indeed put pressure on low-income households. This process is however taken off so slowly in Rotterdam that gentrification has not yet really started. The municipality of Rotterdam has however expressed a concern around 'too much' gentrification (learning from cities like Amsterdam) and is now calling on the IHS and other research institutions to monitor the gentrification process and report back on alternative models.

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:36 PM

Viggo thanks for a very interesting chapter 5. It is a topic we are very aware of but which is less applicable to the developing world where housing allowances, as defined in your research, are not so widely applied. For obvious reasons.

Last year we had a MSc student from China looking into the impact of the various public land leasing systems in China on housing vs land prices. The methodology applied could also lend itself for researching the impact of housing allowances on increase in rental prices vs increase in rental supply. Would be of interest to discuss this further.

ELLEN GEURTS SAYS:

MARCH 23, 2015 AT 8:41 PM

Chapter 6 discusses public rental housing programmes as an innovation. Currently, at IHS we are working on the development of the social housing strategy for Albania. Whereas in the West and North of Europe there is a shift away from social housing for the working class, we have indeed noticed also a 'renewed' interest for public or social rental housing across South-eastern Europe and the Balkans. The programmes are of a much smaller clear as compared to what happened in Western Europe in the post-war period. A lot of lessons can be drawn from the post-war western Europe housing model for this innovation for the Balkans.

The tendency across western Europe is however the residual approach, whereby social or public housing is increasingly focused on the provision of housing for marginalized or very low-income groups – more often referred to in fact altogether as 'vulnerable' groups.

LASSE FRYK & JENNY STENBERG SAYS:

MARCH 30, 2015 AT 9:28 AM

Having read the interesting text about gentrification by Adrienne Csizmady, Gábor Csanádi, Gergely Olt and Eötvös Loránd from University Budapest, Hungary we decided to make some comments by bringing in another context. The city of Gothenburg has gone through both a rapid and a dramatic transformation from an industrial to a post-industrial city within the last forty years. This gentrification process has been effective in dividing the city into middleclass with a good wealth status connected to the core of the city and to some suburban areas going a bit south. Outside the city centre there is a rim of poorer suburban areas very effectively excluded from moving over this invisible, but very clear boarder between the two parts of the city. In areas where poverty reigns inhabitants with migrant background are the dominant group. Compared to other European countries Germany and Sweden stand out as fairly open when it comes to receiving refugees from other countries. We have expanded on this in the new Reader!

EDGARS BONDARS SAYS:

MARCH 30, 2015 AT 5:58 PM

Regarding the Chapter 1, section "Design Tendencies":

1. I found the issue about the functioning of the passive house in face of future climate change very interesting. To my mind, this is a question, which could be developed a little bit wider, or supplemented with some data, if possible.

2. It must be noted, that in contemporary terminology there are plenty of terms, related to buildings, which are designed with sustainable concepts in mind. Sometimes the same terms even have an opposite meaning, for example, in the first chapter of the reader the traditional (energy-inefficient?) building is titled as "active" building, while at the same time the term "active house" or "active building" sometimes (but not always) is being used to represent a contemporary, healthy and energy-efficient building. Keeping in mind, that the Reader, as well as Oikopedia articles will be used to support pedagogical activities, the idea came to mind, that I would like to devote a short article in one of the upcoming readers, to give a summary and analytical explanation of the terminology in this specific field, as well as to add some corresponding entries to Oikopedia later; of course, if someone finds it to be useful.

LASSE FRYK SAYS:

MARCH 31, 2015 AT 9:12 PM

Thanks Ellen for the comment on our text on chapter two, and for all the other comments. It gives an increased insight into your perspective and helps to broaden the views on housing needs. Your way of thinking around livelihood and housing we find close to our way of thinking. Shall be interesting to work further on this. I think the reference you gave us regarding our text in chapter two can be very inspiring for us to look further into.

LASSE FRYK SAYS:

MARCH 31, 2015 AT 9:39 PM

A comment on social housing. In Sweden we have said no to social housing, one of the reasons being the stigma following that kind of support. However, a growing number of people are finding it next to impossible getting in to the housing market. Youth and people with migrant background are two concerned groups. A third group coming close to this situation is pensioners that find it difficult coping with increased rent as gentrification is pushing housing prices up. In Gothenburg local government is trying supplementary rent or special low rent for some flats in a new development in the city centre. That is not social housing, but a deal made with the housing company. To be able to get the contract they had to arrange for some flats with reduced rent, paid by higher rents in the rest of the complex. Lack of dwellings in the big cities pushes prices up to very high levels which makes it impossible for people with low income to find a flat.

KHADJRI SAYS:

APRIL 19, 2015 AT 9:58 AM

Thank you all for your helpful comments which are important in sustaining our discussion on contemporary housing and the global dwelling more generally. We need also to start thinking about how these contributions would inform our next reader and more specifically which aspects of housing need further research and how Reader 2 can be used to address this. Many thanks.

KRISTIN AARLAND SAYS:

APRIL 27, 2015 AT 10:16 AM

Regarding "Affordable housing" (3.5. in chapter 3 Contemporary housing issues) I'd like to promote an integral approach to delivering affordable housing. Most countries have a wide range of housing policy instruments in place that either work through the demand side by lowering the price of housing or increasing the ability to pay for housing, or through the supply side by increasing the amount of housing available through construction subsidies. However, while most are in favour of affordable housing, it often loses in the competition over public funds to other types of public goods such as health care, elder care, education and infrastructure. However, good housing may be a premise for better outcomes in other life areas, which is the founding principle of the "housing first"- approach. In Norway, where much of the executing of housing policy is delegated to the municipality, the implied closeness between client and case worker and the potential for individual tailoring and "packaging" of housing as well as other services has proven beneficial. Although not properly researched, many municipalities report that the demand for other services decline when people are properly housed and achieve a certain stability and predictability in terms of their housing situation. This is certainly an

appealing thought that deserves to be put on the research agenda. Investing in good housing policies should therefore not be viewed as a drain on public resources, but rather a good investment that will pay off for generations to come.

VIGGO NORDVIK SAYS:

APRIL 27, 2015 AT 10:33 AM

The introductory chapter on Contemporary Housing Issues draws up many important topics, which is important for policy makers, planners and other stakeholders. I would like to stress the importance of the historical approach on demographic factors that is part of the discussion of housing needs. Across Europe, mass housing construction was a response to demographic change in the form of growing population and concentration of the population to urban regions. The latter trend was very strong in both Sweden, Finland and Norway. Nowadays we are facing different demographic transitions; for example, we have a strong pattern of ageing across Europe. We do also have a growth of the population originating from outside Europe in most European countries. Finally, as the paper says, there is also changes in family patterns. Fertility is low and family size has decreased among the native population. On the other hand we have a growing immigrant population who has a tradition for larger families and   higher   fertility. These changes and the consequences of them deserve more attention within the housing research community over the coming years. We need to know more about the consequences for total housing demand and for design for those groups that are increasing in size.

SAŠO MEDVED SAYS:

APRIL 28, 2015 AT 6:04 AM

Interesting holistic view on Contemporary Housing Issues prepared by Karim and Isaiah in subchapters 1.4. to 1.9. For those involved in engineering processes of housing, social aspects are very relevant. Engineering aspects could be more ambitious. Could we (just) "borrow" research trends from car industry? It is well developed and quite visionary. Could we define "double triangle" research goal?

First triangle is social: affordable, multi generation, social responsive. The second triangle is technological: nearly Zero Emission Building, connected building, self-living house.

VIGGO NORDVIK SAYS:

Submitted on 2015/04/27 at 10:41 am | In reply to Ellen Geurts.

Ellen, your question goes into the core of what is needed to discuss at an empirical basis when it comes to both research on and design of housing allowance systems. Do the housing allowances affect prices/rents or do they affect the housing conditions at large in the society. Another aspect that is worth going into is whether housing allowances as they are designed in most European countries have a potential to contribute towards better housing and social justice in countries where public budgets are even more limited than they are in the European countries. The answer to this question is by no means trivial.

IODUROSAIYE SAYS:

Submitted on 2015/04/27 at 4:46 pm | In reply to Ellen Geurts.

I would like to highlight the context within which people's housing needs is discussed in chapter 1. First it is important to further reiterate the historical perspective that was followed in this attempt to define contemporary housing evolution in Europe. I do appreciate that these housing needs may have been driven by supply; in fact, by the acute shortage of housing in post-war Europe, which focussed more on availability, rather than the 'actual housing needs' of the people. However, I would like to emphasise that this chapter is making an attempt to 'define' contemporary housing, which is a big ask. Contemporary housing, as was also made clear in the same chapter, lends itself to 'currency and dynamism'. It will only be true in its own time, based on what the drivers are. What is contemporary in a particular place, for a particular society, at a particular period of time may be very different.

Furthermore, while I do appreciate that contemporary housing needs in Europe today, no doubt, transcends the 'needs' of twentieth Century Europe, the same principles that governed contemporary housing provision then, still hold today. The drivers of contemporary housing today, however, are very different. The question is how topical are these drivers on the political agendas across Europe today, as they were in post-war Europe. I would say yes in case of environmental sustainability, but I am not overtly convinced when we consider issues posed by demographics, changing living patterns, including the needs of previously sparsely represented minorities, like immigrants (as has been mentioned), LGBTIs, older people living as lone-dwellers, multi-generational dwellings, older people in sheltered homes, modern forms of cohabitation, and the list goes on. These trends are further compounded by an ageing population, as these marginalised groups enter the older age group in European societies.

READER #2

CHAPTER 1: URBAN BROWNFIELD REGENERATION

Karim Hadjri & Isaiah Oluremi Durosaiye,
Grenfell-Baines Institute of Architecture, University of Central Lancashire (UCLan), UK.

Introduction

Urban regeneration is informed and driven by the causes and effects of globalization, climate change, the global economic crisis, and lifestyle changes. In Europe, there is currently a pressing demand to redevelop brownfields areas, inner-city heritage sites, post-conflict and post-disaster areas, and large-housing estates. Housing regeneration tools range from large-scale to micro-scale interventions that lead to a complete change to the physical features of neighbourhoods and the life of their residents.

In Europe 'urban regeneration' began to develop after the Second World War as a result of post-war decline and destruction. Urban regeneration is understood as urban renewal which involves physical redevelopment of deprived areas or slum clearance within urban areas, fostering investment, enhancing the quality of life of residents, and creating sustainable communities (Couch et al, 2011). Urban regeneration programmes nowadays focus on urban development with the aim to reduce or suppress urban problems and boost economic development and improve social welfare. This also highlights that communities are always the centrepiece of any urban regeneration and continue to be a major concern for all those involved in these processes (McDonald et al, 2009).

The European project CABERNET (Concerted Action on Brownfield and Economic Regeneration Network), states that brownfield regeneration involves the redevelopment of sites that:

- are derelict and underused;
- may have real or perceived contamination problems;
- are mainly in urban developed areas; and
- require intervention to bring them back to beneficial use (Oliver et al., 2005).

Despite these guidelines, there is an ambiguity in the definition, and disparity in the practical use, of the term 'brownfield regeneration' across Europe. While the Nordic countries use the term to define contaminated land remediation, the Western European countries usually associate brownfield regeneration with the redevelopment of the built environment (Oliver et al., 2005). Common to these two approaches is the need for the conservation of natural resources, which is a function of a country's level of economic development. The idea is buttressed by Osman, Frantál, Klusáček, Kunc, and Martinát (2015) who suggest that the major difference in the characteristics of brownfield regeneration between the capitalist West and the post-socialist Eastern European countries is time lag. In Western Europe, the brownfield regeneration phenomenon started in the early 1970s, whereas it was the shift from controlled to market economy that paved the way for this type of capital investment in Eastern Europe in the early 1990s.

A building that has simply reached the end of its useful life may not be fit to continue serving its original purpose, and so may need to be revamped in order to extend its service life. Upgrading and modernisation, as in energy efficiency refurbishment, may well justify the need for brownfield regeneration (Pan & Garmston, 2012). Legislative restriction against expansion into 'green areas' may make green planning permit an unattainable choice of urban developers. The urban community itself may be a deterring factor to further expansion into green areas, for cultural heritage, historical, aesthetic or even landmark reasons. All these factors would make the reclamation of unused, unwanted or wasted built and natural environments an obvious path to maintaining socio-economic equilibrium in the society. However, brownfield regeneration is

sometimes associated with reclamation of contaminated land, which may be seen by some interest groups as rekindling old industrial 'crime' (Thornton, Vanheusden, & Nathanail, 2005). The overarching goal of brownfield regeneration is not just to accomplish the ultimate status of sustainable use of scarce virgin land space for redevelopment, but for the project to be 'green' in every aspects of the reconstruction process (Moffat & Hutchings, 2007).

Brownfield regeneration in the UK

In the UK 'urban regeneration' emerged after the second world war as a result of post-war decline and destruction. Urban regeneration is understood as urban renewal which involves physical redevelopment of deprived areas or slum clearance within urban areas, fostering investment, enhancing the quality of life of residents, and creating sustainable communities (Couch et al, 2011). This normally has had a tremendous effect on society as a whole. Urban regeneration programmes nowadays focus on urban development with the aim to reduce or suppress urban problems and boost economic development and improve social welfare. This also highlights that communities are always the centre piece of any urban regeneration and continue to be a major concern for all those involved in these processes (McDonald et al, 2009).

Previous UK governments have argued that new development should have "high quality and inclusive design", brings people together therefore avoiding segregation. As a result, urban spaces are created that "respond to their local context and create or reinforce local distinctiveness" (ODPM, 2005:14-15). The target of 60 per cent of new urban development on brownfield land was achieved in many areas in England. This was partially driven by a number of funding schemes, although none of these were specifically related to brownfield sites per se, but rather to refurbishment of existing buildings. Nevertheless, developers appear to be encouraged to demolish rather than preserve and reuse, which is mainly due to all the remediation work that would be required in brownfield land. (Hadjri et al, 2008)

It is evident that the redevelopment of brownfield land is a fundamental part of the current housing development programmes in the UK. The government has put in place mechanisms and incentives to encourage the re-use of formerly developed land over the use of Greenfield land in order to meet the UK housing supply. Additionally, the development of brownfield sites makes a significant contribution to the regeneration and rejuvenation of deprived and run-down areas in the process. There are issues that lie within the brownfield development process, which are restricting the ability of developers to help the government to meet the housing demand. There are no specific 'hard' barriers, which are impeding the development of brownfield land. On the other hand, the 'soft' barriers, such as planning permission hurdles represent constraints for the developers to achieve successful development in an efficient manner. The main constraints come in the form of planning, financial, and physical site condition issues; in addition to concerns regarding ownership of brownfield land as well as technical and real or perceived difficulties. (Hadjri et al., 2008)

Additionally, urban regeneration of waterfronts in the UK during the 1980s and 1990s led most notably to conservation and reuse of historic buildings and the protection of local heritage, the provision of better infrastructure and improvement in the environmental conditions of the area (Jones, 1998). The 'Urban Renaissance' championed by the Labour Government in the 1990s was seen as a positive approach to inner city problems, but has been criticised for its 'gentrification' effects and change to public spaces (Colomb, 2007). The Urban Task Force was set up in 1998 to identify the causes of urban decline in England, and to propose solutions on how to make cities more attractive for living. The work of the task force continued along the urban renaissance concept and proposed over 100 recommendations to improve cities. Some of these were concerned with design excellence, higher densities and brownfield site redevelopment [iii]. Overall, the proposal would allow the creation of sustainable urban realms through social mix, mixed use and high densities. However, its vision of urban liveability was

criticised for promoting gentrification, and the nature of urban renewal challenges in England, particularly in relation to the differences between the north and the south-east (Atkinson, 2003).

The redevelopment of brownfield sites in urban centres can help make the best use of existing road infrastructure and public transport, electricity, water supply, sewer, and telephone. However, brownfield sites are regarded as less attractive due to substantial redevelopment costs. There is the 'extra' costs incurred when redeveloping brownfields, which vary greatly from site to site. Additional costs can be due to contamination, existing foundations or other unforeseen ground conditions, conservation and planning issues or infrastructure constraints. Hence not all brownfield sites are suitable for redevelopment since the cost of the 'abnormals' (contamination, land stability, site clearance) offset the value of potential returns making them developments that are uneconomically feasible (East of England Development Agency, 2005).

There are at least three categories of brownfield redevelopment. Category 1 represents commercially attractive sites with development costs that are sufficiently below the value of the end use therefore ensuring commercial profit to the developer. Category 2 designates the site abnormals that can reduce the required profit margin of redeveloping the site. These only achieve a breakeven situation between costs and profit, hence market interventions are required to make these sites attractive for commercial development. Category 3 represents brownfield sites that erode the profit margin, and surpass the anticipated cost of the new development, which makes the unattractive to the developer unless the government aids the redevelopment. Non-viable sites are often referred to as 'hardcore sites' - land that have been vacant for nine or more years. This is because the development constraints are more deep-seated and more expensive to resolve. (East of England Development Agency, 2005; English Partnership, 2003)

Brownfield redevelopment costs may be lower with potential to achieve high value as an end use if used for a soft end use such as open spaces or nature reserves (English Partnership, 2003). The extent of 'abnormals' generally require long-term maintenance after redevelopment, making the lifetime costs further erode end-use values. There are cases when the result can be negative which explains the private sector's lack of interest in developing these sites. In fact, the benefits for such sites are more concerned with ecological and environmental protection.

De Sousa (2000) pointed out that developers' perception of industrial brownfield development led to the assumption that this was less cost-effective than Greenfield development, and that profitability over similar Greenfield residential developments can be achieved with minor policy changes governing housing brownfield projects. Greenfield sites are often cheaper and easier to acquire and develop judged by current housing development practices (Breheny, 1997), which is primarily due to concerns over potential legal liabilities, and a lack of certainty about funding support on brownfield sites (Banister, 1998). Also there is reluctance by financial institutions to invest in unconventional hi-risk developments (Cadman and Topping, 1995). Oliver et al (2005) argued that a combination of 'sticks', through taxation on development of Greenfields and 'carrots', through financial incentives such as tax relief for brownfield development, can overcome current financial obstacles. In the UK, redevelopment of brownfield land is led largely by the private sector, and government bodies have very little direct involvement with developers. These only act as "regulators" by issuing approvals and legal permissions. There are however specific programmes to support and encourage the development of brownfield sites, which fall into four main categories: Spatial Planning, Technical Support, Financial Support, Direct Development (Denner & Lowe, 1999).

Spatial Planning

The UK current planning system restricts development on Greenfield sites, but promotes brownfield development, due to national, regional and local levels planning policies, where decisions are made on the basis of the local circumstances. Councils are also reluctant to release previously used land particularly for residential purposes (Chevin, 2000). This may be

explained by concerned potential developers caused by the complexity of the UK planning system. Redevelopment in such cases can in fact be accelerated by effective participatory planning approaches (Adams & Disberry, 2002). Allocation of new housing development on Greenfield sites is subject to the results of complex 'sequential test' (DETR, 2000), where local authorities must ensure that there are no suitable brownfield sites. In any case, local planning authorities should follow the development plan and are ultimately responsible for the assessment of planning decisions on brownfield land. (Ferber & Grimski, 2002, p.110)

Technical Support

Technical support can be both proactive and reactive. Pro-active technical support is evidenced by funding of 'best practice' research and development and offering advice to assist in the development of brownfield sites by the national government and private sector. Reactive technical support addresses factors which might hinder brownfield development. Since contamination is one of the major physical and environmental characteristics that could be an obstacle to the re-use of previously developed land, research for improvement for brownfield development is needed (Joseph Rowntree Foundation, 2001). Confidence building initiatives and measures in collaboration with the financial and property sectors are also useful. Reactive support requires programmes to build awareness of potential developers and financiers, in order to change their perception of brownfield development. Brownfield development contains a major risk due to its inherent problems discussed above. Hence help developers understand liability for contamination of land, and for reviewing the licensing process for land remediation is beneficial.

Financial Support

Grant aid or gap funding are provided as financial support by the public sector to redevelop sites and achieve the social and economic policy objectives. On the other hand, housing gap funding schemes are available to the public sector in order to support regeneration and increase housing supply. Local Authorities, Regional Development Agencies (RDAs), the Welsh Development Agency, Scottish Enterprise and agencies such as English Partnerships provide grants through this scheme for housing-led development to private developers and housing associations (English Partnerships, 2003). More recently, EU competition policy limitations have led to a reduction in government funding for private sector schemes (Ferber & Grimski, 2002). Hence approval from the EU Commission for supporting projects is required before government funding is granted therefore placing strict limitations on the support provided for private sector housing development. This is put the UK government under immense pressure, which led to the 2000 Urban White Paper which recommended that new financial measures are needed to help housing developers offset the costs of remediation, and which 'tax credit' are possible. (Ferber & Grimski, 2002)

Direct Development

In the UK direct development projects can be carried out by local authorities and public sector regeneration agencies (Ferber & Grimski, 2002, p.112), from simpler site clearance projects to fully worked up developments. The re-use of the less viable sites namely 'hardcore' sites benefit from the UK's 'Development platforms' which are particularly helpful because they provide the developer with an incentive to select sites for redevelopment. Providing support infrastructure within or near the redevelopment area would still require public sector involvement. The government also encourages new sustainable development initiatives. Test sites have been built on brownfield sites in Salford such as the Persimmon Homes. The Peabody Trust is also actively redeveloping brownfield sites in London into housing and mixed use developments.

Conclusion

This chapter reviewed the definition and practice of brownfield regeneration in Europe. It argued that brownfield regeneration is sometimes associated with reclamation of contaminated land. The overarching goal of brownfield regeneration is to ensure that the reconstruction process is sustainable in every way. The review of the UK case on brownfield regeneration revealed that the redevelopment of brownfield land is a fundamental part of the current housing development programmes. The UK government encourages the re-use of formerly developed land over the use of Greenfield land through a number of mechanisms and incentives in order to meet the UK housing supply. These programmes designed to support and encourage the development of brownfield sites are Spatial Planning, Technical Support, Financial Support, and Direct Development.

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CHAPTER 2: LOCAL URBAN HEAT ISLAND (LUHI) MITIGATION BY THE WHITENING AND GREENING OF THE SETTLEMENT'S SURFACES

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Introduction

The replacement of natural ecosystems with the building blocks of the urban environment impacts on the thermal and hydrological balance of the urban environment; especially in dense urban environments such as modern cities. The phenomenon is known as urban heat island (UHI) and accounts for the higher temperatures in cities compared to the suburban or rural areas. Recent research on UHI carried out in Europe indicated different prediction of UHI intensity from slight, around 0.1 °C, to extreme, up to 16 °C (Santamouris, 2007). Higher environmental temperatures in urban areas lead to rise of energy consumption for cooling, increase of peak electricity demand, degradation of air quality and deterioration of thermal stress on residents of urban areas (Fink, 2012, Kolokotroni, 2012, Mishra, 2013, Pantavou, 2011, Santamouris, 2014-B, Sarrat, 2006 and Sun, 2014). The most effective strategies to mitigate UHI are reducing of solar radiation absorptivity of urban environment elements – use of materials with high optical performances, green roofs, urban vegetation and shading and heat sinks. General overview of using materials with high solar reflectance and infrared emittance was presented by Santamouris (2011 and 2014-A). On the smaller scale, local urban heat island (LUHI) can be defined as difference between maximum daily outdoor air temperature in pedestrian zone inside parts of the city like settlements or city parks and boundary conditions. Niachu et al. (2008) found that in the case of greening only the buildings' envelope, the average decreasing in ambient temperature is 3.7 °C, while in greening all surfaces in street canyon, the value of mitigation increase up to 4.9 °C. Similar results were presented by Šuklje et al. (2013). Diamoudi presented research (2003), that the greening of the atrium, surrounded by buildings can mitigate the extreme daily ambient temperature by up to 0.8 °C. The study of mitigation of LUHI within city parks was presented by Vidrih and Medved (2013). They found that the cooling effect of the park with an area of 2 ha is up to -4.8 °C and concluded that city parks have great potential on reducing the urban heat islands.

