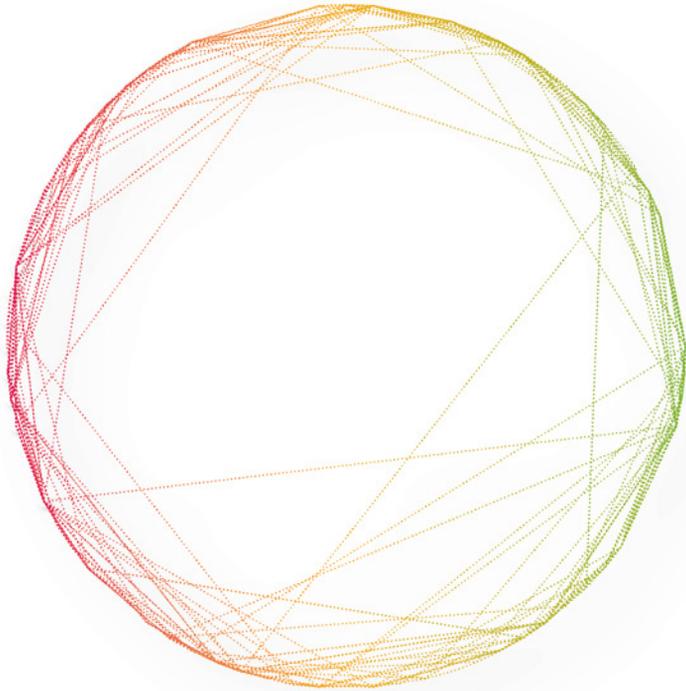


# **Global Dwelling**

Intertwining Research,  
Community Participation  
and Pedagogy



**Edited by  
Leandro Madrazo**

This book summarizes the work carried out by OIKONET, an Erasmus Network project dedicated to promoting pedagogic innovation in the field of housing studies which was carried out from 2013 to 2016 with the support of the Lifelong Learning Programme of the European Union.

The network was structured into three sub-networks which became interwoven through the project activities:

#### HOUSING RESEARCH

was dedicated to identifying relevant research topics in the current debate about housing in a globalized world.

#### COMMUNITY PARTICIPATION

aimed at engaging local stakeholders in community action projects to address the planning and renovation of the built environment at various scales, from residential to public.

#### PEDAGOGICAL ACTIVITIES

was devoted to the collaborative design and implementation of learning activities to study contemporary housing issues.

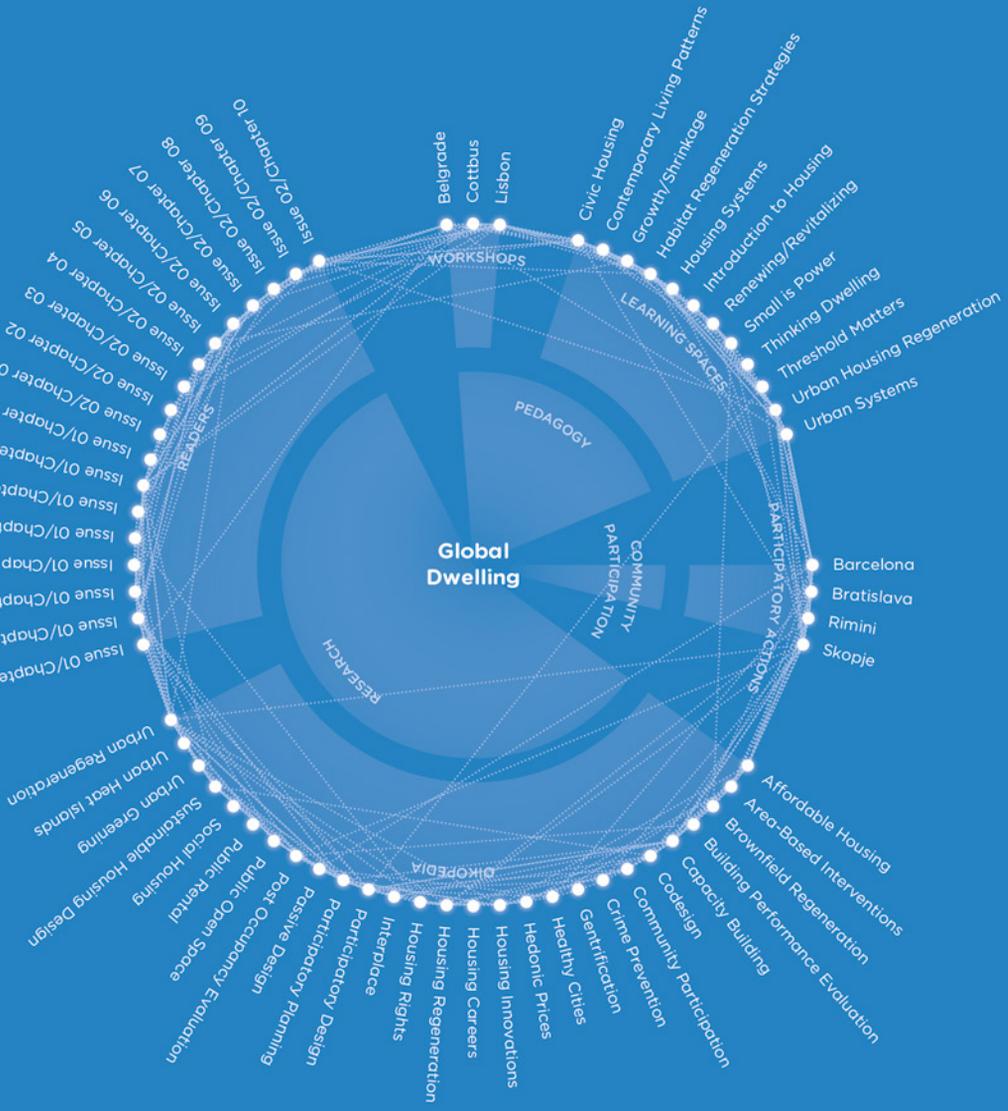
The book contents have been organized to reproduce the structure of the network and its construction process:

**MAPPINGS** reflects the stage of identifying and visualizing the network nodes (people, courses, research topics, case studies). Key issues concerning contemporary housing which have been identified by partners are summarized in this section.

**INTERACTIONS** corresponds to the process of finding affinities among partners, subjects and areas of interest, in order to foster a collaborative and interdisciplinary study of housing, in its global dimension. Interrelationships between Housing Research, Community Participation and Pedagogical Activities have been explored in order to delineate potential transactions across the three realms.

**CONFLUENCES** refers to the novel territories that have emerged as a result of the interactions across the network. This section includes examples of learning spaces and community-based participatory actions which were the result of overcoming institutional and disciplinary boundaries, physical distances and cultural differences.

# Global Dwelling





To Johan Verbeke  
in memoriam

## **Global Dwelling**

Intertwining Research,  
Community Participation  
and Pedagogy

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# **Global Dwelling**

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Community Participation  
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L. Madrazo

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# Introduction

Leandro Madrazo

OIKONET—*A Global Multidisciplinary Network on Housing Research and Learning*, is an Erasmus Network project dedicated to promoting pedagogic innovation in the field of housing studies which was carried out from 2013 to 2016 with the support of the Lifelong Learning Programme of the European Union. Thirty-four organizations representing twenty-five European countries, and a further four outside the EU, formed part of this network.

The purpose of OIKONET is to build a flexible, comprehensive and cross-cutting framework to examine contemporary dwelling from a global perspective, by acknowledging that:

- There are common driving forces influencing the contemporary habitat in different cultures, societies and places, among others: gentrification, mobility, sustainability, digitalization, and economic and social restructuring.
- Dwelling as a subject-matter inevitably brings together various scales, disciplines, and areas of expertise, including: architecture and urban planning, sociology and community psychology, economics and finance.
- It is necessary to adopt inclusive approaches to identify housing needs and to find appropriate solutions with the joint participation of citizens and experts, community and local representatives, and political and financial institutions.

Nowadays, the study of housing in higher education institutions is mostly undertaken from a disciplinary perspective, for instance, from an architectural, urban, sociological or economic point of view. However, there is a need for multidisciplinary and interdisciplinary frameworks to address housing in today's academic programmes from a global perspective which properly reflects the conditions of our time. Those frameworks cannot be circumscribed to academia; rather they should involve other institutions and stakeholders such as local administrations and civic organizations, citizens and professionals, researchers and experts in a debate on contemporary housing.

The aim of OIKONET is to foster the exchange of knowledge, methodologies and good practices among research groups, higher education institutions and community stakeholders involved in the processes that shape contemporary dwelling in our global societies. The activities carried out in the project enabled partners to interlink research activities with the collaborative design of learning processes, and to embed these in the social and cultural local milieus. Collaborative learning activities and community outreach actions were designed and implemented in various locations with the participation of academics, professionals, researchers, citizens, social activists and local authorities to address some of the pressing issues which determine today's living environments, among them: citizen participation in housing design and urban development, energy efficiency, digital fabrication, housing affordability, social and environmental sustainability, urban regeneration and liveability in contemporary cities. These activities have contributed to fostering interactions and exchanges between students and teachers, researchers and community members, thus cutting across cultural, institutional and territorial boundaries.

## NETWORK STRUCTURE

OIKONET partners include higher education institutions, research groups, local authorities, community groups and international organizations. The expertise covered by the consortium embraces a wide range of subjects: architecture and urban planning, engineering, housing studies, urban policies, sociology, social studies, and pedagogy. The challenge of the project was to bring together this variety of actors and fields of study, to foster the exchange among research groups and academia, to interlink research activities with the collaborative design of learning activities, and to embed learning processes in the social and cultural environments. To achieve these goals, the network is structured into three sub-networks which became interwoven through the project activities (Figure 1):

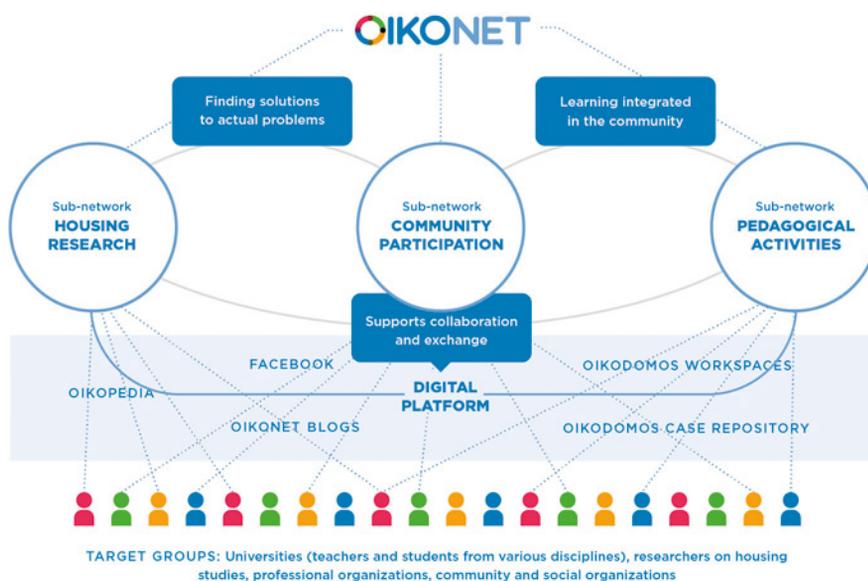


FIGURE 1.  
Network  
Structure

- HOUSING RESEARCH was dedicated to identifying relevant research topics in contemporary debate about contemporary housing issues in a globalized world.
- COMMUNITY PARTICIPATION aimed at engaging local stakeholders in community actions to address the planning and renovation of the built housing environment at various scales, from residential to public.
- PEDAGOGICAL ACTIVITIES was devoted to the collaborative design and implementation of learning activities—carried out on-site and on-line within blended-learning environments integrating courses and learners from the participating schools of architecture and planning—to study contemporary housing issues.

The process to build the network spanned over the three years of the project and went through the following phases:

- IDENTIFYING AND VISUALIZING THE NETWORK NODES (people, courses, themes, case studies). This was achieved through the joint preparation of learning spaces and workshops, identifying and discussing themes of research and proposing cases of study in local contexts.
- STARTING OUT INTERACTIONS WITHIN EACH SUB-NETWORK (Housing Research, Community Participation, Pedagogical Activities). Finding affinities among partners and areas of interest and designing learning activities which involved members of various sub-networks: Researchers, academics, and local community representatives.
- FOSTERING CONNECTIONS BETWEEN SUB-NETWORKS. Carrying out joint collaborations, such as engaging researchers in the design of learning activities or involving citizens in community outreach actions.
- CONSOLIDATING THE TIES BETWEEN NODES. This involved the joint preparation of contents for this book as well as the creation of a compendium of learning outcomes and competences for a learning programme about “Global Dwelling”.

## DIGITAL PLATFORM

The activities of the OIKONET network are supported by a digital platform specifically created for the project. The OIKONET web portal ([www.oikonet.org](http://www.oikonet.org)) provides information about the network activities and facilitates the public access to the outcomes produced during the project (Figure 2). Specific project outputs and resources available in the portal can also be accessed through the links included in the digital version of this book ([www.oikonet.org/global\\_dwelling](http://www.oikonet.org/global_dwelling)).

The screenshot shows the OIKONET web portal home page. At the top, there is a navigation menu with links for Home, Project, Consortium, Conferences, Workshops, Activities, Outcomes, Dissemination, Guide, and Contact. The main header features the OIKONET logo and the text "A GLOBAL MULTIDISCIPLINARY NETWORK ON HOUSING RESEARCH AND LEARNING". Below this is a large blue banner with a white silhouette of a city skyline and the text "A global multidisciplinary network on housing research and learning." The main content area is divided into several columns. The left column lists "Recent Activities" with a date of April 27, 2017, and a title "FIRST OIKONET POSTGRADUATE WORKSHOP: School of Architecture of Valencia, Spain, 22-24 June, 2017". The middle column lists "Activities Log" with a date of October 20, 2016, and a title "The integration of a collaborative platform with the design studio". The right column lists "Follow us" with social media icons and a newsletter sign-up form. At the bottom right, there is a circular network diagram with nodes and connecting lines.