Evaluation of LUHI mitigation by whitening and greening

Increasing the albedo of the urban surfaces and replacing built environment with green areas are regarded as the most effective measures for mitigation of LUHI. The efficiency of such measures greatly depends on shape of the settlement. To avoid overrating the mitigation potential urban planning should not be based only on intuition but on scientific approach as well. Computational Fluid Dynamics (CFD) methods for solving temperature, velocity, pressure and concentration 3D fields are commonly used for this purposes. In this section results of such analysis are presented for three urban settlements built inside equal outdoor space area.

Study cases

Three different shapes of urban settlements: row type, chessboard type and atrium type as presented in Figure 1 were analysed. The common for all three settlements presented in Figure 2.1 are equal area of outdoor spaces (140 x 140 m) and total living area of buildings (2156 m^2). For each of the settlement's type three ratios of building height to street width (H/W) were assumed. As the living area is equal for all analysed settlements, H/W ratio is different for each

of the settlement type (for row type H/W 0.35; 1.0; 1.75; for chessboard type H/W 0.13; 0.38; 0.65; for atrium type H/W 0.06; 0.19; 0.32). The LUHI of the reference settlements having albedo of the average modern city (0.35) was compared to LUHI in the settlements having increased albedo (0.65), green ground surface areas and fully green surface areas including facades and roofs of the buildings.
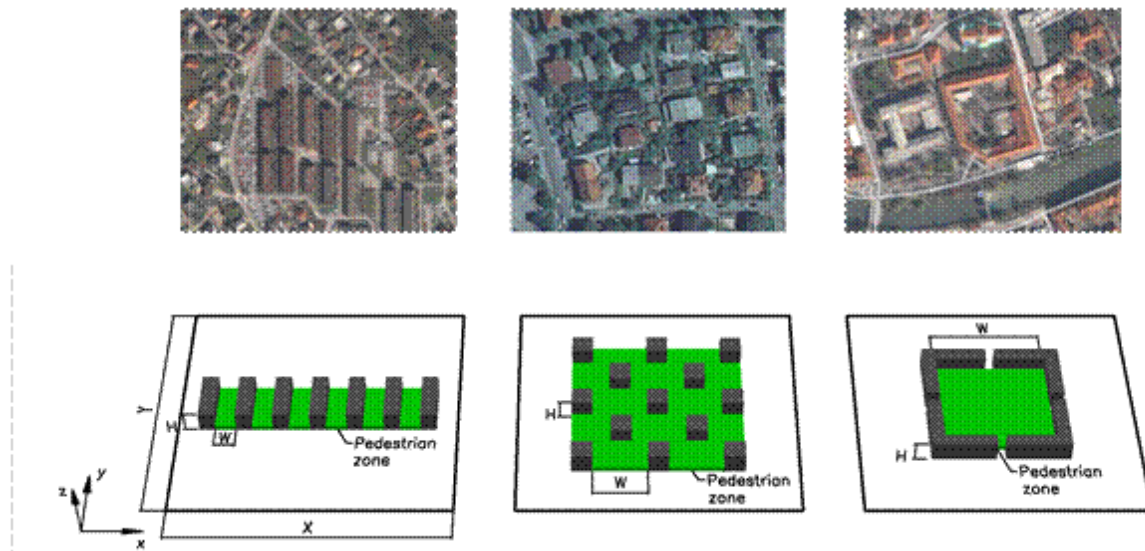

Figure 2.1: Floor plan of different settlements built inside equal outdoor space area (X=140 m, Y=140 m) with equal living floor area (2156 m2) analysed in the presented study; H represents high of the building and W width of the street corridor as considered in the study

LUHI were determinate by coupling of two numerical tools: CFD tool ANSYS (ANSYS, 2011) for determination of temperature, velocity, pressure and air humidity three dimensional field and TRNSYS computer code (TRNSYS 16, 2005) for determination of boundary conditions on surfaces of build environment. It was found out that such approach is more convenient because it speeds up CFD calculations especially because it simplifies the long-wave radiation heat transfer between settlement surfaces. Numerical procedure starts with selection of reference summer day for 24-hour numerical simulation. Data from TRY database was used for reference location (the summer day with average outdoor temperature 25.8°C, average humidity 48% and maximum solar radiation on horizontal plane 850 W/m$_2$ was selected for the site with latitude 46° north). Reference wind velocity is taken at 10 m above the ground and 0.3 exponent is assumed for the calculation of wind velocity at different heights. A separate energy balance model was developed for built surfaces, green areas on the ground and green areas on the facade and roofs of the buildings. It was assumed that all green areas have leaf area index LAI equal to 1 and sufficient soil moisture is also assumed to ensure maximum effect of natural cooling.

Results are presented in form of LUHI intensity in Figs. 2 to 4 regarding to different mitigation strategies – for the case of high albedo surfaces (Figure 2.2), for the settlements with green ground area (Figure 2.3) and for the settlements with green ground and build surfaces (Figure 2.4). In all figures LUHI of low albedo settlements are shown in order to facilitate comparison between mitigation strategies.
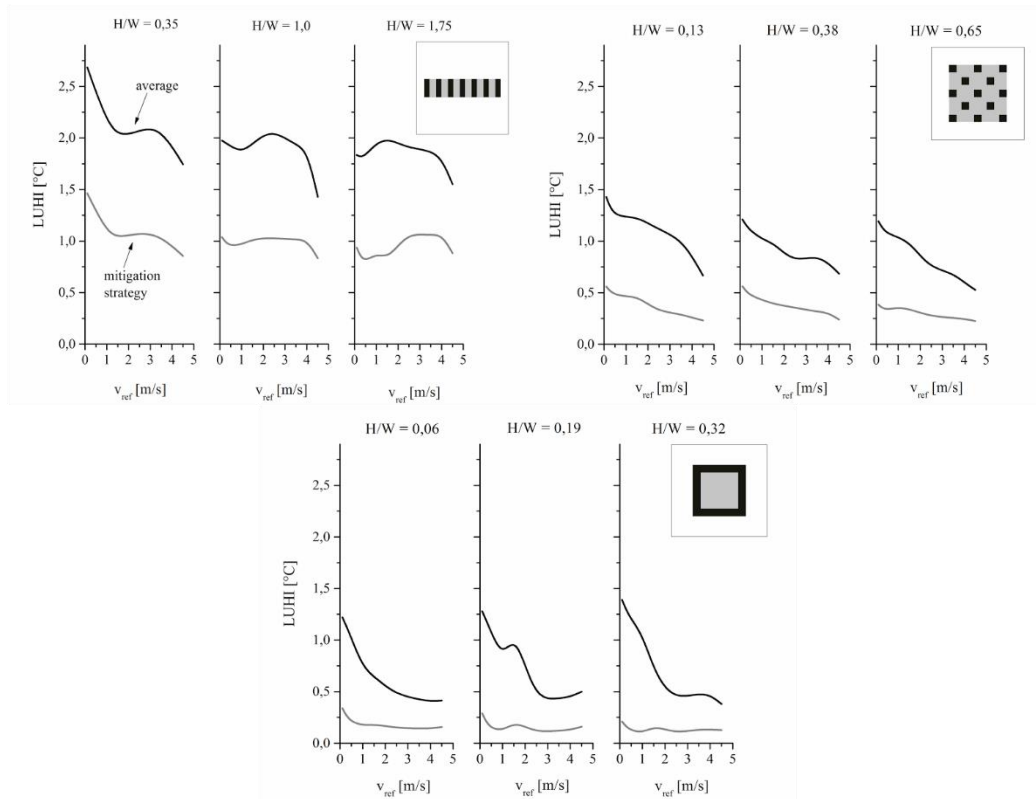
Figure 2.2: LUHI for different type of settlements and H/W values in case of increasing the albedo of all surfaces in the settlement domain from 0.35 to 0.65 (including ground and building envelope surfaces)
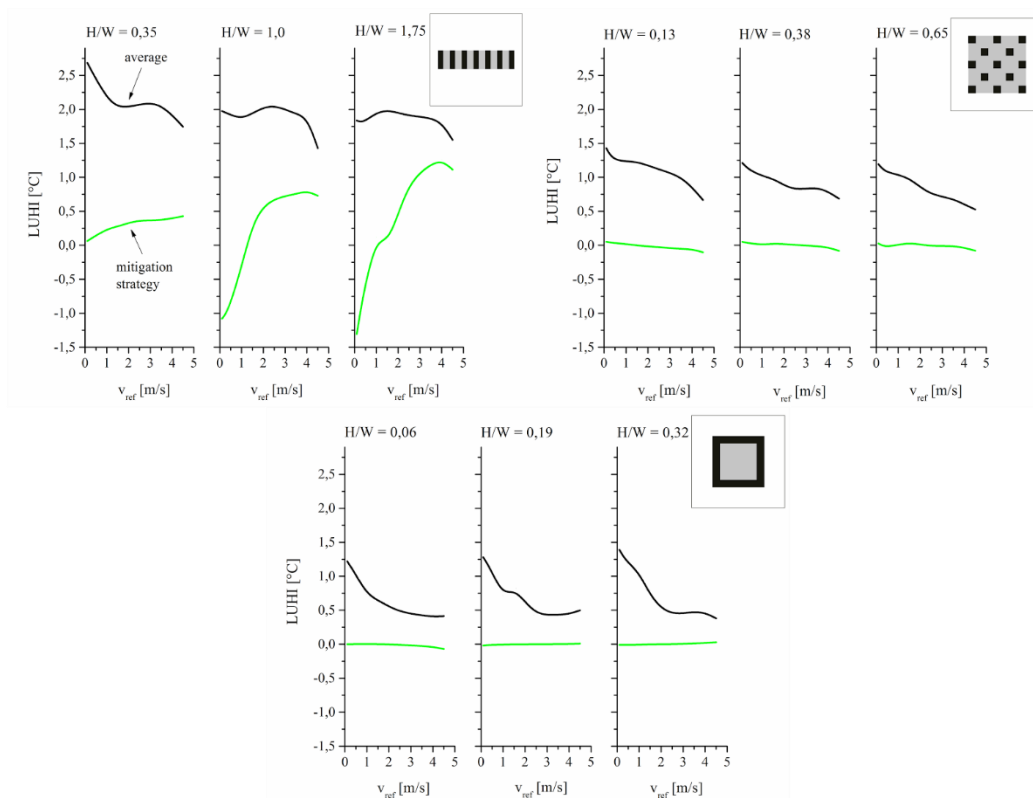

Figure 2.3: LUHI for different type of settlements and H/W values in case of greening of the ground of settlement domain
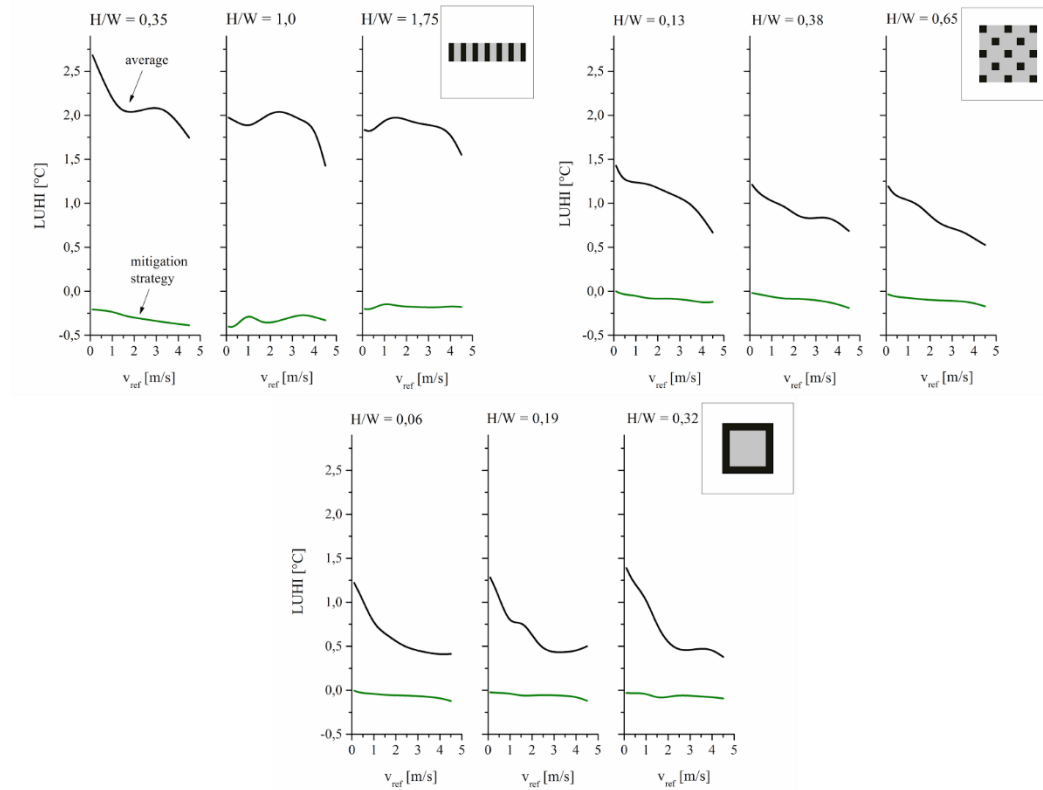
Figure 2.4: Values of LUHI for different type of settlements and H/W values in case of greening of all surfaces in settlement domain (including ground and building envelope surfaces)

From presented results it can be concluded that urban planning process has significant influence on mitigation of local urban heat island which are formed in street canyons. LUHI in common low albedo settlements (dark line in Figure 2.2, Figure 2.3 and Figure 2.4) is much lower in case of LUHI is reduced from 2.5 K to 1 K in atrium type of settlement. H/W ratio has significant influence on LUHI only in case of low reference wind velocity ($< 1,5$ m/s measured on the settlement domain boundary). LUHI intensity in high albedo settlements (Figure 2.2) are significantly lower, but noticed regardless of the type of the settlement. Nevertheless, LUHI is as low as 0.25°C in case of atrium type settlements. As in the previous case, reference wind velocity has minor influence on ULHI intensity if velocity is above 1.5 m/s. It was found out that greening of ground of settlement domain (Figure 2.3) is very effective LUHI mitigation strategy in chess and atrium type of settlements because LUHI is almost eliminated. Even higher influence of the green ground areas can be noticed in case of high rise buildings and low wind speed conditions in row type settlements. In this case green ground areas have cooling potential. From the Figure 2.4 it can be seen that all green settlements have cooling potential regardless of the type as LUHI is negative for all analysed cases. No significant influence of street canyon height to width H/W ratio or reference wind velocity was found leading to conclusion that results can be treated as general roles.

Conclusion

As settlements are core structures of the cities and LUHI as shown in the study could be intense, the mitigation of LUHI has to be taken into consideration in frame of urban as well as global climate change mitigation.

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Chapter 3: Post-conflict regeneration in the historic centre of Nicosia: global challenges and local initiatives

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The Challenge of Change: global patterns, social change and transformation

As the 21st century unfolds, an increasing majority of the world's population will live in cities. People are drawn to cities as centres of economic activity, innovation, and opportunities for a better life. However, cities are complex entities, which are constantly changing in terms of their built form, their social and demographic make-up, their street network and public spaces as well as the way in which they are used and lived by their population. Multiple, even abrupt changes that cities face today due to globalization, massive internal flows of labour and migration, climate change, economic fluctuations, and terrorism pose challenges of increasing complexity.

An alarming rapid transformation is taking place around the world affecting the majority of cities and their citizens globally, with impacts on the economy, the environment and communities. These impacts are affecting people differently, and are most devastating to those already facing disadvantageous situations within society. The recent patterns of urban segregation and exclusion in cities are discussed in the context of globalization effects, changing forms of production, declining welfare, changing power relations and developing technology (Marcuse & van Kempen, 2000:1), which relates to a more general discussion of societal transformations. Urban social patterns are changing at an increased pace affected by societal and global transformational forces; social changes relate to respective spatial changes such as service-adapted spatial patterns versus manufacturing-based patterns, and central and edge city patterns versus peripheral and traditional ones (ibid). This shows that cities of today are becoming "radically altered" in the sense of their scales, scope and complexity (Ibid.) with respective implications for housing design and supply.

So, while cities are indeed hubs for innovations and investments that may expand opportunities for human wellbeing they need to confront such multiple challenges such as social breakdown, physical collapse or economic deprivation, especially in inner city areas. Mediterranean cities for example are predominantly urban with historic centres experiencing spatial, social and economic deprivation due to suburbanization, political crises, poor infrastructure and lack of resources. Poor housing supply, physical degradation, ageing of the remaining population, large concentrations of ethnic minorities, unemployment and loss of economic activities are often problems faced by such areas.

Urban municipal authorities and policy makers are called to respond to such rapid and simultaneous changes in new and often innovative ways and initiatives. Many of these differ in geographic scale - home, neighbourhood, inner-city and suburbs– and are often criticized for a lack a unifying framework for assessment and intervention. Initial efforts in the 1980s for example, addressed urban problems of historic centres focusing either on the physical or on the economic aspect (Petridou 2003) and have been criticized as being targeted in ad hoc projects without any overall strategic vision and with little consideration on the priorities of the local communities.

Within this framework, urban regeneration approaches appear prominent in addressing such problems and in planning for change, being primarily concerned with the upgrading and reorganization of inner city centres, former industrial areas or housing areas facing periods of decline due to major short- or long-term economic problems, deindustrialization, demographic changes, underinvestment, racial or social tensions, physical deterioration, and physical changes to urban areas.

Planning for change- Urban regeneration projects

Urban deprivation has initially been addressed through economic and planning policies geared towards physical and economic renewal and revitalization of local areas. Recognition that successful regeneration should also incorporate social and environmental policies resulted in a shift from urban renewal and revitalization techniques to a comprehensive urban regeneration approach (Couch 1990). Such a definition of urban regeneration states that it is a comprehensive and integrated vision and action to address urban problems through a lasting improvement in the economic, physical, social and environmental conditions of an area, with a strong emphasis on place-based approaches that links the physical transformation of the built environment with the social transformation of local residents. The outputs of the urban regeneration process can thus be grouped under five headings; neighbourhood strategies, training and education, physical improvements, economic development and environmental action (Roberts, 2000).

The spatial scale of urban regeneration programs and projects vary from local area-based approaches to broad national policies. Different kinds of problems need to be dealt in different spatial levels. Likewise, each policy level should be considered, giving appropriate acknowledgement to other layers of policy both below and above while working on a specific scale. Further challenges are linked to tensions between top-down technical and managerial approaches to urban regeneration and bottom-up or grassroots environmental needs, expectations and initiatives. It is widely accepted that in democratic societies urban regeneration processes should adopt governance approaches that involve multiple stakeholders including residents and other stakeholders, stimulate local economies and prevent displacing problems from one area to another (Roberts and Sykes, 2000). The local authorities must have the power to play a vital role in the regeneration process since they have knowledge of the particular circumstances of their areas and they can act as catalysts and bring together other partners, including housing associations, community groups and the private sector.

Urban regeneration projects and research also need to engage with issues of social cohesion, housing supply, affordability, and the engagement of different groups in the process alongside infrastructure investments such as new roads and public transport, public realm improvements, the provision of building land or properties and refurbishment of existing buildings including housing developments. Possible impacts of housing regeneration strategies in relation to quantity, quality and context of housing growth and the respective demand on local communities are also important concerns.

The need to tackle the interrelated aspects of deprivation in a holistic way, by adopting a comprehensive regeneration approach which includes not only physical and economic aspects but also the social issues of safety, employment, social services, health, training etc. should gradually be acknowledged.

Nowadays there are commonly accepted best practices which do attempt to adopt an integrated and holistic urban regeneration approach through the identification of both the global but also the specific to each case local factors that may have caused deprivation and the understanding of local needs and aspirations. The development of such an approach is a major challenge to authorities, urban designers and relevant stakeholders. Urban regeneration in post conflicts cities such as Nicosia is an even greater challenge.

This article explores housing regeneration projects in the historic centre of Nicosia which attempt to revitalize the deprived areas of the inner city, rebuild physical infrastructure, manage negotiations between the two different/divided parts of the city through the building of commonly accepted institutions, and direct local and external resources towards the real needs of all citizens (Petridou 2007).

Nicosia: Planning for a divided city

Nicosia's urban development and social characteristics

Nicosia has been the capital of Cyprus since the 9th century AD and remains the largest city and the political and administrative centre of the island. Originally the city remained self-contained within Venetian walls until the 1930s when wealthy Greek residents moved to the south of the old town due to public health reasons as by the 1930s the population had grown rapidly causing overcrowding and putting strain on the infrastructure. The post war and post-independence periods saw rapid urban growth in the city where the two ethnic populations that inhabited Nicosia already tended to live in separate areas (the Turkish Cypriots in the northern side of the town and the Greek Cypriots in the southern side).

The city is currently divided east-west by a buffer zone implemented by the United Nations following the 1974 Turkish invasion of Northern Cyprus which led to the complete separation of the two major ethnic groups on the island. The southern side of the city is administered by the Nicosia Municipality, while the northern side by the Turkish Municipality of Nicosia – the two have long cooperated not only to maintain the common infrastructure of the city such as the sewerage system but also to develop a planning view of Nicosia as a whole with a first masterplan prepared in 1979, though this was not enacted until 2001.
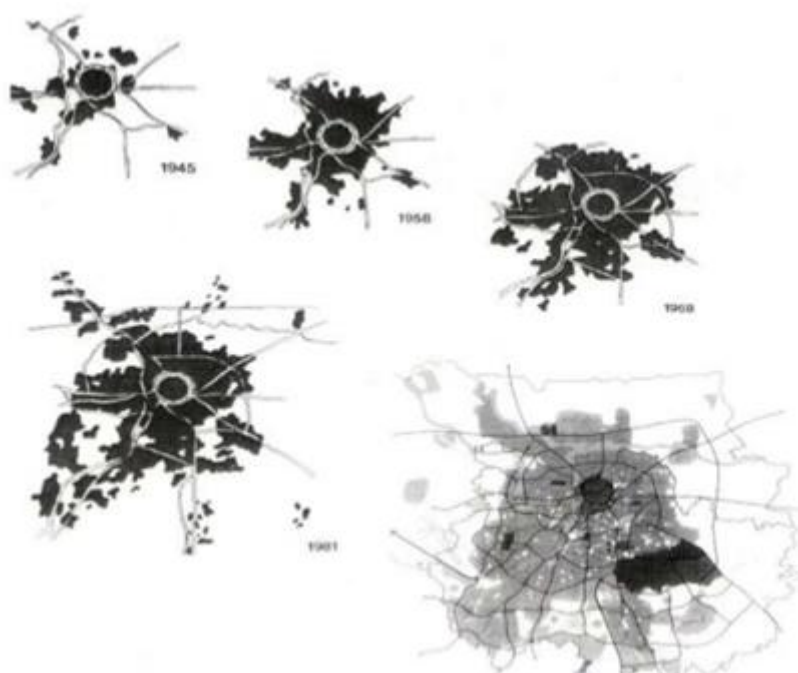
Figure 3.1: Nicosia's urban growth (Source: Nicosia Local plan 2003)

The urban structure of Nicosia can be categorized into four parts:

1. The walled city, which is the historical core and, despite the decline following the division, still retains a mix of commercial, service, residential and cultural uses, as well as light industries, especially in workshops along the buffer area. Much of the poorer and immigrant population live in this area, although some investment by

wealthier classes in renovated residential historical property has taken place in recent years.

2. The buffer zone which cuts across the walled city as well the modern residential areas to the east and west of the historical core.

3. Two core business areas, one in the north located just outside Kyrenia Gate, the other in the south centred around Makarios Avenue, but expanding to its east along and to the south of the main ring road running along the south of the old walls.

4. Residential areas built before 1974 toward the west and the east of the old town and further residential areas developed after 1974 further beyond the core business areas, which, in the south have come to encompass former villages within the urban sphere of Nicosia.