FIGURE 2.  
Home page  
of the OIKONET  
web portal

The web portal incorporates OIKONETWORK, an interactive visual map to plot the network activities and their interrelationships (Figure 3):

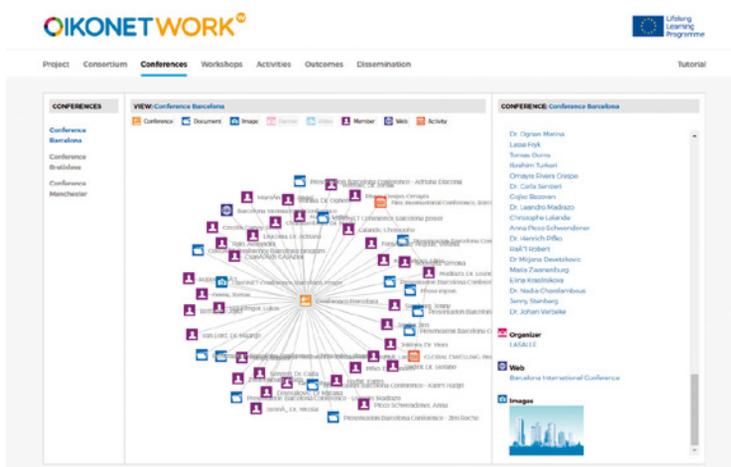


FIGURE 3.  
OIKONETWORK

## BOOK STRUCTURE AND CONTENTS

The book is structured in three sections:

- **MAPPINGS.** This section provides a representative overview of current housing research. Key issues concerning contemporary housing which were proposed by members of the Housing Research sub-network are summarized. Some of the identified issues were addressed as well in the learning activities and community actions carried out in the project.
- **INTERACTIONS.** Interrelationships between the work carried out in the three sub-networks—Housing Research, Community Participation and Pedagogical Activities—have been explored in order to delineate potential transactions across the three realms. With this purpose, some the chapters have been co-authored by members from different sub-networks to foster cross-fertilization of ideas and disciplines. In other chapters, issues concerning the three sub-networks are interwoven in the work of a single author.
- **CONFLUENCES.** The interactions across some of the network components—people, organizations, subjects, and disciplines—have given rise to novel territories that cut across pre-established divisions between academia and community, researching and learning. This section includes examples of learning spaces and community actions which emerge as a result of overcoming institutional and disciplinary boundaries, physical distances and cultural differences.

## Mappings

This section begins with an overview of the research topics discussed within the network, collated by Karim Hadjri, coordinator of the sub-network Housing Research. Research topics concerning contemporary housing put forward by project partners have been grouped in four broad areas: Sustainability, Participation, Affordability, and Regeneration. Within each area, specific research issues are introduced and discussed with reference to relevant literature. Likewise, mentions of research works by OIKONET partners appear in the discussion. The conclusions highlight the interconnections between the four research areas and their global nature.

This introduction is followed by a compendium of 11 concepts selected from the entries that OIKONET partners added to the Oikopedia on-line knowledge-base about contemporary housing: Affordable Housing, Building Performance Evaluation, Community Participation, Gentrification, Participatory Design, Passive Design, Social Housing, Sustainable Housing Design, Urban Greening, Urban Heat Islands and Urban Regeneration. Each of these terms is introduced in a concise manner resorting to the basic literature and to representative cases.

## Interactions

In “Moving Targets: Practice, Architecture and Urban Shrinkage”, Adam Evans draws the attention to the lack of correspondence between the phenomena of the shrinking cities—which affects urban areas worldwide—and the established teaching and learning practices in architecture and planning schools. Typically, academic programmes are very much focused on forming professionals for making cities grow. Future architects and planners are trained in design studios to create buildings and plans for the expanding city. They are not trained, however, to concoct strategies for the shrinking urban areas. Evans turns to Henri Lefebvre’s *The Production of Space* to propose a framework which would enable learners and practitioners to deal with the creation of new spaces and the resignification of existing ones. Thus, Lefebvre’s triad of *conceived-perceived-lived space* would be valid both to explain the production of space in a growing and in a shrinking context, that means, for the production and the “unproduction” of space. Evans appeals to “the beauty of the shrinking city”, a city which can be seen “as a laboratory, a contextual test bed for new ideas and methods of spatial engagement which also affords time for reflective practice, which is rarely possible under the constraints of working in a growing city where the emphasis is on product rather than process”. Accepting the reality of the declining urban areas leads to the rethinking of design studio pedagogy, to transform the studio into a space to investigate existing local traditions, cultural contents and the role that inhabitants play in creating a sense of place. The tasks of designers operating within the framework of the shrinking city would be to reimagine, to reinvigorate and to reestablish the values of the lived places thus helping to overcome the negative

connotations that declining urban areas still carry nowadays. Ultimately, Evans invites us to confront the incongruity between the reality of the built environment and the prevalent teaching and learning models.

The gap between the reality of a changing world and the established teaching and learning models is also addressed by Nadia Charalambous in “The Challenge of Change in Living Environments: Implications and Opportunities for Architectural Education”. Charalambous argues that changes in architectural education, in particular in housing design studios, are necessary to face the ongoing transformations in living environments in cities around the world which are driven by multiple forces: Globalization, increased mobility, massive movements of labour forces, migration flows, technological developments, economic fluctuations and terrorism. Some of their consequences are lack of affordable housing, homelessness and overcrowding, and social integration problems. However, in spite of these ubiquitous and tangible transformations, architectural education—in particular design studio pedagogy—seems to be “an isolated island in the middle of a complex reality”. To overcome this insularity, it would be necessary to adopt “multidisciplinary approaches in studio pedagogy, going beyond disciplinary and academic boundaries, and cancelling out the tensions between global dynamics, cultural diversity and local realities”. In the same way as living environments change, so does the architectural profession. Furthermore, there is a lack of correspondence between what architects are expected to do in a changing and global society and what they learn at schools: “Architectural educators continue designing and teaching the studio on the basis of what an architect currently is or was”, rather than what they will do as professionals. Solving the incongruity between the fast-moving world and conventional academic education is an opportunity to reflect about the profession and contribute to its renewal. To undertake such transformation in architectural education and practice, the housing design studio needs to be reconstituted. It is necessary to overcome disciplinary and academic boundaries and deal with global forces and local socio-spatial realities in design studio work. In a reformed housing design studio questions posed by society would not be taken as fixed and well-defined problems but as opportunities “to investigate how social and life patterns evolve” through research-based design. Therefore, such a design studio would not be an island detached from the complexity of the world but interwoven within it, and design would be seen not as a formal solution to a well-defined problem but as an instrument to investigate the nature of the problems in their own real context. Thus, pedagogical models based on “project-based learning”, “research as design”, “designerly research”, and “action research” would suit to the goals of this reformulated design studio.