Since the post war period the southern side of Nicosia has seen further urban growth spreading out towards suburban areas as the old town declined, commercial uses changed their location and local residents moved out (Charalambous et al, 2002). Generally, the city has expanded to the north and to the south, avoiding the east-west axis along the buffer area despite the fact that before 1974 development was occurring towards the east and the west. The old town centre has faced a long decline, as it became an area at the edge of the city following the division. However this has recently been revitalized, partly thanks to the Nicosia master plan (Figure 3.2) through which regeneration of the historical residential areas of Taktakalas and Chrysaliniotissa in the south and Arabahmed in the north was funded and partly due to the revitalization of the high street and its surrounding areas following the opening of the check point on Ledras Street, making it a thoroughfare for tourists crossing from one side to the other and also recreating a level of mix for those from the two communities willing to visit the other side (Figure 3.3).

Nicosia Master Plan: urban regeneration in the historic centre

The Nicosia Master Plan, a common flexible master plan for the city, was prepared in 1978 by representatives of the two communities in an attempt to address existing problems while creating an adaptable framework that would facilitate the development of the city as a whole. This framework aimed at the regeneration of the declined city centre, its future local and regional opportunities, and the potential role that this area could assume in the case of reunification.

The masterplan acknowledged that the regeneration policy for the historic centre needed to be approached as a multidimensional process in order to effectively address the environmental, social and economic problems of the walled city (such as the decline in population, loss of commercial activities and employment, large concentrations of migrants mainly due to low rents, high number of vacant properties, absence of private investment and deterioration of its environmental quality). It is described as 'urban heritage-based regeneration', adopting cultural tourism and education as the prime movers to stimulate future residential and commercial activity.
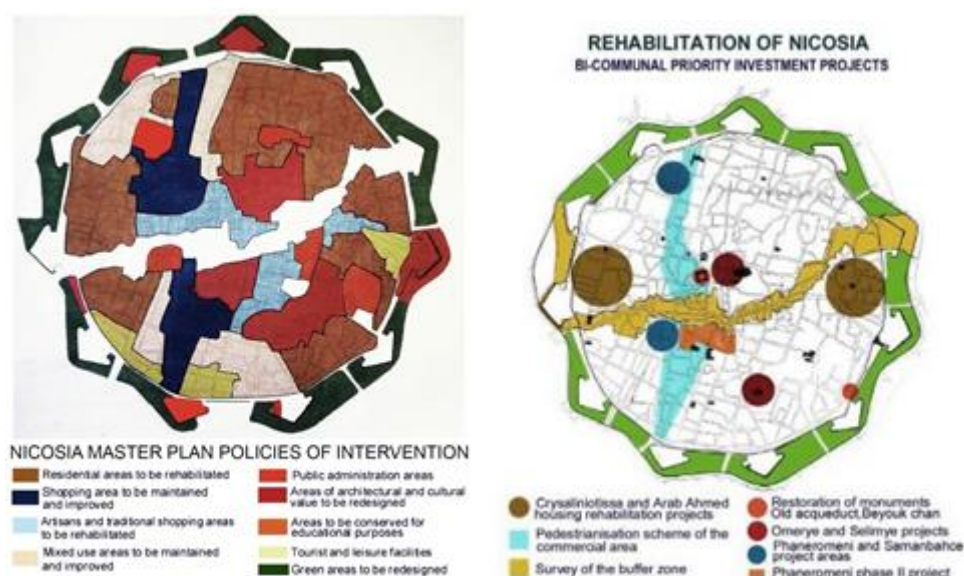
Figure 3.2: Nicosia master plan Figure 3.3: Bi-communal projects Nicosia

(Sources:
http://www.thepep.org/en/workplan/urban/documents/petridouNycosiamasterplan.pdf)

The proposal incorporated the following objectives (Petridou 2007):

a) Social objectives; rehabilitation of old residential neighbourhoods, community development and population increase.
b) Economic objectives; revitalization of the commercial core and increase of employment opportunities.
c) Architectural objectives; restoration and reuse of individual monuments and of groups of buildings, with significant architectural and environmental qualities.
d) Planning objectives; balanced distribution of mixed-use areas and the density of development in relation to the character of the historic centre, improvement of traffic circulation based on "pedestrianisation" schemes and one-way loops system in order to avoid through traffic.

During the last fifteen years a series of bi-communal projects have been implemented in selected areas on both sides of the historic centre. The objectives elaborated by the Nicosia Master Plan (NMP) for the historic centre have since been implemented through a combination of actions: through the provisions of the Local Plan, through economic incentives given to private owners by the government and through public investment projects.

Housing regeneration: empowering the neighbourhoods

Following the division of the city in two distinct areas, a process of population exchange took place between the Greek and Turkish Cypriot sides. Both sides had to face a great challenge of housing an important number of refugees while dealing at the same time with the properties that were evacuated. Housing rehabilitation and neighbourhood infrastructure was thus high in the agenda of the projects mentioned in the previous section aiming at supporting the creation of an enduring local community.; involved stakeholders supported the argument that housing "rehabilitation can only be achieved as a long-term process only if it refers to social revitalization, involving as its basis the revitalization of population structure, which is the precondition of sustained physical conservation" (Petridou 2007).

Between 1985 and 1990 two important such programs took place in the walled city: the housing programs at the areas of Chrysaliniotissa and Taht-el-Kale. The project in Chrysaliniotissa was part of a twin bi-communal pilot regeneration project (in the quarters of Arab Ahmet -northern part and Chrysaliniotissa - southern part) under the NMP with the support of the UNDP and USAID where the state acquired all the abandoned and derelict buildings and empty plots through compulsory purchase orders. The project in Taht-el-Kale was part of the national policy for the rehousing of refugees, which also provided an effective solution for the provisional usage of evacuated Turkish Cypriot-owned properties. This project was implemented in continuity and complementarity with previous EU-funded projects located in the intervention area, such as the Multifunctional and Children's Centres, comprising altogether a comprehensive and multidimensional urban development program (AEIDL 2012) .These programs are considered successful since they managed to establish a local community and ensured a balance among the income groups that live in the area[1].

Chrysaliniotissa. The area of Chrysaliniotissa was characterized by neglected status of buildings, low proportion of owner-occupiers, low-income position of both owners/occupiers and tenants, lack of community facilities, lack of economically active residents and a high proportion of aged residents.

The overall objective was to increase the available housing units and the provision of community services, public facilities and commercial uses (such as a kindergarten, artisan's workshops, students hostel, and the enhancement of public open space) in order to attract new residents, based on the belief that neighbourhoods need to comprise a mixture of activities which work to strengthen social integration and civic life (Nicosia Master Plan team). Young couples with children were housed in existing repaired traditional buildings allocated according to certain criteria to those willing to reside in the area on a long-term basis. Priority was given to families of previous owners and to people related to the neighbourhood while consideration of their needs and aspirations through their involvement was a major aspect of the process. The project gradually stimulated private investment in the restoration of many listed buildings of the area.

Figure 3.4: Chrysaliniotissa area.

Taht-el-Kale. The project was carried out by the municipality of Nicosia with ERDF support under the OP 'Sustainable development and Competitiveness 2007-2013'. The technical team of the NMP Office, consisting of architects, planners, civil engineers, quantity surveyors and financial administration officers, designed the project and are responsible for its implementation and management.

The quarter of Taht-el-Kale is located in the south-eastern part of the Venetian walled city; it is one of the traditional neighbourhoods of the walled city, situated very near the buffer zone that divides the city in two. As in the case of Chrysaliniotissa, the shrinking and ageing of the population, the lack of open public spaces and the reduction of the productive base are some of the most important problems of the area. A recent population increase, as well as a considerable share of the commercial activity, is due to the settlement of migrants in the broader area who take advantage of the low rent levels. However, in most cases, the housing conditions of migrants and low-income people are very bad. There are also major problems of traffic and accessibility mainly due to the dependency on private cars.

The proposal for the urban regeneration of the area includes housing revitalization, improvement of the physical and built environment of the neighbourhood, restoration of historic buildings and upgrading of public spaces aiming at its broader socio-economic regeneration. The significance of public space is emphasized and it is expected to have a multiplier effect, by enhancing the confidence of the private sector to invest in the area, as well as consolidating the appreciation of local residents for their neighbourhood and thus motivating their further involvement in processes of urban development.

The project mainly consists of restoration of façades and fences of buildings facing the roads; restoration of buildings of significant architectural value; redesign of public spaces and roads in order to improve pedestrian accessibility, particularly for disabled people, including lighting and urban equipment; creation of small public open spaces; rearrangement of common service infrastructure and upgrading of the sewage system and new traffic arrangements. More specifically the project aims at (AEIDL 2012):

- the preservation of the area's traditional character. In this way the project is expected to act as a catalyst for private initiatives for the rehabilitation and reuse of abandoned buildings.
- the creation of important landmarks of city-wide appeal by redesigning open public spaces (which are very limited in the area) in order to improve the quality of life and strengthen the sense of community and neighbourhood for local residents;
- the future development of the area as an important and lively regenerated urban centre in connection with adjacent neighbourhoods and other important social and cultural spaces which are also part of the overall plan for the revitalisation of the walled city;
- mobilisation of private investment and initiatives for the development of new economic activities, especially third sector initiatives relating to culture and leisure (youth leisure activities, small enterprises compatible with the main residential use of the area, creative sector activities etc.), while also providing new employment opportunities;
- attracting new residents (especially young couples) and economically active social groups, as well as visitors and leisure and touristic activities.
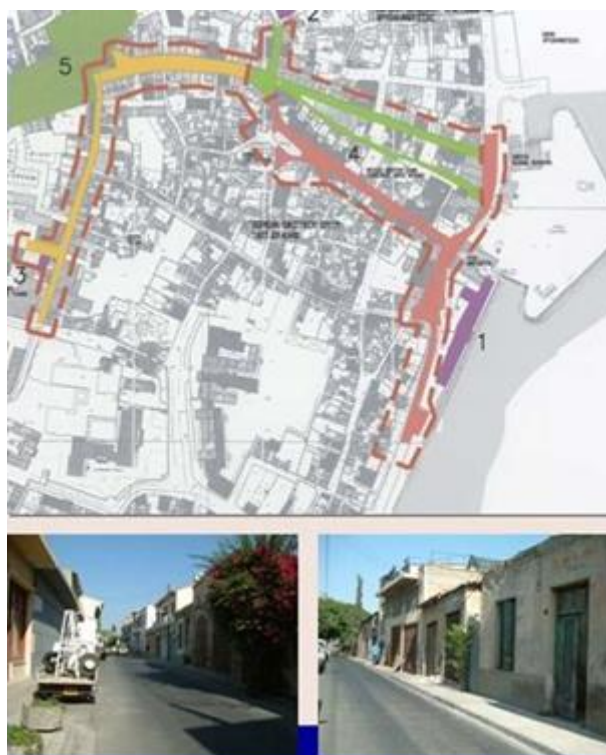
Figure 3.5: The proposal for the urban regeneration of Taht-el-Kale

(Source: http://www.nicosia.org.cy/el-GR/municipality/projects/under-construction/47963/)

Challenges and future impact

Within the framework of urban regeneration as a comprehensive and integrated vision and action which can address urban problems through a place-based approach which links the physical transformation of the built environment with the social transformation of local residents taking into consideration economic, physical, social and environmental conditions of an area, it is still early to assess the long-term effects of the projects described in the previous sections, in relation to the initial goals and final outcomes (such as attraction of private investment, young families with children, new economic activity, employment etc.). Nevertheless, discussions of relevant stakeholders and planners with the users of the areas highlight some important challenges in relation to the long-term impacts of the projects on the neighbourhoods and local residents.

In relation to the aim of the projects to attract private investment and initiatives in the areas it seems that it has indeed prompted an increased interest in rehabilitation subsidies. However, as pointed out by AEIDL there is concern that rehabilitation of façades only may lead to the deterioration of the repair works, in the case of empty dilapidated buildings or in the case of low-income owners and residents who do not have the means to complete the restoration.

One of the most important aims of the projects was the return of the past residents, the attraction of young couples with children and the establishment of new economic and third sector activities in the area. A growing interest of people wanting to buy or rent in the area has indeed been observed following the implementation of the first phases of the project and new residents are found in the areas. Also, people related to creative activities have started moving their workshops and officers back to these areas. Property values however, have since risen making the realization of the project's' aims more difficult. Finally, both existing and new residents have been questioning the diversity of uses encouraged in their neighbourhoods asking for stricter control of the new cultural and entertainment uses settling in the areas.

The Planning and Managing Authority on the other hand has acknowledged that the integrated perspective has been quite underdeveloped during the current EU programming period and that the projects funded consisted mainly of basic infrastructure works (AEIDL 2012). For the planning of the next funding period they highlight the importance of empowering even more the local level and of ensuring that the appropriate mechanisms are in place for the actual participation of citizens from the early planning stages onwards.

Nevertheless, the projects have emphasized their integrated dimension and have successfully taken advantage of co-funding possibilities. National and local planning and managing authorities have been implementing individual sub projects as part of a wider strategy for the city and have pulled together different kinds of plans and programs from different levels, subsequently enhancing social and economic impact. The latter according to the people involved, has been wider than expected and positive results are already visible.

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[1] In addition to these, a number of other projects (such as the pedestrianisation of important shopping streets) have been implemented with the aim of enhancing the attractiveness and functionality of the main commercial areas of the walled city. Furthermore, since 1991, the state's Green Line Regeneration Program has funded municipal social infrastructure projects such as youth centres, supported entrepreneurs, and grant-aided the rehabilitation of shops and offices. Since 2001, the UNDP/EU-funded Partnership for the Future program has had a special section for the Rehabilitation of Old Nicosia, and has restored and promoted important historical and cultural landmarks.

CHAPTER 4: NEIGHBOURHOOD REGENERATION, THE CASE OF OSLO

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Introduction

Regeneration can be about preservation or improvement of the quality of single housing units, or it can be about such improvements in a locally delimited area – in a neighbourhood. This short note is about area based regeneration initiatives in Oslo. Two interrelated features make this special in a European context. Firstly, the fact that owner-occupation is a dominating tenure across Oslo, also the parts that are candidates for area-based initiatives. In fact, the proportion of rented properties does not reach 50 percent in any township or neighbourhood in Oslo. Secondly, the fact that large parts of both activities and goals are not directly targeted towards physical aspects of the neighbourhoods that are 'treated'.

Obviously improving quality can be (and often are) about upgrading or maintaining the physical quality of housing units and their surroundings. As argued by e.g. Nordvik and Turner (2014), neighbourhoods form a frame of our lives - in part because of who the neighbours are, and our choices of staying in or leaving one neighbourhood for another. Using a variety of social capital arguments Hoff and Sen (2005) forcefully argue for the importance of population composition for the quality of life in a neighbourhood. Hence, neighbourhood regeneration can affect the quality of life also through its effects on composition of the population. For this reason area based policy initiatives often aim to improve or sustain the social mix of some particular neighbourhood (Galster and Friedrichs 2015). Changing social mix is sometimes thought of as fighting against segregation along either ethnic and socio-economic lines, or both.

The Programme-approach

There are many examples of areas that have entered into serious negative and self-enforcing spirals of decline, multifaceted deprivation and even accelerating crime, where public agencies initiate regeneration programmes. Often, such programmes include physical upgrading of the housing stock, in particular this is an available option if (a larger part of) the housing stock consists of public housing. There are also examples of large-scale demolition programmes, one of the most infamous examples is the demolition of the Cabrini Green blocks in Chicago (Sampson 2012). One can also find examples of such drastic interventions in Europe.

Other interventions available in the menu of possible instruments of area based regeneration programmes are e.g. (financial) incentives for private investments, improving the quality of public services (e.g. schools) and investments in improvements of public spaces (notably easing the traffic burden on vulnerable parts of cities) (Andersson and Musterd 2005). One could also argue that facilitating coordination of private investments in an area, e.g. by setting up some kind of public-private partnerships, could be part of a regeneration programme.

The Oslo context

Spanning the last fifty years one can identify three major cluster of area-based initiatives in the Norwegian capital. The first one was the City-renewal programme of the 1970 and 80s. A main target of this was to eliminate sanitary substandard housing. The programme was successful as it almost entirely, eliminated the incidence of housing units without WC and bathroom facilities. Parallel to this, many of the rehabilitated properties were also transformed from rental housing into coops (Wessel 1996).

The next two programmes were targeted towards somewhat troubled parts of Oslo was the Inner city East programme in work from 1997 to around 2005 and the Groruddalen initiative which was launched in 2007 and is expected to continue until 2017. Neither of these two programmes were initiated in order to improve physical housing qualities in isolation. Rather, they were initiated because of observed differences in a set of indicators of living conditions and a concern for socio-economic and ethnic segregation. It is, however, probably correct to say that they did not address serious problems of deprivation – the observed differences were not dramatic (Aarland, Gjestland et al. 2014).

As already indicated Groruddalen is dominated by owner-occupation, mostly in the form of cooperatively owned housing units; the aggregate homeownership rate is 81 percent. This puts some limits to the design of the programme. The programme consists of four different sub-programmes targeted towards:

1. Environmentally friendly transportation
2. Green areas, sports and culture
3. Area based intervention and local urban development
4. Childhood and adolescence, civic participation, education and inclusion

Hence, one might summarise by saying that the programme intends to increase social capital in the targeted area. At the outset, the total budget of the programme was approximately 125 million Euros.

The programme is broad and includes a number of smaller and larger activities such as activities geared towards local youths and creation of activities and arenas that foster and showcase multicultural contact and understanding. Other activities and investments include setting up local malls, upgrading parks, recreational and sports facilities and creating safer walkways by installing street lights and upgrading sidewalks, underpasses and overpasses, see (Aarland, Gjestland et al. 2014).

Concluding remarks

It is not trivial to assess whether an area based initiative such as the Groruddalen programme has been successful or not. The ambitions of programmes can often be vague and the outcomes for the area itself and for its initial inhabitants can differ. Hence, it is not self-evident which criteria should be used for assessment of the success of a programme. Candidates for indicators used in evaluations are high school completion rates, reduced (white) flight and labour market participation. Obviously, the choice among these depends on the exact goal of the programme. We would also argue that changes in home prices often could be used as an indicator. Home prices captures the relative attractiveness of housing units in the regenerated neighbourhoods, as compared to elsewhere.

Another challenge in the evaluation of an intervention is the lack of evidence to the contrary. (Imbens and Wooldridge 2009). Even if one evaluates the situation on relevant indicators before and after the intervention, one cannot observe what would have been the case without an intervention. As we argued in the introduction, sometimes an area-based intervention is the response to rapid decline. Hence, stabilisation (instead of continued decline), could in some cases be a huge success of a programme.

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CHAPTER 5: REGENERATION OF MULTI-FAMILY BUILDINGS IN LOCAL COMMUNITY OF ZAGORJE OB SAVI AND USER FEEDBACK

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Introduction

The EU-27 residential building stock has high potential for improved overall energy efficiency and reducing the greenhouse gasses emissions. It is estimated that approximately 25 billion m^2 of floor space is used in EU, 75% of which is residential. Final energy consumption increased from 400 Mtoe to 450 Mtoe in last 20 years. Building sector represents the second most energy demanding sector and cause 36% all CO_2 emissions (BPIE, 2011). Ambitious tasks regarding lowering energy consumption and CO_2 emissions were set in EPBD, especially in EPDB recast presenting the Nearly Zero Energy Buildings requirements. Despite being more difficult to fulfil these requirements comparing to the new buildings, the retrofitting of existing buildings has larger savings potential. Retrofitting faces number of engineering challenges especially in the case of multi-family buildings. Successful retrofitting of multi-family buildings depends on several other factors, such as diverse ownership, low-incomes and lack of awareness. Those barriers can be overcome by large-scale local community driven activities, including awareness campaigns and best practices presentations. Below we present the example of the campaign, technical solutions and users' responses for the case of large scale retrofitting of multi-family buildings in local community Zagorje ob Savi.

Local Community

The local community of Zagorje ob Savi is old mining community. In the year 1995, after 240 years of tradition, the coal mine was closed and, consequently, many jobs were lost. The unemployment rate is very high. The area is also one of the most polluted in Slovenia. The municipality is striving to lower energy consumption and the pollution that is caused by individual heating systems. Thirty years ago they built biomass district-heating systems. In 2007 programme of social multi-family buildings retrofitting started and until 2012 twelve multi-family buildings with 391 dwellings were energy retrofitted as part of the EU 7FP Concerto REMINING-LOWEX Project (Figure 5.1). The building-envelope, energy retrofitting covered façade thermal insulation, window replacement and, to a great extent, where it was technically feasible, thermal insulation of constructions for unheated basements and attics. The energy retrofitting also included the installation of heat-cost allocators, the installation of thermostatic valves and the installation of energy-efficient lighting in common areas (staircase, etc.) and in dwellings (energy-saving bulbs). Results of retrofitting are:

- the average U-value of the façades of the retrofitted buildings is lower than 0.23 W/m^2K, which is 18% lower than that requested according to national regulations;
- on average more than 90 % of windows have been replaced; new windows have a U-value between 1 and 1.1 W/m^2K, which is 30% lower than requested according to national regulations;
- ceilings under unheated attics were insulated with 25 cm of thermal insulation, having a U-value on average of 0.154 W/m^2K, which is 23% lower than requested according to national regulations;
- where it was technically feasible, the floors over unheated basements were thermally insulated with 10 cm of thermal insulation;

- thermostatic valves installed on heat emitters;
- heat-cost allocators installed on heat emitters;
- adjustment of the heating-water temperature in order to lower the required heat power.

Figure 5.1: Location and area of the retrofitted multi-family buildings

Results of retrofitting

The results of energy retrofitting were assessed by an analysis of the actual energy use for heating. The three-year period before retrofitting and the two heating seasons after retrofitting were analysed. The retrofitting measures were also checked using IR thermal scanning and blower-door tests. Both tests confirmed the good professional skills of craftsmen. The figure shows the average annual energy consumption for heating before and after the buildings' retrofitting. The results of the analysis show that the specific final energy used for heating decreased, on average, by 47%, from an average of 119.6 kWh/m²a before the retrofitting to an

average of 63.8 kWh/m²a after the retrofitting was completed (Figure 5.2).
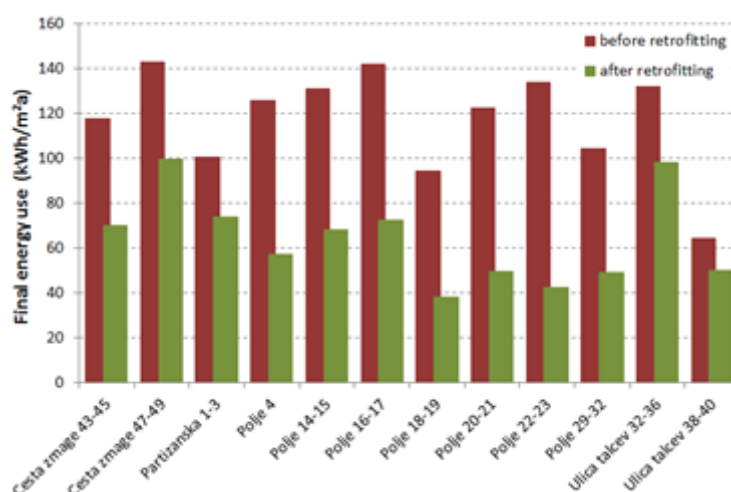
Figure 5.2: The annual specific final energy used for heating per m2 of heated area before and after energy retrofitting; three years of data were collected for the period before the retrofitting and two-to-three years of data after the retrofitting

Users' feedback

As retrofitting has a large influence on improved living comfort in the indoor environment, a survey of the residents in the retrofitted buildings was performed. The answers were compared to another group of residents living in a similar, non-retrofitted multi-family buildings in the same neighbourhood (Figure 5.3).