In “The Challenges of Social and Demographic Change for Urban Planning and Housing Design”, Adriana Diaconu, Jim Roche, Paulette Duarte and Sandra Marques Pereira examine some of the policies adopted in three European countries—Portugal, Ireland and France—to address the discrepancy between the characteristics of the existing housing stock and the ongoing

demographic changes. They have undertaken a comparative study of the plans implemented in four urban areas in Europe: Lisbon, Dublin, Paris Region and Saint-Étienne. The four areas are facing similar demographic changes due to shrinking and growing populations, ageing residents and household restructuring. On the other hand, the available housing stock does not satisfy the needs of the changing population: Lack of affordable housing, need of smaller units for smaller households, derelict structures which need to be renovated, among others. However, the strategies adopted in each area to find solutions to these problems differ. In declining areas, there are private initiatives to renew dwellings to make them attractive to younger residents (Portela housing estate, in Lisbon), and public interventions in strategic areas to upgrade housing buildings and improve adjacent public spaces while enhancing existing services (Saint-Étienne). In expanding areas (Dublin), the public sector needs to create the conditions for private investors to build new housing units and renew existing ones, with the aim of providing housing that satisfy current demands (single occupancy units, flexible housing systems and varied tenure possibilities), especially of the most vulnerable segments of the population; and it needs to prevent urban sprawl (Paris) by densifying existing urban areas which implies upgrading the public transport systems and public spaces. Carrying out these strategies with the involvement of the affected communities requires professionals able to work as mediators, to manage building and urban transformation processes, to steer and monitor densification and land use with the participation of residents, skills which are not acquired in the planning and architecture schools. Therefore, the authors conclude that it is necessary that demographic and social changes, strategic planning and policy making, are part of the training of architects and planners.

The participation of citizens and communities in the processes to shape the living environment has become a goal shared by schools around the world. In Latin American countries, in particular, there is a long-standing tradition of collaboration between community and academia. In “Community Participation in the Design and Construction of the Built Environment in Puerto Rico and Chile: Intertwining Community and Academia”, Omayra Rivera and Viviana Fernández describe their pedagogical work which bring together academia, communities and local administrations in activities aimed at transforming the living environment. Their learning and teaching practice is based on the assumption that cities belong to people and, therefore, they are a product of their actions: “Residents of communities know the space they inhabit, their needs and aspirations, but they need experts to help them find design solutions”. Therefore, a role for architects is to help citizens give form to their living environments, acting as experts, mediators and facilitators in participative design processes. In the School of Architecture of the University of Puerto Rico, the *Community Design Studio* taught in the late 1960s by architect Edwin Quiles is the direct precedent of the ongoing *Collaborative Design Studio and Evolutionary Habitat*. A difference with the previous studio is that “students are expected to outline a plan

to communicate with the residents to help them to describe their needs and aspirations before starting to design a project". All participants—students, residents and experts—are expected to collaborate on equal basis. Four examples of the work carried out in the studio are described: Improving the living conditions of residents of eight neighbourhoods around Caño Martin Peña in San Juan; proposing new usages for deprived spaces in Alto del Cabro; renewing an abandoned bridge in Tras Talleres and helping the association Machuchal Revive to convert an abandoned house into a civic centre. The work of students in these projects helped residents to rediscover the value of their living places and contributed to forge links between the university and the local communities. Also, an account is given of the experience with participatory budgeting in San Juan, a project which counted with the participation of students of the three schools of architecture in the country. In Chile, participatory design is part of the curriculum of the Faculty of Architecture and Urbanism. It is assumed in the academic programme that "the participation of citizens in the interventions aimed at transforming the territory at its various scales is considered a basic condition of a democratic society" and, therefore, "teachers need to make students aware of the importance of shared responsibility in the design and construction of the city". The work done with two community-based projects within the course "Multi-Scale Participatory Processes: Housing, Neighbourhood and City" is described: The reconstruction of El Cerro neighbourhood in Valparaíso, and the revitalization of the Matta neighbourhood in Santiago. The authors conclude with a joint reflection about the experiences of rooting learning practices in these communities: Practical difficulties to plan and implement the activities, abilities that the students have acquired and benefits for the participating community members. What the experience with these courses shows is that by embedding learning activities in the social and physical milieu, it became possible to bridge the gap between the culture of the place and academic training.

Dorina Papa, Joana Dhiamandi and Divna Pencic analyse the involvement of the community in the design and planning of public spaces in Albania and Macedonia in the chapter "Integrating the Community in the Planning and Design of Public Space in the Balkan Region". After the advent of democracy following the end of the communist regimes, a process was started to build a civil society in which individuals and groups could work autonomously from the state, as in western countries. Today, people in Albania and in the Republic of Macedonia have become more aware of their "right to the city" which includes the right to have quality public spaces. In Albania, public space—especially in neighbourhoods—has been either neglected by public authorities or embellished for political purposes, as in the artists' interventions in some representative public spaces in city centres. In any case, there was no involvement of the community in these transformations. In Macedonia, the involvement of citizens and communities in urban planning and design has a long tradition that goes back to the communist period. In that

time, community representatives took part in the planning of public spaces in the neighbourhoods, and the state took care of their maintenance. The situation changed after the advent of the market economy. Nowadays, citizens are only consulted to answer surveys during the early stages of a design, or in consultations made for political image-making purposes. Both in Albania and Macedonia “a process of illegal occupation, degradation and shrinking of the public space is taking place” with the connivance of the public administrations. To change this situation, and to stop with the ongoing privatisation and political instrumentation of public space, the involvement of the community is necessary. For this purpose, non-governmental organisations and universities, in collaboration with local governments, have started to undertake a series of initiatives. In this context, universities can play an important role in bringing together multiple actors, fields and interests to create more inclusive and socially sustainable public spaces. Ultimately, what the situation of public space in both countries reveals is that its meaning and value cannot be but the result of the multiple and conflicting interests between all stakeholders which claim a stand on it: citizens and administrations, private investors and local governments.

“Can Top-Down Policy Meet Local Diversity in Urban Transformation Processes?” is a joint reflection by Jenny Stenberg, Maria Zwanenburg and Lasse Fryk on the power shifting between governments and citizens as a result of the empowerment of the latter through participatory processes. The aim of a transformative participation is to empower people so that they can make their own decisions, to set up action plans and carry them out. At the outset, this can be achieved through two opposite approaches: Top-down *Community-Driven Development* (CDD) led by governments, as in a case in Indonesia, and bottom-up experimental approaches, as the one carried out in the area of Hammarkullen, in Gothenburg, Sweden. The first method tends to become a *black box*, which means that “modes of thoughts, habits, forces and objects” are embedded in the structures that mediate between institutions and citizens, mechanisms which are invisible to them and, therefore, cannot be a matter of debate and even less changed. Even though a CDD participatory process aims at transferring resources and decision-making power to citizens, it remains unclear whether a real power transmission takes place. By assuming that communities are homogeneous and egalitarian entities, CDD overlooks the conflicts of interest between community groups, for example, between the elites and the most disfavoured segments of the society. For CDD to have a true transformative power, it would be necessary to open up the black box, that is, to question the established power structures and roles. In turn, this would reveal the need for an interface between institutions and citizens, and between community groups. Such an interface is what a community plan in Hammarkullen aimed at providing. Initially, the goal of this participatory experience was to change the practices to renovate the housing stock built in Sweden in the 1960s and 70s with the objective to prevent gentrification and social exclusion. With this aim, a centre was

created to help inhabitants of this suburb becoming knowledge producers “by intertwining research, education and civil society through community outreach”. It is a way to open up the black box, by enabling residents to discuss the laws that regulate the relationships between owners and tenants, and the public procurement procedures to renovate buildings, so that they can propose measures not just to renew the buildings but to transform the social and political structures.