Figure 5.3: Location of retrofitted and non-retrofitted multi-family buildings where the survey of indoor comfort was conducted (above); Polje 16-17 before and after retrofitting (below)
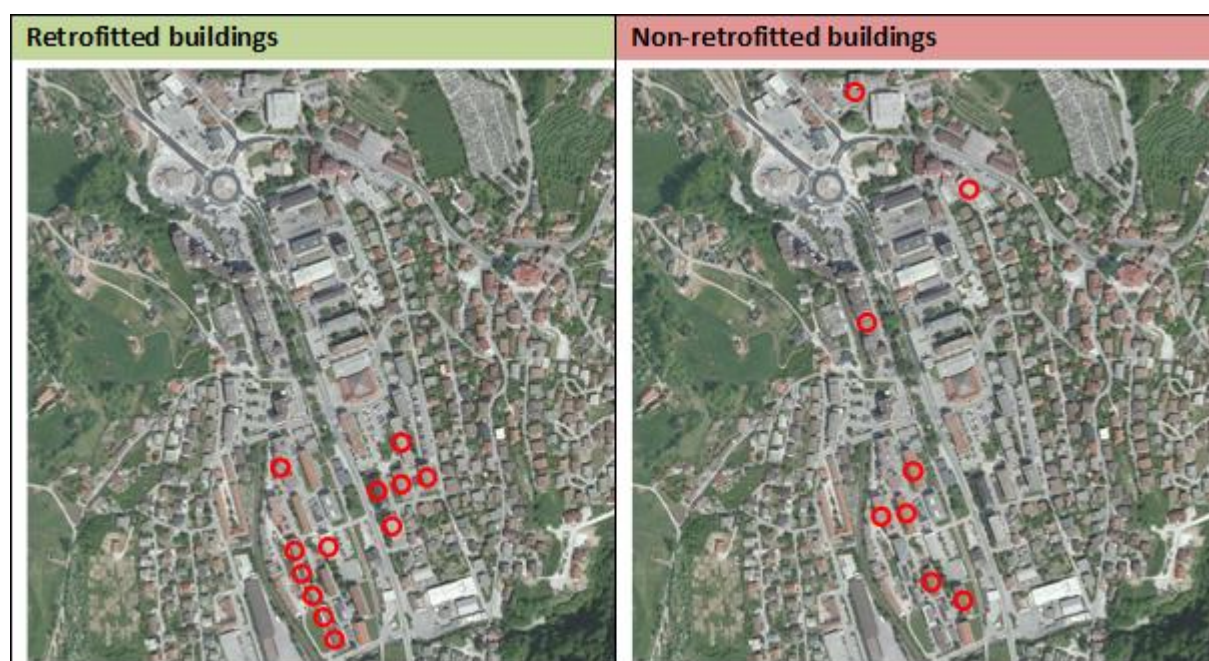
The survey was structured in such a way as to cover all areas of living comfort: thermal comfort, indoor air quality, lighting comfort and noise protection. At the end a section was added about the residents' knowledge of energy efficiency and renewable energy-source technologies, with an emphasis on local systems (biomass district heating, etc.).

Thermal comfort

The sense of thermal comfort was expressed by the residents with their subjective assessment from +3 (very satisfied) to -3 (very dissatisfied). It was found that residents are significantly more satisfied with the thermal comfort in retrofitted apartments (average rating +1.65) than with the thermal comfort in non-retrofitted apartments (average rating -0.04), which served for the comparison in the survey (Figure 5.4). In the retrofitted buildings the number of responses with +3 and +2 assessments of the thermal comfort were significantly higher than in the non-retrofitted buildings, and the evaluation of thermal comfort with -3 and -2 was significantly less frequent in the retrofitted buildings (Figure 5.5). The lower assessments of thermal comfort in the retrofitted buildings were mostly evaluated by the elderly, for whom higher temperatures are more suitable.

It can be concluded that energy retrofitting has a major impact on an improvement in living conditions.
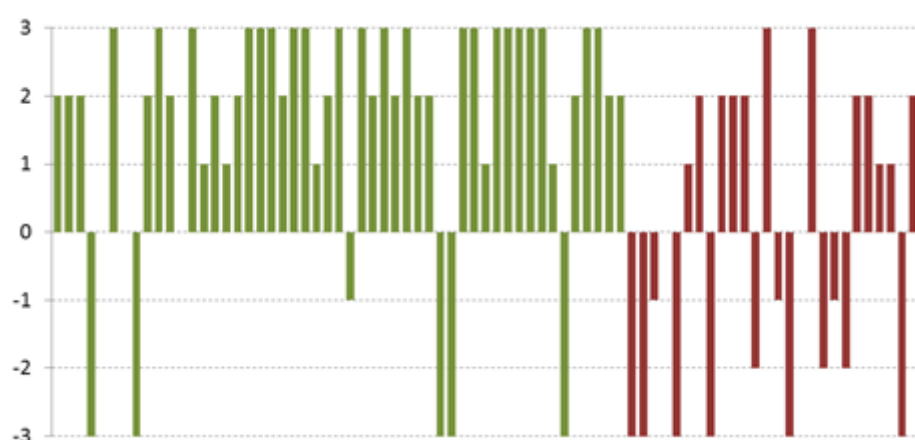

Figure 5.4: The results of the survey of thermal comfort (retrofitted buildings – green, non-retrofitted buildings – red); scale from +3 "very satisfied" to -3 "very dissatisfied"
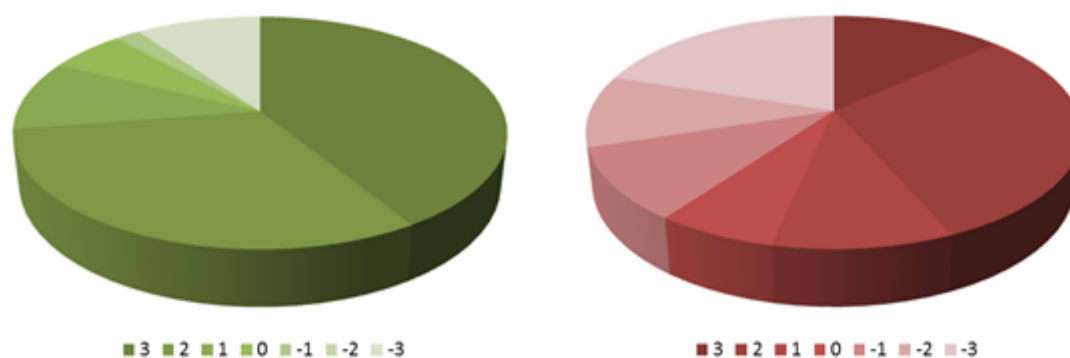
Figure 5.5: Thermal comfort assessments share in retrofitted (left) and in non-retrofitted buildings (right)

The thermal comfort assessment was mainly made according to the heating of buildings, but the difference in thermal comfort in retrofitted and non-retrofitted buildings also reflects in the summer period. In the winter period, in the retrofitted buildings, the dominant thermal comfort ratings are neutral, pleasantly warm and warm, while in the non-retrofitted buildings the dominant ratings are very cold and cold. In the summer period the dominant ratings in the retrofitted buildings are pleasantly warm, neutral and pleasantly cool, and in the non-retrofitted buildings warm and hot (Figure 5.6). This confirms that the energy retrofitting also has a positive impact on the thermal comfort in the summer.
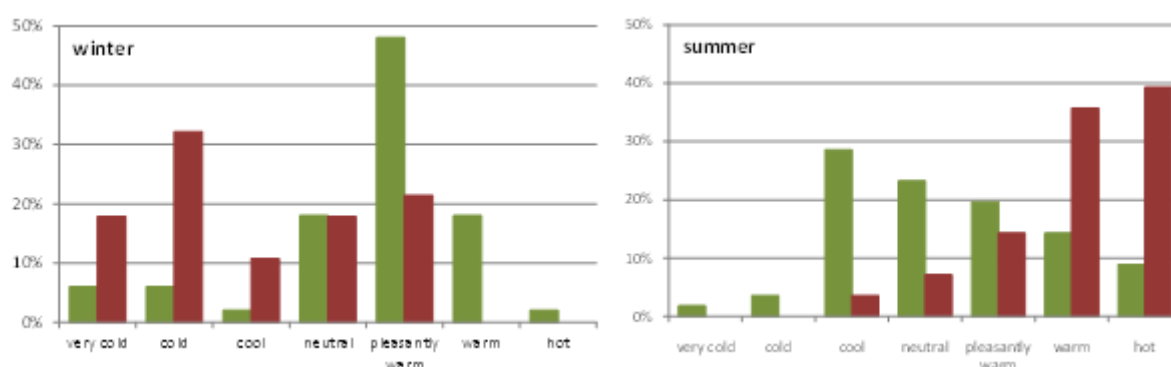
Figure 5. 6: Thermal retrofitting measures have a great influence on the summer thermal comfort as well (retrofitted buildings – green, non-retrofitted buildings – red)

Although more than 60% of the residents in retrofitted buildings assessed the thermal comfort as good, there are a relatively large number of residents who, during the winter, feel the draft and/or the effect of cold surfaces (16% of both), especially when it is cloudy (Figure 5.7). The analysis showed that those are mostly the residents that live in multi-family buildings, whose envelope was not completely insulated (for example: dwellings in the ground and upper floor of Polje 15 and Polje 16), indicating the importance of a comprehensive buildings' envelope retrofitting.

During the summer the residents that live in non-retrofitted buildings feel thermal discomfort in the afternoons during sunny weather. It is interesting that the residents of the retrofitted buildings assess the high air humidity as the reason for the discomfort, as a result of the replacement of windows that are significantly tighter than the old ones.

Figure 5.7: Assessment of feeling too cold during the winter and too warm during the summer (retrofitted buildings – green, non-retrofitted buildings – red)

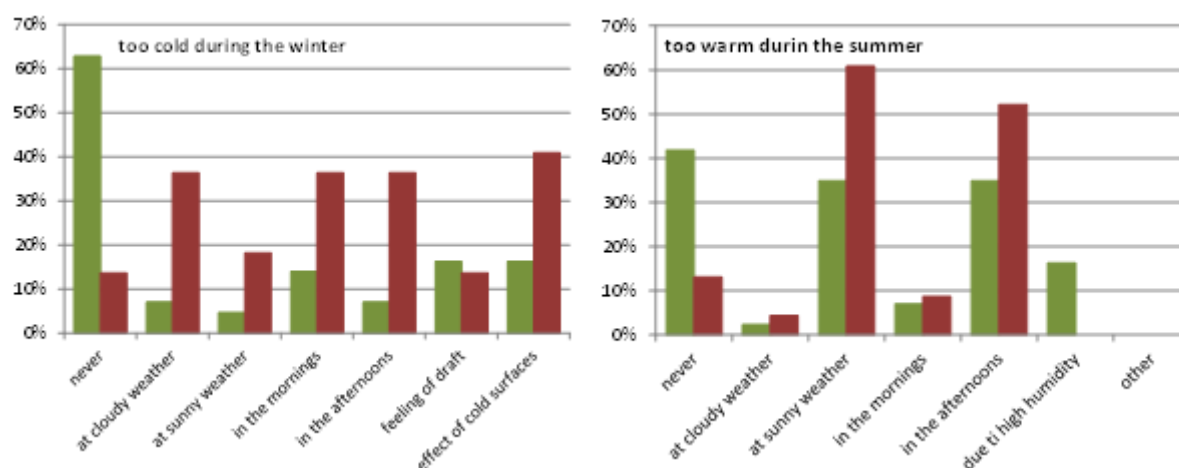Based on the survey results, it can be concluded that energy retrofitting also affects the thermal comfort of living. But it has to be comprehensive, any inconsistency is "punished" with a lower assessment of comfort.

Indoor air quality

New windows are air-tight, and that potentially can also cause a worse indoor air quality. This can be seen from the survey results in this case as well. Nevertheless, the sensed air quality was on average better in the retrofitted buildings. It can be concluded that a lower condensation risk on thermally insulated constructions is the reason for that.

To assess the perception of indoor air quality, the same evaluation criteria were used as for the evaluation of thermal comfort (from +3 (air quality is very good, the air is fresh) to -3 (air quality is poor, the air is musty, I perceive odours)). Figure 8 shows the responses of the residents. The share of positive assessments (+1 to +3) in both groups of buildings, retrofitted and non-retrofitted, is over 75% (Figure 5.9). The average assessment from the residents that live in retrofitted and non-retrofitted buildings are practically the same (1.13 and 1.21), which is surprising given the fact that buildings are not mechanically ventilated. The tighter envelope of the retrofitted buildings can be seen from the negative assessments, of which almost none were received from the residents that live in the non-retrofitted buildings.
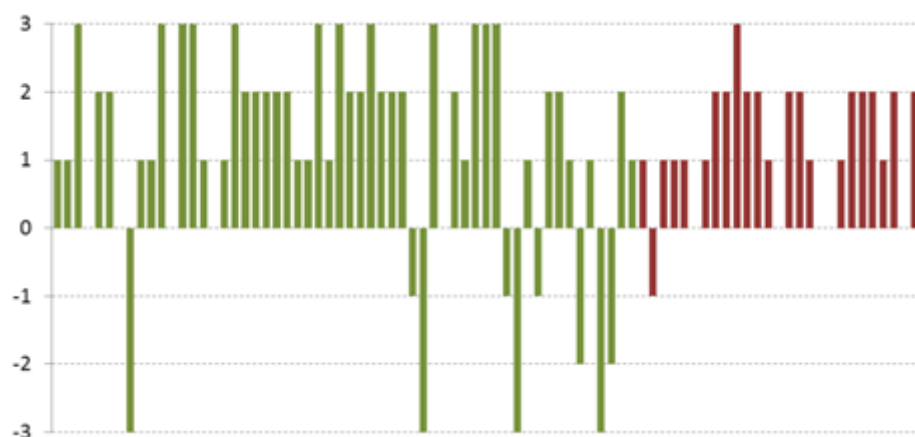

Figure 5.8: The results of the survey of indoor air quality (retrofitted buildings – green, non-retrofitted buildings – red); scale from +3 "the air is fresh" to -3 "I perceive odours"
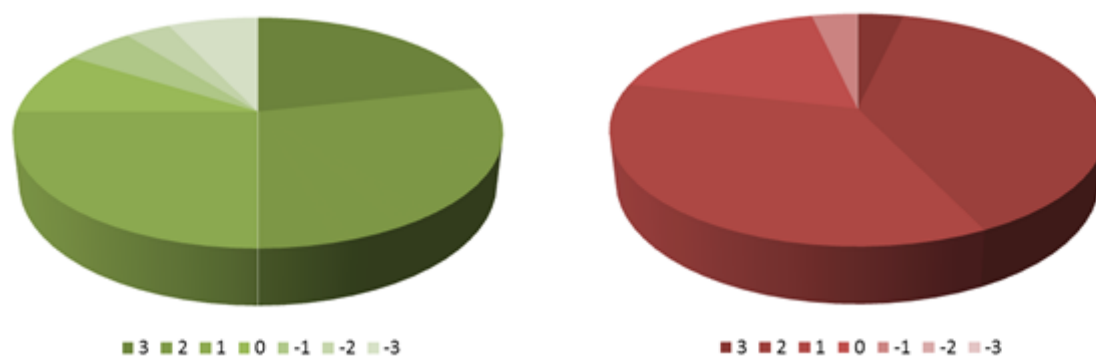
Figure 5.9: Indoor air-quality assessments share in retrofitted (left) and in non-retrofitted buildings (right)

Lighting comfort

The lighting-comfort assessment is based on two criteria, adequate duration of the solar radiation and the natural illuminance. In Figure 10 the residents' assessments of the lighting comfort are shown (from +3 (solar radiation of the dwelling seems appropriate) to -3 (the duration of the solar radiation of the dwelling is too short). The assessments are relatively high, indicating the correct urban design of the settlement. The average assessment of the solar-radiation duration from the residents that live in retrofitted buildings is 2.0, and from the residents living in non-retrofitted buildings it is 1.43. The slightly lower assessment from the residents of the non-retrofitted buildings may be subjective, due to the lower general satisfaction with the living comfort. It cannot be explained based on the negative assessment (-2 and -3), but it can result from the shading of windows in the lower floors from the surrounding trees.
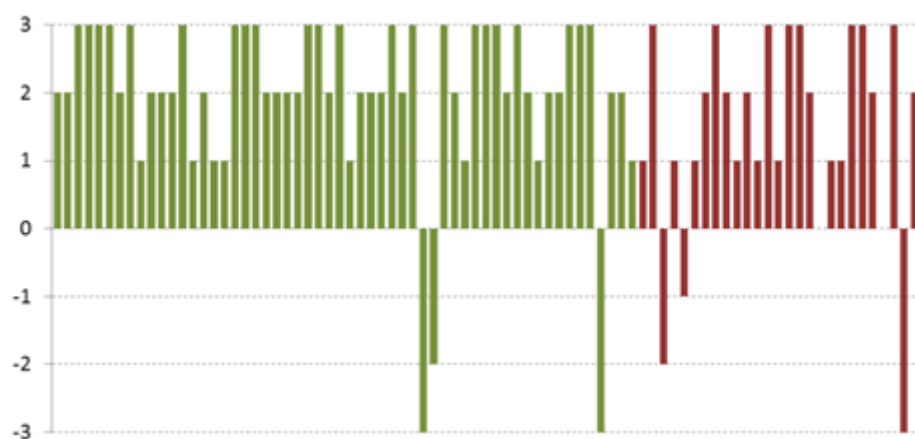
Figure 5.10: The results of the survey of adequate solar radiation (retrofitted buildings – green, non-retrofitted buildings – red)

The assessment of the natural illuminance of dwellings (Figure 5.11) is consistent with the assessment of the solar-radiation duration, perhaps even a little better. The average assessment of the natural illuminance from the residents living in the retrofitted buildings is 2.35, and from the residents living in the non-retrofitted buildings is 1.82. The same conclusion as from the assessment of solar radiation duration can also be drawn for the difference in the assessment of the natural illuminance of the dwellings.
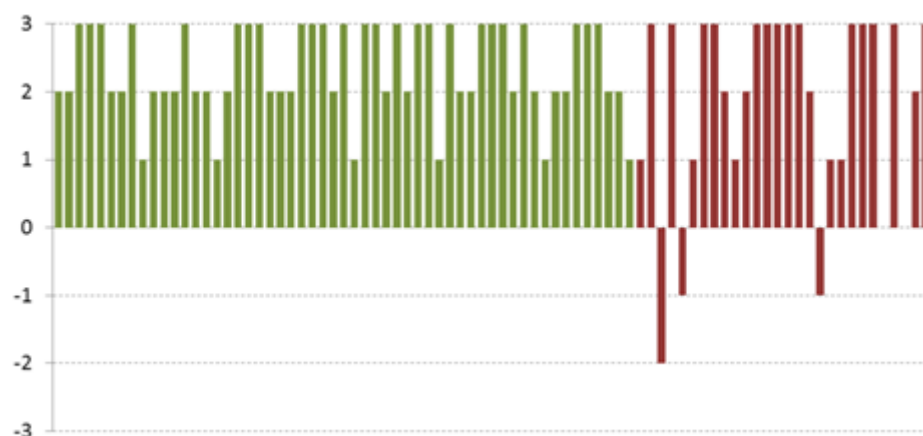
Figure 5.11: The results of the survey of natural illuminance of dwellings (retrofitted buildings – green, non-retrofitted buildings – red)

The residents are well aware of the energy-efficiency measures involved in lighting, especially in the use of energy-efficient lamps. Those are used by 88% of the residents living in retrofitted and by 96% of the residents living in non-retrofitted buildings. This confirms the high motivation of the residents in both groups of buildings for energy efficiency, which in the future will facilitate the implementation of energy-efficiency measures on the not-yet-retrofitted buildings' envelopes.

As for the living comfort, the illuminance of the buildings' surroundings and the energy efficiency of the public lighting for the local community are also important, we also asked residents about a subjective assessment of the outdoor illuminance after the street lamps were replaced. Most residents (> 75%), irrespective of the group of buildings they live in, assessed the outdoor illuminance as better due to the reduced glare of the new lamps.

Noise protection

The second major advantage of air-tight windows is the improved noise insulation. This is also evident from the survey results in this case.

Figure 5.12: The results of the survey of noise comfort (retrofitted buildings – green, non-retrofitted buildings – red); scale from +3 "without annoying street noise" to -3 "street noise is very annoying"

Only a quarter of the residents that live in the retrofitted buildings and a third of the residents that live in the non-retrofitted buildings do not perceive any disturbing noise (Figure 5.13). The better quality of the joinery significantly affects the lower noise transmission from the environment. On the other hand, when naturally ventilating buildings through open windows, it causes higher noise pollution, which is disturbing for almost half of the residents of the retrofitted buildings. In the non-retrofitted buildings, the share of residents that observe disturbing noise from the outside is only 1/3, despite the non-tight windows. The noise from next-door rooms is the most common cause of disturbing noise in the non-retrofitted buildings. In both groups of buildings, the residents assess that the most disturbing is the noise transmitted through the ventilation shafts. In some cases, the residents already effectively reduced noise transmission from the staircase by replacing the front door.
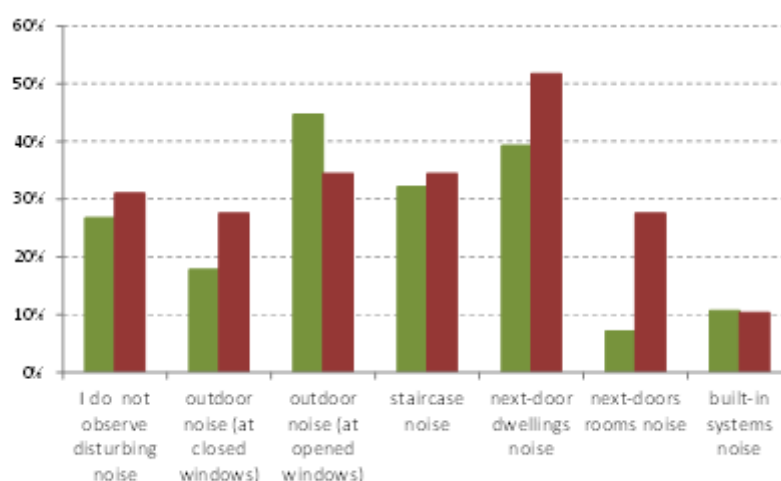
Figure 5.13: Review of the responses on the main sources of disturbing noise

Overview

The results of the survey are summarized in the comparative chart of the common-parameters assessment of living comfort (Figure 5.14). It is clear that the energy retrofitting of buildings significantly affects the perceived quality of the thermal comfort. The better tightness of the joinery, which is part of the energy retrofitting, also affects the better municipal noise protection. A thorough renovation of the buildings that would not only include the energy retrofitting of the building envelopes could also improve both air quality and noise protection.
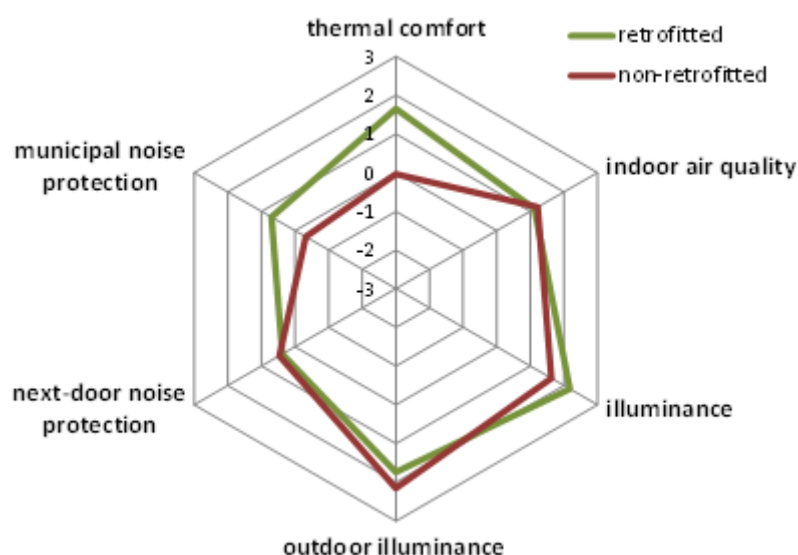
Figure 5.14: Average assessments of the living-comfort parameters of the residents living in 63 retrofitted and 29 non-retrofitted dwellings in multi-family buildings in the city centre of Zagorje ob Savi

Conclusion

The common retrofitting measures implemented in the presented examples of retrofitted multi-family buildings significantly reduce the final energy demand for heating. On average, the heat demand was reduced by 47%, and in the best case up to 70%. In general, retrofitting improves the energy class of the multi-family buildings from E to C class. The results of the survey among the residents in the retrofitted and not-retrofitted buildings show that the retrofitting must be presented as a process of improving of indoor living comfort, with improved thermal indoor comfort and noise protection being the most noticed effects of retrofitting.