In “Public Participation in the Regeneration of Large-Scale Housing Estates”, Sandra Treija, Uģis Bratuškins and Edgars Bondars highlight the importance of engaging citizens in the regeneration of residential areas, to intensify their sense of belonging to a place and to assure a sustainable development. Nowadays, many housing estates built in Europe after the Second World War, especially in former communist countries, are perceived as degraded and dangerous areas inhabited by deprived social groups. To change this negative view and to make these areas attractive to new residents, it is necessary to upgrade the buildings and to improve the surrounding spaces. This offers an opportunity to engage residents in the renovation process. Their participation does not have to be limited to the planning and design stages; rather it can also occur in the design execution and in the maintenance of the built spaces, especially the public places. Urban gardens, as those carried out in Malmö, Sweden, enable residents to participate in the upgrading of public spaces through small-scale interventions that help them to forge a sense of belonging to the places they live in. On the other hand, the renovation of the dwellings in the formerly state-owned housing estates has become more difficult after their privatisation. Individual ownership hinders the adoption of measures to protect the communal interest, for example, the renewal of the building envelope to improve energy performance. To overcome these difficulties, local authorities need to find ways to encourage owners to invest in the renovation of their apartments, by changing the existing legal frameworks and ownership schemes, and by carrying out awareness campaigns to make people understand the importance of their participation in the renovation processes. The renovation of the former state-owned housing estates makes it necessary to reformulate the limits between domestic and public spaces, to come to grips with the diverging private and collective interests, and to redistribute responsibilities which were previously the domain of a single authority, among individuals.

### **Confluences**

Filippo Boschi presents the work done in a participatory action carried out in a middle-sized city to find out feasible strategies to solve the social housing problems with the collaboration of the private and public sectors. As in many other cities and countries in the world, public authorities in Rimini, and in Italy, have steadily given up their responsibility to provide social housing. The situation has been aggravated with the latest financial crisis which has

contributed to increase the demands of social housing after some segments of the middle class, which before the crisis had no difficulties to get a house in the free market, could no longer afford it. In front of this social problem, some public and private organizations have tried to offer solutions although in an uncoordinated manner. The lack of collaboration between these organizations hinders the effectiveness of the possible solutions. In light of this problem, the municipality of Rimini, with the collaboration of Heriscape and the Chamber of Architects, carried out a plan to bring together the private and public local stakeholders to collaborate in the solution of the social housing problem. The plan encompassed three stages: Analysis of the housing shortage in the city, selection of stakeholders which are committed to help in finding solutions and implementation of round tables to coordinate the actions to be taken. Four ongoing projects led by housing associations, financial institutions and non-profit social welfare organizations were presented and discussed in the round tables. The discussions revealed the need for more financial resources, better communication between public institutions and non-profit organisations, and greater collaboration to execute the projects. As a conclusion, participants agreed that it was necessary to create a committee on social housing to steer collaboratively the actions. This committee would provide a comprehensive picture of the situation of social housing in the city, something that the municipality has not been able to deliver, and to seek financial resources to undertake larger projects, beyond current small-scale initiatives. This community action in Rimini reveals the need to rebuild the public realm to counteract the undesired effects of an urban development led only by private economic interests, locally and globally; a new public realm in which a multiplicity of actors, groups and interests must negotiate and agree on the priorities and needs of the community and to assure the means and resources to fulfil them.

In “Civic Housing: Designing Participatory Processes for a Cohousing Project”, Leandro Madrazo and Ángel Martín Cojo summarize a learning experience aimed at engaging undergraduate architecture students and members of a housing cooperative in a codesign process to refurbish a multi-story housing building in the historical centre of Barcelona. The task for students was to design ad-hoc tools and methods to enable dwellers to communicate their experiences about the spaces they inhabit. In this process, students played the role of facilitators—providing dwellers with the tools they needed to express their knowledge—and of mediators—engaging in a dialogue with future residents to understand their needs. At the end of the process, students proposed a range of architectural responses to the issues identified in the dialogue with dwellers. The activities planned in the seminar were of pedagogic value for both the members of the housing cooperative and the architecture students. On the one hand, dwellers could learn to express and communicate their experiences about the spaces they live in, to reflect on the value these spaces have for them and to envision their future homes. On the other hand, students played the role of designers of a participatory process rather than

designers of artefacts; they learned from the experience dwellers have about the spaces they lived in and brought this knowledge in their design proposals. The experience showed that every participatory process is unique and, therefore, needs to be addressed much like any other design task: Understanding its specific context and objectives, using the resources at hand and recognizing the existing constraints.

In “Living/Dwelling: A Participatory Action in the Neighbourhood of Ilinden, Skopje”, Mihajlo Zinoski and Ognjen Marina describe a community outreach project carried out with the participation of schools of architecture from three universities: University Ss. Cyril and Methodius, Skopje; Polis University, Tirana, and University of Belgrade. The Ilinden neighbourhood, located at the margins of the city of Skopje, has an increasing potential for urban development due to the benefits of its proximity to the urban centre and to the stimulating investment policies which make the area attractive for business. The current state of urban development in Ilinden was analysed by students and teachers, residents and local administrators. Nowadays, the area is undergoing a transformation from rural to urban which makes Ilinden in this transition period an example of a “rurban” (rural and urban) environment. The combination of the rural and urban components and practices is reflected in the housing typologies and in the usages of semi-private spaces such as the yards. Hence, the main research issue was to figure out the social processes by which the limits between public and semi-private spaces are negotiated in the permeable boundaries of the yards. The methodology applied in this research was based on the RSVP cycle (Resources, Scores, Valuation and Performance). In the Resources phase, students analysed the living patterns and usages of the semi-private spaces and the emerging spatial patterns. The information was obtained by surveying the site and interviewing residents. In the Scoring stage, there was a brainstorming session to elicit from the interviews the social and physical elements which were relevant to the residents (e.g. identity, fence, sharing, community garden, social zoning, common elements, spatial compromise, patterns, and provocation). This session contributed to gaining a better understanding of how the area could develop in the future by respecting the existing social and economic structure. In the Valuation stage, the data obtained in the surveys was structured and then visualized in sociograms which revealed some patterns in the relationships between community members and groups. Finally, in the Performance phase a workshop was organized to build a sense of accomplishment among the participants by reviewing the results. Participants were invited to discuss three scenarios for future spatial development of the local community which were found in the third phase. Through this community action it was possible to bring to the fore the multiple perceptions about the semi-private spaces and their potential to create a socially sustainable community. Students learned to analyse the social and physical structure of neighbourhood using a variety of tools (questionnaires, sociograms), to create bridges between residents and authorities and to devise

planning strategies that respond both to the top-down visions of the power structures (municipality, business) and to the bottom-up construction of the sociophysical space by residents.

The development of the collaborative learning space “Introduction to Housing” during three academic years is recapitulated by Carla Sentieri, Nadia Charalambous, and Yasemin Alkışer Bregger. The purpose of this learning space has been to initiate students in the basic principles of designing (and understanding) what a house might represent in our contemporary culture (or cultures). A learning programme was jointly created by teachers from five schools of architecture, led by the School of Architecture of Valencia. Following the methodology developed in the previous OIKODOMOS Virtual Campus project, a learning structure made up of learning activities and tasks, aligned with the courses at their respective institutions, was created. The process of creating a joint programme went through different phases and forms of collaboration between the participating institutions. A first learning structure was built upon the curriculum of the first year housing design studio in Valencia, the second year housing design studio at the University of Cyprus and with some contributions from a communication course in the University of Belgrade. In a second edition of the learning space, the initial structure was refined and simplified to facilitate the integration of the various courses involved and to enhance the collaboration between learners from various institutions and cultures. This flexible structure made possible that three more schools joined the third edition of the learning space: Istanbul Technical University, Gebze Technical University, and University Institute of Lisbon. Altogether, the experience of designing this learning space has given tutors the opportunity to collaborate with other universities, to get to know diverse teaching methods as well as the work done by students from other schools, to attend and also deliver on-line lectures and to share learning resources using a combination of web-based platforms and communication tools (including OIKODOMOS Workspaces, blogs, Skype, and Google+). Students who participated in the learning space learned to interact with peers and teachers from another schools in the rather unfamiliar context of a blended-learning environment, in which they had the opportunity to share comments about their work both in classroom and on-line and to be exposed to different types of teaching and learning. The process followed to build this joint learning structure can be useful for teachers from other schools who are interested in creating spaces of collaboration following the philosophy of blended-learning.

In “Teaching Site Design across Scales and Borders: On-Site and On-line” Nicolai Steinø describes a collaboration between students and teachers of two programmes, one focused on urban design at Aalborg University (AAU) in Denmark, and a second one dedicated to urban design at the Brandenburg Technical University (BTU) in Germany. The purpose of the collaboration was to carry out some joint learning activities which would enable students from each programme “to expand their respective understandings of site design

across scales, locations and theoretical approaches”, by approaching building from the perspective of urban planning and moving from the urban scale to the building scale. Besides overcoming disciplinary barriers, this convergence of two study programmes from two countries had to face other difficulties: The differences in the professional cultures in the two countries regarding the role of architects and planners, the distinctive skills that architects and planners are expected to acquire in their education, the particular timetables of each programme, and the physical distance between the schools. To overcome these difficulties while creating at the same time a shared learning space (both digital and physical, following a blended-learning philosophy), a joint reader was prepared for students of both courses, synchronous activities were planned on-line (in the format of teleconference) and on-site (through joint site visits and a workshop in Berlin). All of these activities contributed to create a sense of social presence among learners, a sense of being together regardless physical and cultural differences. Altogether, the most valuable aspect of the collaboration between the two programmes was “the possibility for students to interact and exchange views and understandings which are likely to differ across cultural, disciplinary and institutional borders”. What this learning experience exemplifies is a strategy to create a blended-learning space by connecting learning resources facilitated by various courses (readings, lectures) in different settings (on-line conferences, on-site workshops), and doing so overcoming practical constraints with the available resources (on-line communication tools, field trips).

The work done in the “Lisbon Workshop: Contemporary Living Patterns in Mass Housing in Europe” is abridged by Alexandra Paio, Sandra Marques Pereira, António Brito Guterres, and Vasco Moreira Rato. The objective of this workshop was to examine the coexistence of “formal” and “informal” housing patterns, a global phenomenon manifested in many cities around the world. In Lisbon, these two patterns can be exemplified by two neighbourhoods, “Portela de Sacavém” and “Bairro da Liberdade”, respectively. Before meeting in Lisbon, students carried out some preparatory activities working distantly on the OIKODOMOS Workspaces learning environment and using as well some social media (blogs, Facebook). The work done at each school during the preparatory phase was presented in a public session on the first day of the workshop. The workshop programme encompassed four themes which became intertwined in the learning activities: Participatory Processes, Home and Social Change, Energy Efficiency and Construction Materials, and Computational Design (CAD/CAM tools). The knowledge they acquired in the lectures and exercises on each of these four themes was incorporated in the design studio work. Students working in teams analysed the two neighbourhoods and identified the issues to be addressed in order to improve the existing living conditions, respecting the character of each settlement. By the end of the workshop, each team was able to build a full-scale module of a representative part of their design proposal using digital fabrication techniques and to present their proposal in a poster for public review.

The integration of various subject-matters (participation, sociology, energy efficiency, digital fabrication) with design studio work to address contemporary housing both in its global (the coexistence of formal and informal living patterns) and local dimensions (the need to renovate and upgrade two quarters in Lisbon) makes the Lisbon Workshop a reference pedagogic model.





# 01

# Mappings

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# **Emerging Themes in Contemporary Housing Research**

**Karim Hadjri**

## INTRODUCTION

This chapter presents a review of emerging themes in contemporary housing research identified as part of the OIKONET research activities, namely sustainability, participation, affordable housing, and housing regeneration. This research on contemporary housing is wide ranging and also covers sub-themes such as housing design, citizens' participation, retrofitting, and urban renewal. Other relevant topics that have been examined by OIKONET partners as part of their recent research activities are related to capacity building and codesign, energy efficient building design, gentrification, housing allowances, public rental housing programmes, and to the relationship between design and research within the design studio context.

As a result of the collaborative research effort undertaken during the OIKONET project, it has been possible to identify common research topics on contemporary housing policy and practice such as those concerned with regeneration issues, namely: Brownfield regeneration, neighbourhood regeneration, regeneration of multi-family buildings, and post-conflict regeneration, some of which will be discussed in this chapter.

## SUSTAINABILITY

Sustainable development was progressively developed through the *World Conservation Strategy* (1980), the *Brundtland Report* (1987), the *United Nations Conference on Environment and Development* in Rio (1992), and more recently the *Paris UN Climate Change Conference COP21* (2015). In addition, the actions of national and regional governments and the commitment of business enterprises and communities, as well as non-governmental organizations, have contributed to fostering sustainability in many areas. Public sensibility about environmental and social issues in sustainable development is on the increase nowadays as citizens and communities become aware of the benefit of their effects on their well-being and to the common good (Adams, 2006). Sustainable development embraces the main interdependent and indivisible areas of environmental protection, economic development and social development. Sustainability principles that support these three dimensions consider both local and global consequences in the short-term and the long-term, and generally present broad assessments of progress toward sustainable development (Shrivastava & Berger, 2010).

Sustainable or green building construction of housing aims to endorse the principles of sustainable development in the siting, design, building, maintenance and occupation of buildings. Over the last few decades, sustainable housing design has become increasingly important given the housing stock's impact on the environment and the concerns for the occupants' health and well-being. Norris and Carnegie (2015) list a

number of measures that can improve environmental sustainability such as using brownfields for housing; promoting mixed-use developments; fostering renovation to avoid demolition; using more sustainable building materials; favouring high densities, and preserving natural habitats and green areas.