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CHAPTER 6: ROLE OF PARTICIPATION IN MANAGEMENT OF PRIVATIZED HOUSING

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Introduction

Over the last decades the sale of public housing stock has been a major aspect of housing reforms across Europe. In the Northern and Western European countries this has been the result of a shift in social housing policies, whereby the social housing stock was to be reduced and social housing was sold off to either tenants or non-public organisations or privatisation of public bodies. Across Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) large-scale privatisation of housing stock took place in far more radically way to reform the housing markets after the collapse of communism. This large-scale privatisation has created new challenges with regard to housing management of privatised stock (Gruis et al., 2009).

In this chapter we discuss this challenge of privatised housing management across CEE and CIS countries. Specific attention is given to a number of countries where the Institute for Housing and Urban Development Studies (IHS) has supported this process with a range of capacity development activities; after which the focusses on the challenges in Riga, Latvia where Riga Technical University (RTU) is engaged with this challenge.

This chapter looks at the challenges of management of privatised housing stock and argues for an active role of residents to engage in management. It also signals a cause for concern that continued privatisation and diminishing public and social housing stock will further exacerbate housing affordability and that privatised stock has also contributed to increased household poverty. Nevertheless, the existing housing stock continues to be an important housing solution across CEE and CIS countries, where the private sector continues to invest in these neighbourhoods. Whereas in Western Europe these large-scale high-rise housing estates are being demolished, we show the importance here of refurbishing this housing stock rather than demolishing and mention ways of how to attract private sector investments to do so.

Neo-liberal reforms and new forms of management

Neo-liberal developments have been the driving force behind the reforms of the housing markets and policies of the past decades. Neo-liberal keystones of decentralisation, deregulation and privatisation have been the driving force behind the great sell-out of public and social housing stock (Gruis et al., 2007). In former communist countries, privatisation of housing stock was to reform the housing markets, to promote more equitable markets and to enhance market efficiencies. Although a rise in home-ownership is very notable across former communist countries, the 'performance' of housing reforms has not led to the establishment of more efficient and equitable markets with often significant polarisation within housing markets (Pichler-Milanovich, 2001).

One of the key features of management of privatised housing stock is that it largely concerns multi-family buildings which are often even of a high-rise nature. This housing typology is more complex to manage as it involves many individual owners of housing units that are from a management perspective all clustered in a joint ownership pact, namely that of the larger building and the plot of land. In most CEE and CIS countries, full individual home-ownership

in particular in urban areas was non-existent or difficult to achieve. The entitlement to outright own an individual house still resonates strongly across this region and has made it particular difficult to make arrangements of joint ownership in the form of cooperative housing or condominium arrangements. At the time of privatisation very few legal or institutional arrangement were made to arrange for joint ownership and responsibility towards jointly owned parts of the buildings (land, facades, roofs, entrances, staircases and lifts, and the bulk service connections'.

Over the past decades it can be noted however that all these countries have started to set-up the institutional framework to support this and developed the legal framework to enforce this. This is a complex task as the real estate sector needs interacting institutions from many sectors, including construction, banking, legal, insurance, and government (Palacin and Shelburne, 2005). In some countries this meant the abolishment of old institutional structures but in many cases they have continued to co-exist, so institutional structures can be found from the past and present.

In most CEE and CIS countries, but also in other EU countries, central governments have implemented relatively little in terms of policies that regulate this joint management of building stock and in terms of institutional structures, financial requirements and regulating the roles of the different stakeholders. In some countries, the responsibility for housing policies have been devolved to local governments who are often even less responsive to developing adequate institutional, legal and financial frameworks, although this is of course not true for all local governments but is certainly common for local governments where decentralisation has been a recent phenomenon altogether and local government capacity is overall low. The major determinants for housing management are built upon: specific legislation, management responsibility for housing management, organisation of maintenance; and cost/financing (Tsenkova, 2009).

Many countries have now provided for the legal formats to manage in particular multi-family privatised housing and requires the homeowners to either establish a condominium or Home Owner's Associations (HOAs) or less common, a cooperative structure. This is essential as the participation of resident owners is key to functioning housing management. However, the responsibilities of these condominiums, HOAs and cooperatives are not always clearly spelled out in law, especially when it comes down to e.g. urgent repairs, extensions to the units and where the divided made from bulk to individual pipelines. Another issue with the legal framework is enforcement of these regulations. (Gruis et.al. 2007)

Although the joint ownership can be arranged through HOAs, cooperatives and condominiums, this does not mean that these are functioning bodies to deal with general management policies of the buildings. Resident owners need to be able access functioning professional structures that provide services for housing management. Across Western Europe, the general management of buildings is often outsourced to professional companies which are appointed by the assemblies of owners. In CEE and CIS countries, there is a lack however of these professional companies and if outsourced at all, assemblies of owners often depend on existing structures from communist times still, which are often highly inefficient. Decision-making within assemblies of owners is also problematic as the rules in some countries require a 2/3 and sometimes even a 100% vote for decisions to be taken; which is in practice hard to reach as not all owners can or want to participate in the activities proposed. IHS trained condominium organisations in Ukraine to take ownership of the management of housing. However, Ukraine is one of the countries where reforms have taken off very slowly and when it comes to housing management, there are very few functioning service providers available that deal with privatised housing stock. Most of the new companies only work with newly-built dwellings and the privatised stock still depends on the former communist service providers to assist them with housing management – which basically means that no service is provided.

The issue of participation of owners also impacts severely on the financial capacities of these assemblies of owners' structures. Although they are owners who are not willing to contribute, there are also often a considerable number of owners who are not capable of contributing, in particular elderly and single person households often simply the financial means to do so. In some countries or cities, national or even local governments have stepped in and provide access to financial means or facilitate the development of maintenance funds. Several programmes have been initiated also by the EU which make funding available for energy efficiency renovations of the building stock. However, the amount of subsidies is not efficient and certainly not accessible for home-owners and private investment is needed. In Sibiu, Romania it was observed that building improvements (such as facades, staircases and roofs) were financed by adding 1-2 floors to the buildings. The sale of these new dwellings recovered the cost for improvements to the overall building.

Figure 6.1: Roof extensions Sibiu, Romania

Source: Ellen Geurts, 2015

The photographs from Romania show also that the private sector is very much investing in these multi-family high-rise dwellings. The pictures below from across the region show a wide range of improvements made by private owners. The complexity lies with improvements at building level – at dwelling level, private owners are very willing to invest where capable. Also it can be observed that the public spaces surrounding these buildings are increasingly converted. The example of Latvia will go deeper into this. But the existence of and access to *inter alia* social services, transport hubs, and existing bulk services make these neighbourhoods attractive areas for the private sector to develop in, including both apartment owners as well as private investors and (small-scale) real estate developers.

Affordability and privatisation of housing stock

Housing affordability, or in fact lack thereof, has been and continues to be one of the driving forces of national housing policies but increasingly also for EU policies. The financial crisis which has had a huge impact on housing markets globally but also in EU countries, has impacted on housing affordability across housing markets, affecting both tenants and owners. In general, households living in private rental housing experience the highest overburden rate of housing costs; followed by tenants in reduced rental housing, owners with and owners without mortgages (Pittini et al., 2015). In a recent study by the UNECE (2015) it was found that at least 100 million low and middle income people in the UNECE region are overburdened meaning that they spent over 40% of their disposable income on housing. Housing affordability is not only indicated by the overburden rate but also requires an understanding of poor housing quality (basic amenities), overcrowding (in particular young adults remaining with their

parents) and the low energy performance of residential buildings and increased fuel poverty. Although in CEE countries many households have high levels of ownership and low mortgage lending levels, the latter two phenomenon can be widely observed.

Selected experiences from the CEE and CIS region

In the period from 2005 – 2009, the IHS ran a tailor-made training programme on 'management and maintenance of multi-family high-rise housing' for participants from Lithuania, Belarus, Bulgaria, Ukraine, Albania, Romania and Moldova. Although there were and are similar challenges between these countries, they also differ in many ways. A country like Romania has the highest level of home-ownership (approx. 98%) in the EU as well as the highest rate of housing deprivation; whereas Bulgaria with home-ownership levels of approx. 82% it tops however the EU records of the highest share of people not able to keep their houses adequately warm (Pittini et al., 2015).

From the experiences gathered from these capacity building processes, it has to be pointed out that although legal, financial and institutional arrangements are all very challenging, one other challenge is problem even more overriding for the majority of home-owners is the fact that there is not sufficient awareness for the need of proper management and maintenance. Although there are of course notable exceptions to this and many home-owners do invest in their individually owned units, the sense of urgency for the collective maintenance and management is often lacking. We refer to this in our title in the question 'Who owns the problem?' Many home-owners simply have not taken ownership yet of this challenge of management and maintenance but neither have many (local) governments or even the private sector for that matter, as the service provider companies are generally only interested in very recent stock, but not the privatised stock.

Experiences from Latvia

The privatization process of state and municipal housing in Latvia resulted in a principal change of the tenure structure of the dwelling stock. More than 80% of housing stock are privately owned at present (Eurostat, 2012). However, the decision of changing status from tenant of the apartment to owner of it in most cases was made without fully spelling out to the new owners all the consequent rights and duties. Also the management system did not follow such rapid reforms of ownership in housing areas. Observations of current status of buildings and open spaces show that the existing housing management system fails to make substantial renovations of the living environment, so a huge number of housing stock is exposed to the risk of degradation. This leads to a broad and complex structure of stakeholders, which significantly delays defining common interests, setting goals and collective decision-making.

In Latvia denationalisation of the former apartment houses and privatisation of flats by their owners began in 1991. The same year part of the public housing stock was given in charge of municipalities. Almost 99% of municipal and state-owned buildings were offered for privatization. These houses were divided into apartment properties where the property contained the deemed part of the property (residential communal space, outside walls, roof, foundation, communal engineering communications, attached land plot). As a result of denationalisation of real estate and privatisation of the public and municipal residential buildings, the ownership structure of the housing stock considerably changed in Latvia (Tsenkova, Turner, 2004).

Table 6.1: Privatisation of apartments in Latvia (Database of the Central Statistical Bureau, 2006)

	1996	2000	2006
Privatized apartments as % of total apartments slated for privatization	3	63%	85%

Privatization of flats for vouchers resulted in emergence of a middle class in Latvia, which acquired a kind of savings in a form of immovable properties. It led to the increase of paying capacity of a large proportion of population and formation of a market segment of standard apartments. From other hand, the lack of knowledge and resources prevents the owners of privatised houses to restore the housing stock on a systematic basis (Treija, 2009).

Since the beginning of the privatization in Latvia there is topical discussion on housing management issues and problems. Consequently, due to the apartment privatization, the responsibility for maintenance of residential buildings has shifted to apartment owners, but the apartment owner understanding regarding the property maintenance is still low. There is a lack of experience of the apartment owner in order to perform their duties and to carry out reasonable actions (Slava, 2012).

Latvia is moving towards the professional facility management that is evidenced by a number of laws and regulations determining the provisions of administration and management of residential houses which have been adopted during the last years. The Law "On Residential House Management" has entered into force in 2010, but in some cases the provisions of this law have not been observed in the practice and non-compliance with the laws and regulations create problems for the companies operating in the sector. Cabinet Regulations (2010) are adopted as a supplement to the Facility Management Law. The Law "On Residential Property", which is more updated and which more clearly defines the rights of apartment owners, their duties and responsibilities, has entered into force in 2011 and substitute the previous law with a similar title. Currently the biggest challenges referring to the facility manager activities are low solvency of the property owners and the gaps still existing in current legislation.

According to the legislation the owners of the apartments are obliged to participate in housing management. The community of apartment owners of the building can choose one of three ways of management of the property.
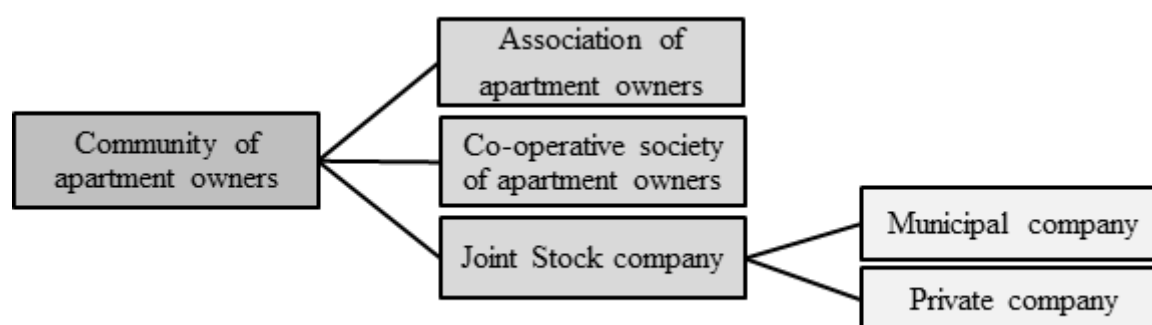

Figure 6.2: Forms of housing management

If 85% of the apartments are privatized, then it should be highlighted that only 20% of apartment

buildings are privatized. This indicates that the apartment owners who have purchased these apartments as a property is either very inactive or there is nothing that motivates them to take over the house in their possession, or they are satisfied with the current situation when the apartment owners may apply to the local municipality and request the repair of the deemed share of their house and require to provide facility management services at the expenses of the municipality.

Large-scale housing represents a large part of the housing stock in Central and Eastern European countries, its house a very large proportion of the population (in some countries up to 40 or 50%). In 2011, 41.5 % of the EU-27 population lived in flats, the share of persons living in flats was highest among the EU Member States in Latvia (65.3 %) (Eurostat, 2012). In Latvia multi-family housing are one of the quantitatively largest housing types of built-up areas (Eurostat, 2012). Large scale housing is the living environment for the major part of community and for inhabitants belonging to the middle class in its traditional sense: workers and professionals mostly employed in the public sector, as well as pensioners who are living here from erecting of the estates. Their level of income prevents them from improving their housing conditions for years to come. In Riga, large-scale residential areas very often are located within an easy reach from the city centre; they have service objects, educational establishments and facilities for recreation. For these reasons the large-scale housing districts of Riga are active urban territories, the public image of which is appealing to a vast number of inhabitants. Still it is obviously that current quality of housing estates and apartment buildings does not meet the requirements of contemporary housing standards; green open areas are not properly managed, but people lack the information and motivation to improve the neighbourhood (Treija at al., 2012).

Most of the buildings have high energy consumption and low heat resistance, which significantly affects the heating and home maintenance costs, the gradual renovation of buildings is topical question. Since Latvia has joined to the EU funding for renovation of the buildings has been available. Ministry of Economy and other institutions responsible for the work carried out informative campaign. The legislation relating to the management of residential buildings adjustments was made to support the renewal of the housing stock. However, the number of renovated residential houses is still very small. One of the major obstacles of slow renovation of the housing stock referred to residents or owners of apartments is their low activity or lack of understanding of their responsibilities.

Figure 6.3: Renovated residential buildings in Riga

Source: Sandra Treija, 2015

The process of housing reform has led to diversity of ownership – land, buildings and apartments are often owned by different persons. This diversity poses risks to decision-making, as a considerable obstacle to reconciling the common interests. For the part of former tenants, the legal status of the ownership is associated more with exclusive benefits and less with the property-related duties and responsibilities. Quality management and facility management services of multi-storey apartment building depend on the interest and collaboration of all apartment owners. In many cases, the chosen form of facility management and disagreement among the owners regarding decision making on important issues is one of the reasons for the failure of the facility management.

Interviews certify that the main problem both for inhabitants, land owners and managers is the shared property (the land and the buildings are not owned by one person). Lack of understanding about the legal relations between landowners, managers and apartment owners as well as lack of knowledge about their mutual rights and responsibilities (even more – sometimes these relations are imposed artificially and are not developing in a natural way, taking into consideration the interests of all parties) create frustration and passivity in regard to the development of the housing environment. Taking into account the specific socio-demographical context of the housing block (elderly inhabitants, sleeping area), there is low activity from the inhabitants and a lack of initiation.

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CHAPTER 7: LOCAL COMMUNITY RESPONSES

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Introduction

How may municipal actors make use of local community reactions and responses to urban planning proposals concerning new housing and regeneration of existing housing? May inclusion of such reactions and responses in an early stage of planning processes lead to increased satisfaction of basic human needs? Why is it so difficult to be receptive and open to citizen´s knowledge and experiences? How can citizen's views, opinions and knowledge from such processes be taken care of and be transformed to other actors in planning processes? Are we in for a more daring change than we understand when talking about citizen participation in design and planning?

The lack of citizen dialogue in planning is increasingly becoming a problem due to the quick changes modern societies are going through and the awareness of problems becoming more and more complex. Authorities and experts can no longer understand the problems by themselves, but need to develop learning processes where a large amount of actors are involved, which has developed the planning procedure considerably lately. Citizens as individuals are through general elections considered to be represented by politicians or civil servants in such processes, however as time passed it has been obvious that this is not always the case. Many individuals in society consider themselves to be excluded from not only decision-making in planning processes but also from information and dialogue. Moreover, planning processes does not encourage citizens as *groups* to co-produce planning together with each other, and other actors such as e.g. enterprises, implying there is no chance for a common learning process about cities to take place. As a consequence, cities more and more tend to be planned in a way that not just disrespect democratic values (as all actors are not invited to dialogue), but the lack of citizen knowledge (local as well as political) in planning have implied that cities become something that not many citizen really want – and cities are many times therefore not utilised in the way planners plan for. Consequently, planner's plans for sustainable cities is unlikely to be implemented.

This background to why citizen participation in planning is considered to be important is of specific interest in view of refurbishment of the existing apartment building stock. In Europe, this refurbishment to a large extent concerns housing areas built in the 1960s and 70s. These have often poorly maintained large scaled buildings with substandard climate protection in need of large investments to achieve a high enough standard. Still, there are no resources put aside in renovation funds – if being used for incorrect distribution of profits or lost due to bad administration is disputed among scholars. These areas are often also exposed to other problems. Neglected maintenance has led to the areas being populated by inhabitants who for various reasons are exposed and socially excluded from society. Moreover, the areas often carry a stigma, significantly influencing the opportunities of the inhabitants to become community builders. What does it take for planning procedures to be adapted to this reality? How can planning include also these people in dialogue and decision-making about how the city should be developed? This is one of the challenges society is facing today.

Local community responses in Sweden

In Sweden, these circumstances have led to a series of activities to possibly learn from, developed in a suburb as described above, which is situated in the outskirts of Gothenburg. In 2010, University of Gothenburg and Chalmers University of Technology together started a centre[1] in the suburb called Hammarkullen (8,000 inhabitants), aimed at developing

knowledge about how to open the door to higher education also for inhabitants with a foreign background and with less economic resources than the average in higher education. By intertwining research, education and community outreach,[2] the centre facilitated for *inhabitants* to become knowledge producers in academic work and simultaneously their activities helped involved teachers developing higher *education* to better adapt it to the society we face (Stenberg and Fryk 2012). The ambition was also to develop the procedures of related municipal institutions, such as the city district administration, the city planning office, the real estate office (and their political committees) however this goal turned out to be quite problematic. Similarly, with higher levels at the two involved universities, the municipal actors were not prepared to consider the necessity of their *own* institutional change to meet the challenges mentioned in the introduction of this chapter. This crucial experience was developed in another action oriented research project [3] and eventually resulted in interesting leanings. A concrete result was »socially responsible public procurement« of a building project where inhabitants of the suburb where employed for a few months. This experience of social procurement was considered a success in many ways. If involved institutions succeed in changing their procedures to force this form of procurement also in the future, this may be described as a *systemic change* which would imply the procedure to be replicated independent on »citizen-participation-enthusiasts« to be present (Stenberg 2013).

Systemic change may be described in many different ways depending on discipline. What they have in common though, is the focus on some kind of transfer of power. In design and planning research is often referred to analysis of power aspects with awareness of understanding the »rationalities« (Foucault 1982; Flyvbjerg 1998; Lapintie 2002) of different actors when implementing measures. [4] Such an analysis result in the exposure of »black boxes« (Callon and Latour 1981), which may be found to be under reconsideration when »micro-actors« found reason to oppose them. Thus, a black box is containing elements – modes of thoughts, habits, forces and objects – which no longer need to be reconsidered and one may describe a strategy of openness as an important step in enabling the citizens (micro-actors) to oppose certain black boxes – i.e. to help changing ordinary procedures, e.g., in planning.

An actor grows with the number of relations he or she can put, as we say, in black boxes. A black box contains that which no longer needs to be reconsidered, those things whose contents have become a matter of indifference. The more elements one can place in black boxes – modes of thoughts, habits, forces and objects – the broader the construction one can raise. Of course, black boxes never remain fully closed or properly fastened /.../ but macro-actors can do as if they were closed and dark (Callon and Latour 1981: 285).

Thus, a macro-actor with certain elements put into black boxes does not need to renegotiate from scratch all the time; this actor may instead use the taken-for-granted assumptions hidden in black boxes in new negotiations. »To summarize, macro-actors are micro-actors seated on top of many (leaky) black boxes« (Callon and Latour 1981: 286). (Stenberg 2004)

In the discipline of sociology there is also a distinction between *first and second order change* (Petit and Olson 2013) to make of power aspects more visible. These concepts stem from Gregory Bateson (1972) arguing that reality is a semantic and social construction. There is no neutral and objective world »outside« to be observed by the viewer. They argue that when observing, describing and acting in the world, we are at the same time creating it, making sense and meaning of it, through our preconceived concepts, experiences and knowledge. When taking part in a dialogue or co-creation of design and planning, trust and confidence is therefore important in the relationship between the co-creators – that is if all participant's perspectives are to be included. When realising this we are »living« the concept of the *second order change*.

What we therefore argue in this text is the importance of carefully designing the circumstances around the interface between community and municipal institutions when co-planning and co-creating the world together. This design is important as knowledge is power and the balance of

power is at the moment tipping heavily towards municipal structures. Therefore, there is always a learning project connected to a co-planning project. If this level of »learning project« is neglected, the co-planning strategy will take place only on the level of *first order change* – which is usually not satisfactory as the major challenges we face in society requires major changes. First order change is an incremental and linear progression, often initiated from a position outside the local interest. When co-planning an area in such a manner, the municipal structures often involve local dwellers just through collecting information, and using local knowledge in a way that confirms established power structures. Even though supportive laws and guidelines for citizen dialogue are formed, municipal representatives may continue acting on the level of first order change. This is problematic and in the next chapter this will be further elaborated.

However, we will here focus at the very local level and discuss how local work can influence norms, laws and regulations and why this is important. Answering why is of course quite easy. Structures that are formed mainly from above implies a society with a serious lack of democracy. A systemic change formed by co-creation and co-planning would instead be a clear indication that involved authorities really had been responsive to a dialogue they invited citizens to. A changed balance of power namely implies new relationships between stakeholders of the local community. It is not self-evident that municipal actors really want to carry out such a professional journey even if they may be considered as obliged to in their policy documents, thus if the can they may choose to keep black boxes sealed / first order change, as it is faster and easier (not to forget that all tasks should not challenge power, it would waste too much energy and financing). However, as research projects fundamentally exist to really develop the society, in this context it has been interesting for us to investigate what circumstances there are, that facilitate a kind of learning process where the balance of power between inhabitants and professionals develop in an eligible (according to policy documents) direction (thus changing balance of power).