Energy efficiency in housing is one key aspect influenced by design and cuts across several facets of society such as social, economic and environmental. Also, energy efficiency directly affects households' income and the nation's economy. Hence, having an old residential building stock represents a considerable challenge for a country. In particular, energy poverty is becoming a prominent issue in most countries with an outdated housing stock and particularly in those such as the Commonwealth of Independent States (CIS) countries (Amann, 2015) which suffer cold winters and where many homes have inadequate central heating systems. There is no doubt that the task of improving this stock's energy performance through refurbishment can be difficult and is a long-term process. In the UK, for example, the refurbishment of the housing stock is inevitable in order to meet the housing demands (Bell & Lowe, 2000). Nonetheless, refurbishment could provide an opportunity to rethink the design and energy performance of a building, which is important for the provision of contemporary housing.

Nowadays, the construction of new housing is guided by building regulations and technical housing standards which take into account sustainability. At the same time, a myriad of housing concepts emerged such as ecohousing, low and zero carbon buildings, green housing, and passive design. The passive house, for example, seeks to conserve energy, reduce the waste generation and be environmentally equitable (Feist, Schnieders, Dorer, & Haas, 2005). A passive house uses renewable energy and is more cost-efficient to maintain. However, there are concerns about the indoor air quality due to the airtightness which may cause air contamination or overheating (Hasselaar, 2008). The passive house is nonetheless an innovation which needs further development to become a widely accepted and affordable solution for sustainable housing design.

Sustainable housing design should also be responsive to demographic change and sensitive to new and emerging living arrangements, making it possible to expand or reduce a dwelling as it may be required by its current or future occupants. This is why inclusive design is an important component of a sustainable housing. Historically, inclusive design was concerned with disability and mobility. However, recent demographic trends, and more specifically an ageing population, have led to the emergence of new health issues which have an impact on the design and the arrangement of spaces in a house, such as visual and cognitive impairments. Hence policy makers, designers and architects need to consider these new user needs and requirements. Inclusive design is nowadays part of mainstream design. Across the world, sustainability policies have been targeting sustainable development

through the efficient land use planning, issuing housing policies, and fostering sustainable communities. In this context, high quality design refers to place identity and successful outdoor areas. A socially sustainable environment is desirable because it leads to good quality of life, it is safe and easy to use, is accessible and pleasant, and is well serviced (Burton, 2003).

## **PARTICIPATION**

During the twentieth century, modern housing was expected to be user-focused, and delivered through public engagement and participation. This process took place as early as the 1920s (Scott, 2008). In post-war Europe, public participation played a key role in housing development (Glendinning, 2010). Housing stakeholders such as housing associations and agencies, governmental bodies, and architects and engineers had to harmonise changing public needs into aesthetic architectural designs not always popular (Balchin, 1996).

Community, users or citizens' participation aims at taking into account inhabitants' requirements in housing design and planning. Ultimately, the success of participatory processes depends on how effective is the collaboration between professionals, local authorities and users.

Despite the fact that the quest for participation is not new, there are still concerns about its meaning and its application. Participation can be understood as a mechanism to transfer the decision-making power from the administrators to the inhabitants, which does not necessarily imply changes to the administrative structure (Habraken, 1985). Despite the evidence of the successes in user participation, views about the validity of participatory processes to produce responsive environments or redevelop unpopular estates are still divided. In fact, some participatory processes do not always lead to user satisfaction and more efficient maintenance of buildings and public spaces (Hamdi, 1991). Key criticisms focused on the fact that these processes can be time-consuming, complicated and costly, slowing the design process and increasing the administrative work. The validity and value of user participation is still debated in many countries. The goals of participation need to be clarified and the added value should be explicit and attractive so that long-lasting partnerships can be built.

Community participation in housing design and provision is an important strategy whose interpretation and application varies greatly from one place to another. This is due primarily to the type of decision-making power stakeholders might have, and the extent to which their views are taken into account by those in charge of the planning and design process. Participation in design can sometimes be criticised for being unable to fulfil users' housing requirements (Noguchi & Hadjri, 2009).

New approaches such as citizens' empowerment have emerged in Europe recently, where inhabitants are key actors in governance processes aimed at

developing the city, and empowerment is therefore considered to be of great value in planning (Andrews, Cowell, Downe, & Martin, 2006). Empowerment will require capacity building so that actors can engage effectively with the participatory processes.

Codesign is also a powerful instrument to support participatory processes. Contemporary approaches to codesign differ slightly from earlier ones. Today, a diverse range of factors such as citizen power, aesthetics, place-making, and public space are simultaneously considered. This concept has been successfully tested within a Swedish context by colleagues at Chalmers University by intertwining research, education and community outreach (Stenberg, 2012; Stenberg & Fryk, 2012; Stenberg et al., 2012).

### **AFFORDABLE HOUSING**

Nowadays, the supply of quality housing represents a global challenge illustrated by acute shortages and affordability issues. Problems with homelessness, overcrowding, tenure security, substandard housing, and segregation and clustering of poor quality housing are present in many countries (Hegedüs et al., 2015). In particular, overcrowding is driven by a lack of affordable housing, thus forcing many young adults to live with their parents and grandparents, sometimes in substandard housing.

The following statement provides an interesting definition of affordability: “Affordability’ is concerned with securing some given standard of housing (or different standards) at a price or a rent which does not impose, in the eyes of some third party (usually government), an unreasonable burden on household incomes” (Maclennan & Williams, 1990, p. 9). At a global level, the debate on urban resilience addresses affordability through a focus on the physical, social and economic challenges currently faced by cities (Haffner & Elsinga, 2015).

A lack of affordable housing remains a major concern worldwide due to the priority given by governments and housing providers to other dimensions of sustainability over economics. This has led UN-Habitat and the Global Network for Sustainable Housing (GNSH) to engage in the solution of this problem through a number of global initiatives.

During the last century, mass social housing not only improved affordability but also resulted in a greater citizen participation in housing design and planning (Scott, 2008). Affordability in contemporary housing is not simply a financial issue, but a more complex question of *if and how* the society at large can embed housing demands into everyday architecture. For example, in most European countries there are social housing support systems intended to facilitate low-income and/or working class households an access to a house. 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 or inclusive these policies are (Amann, 2009). Affordability is usually seen through the lens of return on investment and the balancing act of realigning social justice and market forces (Turner & Elsinga, 2005).

Access to decent affordable housing is a fundamental determinant of people's welfare, and its role in strengthening social integration and social cohesion. Throughout the world, social housing—either for rental or for first-time buyers—is not always accessible or affordable, especially to low-income population and young generations. Therefore, innovative housing solutions are needed to facilitate to these population segments access to housing. For example, more innovative mortgages; non-profit tenant cooperatives; tenure-neutral measures; and improvement of the public rental sector's procedures would be helpful (Hegedüs et al., 2015). Policies for affordable housing are also needed across the globe to improve social inclusion through, for instance, linking housing quality and its costs. Adequate housing policies will be required to tackle affordability issues and drive housing innovation for both the public and private sectors (Haffner & Elsinga, 2015).

In Europe, some social innovation programmes aim to facilitate access to housing to young households (Bežovan, 2012). Nonetheless, there are still challenges with regard to a polarized tenure structure, lack of investment in social housing, inefficient subsidies, and growing affordability limitations which need to be faced (Tsenkova, 2003).