After being active during a long time in the suburb mentioned above, it has become obvious that many of the learning activities that included a change of power balance, have interacted with a municipal institution called *Mixgården* – a youth centre that existed in the area since the 1970s. The work team at Mixgården has developed a dialogic and engaged »culture« at the centre, which may be described as relational and capacity-building rather than controlling, and the working methods have often been praised – not only locally but by actors also at other levels of society (Jordan and Andersson 2007). Around 60-80 youth in the ages of 15-20 are at the centre on a typical day. They (or their parents) come from many different countries and a number of youths consequently carry with them frustrating experiences and feelings from different kinds of conflicting perspectives such as in Balkan, Somalia, Palestine, Iraq, Kurdistan and Syria. So how do Mixgården succeed in working dialogical under these challenging conditions?

Mixgården has a strategic location in the area, close to the square with the area's only tram stop where people pass naturally every day. Moreover, the facilities are spacious and flexible which suits an establishment with openness to the complexity that characterizes the area. The staff goes into every working day without knowing for sure how it will become and the localities may be changed to fit different purposes. Further, the global connectivity described above influence their approach. They share a strong awareness of the variety characterizing the society of today and the wide gap between rich and poor. Youths coming to the centre bring with them different views of global problems. The staff do not try to avoid this kind of difficult conversations, but are instead open to it and facilitate for it to create a sense of security among the youths. If the physical prerequisites mentioned above are called *a room for core activities* as youth centre, this second approach may be described as opening up for *a global room*, creating cultures of capacity-building where young people's globally rooted everyday lives and

difficulties are at the heart. The reason to why tough conversations are possible to carry out in a friendly or at least not violent way at the centre, is the approach of letting the youth using the place as an *extended living room* for discussions between themselves.

As a result, youths at the centre felt that they have support for turning outward with activities related to their thoughts. When e.g. a Somalian association organize reception of political representatives from Puntland, the staff at the centre collaborate on receiving them well and connecting them to appropriate Swedish institutions. In order to do this kind of work, the staff have a well-established and well thought out relationship to the local context, implying active links to schools, associations, religious institutions, police, housing companies, politicians, citizen office, etc. This outreach strategy may be labelled focusing *the collaborative room* and has been a core activity for many years, which has created a significant trust capital which is crucial for their work. This way of working also explains why employees at the centre work as team, implying constant and systematic dialogue about what happens at the centre as well as in the 'glocal' context, and common decision-making at weekly meetings.

How do this flat and organic structure and the »four room approach« then fit into the linear and quite top-down municipal city district organization the youth centre is part of? Obviously, there is friction, but still they continue working in this way and actually also help other local municipal and civic institutions/organizations to develop a dialogical and collaborative approach. This is interesting. What can we learn from them about how to act on local community reactions and responses? One thing we directly can make use of is awareness of problems being opportunities: conflicts should not be avoided but considered as »triggers for learning« (Krogstrup 1999). Community reactions and responses, regardless of whether they are considered positive or negative and in whatever form they are presented in, thus provide opportunities for development. How can actors in charge for housing and regeneration of housing areas – which is in focus for this text – make use of this knowledge?

Our experience from intertwining research, education and community outreach in Hammarkullen have shown the importance of approaching a local area with a genuine desire to really *share* power. This does not mean that democratic systems should be eliminated, but citizen dialogue need to be allowed *developing* democracy. In the case of housing and regeneration of housing areas, such an awareness implies quite a change of approach. In current research we investigate how this may be carried out. In a programme called *Sustainable Integrated Renovation* funded by Swedish research financier Formas 2014-2018 with 250 000 euro and likewise by the participating partners, the research aims at developing knowledge about how to radically change national renovation practice through collaboration, participation and holistic views on sustainability. The programme involves researchers from different fields and focus on five areas; establishing a living knowledge base: analysis of earlier and on-going cases of renovation; innovation, demonstration and Living Lab, developing models, methods, tools for integrated sustainable renovation; and communication, dialogue and dissemination of results.

Figure 7.1: Housing in Hammarkullen

Source: Albin Holmgren

One of the Living Labs in the programme is carried out in the suburb of Hammarkullen. This Lab focuses on »sustainable property management and maintenance« and how this may affect renovation requirements. It aims at (a) developing methods for integration of knowledge from the tenants early in the process, (b) discussing with all actors what different lifestyles imply in the context of sustainable renovation, and (c) finding forms for tenants to participate in the *decision* making process in renovation. Thus, the ambitions are high concerning sharing of power, however there is – for better or worse – not an actual renovation process taking place. To emphasize these circumstances the project has been labelled *Learning* Lab Hammarkullen. The involved actors are Bostadsbolaget Housing Company (municipal), Carnegie/Graflunds Housing Company (private), Swedish Union of Tenants, SP Technical Research Institute, Chalmers University of Technology, Lund University of Technology, Gothenburg University, Stamfast and Rotpartner (private companies for renovation and financing). The actors meet on a regular basis for planning and implementation of the project and also collaborate closely with university students who, in dialogue with tenants, in an organized manner contribute with work. The challenge is how to organize the common learning process. How may it be formed, to allow the participants to act on local community reactions and responses in a manner that integrate produced knowledge from all actors, and use it to form proposed new renovation strategies?

One obvious way forward for a research project like Learning Lab Hammarkullen is making sure to be part of the *collaborative room* that Mixgården and other actors' form, which is relatively easy as several of the participants have a long history in the area and a built up confidence. Still, these activities have to be scheduled and made room for in the time plan. The Learning Lab also need to be exposed at other places locally where community responses may show, e.g. in the three local schools and at different kinds of gathering sites. This is important

as renovation of housing from the 1960s and 70s in Sweden raise a lot of strong feelings which are expressed in different fora. The debate is extensive at the moment and it is being discussed who should pay for the high costs, in some cases the tenants are threatened with rent increases of 60%. One important question is how knowledge and opinions about these circumstances may be integrated in the learning process. And in the end, how this kind of information may be part of a model for renovation on a regular basis – a systemic change.

In action-oriented research projects such as investigations based on Learning Labs, it is close at hand to organise common learning processes also for analysis and theorising. This phase is maybe where it is most relevant to transfer of power from those actors with the most to those with least. Such an approach, however, puts high demands on the design of the learning process, as tenants, employees in housing companies and academics have very different prerequisites of exercising of power. The design need to handle these inequalities. In our case, one way of doing this may be for the Learning Lab team to, by being part of the *collaborative room*, be aware also of what happens in Mixgården's *extended living room* and be open for discussions taking place there. A following strategy could be to embed for being aware also about other *extended living rooms* that local actors use for dialogue on a regular basis. Maybe it implies learning from what takes place in more local premises in a staircase or in someone's home. Discussing things there – where inhabitants have an advantage in terms of power as it is their place – may bring with it new information put on the table and subsequently new discussions. Thus, instead of having as strategy to invite inhabitants to power-neutral meeting rooms (e.g. to People's Hall / Folkets Hus which is quite a common way of trying to neutralise power), it may be wise to invest time in the *collaborative room* and subsequently see what it entails for knowing more about what is happening in the other rooms.

Ultimately, such an approach could open up for a Learning Lab creating cultures of capacity-building where *tenants'* everyday lives and difficulties is the heart of the learning process. The tenants in Hammarkullen have their roots in many countries and are often also well connected with relatives and friends in these countries. What can they, with their many different experiences of housing and renovation, contribute with in a learning process about sustainable renovation in Sweden? Such kind of interest from authorities and estate owners in not only joint knowledge production on housing, but actually a changed balance of power in relation to inhabitants, would radically change procedures and require entirely new skills and competences from experts. And from inhabitants. These are competencies that need to be developed.

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[1] See urban.gu.se | chalmers.se/urban

[2] See urbanempower.se for description of the first experience of such an integration since the centre started. The reason to why the area of Hammarkullen was chosen for starting a common higher education centre in 2010, was that teachers and students from the department of Social Work, Gothenburg University, had been active in the area for 25 years, collaborating successfully with the local municipality. Chalmers Architecture joined with an annual place-based master course in 2008 and other disciplines from the universities carry out courses in the area on temporary basis.

[3] See mellanplats.se

[4] Some of this text about black boxes has earlier been published in Stenberg (2004).

CHAPTER 8: COMMUNITY PARTICIPATION AND POWER SHARING: LESSONS FROM DEVELOPMENT STUDIES

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Introduction

In their paper "Local Community Responses", Stenberg & Fryk describe a local learning initiative oriented towards the co-production of urban regeneration. They mention several conditions that have been fundamental for co-production between a "community" and the "authorities" in their case study. This is in the first place the necessity for institutional change on the side of the "authorities". This they call systemic change and it would create authorities that are really responsive to a dialogue with citizens, resulting in a change in power balance. Related to their experience in Hammarkullen, they mention the "genuine desire to really share power" of the institutions involved in the learning process.

Since the 1990's, community participation has become part of the mainstream policy approaches in development. National governments have adopted community participation as part of their urban development strategies. The aim of these policies (at least on paper) is indeed to change the relation between governments and citizens, resulting in the direct inclusion of the voice and knowledge of citizens in public policy, as well as the transfer of authority to decide, implement and/or control public policy.

The question of the transformative character of participation also figures in the debate on participation in development policies (Gaventa, 2003). Some argue that the strengthening of participatory processes themselves would be sufficient to unchain the transformative potential. Others advocate for, as Stenberg & Fryk do, that institutional change towards more responsive and accountable government institutions is a pre-condition for transformation to take place (Gaventa, 2003)

In this chapter I want to address the question to what extend (national) development policies directed at community participation and empowerment do lead to the systemic change mentioned by Stenberg & Fryk and whether a more responsive and accountable government is part of this effort. I will use the example of the Community Driven Development approach.

Community participation in development practice and studies

For decades, community participation has figured in development policies and studies. However, for a long time it was an approach propagated and applied by NGOs, as an alternative for the usual state-led centralized policies. During the 1990s, the neoliberal development paradigm takes a turn from market-oriented only, towards a more people cantered approach. Concepts like local knowledge and people's own definitions of and experiences with poverty appear on the international development agenda. The World Development Report of 2000/2001 for the first time speaks of community participation and empowerment, besides the usual call for economic growth. The most recent approach in community participation is the Community Driven Development Approach, promoted by the World Bank and several other donor organizations and adopted by the national government of several countries.

Indonesia is among the countries that introduced the community-driven development policy as national policy. In 1999 the Indonesian government launched the Urban Poverty Programme, by means of a pilot, in selected urban regions in Java. The UPP approach has been further developed under the PNPM (Program Nasional Pemberdayaan Masyarakat) Urban Programme.

The Government of Indonesia launched this PNPM in August 2006 as its policy and organisational umbrella for all community empowerment programmes in the country. In a few years' time, PNPM has expanded to the world's largest demand-driven community development programme. The World Bank (co-)finances and provides technical support to the PNPM programme that operates now in virtually all 1,145 urban sub-districts.

The PNPM has adopted the Community Driven Development (CDD) approach as its central strategy. Bennet & D'Onofrio (2014) "Community-driven development aims to bring about change at the individual, group, institutional and systemic levels. "(29) "CDD gives control of decisions and resources to community groups. These groups often work in partnership with demand-responsive support organizations and service providers, including elected local governments, the private sector, NGOs and central government agencies." (Dongier et.al, 2002, 303) Central in PNPM is the promotion of the development of community organisations (Badan Keswadayaan Masyarakat – BKM). The BKM are supposed to be democratically elected among community members. They are responsible for the identification, planning and administration of community development projects, like small scale infrastructure, social programmes or microcredit funds. The participatory process of CDD and the "ownership" of the community development projects are expected to lead to empowerment of the poor and increase in their social capital. The question is whether devolving decision making and control over resources for community development leads to a systemic change in the relation between authorities and poor urban citizens? And what is the evidence that de support organizations that Dongier et.al. (2002) refer to are indeed demand responsive? I will discuss this looking at three aspects:

a) The terms of participation
b) Institutional change
c) The notion of community

The terms of participation

Community participation is often associated with decentralized decision making and a way to include local knowledge. Local knowledge in principle implies being rooted in specific local social, cultural and historical circumstances. As circumstances are diverse, so is the local knowledge and the ways in which it may contribute to decision making. However, in the PNPM programme in Indonesia, we see that a singular organizational structure (BKM)for community driven development has been implemented in the whole national territory. No matter what the local culture or circumstances are, a BKM should be elected to take charge of community development. In relation to this institutional approach to participation Cleaver (2001) observes that "associations, committees and contracts channel participation in predictable, recognizable ways" (40). And for development bureaucracies, this is best done by establishing "community structures that most clearly mirror bureaucratic structures" (40)

In this respect, we can conclude that the terms of participation (through a one-size-fits-all organizational set-up) are those of "invited space" (Cornwall, 2004). This space is created by government institutions, it mirrors their bureaucratic structure, and it is on government's terms that poor citizens can participate. Moreover, the invited space is limited to decision making concerning the own community, it does not concern involvement in issues of the larger society, which Sneddon & Fox (2007) considers necessary in transformative participation.

Institutional change

Is institutional change necessary for participation to have a transformative character? In the debate on community participation, as well as its practice, for a long time has shown a strong focus on methodology: how to implement participation (Cooke & Kothari, 2001). Guidelines and sourcebooks are important instruments in the implementation of these policies. Guidelines

exist at national level, also but international organizations produce manuals and methodologies. The World Bank Sourcebook for Participation (1996) is an example. However, with the focus on the "how to", the "why to" is neglected. Cooke and Kothari (2001) notice in this respect a " 'tyranny of method' ", which raises the question "Have participatory methods driven out others which have advantages participation cannot provide" (8). Cleaver (2001) furthermore observes that the "technique-based participatory orthodoxy ….. fails adequately to address issues of power and control of resources and provides an inadequate framework for developing a critical reflective understanding of the deeper determinants of technical and social change" (38-39)

The issue of power differences in participatory processes is complex. Power differences occur between government institutions and community, but also within government institutions and within communities. Participatory development approaches have often been criticized for this neglect, however it proves to be difficult to address the issue in policy design. How do responsive and accountable government organizations emerge? The general CDD approach assumes that communities themselves, once they experience CDD, will demand a more responsive government (Bennet & D'Onofrio, 2014). Gaventa (2003) is of the opinion that waiting for community pressure to occur is not sufficient. Direct intervention in institutional change is also required in order to reach a stage of participatory governance.

I suggest that such a change should be visible in the change in position and authority of those that actually implement participatory policies. Therewith, government institutions would put emphasis on the importance of participation in governance. And in an incentive system that rewards and outward oriented attitude. This would also mean a change in the power relation within the government bureaucracy.

In his analysis of a participatory rural development programme in Ghana, Botchway (2001) questions whether the local Department of Community Development is effective in mobilizing communities. He remarks that the department "has not been attractive for high calibre personnel." (142) The department was therefore poorly staffed. It was also poorly resourced by national government. Is this a general situation that could also apply to CDD or do we see evidence of institutional change that favours the position of the actual implementors.

In general, little attention has been paid to what happens at this interface between community and government institutions or to the government staff that operates at this interface. Vasan (2002) observes that "development literature has surprisingly neglected the characteristics, social conditions, perceptions and attitudes of field-level implementers of policy". (4125)

Related to the Community Driven Development approach, Mansuri & Rao (2004) note that: "Frontline staff who work directly with beneficiary groups are especially critical actors in building participatory processes. They are expected to mobilize communities, build the capacity for collective action, ensure adequate representation and participation, and, where necessary, breakthrough elite domination. They must be culturally and politically sensitive, charismatic leaders, trainers, anthropologists, engineers, economists, and accountants. Despite their centrality, however, there is virtually no generable evidence on their role." (24) This is confirmed by Bennet & D'Onofrio (2014) when they state that "The ways in which facilitation affect outcomes is poorly understood and is of considerable relevance to any programming approach which lays claim, as CDD approaches generally do, to changing norms and behaviours around inclusive, participative decision-making practices". (10)

The notion of community

Most participatory approaches to development see the community as a homogeneous, egalitarian society, in which community members make use of their social capital to collectively express their views and needs. This concept of community has much been criticized. Cleaver (2001) shows how this assumption of commonality of interest among community members

obscures the complex reality of a community of "both solidarity and conflict, shifting alliances, power and social structure" (45). In another study, Cleaver (2005) also shows that the assumption that poor families have equal "stocks of social capital" is erroneous. Power differences between individuals and households often create relations of dependency. Mansuri and Roa (2004) similarly note that dependency on powerful groups withhold people from genuine participation. The insecure outcome of participation is not considered worth the cost of losing a proven beneficial relation.

In their study on community driven development in Indonesia, Dasgupta & Beard (2007), show that the internal dynamics of communities lead to very diverse outcomes. In situations of unequal distribution of power, decisions may be dominated by elites. This can lead to elite capture, where elites use their position to benefit themselves. An alternative is elite control, where elites decide on projects that benefit a majority, or even the poorest. They also notice that more democratic decision does not always lead to inclusion of the poorest.

Conclusion and points for discussion

This limited review of community participation policies, Community Driven development in particular, gives little evidence that the support institutions for community participation are indeed demand responsive as Dongier et.al (2002) assume. In the first place communities participate in invited spaces, on terms set by the government and in a one-size-fits-all organizational structure.

In the second place, little is known about the transformation from policy-on-paper to policy-in-practice. Although the most important dynamics of participation take place at the interface between community and government bureaucracy, little is known about the representatives of the government at this level of implementation.

Finally, the neglect of the heterogeneous nature of communities and the power differences this implies, often leads (although not always) to the exclusion of the poorest and most vulnerable among the population. Elite dominance and elite capture is a known phenomenon in community participation. However, the how-to-deal with this in practice is one of the unknown elements of the implementation of participatory policy.

This leaves the following point for discussion: why are government institutions that deal with community participation not responsive. The mere involvement in community participation approaches is apparently not enough. Being change-averse or the lack of political will to share power maybe obvious reasons. Underlying the latter, there may be a lack of incentive for local government structures. CDD approaches are designed by national governments and targeted at local communities. Why would it be attractive for local government structures to act as responsive institutions if they have not been part of the design?

The last reason may a practical one. The case study presented by Stenberg and Fryk concerns a specific local situation that is used as a learning lab. But what if a participatory policy is designed for and rolled out in an entire nation? How well could a government structure (national and local) deal with the diversity that this implies, even if they wanted? In other words: is it possible to have a large scale community participation approach that includes institutional responsiveness with eye for diversity and different expressions and implications of power differences?

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CHAPTER 9: URBAN PLANNING AND THE ROLE OF PARTICIPATION

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Introduction

Urban planning and local housing policy have a significant role – and responsibility – in shaping towns. In the planning phase, various interest groups clash and the dominant interest group emerges the winner, depending on the local balance of power. Which groups will be the direct winners and losers of the changes is virtually decided on the drawing board, and who may profit from the changes and who will be ultimately closed out can also be suspected from the onset.

In Western-European urban and regional development policy of the past decade, focus shifted on residents' participation, enhancing social cohesion, and integration (Manzi et al. 2010). With the help of participation (Geddes 2000 [1915], Arnstein 1969) residents of the area can actively take part in the transformations as early as in the planning phase. However, it is essential for actors of urban policy, planners, and authorities to build real partnership with residents, civil society organisations and local entrepreneurs for realising it. Moreover, this job cannot even stop after the completion of the physical construction or urban rehabilitation, since facilitating the integration of socially and perhaps even culturally different groups is a major prerequisite of the functioning of the new (renewed) environment (Polése and Stren 2000). An urban development committee or some special organization is usually set up for this purpose, whose working group dealing with social issues will remain active for years in the area.

International examples show that real integration – not just one declared in policy documents – is not easy to reach. The discussions of the past decades on participation and its methods are centred around the issue : on what levels, and in what ways people living in the area are needed or practical to be involved in the planning process, and how it can affect the sustainability (and integration) of the results. At the same time, doubts are expressed concerning the residents' capability and substantial level of interest in participating (Rosenberg 2007), and whether the authority is willing to take participation seriously (Lukovich 1997, Arnstein 1969). Some researchers argue that through participation, a new elite can be created of people actively involved in managing matters (Potapchuk 1991). Others think that participation methods that may work on a local level do not necessarily meet the principles of sustainability on a global level, since global and local interests may often be in conflict (Rydin 2003). Another question is the extent of legitimation of the residents involved, i.e. who are actually represented by the residents and NGOs actively present in the process (Csanádi et al. 2010). The transformation of the towns, town planning is happening in a multi-dimensional space where different groups of residents can only, if at all, get a role through complicated systems of interest conflicts.

Budapest

When working on rehabilitation plans today, the social composition of the narrower or broader environment and its consequences are often disregarded. One reason behind this is that in the present local government system it is impossible to elaborate on a complex urban rehabilitation policy comprising the whole capital city, considering the urban structural location, physical characteristics, and social status of each area together; each area is trying to individually implement programs – basically fitting the logics of the property market. In this system, the local residents of a lower status area can easily become losers of the processes while the area itself can even considered successful from other aspects.

For example in Budapest several urban rehabilitation (model) programs were implemented

during the past decades, preceded by discussing many things on the surface – from physical planning through green areas to the state of the buildings, from regulations through the quantity of social housing to the practice of allocating them –, but in the meantime the actual function of Hungarian urban and housing policy and rehabilitation, i.e. the regulations of the social composition of the neighbourhood remained unrevealed.

Experts preparing urban development strategies often claim to formulate real and significant development goals. And indeed, no one can object to investors arriving at the area with substantial capital. It is also justifiable when district authorities try to facilitate the influx of growing number and influence of young, middle class, upwardly mobile people with prosperous perspectives. For middle class residents can be also easy to explain why pushing out "problematic families" from the area is in the interest of the wider area. The local government would also like to act in favour of limiting the extent of clientele of (expensive) elderly and social care. The overall result is twofold: the financial resources for urban renewal cannot be provided for without market actors, and the most problematic social groups must preferably go.

The responsibility of making people move is eased in two ways. They argue on the one hand that the housing stock is in such a bad condition that residents need to be moved out in any rate. The apparent decay of the physical environment (due to being neglected by the local government) is often shocking when (architectural) historical monuments become helplessly deteriorated, but even more importantly, the population of low status living the area becomes more and more vulnerable and learn first-hand that – in spite of their hopes – they can expect no help to improve their living conditions. In this process, higher status participants may easily be led to the assumption that what is going on is favourable to everyone since even the situation of the most vulnerable people is improving by moving to other parts of the city (often just temporarily though). In the meantime, under the surface the real (hidden) goal is achieved: urban (housing) policy is able to transform the social composition of the area so that the interests of people of higher status prevail, while nobody is feeling guilty.

We certainly do not wish to argue that renovating a quarter and raising its level of social status is by itself wrong. High quality bars and restaurants, interesting galleries, shops etc. themselves do not make any trouble, just like bilingual and elite secondary grammar schools. The question is, what price, and what kind of risk: the conservation or growth of social inequalities in the given dimension means on the other side.

The interests of groups of lower status are usually not really represented by either party in the discourses on urban rehabilitation. Such responsibility cannot even be expected of the investors as organisations functioning according to market considerations. In the current framework, the local government designated with the representation of residents' interests would be the actor to act most effectively in favour of the population. However, since they do not have the resources, local governments claim that their responsibility to maintain and renovate the building stock necessarily requires the involvement of investors' resources. This means having to create an investor friendly environment even if it involves violating the interests of some groups at the same time. What is more, as discussed earlier, in these cases the groups of residents affected are exactly the ones being the least effective in endorsing their interests, and it is in favour of the local governments to be able to get rid of the families considered as problematic with "objective" excuses.

The experiences on participation of different social groups in decision making – more precisely in planning activities is very diverse across Europe.

Civil society organisations acting in the matter and some intellectuals raise their voice in some cases against pushing out the poor and "problematic groups", but remarkable results have not been reached so far on the level of systematic urban rehabilitation thinking and concepts. In this aspect the post-socialist societies are ironically in worst situation: the centralized, paternalistic

traditions do not favour the methods of a more democratic decision making. NGOs and groups of intellectuals acting in another circle of cases primarily speak up along a different set of values and interests: in order to protect cultural heritage, and listed historic buildings.

It can be concluded that in the current situation processes of urban reconstruction have a good chance of resulting in favour of the middle class, while reducing rather than improving the possibility of integration for vulnerable groups.

One example from Budapest

An interesting environment full of stimulus influence may play a role in attracting and keeping residents, enterprises and tourists in the inner city (Bianchini, 1995). This is integrated in the planning document in many cities as i.e. "cultural" or "cultural flagship" developments (Hall, 2004; Musterd et al, 2007).

Such transformations in the inner city can be realised in different ways. Besides the intentions of urban planning offices, there are spontaneous processes changing the environment temporarily or for a longer period of time. In some cases the cultural milieu lasts long enough to raise demand for the area and the market processes can raise real estate prices so high that the initial artistic use gets displaced, and the area undergoes gentrification (Zukin, 1987).

The engines of change are on the one hand the local authorities that use these tools in city development strategies. On the other hand there are bottom-up initiatives, which are based on the unique and alternative milieu of a neighbourhood and play important role in the formation of a cultural cluster. These clusters are usually related to a physical centre, a building or a neighbourhood (Mommaas, 2004). Zukin (1982) noted in the early 1980s, that despite positive intentions creative quarters can become exclusive consumption places of the middle class, excluding lower social groups and dissolving the milieu that was once a factor in the development of these neighbourhoods. The economic success of a fashionable neighbourhood may also bring about changes in residential composition resulting in the displacement of the poor, so the groups of a lower status cannot be the recipients of (often public) inner city investment (Smith, 1987; Slater, 2006).

The Hungarian case study attempts to demonstrate these transformations from the point of view of the residents affected by the cultural investment on the example of District VII of Budapest (Erzsébetváros). The local authority of District VII was consciously looking for tools that can render the neighbourhood more attractive for certain social groups and accelerate the gentrification processes (Martinez et al, 2005). This interest is understandable since the population of the capital - especially the inner city of Budapest and the Inner-Erzsébetváros - was decreasing substantially until the late 2000s (Dövényi –Kovács, 1999; Kovács, 1999; Csanádi et al., 2002; Szirmai, 2011). On the other hand, the policy is questionable, since this type of interventions may result in the disappearance of affordable housing and retail places that are attractive for cultural producers and new (usually younger) residents (Csanádi et al, 2010). These changes are effected by two methods: reconstruction and changing the function or intensifying one of the functions of the area, usually supplemented by the rehabilitation of public spaces. The first method was facilitated by the increasing interest from the side of the investors for the area, the second by the urban rehabilitation funds of the European Union.

The spontaneous changes were made possible by the large number of empty buildings that were rented first from the local authority and then later (after the privatisation of the remaining local authority owned buildings) from private investors. The empty ruins of those buildings became first temporary and later stable hospitality venues and cultural places, establishing the so called "ruin bar scene" in Budapest (Lugosi, et al, 2010; Csanádi et al, 2012). The ruin bars were followed by a swarm of customary small and cheaper pubs, more expensive wine bars, "economy ruin bars" targeting young and less affluent people, huge and more expensive "ruin

night clubs", as well as smaller clubs. In parallel with these developments, the projects supported by the urban rehabilitation funds of the European Union were launched. One of these projects was named "Street of the culture", meaning a thematic profile for a section of a street, treating culture as a form of entertainment. But the project failed to facilitate cooperation between cultural activities and was not able to support the cultural and creative use of empty retail spaces and buildings (Louekari, 2006). A further problem is that there was no other form of support for culture in the strategic documents of the local authority (EÖK IVS, 2008). One reason for that may be that the local authority was mostly against such spontaneous projects since they first emerged, therefore, to invite them to support the local authority project was now out of the question.
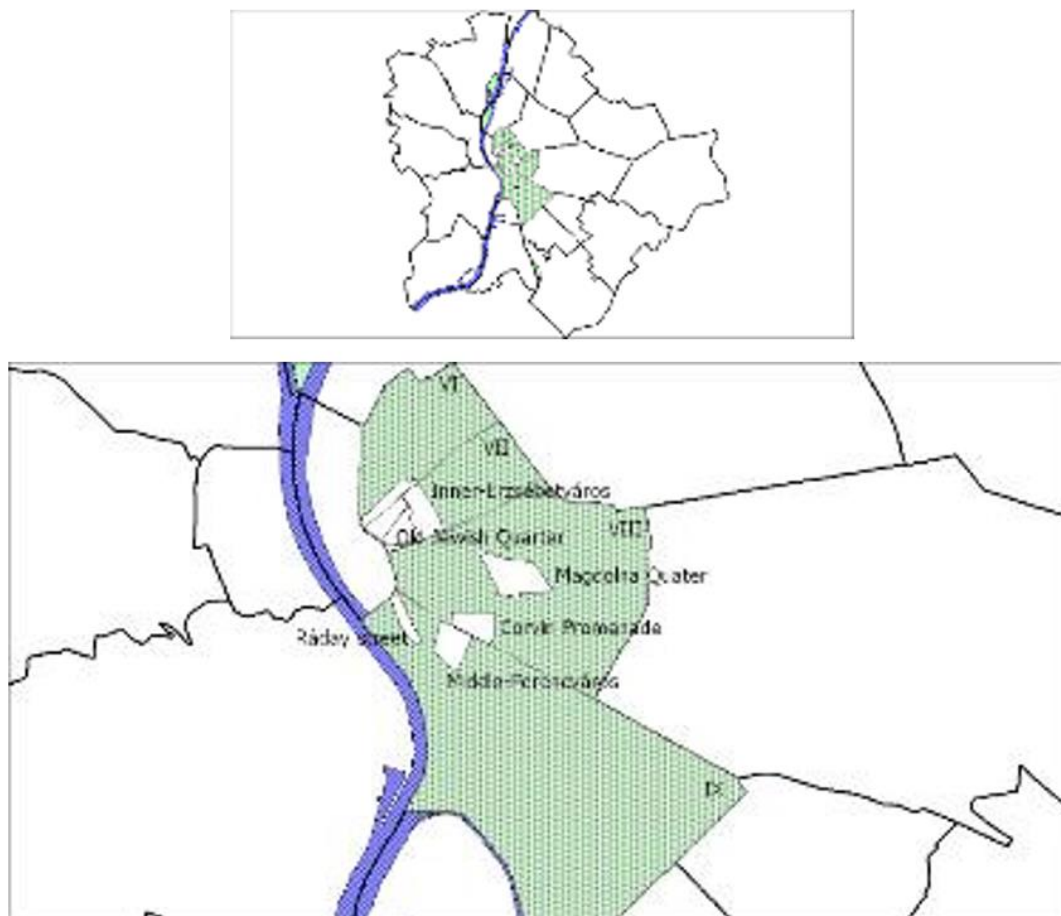

Figure 9.1: Map of Budapest and the map of neighbourhoods in Inner-city area

Source: Adapted by the authors.

Figure 9.2: "ruin bar scene" in Budapest
Source: G. Csanádi, 2015

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CHAPTER 10: HOUSING REGENERATION INNOVATIONS

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Introduction

This chapter schematically presents the concept of housing innovation as an instrument of integrated sustainable urban development. By showing the conditions that an innovation has to meet to be considered sustainable, it will be pointed out that any prolonged deviation from these conditions constitutes a case for regeneration so that the innovation successfully serves its intended purpose. In the last part of the paper, an example from Croatia's capital, Zagreb, is showcased for further empirical research.

Housing program for young academics in Zagreb started in the 1990s, and was conducted by the Ministry of Science, Education and Sports in partnership with the University of Zagreb. The purpose of this program was to meet housing needs of a specific target group by providing them with affordable rented flats in the apartment building located in Borovje quarter, Zagreb. They have an option to live with parents or to rent flats on the black market paying very high amounts of money from their income. Solution to get housing loan and to buy flats was not realistic in that period. General reasoning behind this affordable housing program was that by meeting their basic needs, academics' life quality would increase thus becoming a predictor of their professional excellence, and even a demographic incentive in the long run. Besides that, it was also an initial measure against brain drain. First tenants moved into the flats in 2000, and by all standards this project may be seen as a housing innovation. Since different issues happened in this period – mostly connected with illegal tenancy, various types of contract breaches, bad quality of construction, maintenance problems etc. – the program in general, and the subject building in particular have become scandalized in the public discourse due to serious media scrutiny. Program has become unsustainable and requires policy measures for its regeneration which are pointed out in the conclusion.

Housing innovations

Latest EU development strategy *Europe 2020 – strategy for smart, sustainable and inclusive growth* (European Commission, 2010), has put forth most ambitious set of goals to date, and cities are redefined as motors of competitiveness of regions and member states with regards to proclaimed goals. Passive role of cities as "receivers of help" of sorts has been replaced by a vision of cities as innovative, competitive and creative centres of development that are vital for achieving the broader goals of smart (innovative), sustainable ("green") and inclusive (social) growth. In time, the so-called "European cities" became contrasted with American cities usually characterised with high levels of social inequalities and spatial segregation (Haussermann, 2005).

Yet, with the estimation that around 70 % of the EU population (350 million people) lives in urban agglomerations of more than 5 000 inhabitants and growing, urban problems and risks became a critical feature of European cities as well. URBACT's *Cities of Tomorrow* report (2011), which is the source of the former information, deserves to be quoted in length: "Demographic change gives rise to a series of challenges that differ from one city to another, such as ageing populations, shrinking cities or intense processes of suburbanisation. Europe is no longer in a situation of continuous economic growth and many cities, especially non-capital cities in Central and Eastern Europe, but also old industrial cities in Western Europe, face the serious threat of economic stagnation or decline. Our economies in their current form are unable to provide jobs for all – weakening links between economic growth, employment and social progress have pushed a larger share of the population out of the labour market or towards low-

skilled and low-wage service sector jobs. Growing income disparities and the poor getting poorer – in some neighbourhoods, local populations suffer from a concentration of inequalities in terms of *poor housing*, low-quality education, unemployment, and difficulties or inabilities to access certain services (health, transport, ICT). Social polarisation and segregation are increasing – the recent economic crisis has further amplified the effects of market processes and the gradual retreat of the welfare state in most European countries. In even the richest of our cities, social and spatial segregation are growing problems. *Spatial segregation processes – as an effect of social polarisation – make it increasingly difficult for low-income or marginalised groups to find decent housing at affordable prices.* An increasing number of 'society dropouts' may lead to a development of closed sub-cultures with fundamentally hostile attitudes to mainstream society in many cities. Urban sprawl and the spread of low-density settlements is one of the main threats to sustainable territorial development; public services are more costly and difficult to provide, natural resources are overexploited, public transport networks are insufficient and car reliance and congestion in and around cities are heavy. Urban ecosystems are under pressure − urban sprawl and soil-sealing threaten biodiversity and increase the risk of both flooding and water scarcity" (p. vi, emphasis added).

Housing crisis in the EU has been documented many times (Costa, Bežovan, Palvarini, Brandsen, 2014; Evers, Ewert, 2014; *Leipzig Charter*, 2007; Soto, 2013), and problems that relate to qualitative (inadequate housing) and quantitative (lack of affordable housing units) housing deficit of cities are not uncommon, as can be seen from the previous citation in which the broader urban developmental problems, risks and barriers were listed. Conventional means and approaches for tackling housing problems, such as mass housing developed in Europe after World War II, proved outdated, ineffectual and counterproductive in times when "austerity" (Blyth, 2013) prevails as a policy in EU. In that sense, there exists a permanent demand for innovations.

Housing innovations are social innovations in the field of housing (Czischke, 2013) and may be defined by paraphrasing the BEPA (2010: 24) definition of social innovations. In that sense, housing innovations are "new ideas (products, services and models) that simultaneously meet housing needs (more effectively than alternatives) and create new housing relationships or collaborations". Housing innovations produce different type of tangible services, visibly serving earlier politically unrecognised social needs, where, instead of social rights there are contractual relationships with the potential to develop a new culture of responsible tenants. Social innovation in housing may be driven by government (local and national), civil society (i.e. non-profit housing associations) and the business sector but cooperation and coordination between the relevant stakeholders is crucial for the success of any particular innovation since it acknowledges good (urban) governance (Kearns & Paddison, 2000; Elliot, 2006).

Following a unique study by Czischke (2013), several topic areas of housing innovations in Europe may be listed, although social innovativeness in housing has received little attention in public or academic debate the only exception being the problem of homelessness (i.e. *Housing first* program - Tull, 2004). These include (Czischke, 2013: 9-14): (1) demographic change in housing - i.e. "provision of affordable accommodation and care for elderly people within a cooperative housing association that all elderly persons in a town are entitled to join" (SeniorForum in Sweden); (2) the use of European networks to innovate - i.e. "development and application of an European standard to be used by social housing companies to report and manage their CSR (Corporate Social Responsibility) performance" (EURHO-GR in Grenoble, Orebro, Darmstadt, Brescia); (3) rationalising community investment - i.e. "creation of a foundation to address social issues" (Batigère Foundation in France); and (4) new ways of helping vulnerable groups in housing - i.e. "support to families at risk of losing their home for unpaid mortgage payments" (Mediation program in mortgage debt in Zaragoza, Spain).

Role of regeneration in achieving sustainability of housing innovations

It has been said that "the various dimensions of urban life are interwoven and success in urban development can only be achieved through an integrated approach. Measures concerning physical urban renewal must be combined with measures promoting education, economic development, social inclusion and environmental protection. In addition, the development of strong partnerships between local citizens, civil society, the local economy and the various levels of government is a pre-requisite" (European Commission, 2013). This integrated approach has been termed "sustainable urban development" (Picture 1), after a series of informal ministerial meetings on urban development – in Lille 2000, Rotterdam 2004, Bristol 2005, Leipzig 2007, Marseille 2008 and Toledo 2010.
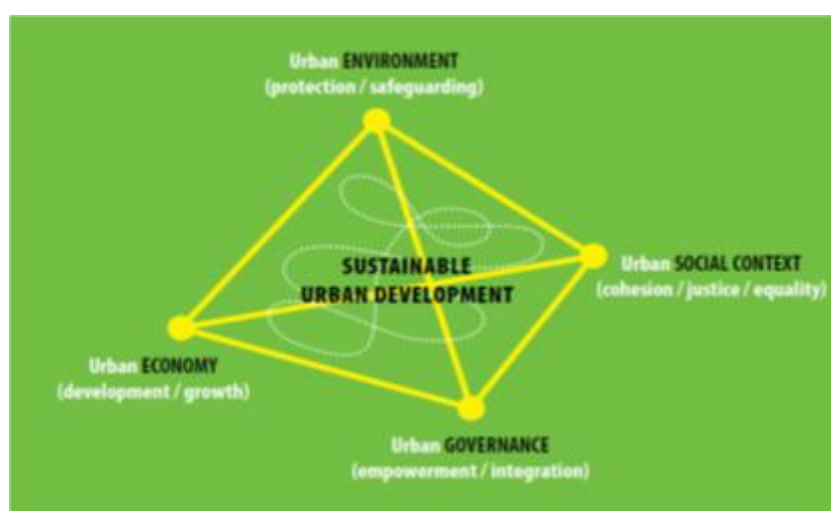

Figure 10.1: The Prism of Urban Sustainability

Source: Czischke, Moloney & Turcu, C., 2015.

Innovations are an indispensable instrument of this approach, but they are not static categories. In other words, innovations themselves have to be sustainable if it is intended for them to serve their purpose and achieve proclaimed goals of urban sustainable development. Although financial sustainability in the form of long-term funding is the most common one, social, political and environmental sustainability issues also arise in time. A certain level of social capital - in form of social trust, cooperation and norms of justice - and cohesion between individuals involved must exist if the innovation is to survive after the initial goals have been achieved. Also, the government's (local, municipal, regional or national) recognition of the value that a certain social (housing) innovation may bring to the community combined with fostering multi-level governance, empowerment and involvement of all relevant stakeholders (public and private) in decision-making processes, are decisive for enhancing the public image and general political acceptance of an innovation. The last but not the least, environmental sustainability of an innovation may be envisaged by paraphrasing the well-known definition of sustainable development by Brundtland Commission: (environmentally) sustainable innovation must "meet the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987). Future needs of beneficiaries cannot be met if, for example, a housing innovation upgrades social inclusion and stakeholder participation but disregards the protection of urban ecosystem by sacrificing the neighbourhood's green areas and using building techniques and materials that do not conform to "energy efficiency standards" (Lewis, Hogain, Borghi, 2013). If any or a combination of housing innovations' sustainability conditions is missing, regeneration is needed.

Housing regeneration can be defined as qualitative improvement of a particular building or a housing block. By narrowing the regeneration scope, it can be differentiated from urban (Leary, McCarthy, 2013) and neighbourhood (Carmon, 1997) regeneration. Further, this improvement includes various physical and social regeneration interventions intended for tackling the problems of housing deprivation: facade refurbishment, fixing isolation problems (heat, sound etc.), renewing green spaces around the building, adjusting building environment and interior with infrastructure needed for meeting the needs of elderly and disabled tenants, constructing playgrounds for children but also includes integrated mediations around certain housing disputes between tenants, involvement of certain shareholders in organised (voluntary) community actions (cleaning the building and the surrounding environment), renewing affordable housing contracts for tenants in need, sustaining the social-mix within the building and other. Housing regeneration schemes are regularly identified with visible (physical) improvements. It seems that with the right amount of financial aid, physical regeneration may be implemented successfully. In our opinion, the more complex task concerns the social component of housing, especially if it was regarded as an innovation before the various issues emerged and started challenging its sustainability. Basically, illegal tenancy, various types of contract breaches, bad quality of construction, maintenance problems and others, all contribute to serious housing deprivation problems. This is particularly true for social housing innovations, since deprivation is usually connected with the lack of funds for regeneration due to local government's budget constraints, bad public image of neighbourhoods with high levels of criminal and socially deviant activity, low social capital and widespread disregard for publicly funded housing due to lack of tenants' personal responsibility for property in question. Involvement of all possible shareholders, but mostly tenants, is a way to a successful housing regeneration since the state, by adhering to subsidiarity principle, doesn't get involved in micro-initiatives of this kind. Public-private partnership (Hearne, 2009) can also be a relevant factor in regeneration schemes and projects to give further legitimation to the social investment agenda. Housing innovation for young academics in Zagreb, Croatia represents a good case for regeneration and will be shown as an almost perfect example of multidimensional unsustainability.

Housing innovation for young academics in Zagreb: a case for regeneration

Government initiative to provide affordable housing to young academics in Croatia started during the 1990s. The *brain-drain* trend, already predicted by several sociologists in the late 1980s, was publicly and politically recognized as an alarming trend during 1990s mostly because of negative impacts of war and transition on social-economic wellbeing of highly educated population. Also, the research of potential *brain-drain*, made in 2000 among young graduate students and research assistants at University of Zagreb showed that "potential migrants are mostly young scientists that are highly satisfied with their positioning within the current system of opportunities but not satisfied with their perspectives in Croatia" (Adamovic, Meznaric, 2003: 160).

Since Croatia was still highly centralized at the turn of the century, especially in terms of higher education provision, it was very difficult (if not impossible) for young scientists to study in the capital. In general, young people constitute a vulnerable group today. High rent costs of flats on the (mostly) illegal private rental market and unaffordable housing loans with unfavourable interest levels worsened future perspectives of potential Ph.D. candidates even further, because their scholarships and wage levels were not high enough for them to adequately meet their housing needs. Young researchers originally from Zagreb faced different – if not "easier" – issues; living with family or relatives creates difficulties for further professional achievement and personal self-development, i.e. starting a family. All these conditions represent the need for innovation that is directed at addressing the problems related to the fourth topic area of housing

innovations' existence mentioned earlier by Czischke (2013): new ways of helping vulnerable groups in housing.

In the early 2000s, two housing instruments were devised to counteract the brain-drain trend of young scientists. Housing program for young scientists in Zagreb was a part of supply side housing strategy, while subsidized housing loans introduced in 2002-2003 acted as an instrument of demand side housing strategy. Subsidized loans indeed boosted housing demand greatly and triggered a constant rise of housing prices in Zagreb until 2008 when the financial crisis and subsequent recession befell European countries. Nonetheless, the supply side instrument that is still (formally) operable and has its physical manifestation (building block) is much more important in terms of housing policy innovativeness in Croatia. Housing program, which had its roots in policy discussions during the 1990s, started officially in 2000 when the first junior researchers and assistants moved into flats in a housing block in Borovje quarter, Zagreb Partnership of Ministry of Science, Education and Sports and the University of Zagreb resulted in implementing an innovative program for meeting housing needs of young scientists by providing them with the option of renting 122 affordable flats in possession of the Ministry, until completion of their work contract which corresponds with the attainment of Ph.D. status.

Shortly after the official start of the program, incident after incident started filling the media headlines. A short public discourse analysis, focused on mainstream media that covered the issues, showed that every public mention of this innovation has been made in a negative context.

As far as 2003, one article from *Vijenac* (18. IX. 2003), a biweekly culture magazine, lay down the foundations of the program's critique in a wider context of criticizing the Ministry's professional incompetency focusing on several (unsustainable) aspects: "Some flats, judging by the dusty and always rolled down window shades, are empty, and some flats the users, who solved their housing situation, are renting out. Building management completely ran out of control and the roof has been leaking while at the same time the pigeons started making the building their home… The tenants are becoming feather collectors. (…) The building is attractive from the outside, but the environment is sad (…). Simply put, the estate doesn't have the needed infrastructure. (…) The flats (27 and 45 m2), although nice, are more like sophisticated student rooms and not flats suitable for a comfortable family life. (…) Bathrooms are inadequate, because they do not have drains for washing machines. So the tenants have to finance their own plumbing".

In the 15 years' timespan several, five governments exchanged in power, yet the program and all its problems became even worse. In the last two years, several main newspapers and web portals (*Jutarnji list*, 5. XI. 2014; *N-1*, 6. XI. 2014; *T-Portal*, 1. XII. 2014; *Vecernji list*, 2. XI. 2014) started actualizing problems related to program's issues and shortcomings. The same data, allegedly acquired from the Ministry's officials, were used in these articles: Out of 122 flats in the possession of Ministry, 20 are empty and 22 are occupied by illegal tenants. On Ministry's behalf, the police intervened and gathered information about 12 of them. In 2013, the Ministry spent almost a million HRK, or 708.000 HRK more than was made from rent. Young scholars are paying rent from 200 to 400 HRK, depending on size, so the revenue was only 290.000 HRK. State's budget revision showed that out of 998.227 HRK, 438.000 HRK were spent on security services, 254.046 HRK on utilities, 193.586 HRK on shared reserve costs and 112.595 HRK on electricity bills.

A more in-depth information about the program's acute problems and especially the scholars' bad conditions of living were gathered in two consecutive articles in a well-known daily newspaper *Novi list* (18. IV and 19. IV. 2015). Journalists conducted interviews with tenants and listed their problems which comprise of: "shady characters that use the building for various means and activities entering and exiting the building as they please; an improvised bed was spotted beneath the stairwell in front of the basement; increased utility costs (water especially) due to a large number of illegal tenants; noise and 'lifestyle' of 'illegals' (smoking in hallways,

leaving trash in common rooms etc.); security guards drinking coffee with the illegals; need for a thorough cleaning".

In the interview with the president of MLAZ (Network of young scientists), a non-profit organization for enhancing development of young scientists' community and its role in society, a more critical attitude towards the current Minister's (lack of) interest and professional engagement was made explicit by listing more systematically the problems of the building, forming a narrative of sorts: "With regards to the fact that the Ministry announces the calls for housing in flats for scientific novices unregularly, a lot of flats remain empty for a long time, without regarding the pleas, questions and warnings that are directed to the Ministry from potential users. In those circumstances, no wonder that illegal tenants started breaking and entering into the flats. Illegal housing has been, unfortunately, a rule for years, and often the illegally housed tenants were linked to criminal activities and other ways of endangering the lives of legal tenants. Police interventions and other emergency services are also not a rare thing. As the front door is always broken, there are people coming into the building all the time which break down furniture (mailboxes, doors, fences), common rooms are full of trash, and kids from the neighbourhood are running around in hallways. (During the construction of the building, the adjacent playground for kids was destroyed). Every change and fixing of locks on the doors have resulted in new breaking the very same day. Also, numerous tenants do not maintain the spaces in front of and around their flats, stuffing the hallways with old furniture, trash, body fluids and such. When the call of application for flats is announced, just a small number of flats is granted, and during the old tenants' process of moving out of flats, empty flats are rarely filled right away. The last call was announced three years ago, the one before that five years ago, and before that the call was not announced for five years. The costs for illegal tenants are covered by the Ministry and legal tenants".

Figure 10.2: Housing block for young scientists

Source: Jutarnji list, 2014

Figure 10.3: Building facade deterioration
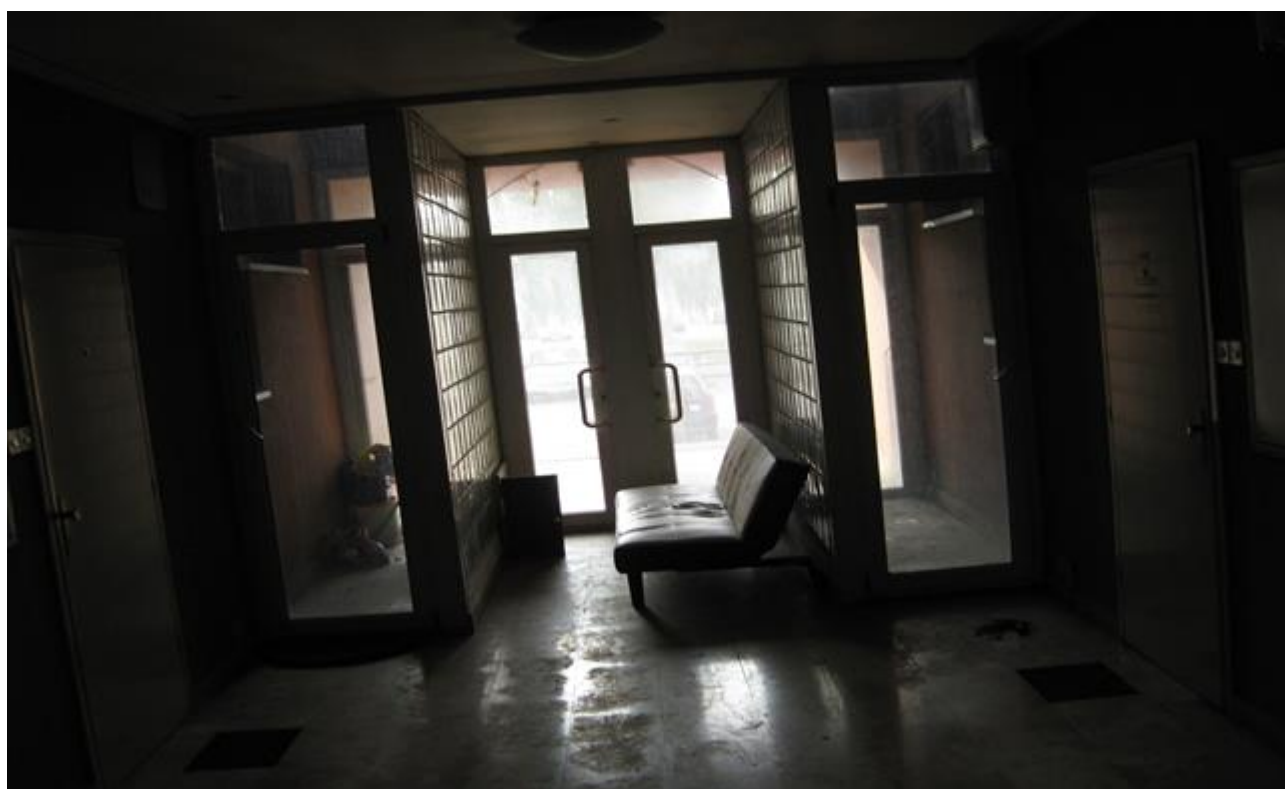
Source: Authors, 2015

Figure 10.4: Hallway deterioration

Source: Authors

There were serious problems with acquiring official data from the Ministry of Education for the research's sake. These would normally include precise information about apartment and tenancy types, contracts signed, maintenance issues and their possible solutions, future plans concerning sustainability and others. One of the possible explanations for the existence of this kind of research barrier may include path dependency argument, originally put forward by New Institutional Economics (NIE) (North, 2000) which makes the claim that performance, capacity and behaviour of present day institutions are determined by their historical legacy. Although Croatia's totalitarian (socialist) and subsequent authoritarian (nationalist) legacy of institutional development is certainly the cause of serious accountability and social capital issues, it may be said that secretive practices of state officials are not exclusively connected with the mere danger of proving (by research) that the policy makers were incompetent thus undermining their public and professional legitimacy. It turns out that this building's existence, as the trademark of government's innovative housing program, was based on "clientelistic" contract between politicians in power at the time (1990s) and their "business" partners from the construction industry. Speculative business deal took place in turn transferring the housing costs back to the individuals it was intended to help in the first place (young scholars) and the general public (Ministry which is financed through state budget, or put simply, with taxpayer's money). In other words, this program was plagued by profit-maximization interest of parties enforcing the mentioned corruptive "contract". Hence the unsustainable quality of construction and large maintenance costs for which the responsible parties – *Industrogradnja* (construction firm), Ministry of Education (project initiator) and *Stambeni servis* (building maintenance firm located in Zagreb) do not hold themselves accountable. The most serious issue is that almost nothing changed in Ministry's approach to unsustainability issues that evolved since 2000 in the housing block for young scientists, especially if it the well-known practice of each government in Croatia to undermine and/or change the successes/errors of the previous one in power is held in mind. As the time moves on, more and more problems will surely occur, while the *status quo* persists endangering future perspectives of young scientists and thus reversing the innovative potential of the housing program which was originally implemented to stop the brain-drain process.

Conclusion

European urban development model envisaged by European Commission in a 15-year period (2000-2015) through numerous urban policy documents once again provides a legitimization framework for strengthening and enhancing the four components of integrated sustainable urban development: economic growth, environmental sustainability, social inclusion and equality, and urban governance. In that same period, significance and novelty of social innovations in the field of housing grew as they became new instruments for meeting unmet needs in cities. EU funding of social innovation programs and projects confirms the importance of implementing new ways of problem solving in a changed, a more austere, policy environment.

Social innovations in housing are thus developmentally inclined but are prone to decline and decay if any of the urban sustainability conditions derived from development goals is missing. Housing regeneration acts as a corrective to those processes. This means the reestablishment of those conditions to meet the conditions of urban development.

Short description of housing innovation for young academics in Zagreb, was used as an example of serious case for regeneration. It is clear that even the innovative solutions may become unsustainable due to various reasons, some more than others. Particular cause of this innovation's decay is more sinister since it concerns socially deviant determinants of (post)transitional countries' institutional fabric that undermined the potential of its successful implementation (unaccountability, political clientelism, business speculation) along with

general negative trends (brain drain, unaffordable housing, housing deterioration). As well as being a social, it became a political issue once again. Regeneration of this innovation must be made as one of the priorities in Ministry's plans and strategies in the field of higher education. During the reaffirmation of this innovation's importance for countering the acute housing problems of young scientists in Croatia, the participation, advocacy and support of all stakeholders, especially the current tenants will be crucial if the positive change is to become the final outcome.

In the light of previous conclusions several sustainability priorities may be formulated for reaching the regeneration goals:

1. Stronger public presentation of research-based knowledge on this innovation's problems and its need for regeneration as a prerequisite of any further collective action;
2. Pressure appliance on responsible institutions by mobilizing resources of relevant stakeholders - unions in the field of education, tenants, non-profit organisations and academia;
3. Application for funding the physical urban regeneration through EU projects and programs, especially with regards to the energy efficiency area;
4. Reestablishment of legal transparency in housing contracts and eligibility procedures for tenancy;
5. Environment problems assessment as a foundation for regeneration of building's surroundings;
6. Establishment of a just and financially sustainable five-year plan for the program's future role;
7. Support of continuous participation and involvement of tenants in facing the sustainability issues.
8. Strengthening of social cohesion in the building by promoting housing co-production, as well as in the neighbourhood (Borovje) to resolve issues of degraded social trust.

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DISCUSSION FORUM ON READER #2

The following comments have been posted by OIKONET partners in the online forum of [Reader #2.](#)

JOSIP PANDZIC SAYS:

FEBRUARY 1, 2016 AT 2:44 PM

Although a brief one, Chapter 9 (URBAN PLANNING AND THE ROLE OF PARTICIPATION) nicely explains the micro-politics of urban rehabilitation, especially the public good rhetoric used as the (masked) self-enforcing legitimation of gentrification and consequential rise of urban inequalities. Post-socialist societies are very similar in this domain. Acute political-economic path dependency and variable social trust in civil society organisations in combination with market-led urban and neighbourhood development paradigm seems to "push-out" lower-status tenants which have to be included in the participation and decision-making processes if social justice and good governance is what modern European cities strive for.

FILIPPO BOSCHI SAYS:

MARCH 29, 2016 AT 3:35 PM

Comment on Reader 2 – "Brownfield regeneration in the UK"

The paper gives a clear and brief review of the topic. Particularly appreciated is the description of the public role, reassumed in main categories. Evidently the contribution couldn't cover all the aspects of the topic.

Nevertheless it could be interesting to widen the focus beyond the contaminated brownfield and take in consideration broader typologies of situations and cases. Today in many part of the world regeneration and redevelopment interventions are not limited to the large heavy industrial sites, but encompass many different situations. It could be interesting to understand how much regeneration projects are sustained through specific programmes (International, national or regional) and by usual planning tools.

It could be also useful (especially for non-English countries) to propose a sort of glossary of the terms related to the topic, including for example: retrofit, urban renewal, regeneration, redevelopment, etc.

VIGGO NORDVIK SAYS:

APRIL 20, 2016 AT 6:39 PM

I agree with Fillipo that the chapter on Brownfield regeneration in the UK addresses an important topic and it illuminates many aspects that are important, both for policy design and for private or public developers approaching a brownfield. Even though Brownfield development holds a more important place in both new construction and the public debate in UK than elsewhere, the topic is important across Europe and the rest of the world.

Urban change is a persistent characteristic of cities. Our focus on brownfield utilization is obviously due to de-industrialization and other forms of industrial change. The chapter on Brownfield development should consequently be seen in connection with Chapter 9 on Urban Planning and Participation by Csizmandy, Csanady and Olt.

The topic of contamination and perceived risk of exposure to poisonous substances lies at the core of many brownfield developments. We would like to point towards two aspects of this that deserve attention. A new development with higher risk attracts less demand, and resourceful families self-sort themselves away. Hence, vulnerable groups that do not have the economic means to opt away may be over-proportionally exposed to risk. This is unfortunate from an environmental justice point of view. Second, the ability to signal that poisonous substances are crucial to attract potential buyers to a brownfield development, and to overcome negative effects of uncertainty. The ability to signal in this regard boils down to trust. Trust, either in (private) developers or in planning authorities that give building permissions. A kind of certification system could be useful as a means to achieve this.

Outside Europe and US, the pace of urbanization is far stronger, leading to even stronger pressure on land use. This is forcefully demonstrated in Ed Glaezer's stimulating book on the 'Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier'. The question how brownfield developments in the mega cities of the developing world should by regulated is of immense importance. Especially as there is lack of trust in the planning system, often for good reasons. Hence, Hadjri and Durosaiye's chapter on Brownfield regeneration deserves attention from a wide public.

KHADJRI SAYS:

APRIL 22, 2016 AT 7:19 AM

Thank you Filippo for your comment. Indeed, there are different scales to brownfield regeneration. The main tendency in the UK at least seems to target large scale development which is the scale of the industrial areas. There are also different types of brownfields depending on the extent of contamination which dictates whether a site is suitable for housing development or not. Chapter 1 is focussed on urban brownfields regeneration hence the lack of information on other types of urban redevelopment. The suggestion of a glossary is very good and we take this on board for the Oikopedia.

LASSE FRYK SAYS:

APRIL 5, 2016 AT 5:52 PM

OIKONET Reader 2 mirrors the challenge of my own town Gothenburg, Sweden, through a global perspective. Nadia Charalambous writes about Cyprus showing how the global development makes the ground for the transformation of a divided city. I am inspired by the way she describes the complexity of a city in constant transformation where globalization, climate change, economic fluctuations and terrorism pushes everything towards increasing complexity. She stresses the fact that this is affecting people differently and are most devastating to those already in a disadvantageous situation. This is a pattern very clear in Gothenburg, a city with extreme segregation and socio-economic division. The severe and ongoing gentrification process shows an increasing gap between rich and poor for each year passing. The shift from renting a flat to buying it and from publicly owned to privately owned speeds up this process. In Stockholm, our capital, this is an even more extreme pattern.

Moving from Nadia's text about Cyprus to Ellen Geurts, Sandra Treija and Uģis Bratuškins writing about Latvia I see an extreme shift in ownership from public to private. Latvia is now facing the danger of certain areas and housing stocks being exposed to the risk of degradation when tenants being very split and unable to get together defying common interests, setting goals and acting collectively. One focus the writers have is on strategies for participation, but the management systems regarding housing with a complex structure of stakeholders makes it

extremely difficult defining common interests. This will hit harder on the already disadvantageous.

Participation is a central theme for Jenny and myself though the challenge in our area is different. The combination of migrants from over 80 countries as tenants and privately owned block of flats being bought and sold between big international housing companies, have put these block of flats in a slope of constant degradation. In the beginning of 2016 the local government in Gothenburg, after a tough political battle, decided to test a new strategy by bring back nearly a 1000 flats into the realm of public housing. This was very much due to the mismanagement by the private sector and a strong opinion formulated by a group of tenants. This was a very unusual solution and I am sure this strategy will not be used again. However, focus will now be intense on this area and heavy investments will be done to increase the standard of bought houses. The risk of increased rents forcing people to move is high. Our focus is now concentrated on the tenants and the new owners' views on participation.

LASSE FRYK SAYS:

APRIL 20, 2016 AT 12:20 PM

Reflexion on the Zagreb situation.

The example of Zagreb shows that good intentions and EU funding is not sufficient when enhancing integrated sustainable urban development. Housing needs of a target group was meant to be met by affordable rented flats. The project was seen as a housing innovation, but in practice turned out being a scandal.

The ambition of the EU to turn passive receivers of help into competing, innovative and inclusive cities did not work well in the Zagreb situation. The increasing gap between rich and poor, strong market actors and local governments with loyalties to the market was not a good combination.

The text explains social structures with increasing tension and very little tools and ambition to introduce change on the structural level. It is said in the text that success in urban development only can be reached through an integrated approach and strong partnerships where local citizens and civil society are central actors. It is very interesting to further read the conclusions that also introduce a concrete and tougher parallel strategy for reaching the goal.

The Chapter ends with targeting the structural level focusing on public presentation of research-based knowledge, pressure on institutions, mobilizing resources of relevant stakeholders, legal transparency in housing contracts, eligibility procedures for tenancy and continuous participation and involvement of tenants. The tough ending addresses some of the central issues that will be needed when talking about an integrated sustainable urban development. Interesting!

LASSE FRYK SAYS:

APRIL 20, 2016 AT 12:22 PM

Comment on URBAN PLANNING AND PARTICIPATION IN BUDAPEST.

When reading about the urban planning experiences in Budapest one central question comes to mind. What is the agenda for the whole of this process? The clashes of interest are obvious, as is the unbalance of power between them, when the town is to be reshaped. Local government forming housing policy and the planners seem to miss a very important part of their responsibility. The question of what kind of society we want and how we build justly for inclusion and sustainability.

There seem to be a silent agreement between market, middle class and local government to exclude the most vulnerable. Arnstein's ladder show they have chosen a suitable level of participation. Through lack of public funding they can argue the need to increase the market influence. Through letting the investors colour the level of investments the gentrification process is given a good push. It is easy to get the impression from the text that there is no genuine interest to "build real partnership with residents and civil society organisations" in an attempt to change the balance of power. The Chapter shows the complicated systems of interests, which only stress the importance of political will in the social transformation and physical planning of towns. The question raised of the risk and danger with the growing inequality when building cities is so very central.

LEANDRO MADRAZO SAYS:

APRIL 22, 2016 AT 7:29 AM

There are several important issues raised in CHAPTER 7: LOCAL COMMUNITY RESPONSES which altogether cast some doubts about the alleged effectiveness of participatory processes as the proper mechanism to engage a community in the decision making processes: 1. Rather than being a mechanism to transform the existing political structures and power relationships, participation can be used precisely for the opposite purpose: to preserve them. However, the ultimate goal of a participation process should be the transformation of the established structures. 2. The notion of community needs to be questioned. It is not the homogenous social body which speaks with a single voice. Rather inside each community there are power struggles, different interests. It is necessary to recognize those facts 3. The limits of a community are not easy to establish. They are probably not static, but mobile. They might grow or shrinking depending of the force, will and motivation of their members, their capacity to mobilize other parts of the population, expanding from the local to the national level.

LAURANEIJENHUIS SAYS:

APRIL 22, 2016 AT 7:38 AM

Chapter 3: Post-Conflict Regeneration in The Historic Centre Of Nicosia: Global Challenges And Local Initiatives, provides an insightful explanation of the challenges not only Nicosia but many other (post-conflict) cities face in today's world. It explains the complexity of the cities themselves, with constant changes in terms of their physical form as well as their socio-economic and demographic composition. Therefore, solutions and initiatives for regeneration must be as dynamic as the cities themselves, and the Master Plan for Nicosia provides that. Furthermore, the description of empowering the neighbourhoods Chrysaliniotissa and Taht-el-Kal are both interesting and hopeful in the sense that these initiatives might be a possible solution for other cities as well. It also links well to the 'housing regeneration' and 'participation' themes of OIKONET.

JOSIPPANDZIC1989J SAYS:

APRIL 22, 2016 AT 7:40 AM

In Chapter 6, some well-known facts regarding post-socialist housing transition are pointed out in a concise way. The simultaneous processes of public housing stock privatisation, housing management decentralisation and housing market liberalization resulted in various problems; further housing stock deterioration, management problems, and an acute marginalization/stigmatization of social housing – as a crucial component in housing policies,

as well as serious safety net for the "new poor" (pensioners, young middle-class adults etc.). It is correctly pointed out that the most serious problem is housing (cost) overburden – especially for pensioners which became "asset rich, but income poor" – acting as a general barrier to meeting households' basic housing needs. The problems in Latvia around which this chapter revolves, may be found in other post-socialist countries as well, and it will (hopefully) serve as a great example on how to proceed with the regeneration of high-rise building management initiatives.

IODUROSAIYE SAYS:

APRIL 22, 2016 AT 7:49 AM

Reblogged this on oluremidurosaiye and commented:

It is interesting to note that despite the fact that the war that led to the breakup of former Yugoslavia does not fully account for the brain-drain highlighted in this article. The brain-drain phenomenon had already been identified long before the collapse of Yugoslavia, and as the article suggested, measures, such as housing provision, had already been put in place to ameliorate its negative impacts.

I think the housing problems, while it had been adequately presented by the author of this article, exemplifies one of the major challenges the post-communist countries are facing in Europe. I think the problem is not unique to early 1990s, but persist until this current time. While one of the cornerstones of European integration is the freedom of movement of people, capital, and goods and services, this also poses a potential problem of highly mobile people moving from the economically less affluent countries to the better developed economies. Obviously it is the highly educated, and very skilful people that could seek better prospects in the Western part of Europe, to the detriment of the countries in the Eastern part, who need these skilful labour the most.

JOSIPPANDZIC1989J SAYS:

APRIL 22, 2016 AT 8:02 AM

In chapter 8, the "Community Driven Development" (promoted by the World Bank) – although with examples from Asia (Indonesia) and Africa (Ghana) – is presented in an elegant fashion with which a European or North American context may relate. The general idea to "change the relation between governments and citizens, resulting in the direct inclusion of the voice and knowledge of citizens in public policy, as well as the transfer of authority to decide, implement and/or control public policy" is a fundamental vehicle for democratization and development of people's housing experience. Yet, the most important question from the chapter remains unanswered: "why are government institutions that deal with community participation not responsive?" In our opinion, the ignorance of central government continually represents an obstacle more than others (lack of funding, lack of political will). In other words, power-sharing is not an idea that the top-down oriented political structures are interested in, since it would basically deprive them of power to make decisions benefiting their own interests.

EDGARS BONDARS SAYS:

APRIL 22, 2016 AT 9:09 AM

Comment on Chapter 5: Regeneration of multi-family buildings in local community of Zagorje

ob Savi and user feedback.

Since a significant amount of residential building stock was not regularly maintained for decades, it has become outdated. Therefore, it is necessary to ensure a complex renovation of the buildings in order to improve energy efficiency, as well as to adapt the apartments to the contemporary living standards (e. g. accessibility). If the buildings are not soon renovated, large housing areas will be open to not only physical, but also social degradation. First stage of European funding for insulation of buildings were focused on improvement of energy efficiency and other needed improvements of the quality of the buildings were not accepted while the new stage of EU funding is opened also towards improvement of technical network of the buildings etc.

Reviews on the subject of range of works included in the renovation process shows also a debate about the quality of window replacement and the subsequent problem of indoor air quality. The largest part of respondents indicates a significant heat loss reduction thanks to air-tight windows.

At the same time practice in Latvia shows that inclusion of windows replacement in the works of renovation projects may be problematic since most owners of the apartments already have carried out window replacement by their own initiative. So, usually, window replacement is not included in the work-list of housing renovation projects in Riga, which unfortunately significantly impairs the visual appearance of the buildings.

SAŠO MEDVED SAYS:

APRIL 22, 2016 AT 10:49 AM

Hi Edgars, I agree that all aspects of living comfort should be addressed during the building renovation preparation phase. As consequence the national or local subsidy support schemes should be developed further to include indicators of improved (health, economic and social) quality of living. Currently the energy conservation measures are dominant, but for success of the urban regeneration there are others (more) important goals should be add.

EDGARS BONDARS SAYS:

MAY 20, 2016 AT 1:08 PM

You are right Sašo, of course, that energy conservation is just one of the many issues to be addressed to ensure the success of urban regeneration. At the same time, the need for energy efficiency improvement can serve as a kind of catalyst to start the complex renovation, which covers a much broader spectrum of issues than ordinary energy retrofitting of a building. Unfortunately, one of the obstacles to that is the extent to which the subsidy support programs provide such a complex renovation measures.

SAŠO MEDVED SAYS:

APRIL 22, 2016 AT 11:08 AM

Even not be an expert in social aspects of urban planning and revitalization, I found the case of regeneration of the historic centre of Nicosia, presented in the Chapter 3, very interesting and encourage. It is example of successful urban regeneration despite of multicultural environment with specific historical background and social requirements.

EDGARS BONDARS SAYS:

MAY 20, 2016 AT 1:10 PM

Continuing Your previous comment where you noted the need to address a number of issues in urban regeneration, I believe that the Reader as a whole address quite a wide spectrum of these issues. Both from the environmental and technical perspective (such as brownfield regeneration, heat island, energy retrofitting) and from a social and economic point of view, such as mixed-use development, increase of employment (Chapters 3 and 4, for example), etc.

SAŠO MEDVED SAYS:

MAY 19, 2016 AT 6:49 AM

Dear Viggo, I find your contribution in Chapter 4 very interesting. As we don't have experience in social research since we are more involved in energy related aspects of neighbourhood renovation, your thesis of changing social mix attracted my attention. I'm particularly interested in methods that you proposed for evaluation of "social renovation" of neighbourhoods. Are there particular indicators in methods such as BREAM, LEED or DGNB that you implement? Is it possible for you to share your article "Survival and Exits in Neighbourhoods: A Long-Term Analyses"?