## **HOUSING REGENERATION**

Urban regeneration is informed and driven by the causes and effects of globalisation, climate change, economic crises, and lifestyle changes. In Europe, there is currently a pressing demand to redevelop brown-fields areas, historical centres, areas affected by conflicts and disasters, and large social housing estates. Housing regeneration ranges from large-scale at the level of a neighbourhood to micro-scale interventions at the building level.

The regeneration of brownfields for housing development is not always desirable or feasible because often this type of land is contaminated. Brownfield regeneration has increased as a redevelopment option for housing development programmes. In the UK, for example, the government encourages reusing this type of land over greenfields through a number of mechanisms and incentives. Regeneration in the UK has become a major element of urban policy, particularly since the 1990s. The objective was to make these redeveloped areas “more attractive places in which to live and work” (Department of the Environment, 1994, p. 158). Today, the redevelopment of brownfield sites is a fundamental part of many housing programmes which provide the technical and financial support required to regenerate them.

Urban regeneration has historically focused on social and economic improvement. However, over the last two decades, following the renovated quest for sustainable communities, more emphasis has been placed on the three pillars of sustainable development namely, environmental, social and economic. Nowadays, urban regeneration programmes for deprived areas are aimed at improving the physical, environmental, social and economic conditions which are necessary to achieve sustainable communities (McDonald, Malys, & Maliene, 2009). This does not mean that an urban regeneration leads necessarily to a more sustainable community. Further research is required to identify the challenges facing the creation of sustainable communities and the type of built environments needed for their development.

Similarly, most Mediterranean cities are experiencing spatial, social and economic deprivation due to suburbanisation, political crises, poor infrastructure and lack of resources. Poor housing supply, physical degradation, concentration of ethnic minorities, unemployment and loss of economic activities are often problems faced by cities like Nicosia. Post-conflict regeneration programmes in Cyprus faced a number of challenging issues. For example, the area of Chrysaliniotissa has a low proportion of owner-residents, low-income population, lack of economically active inhabitants, shortage of community facilities, and high rate of older residents. The renovation projects of this area aim at bringing the original residents back, attracting young couples with children, and establishing new economic activities. Results show that a growing number of people want to buy or rent in this area, and property values have started to rise (Charalambous, 2015).

Budapest is also experiencing significant challenges with urban renewal. The rapid decrease of the population led the city council to renovate the housing in the inner city, including old derelict buildings, and to allow the creation of gated communities (Csanádi, Csizmady, & Olt, 2010, 2011).

With regard to retrofitting strategies, refurbishing of multi-family buildings can benefit from large-scale local community driven activities, including awareness campaigns and the promotion of best practices. Arkar, Domjan and Medved (2013) examined large-scale retrofitting of multi-family buildings in the local community of Zagorje ob Savi in Slovenia. The works included facade thermal insulation, window replacement and thermal insulation of constructions for unheated basements and attics as well as the installation of heat-cost allocators, thermostatic valves and energy-efficient lighting. Lessons learnt from this case revealed that, energy used for heating decreased on average by 47%. Users' feedback proved that retrofitting has a large influence on the living comfort in the indoor environment (thermal comfort, indoor air quality, lighting comfort and noise protection). From the results, it can be concluded that building retrofitting decreases energy consumption for heating substantially and improves indoor living comfort.

Successful retrofitting of housing can benefit from local community driven activities, including awareness campaigns and lessons from best practice. Likewise, access to decent affordable housing has an important role in strengthening social cohesion, and has become a fundamental determinant of people's welfare. The quality of housing needs to be improved to afford residents a healthy living environment. Similarly, tenure security and inclusivity in housing provision should be considered particularly when substandard housing is being renovated.

Empowering local residents and stakeholders to become active participants in the renovation is also a desirable outcome of a regeneration programme. Funding agencies are aware that actors should provide appropriate mechanisms to facilitate participation of citizens from the early planning stages to the operation and use. It is expected that the active engagement of citizens will foster social cohesion and will help to bring together different groups in an urban and housing regeneration project which meets the needs of local communities.

Societal changes across the world have sometimes neglected the dialogue with citizens. This is particularly the case in complex urban and spatial planning processes. Authorities and experts need to develop strategies and learning process that facilitate stakeholders involved to understand the key problems facing an urban regeneration programme, and to help them develop appropriate solutions.

Finally, mass housing in Europe built after the 1960s and 1970s has required significant refurbishment due to poorly maintained buildings with substandard energy performance. In addition, residents of these estates are sometimes socially excluded and belong to the disadvantaged segments of the population. The involvement of residents in decision-making is highly recommended in housing regeneration as it enables them to strengthen their links with the community.

## **CONCLUSIONS**

This brief review of contemporary housing research has been collected following the work carried out by the OIKONET network. The themes that have been identified namely sustainability, participation, affordable housing, and housing regeneration are strongly interconnected. These have informed and guided the network's research, pedagogic and participatory activities.

Sustainability—in its three dimensions, environmental, social and economic—plays a major role in contemporary housing, at the global and local scales. Energy efficiency of buildings has become a driving force for housing development particularly in relation to retrofitting given the large amount of the old housing stock, particularly in Europe. The world is also experiencing significant demographic changes such as an ageing

population and the demands of multigenerational living, which needs to be taken into account when designing new housing. Many governments are also encouraging the creation of sustainable communities through the promotion of sustainable green living, healthy indoor and outdoor environments, and accessible and pleasant neighbourhoods. Sustainable contemporary housing should take into account its location, respond to climate, use locally available sustainable materials, be of high quality in terms of design and building, be socially inclusive, be affordable and, ultimately, lead to the creation of sustainable communities.

Sustainability of housing environments can also be enhanced through effective collaboration between designers, housing providers and users. From the perspective of the design and planning of energy efficient buildings, it is also important the involvement and participation of various stakeholders and the engagement of community representatives, social organisations and citizens. Users' requirements should form an integral part of participatory processes aimed at housing design and planning, and the creation of sustainable communities. The latter calls for more community participation in housing design and provision as a required long-term strategy.

Affordable housing is a significant global challenge as acknowledged by the UN-Habitat and the Global Network for Sustainable Housing. Challenging problems linked to affordability are homelessness, overcrowding, and tenure insecurity. Affordable housing solutions should be reinforced to improve social inclusion. This is another important challenge that can be improved by linking housing quality and its cost. Affordability issues should be addressed through effective housing policies and the engagement of both the public and private sectors through innovative housing mechanisms.

Urban regeneration is one of the key factors driving housing supply in many countries, particularly in Europe given the ageing housing stock. It contributes to improve social and economic environments of target areas that had been derelict or have become brownfields. Regeneration in these areas is aimed at achieving sustainable communities through an improvement of the physical, environmental, social and economic conditions. Despite significant efforts by many local authorities and governments to tackle physical degradation, concentration of ethnic minorities, unemployment and loss of economic activities through regeneration programmes, more needs to be done in order to improve the physical environment and the economy, provide affordable housing, and nurture sustainable communities. Further research is needed to establish the effects of contemporary urban renewal; to review housing regeneration strategies on communities; to identify the challenges regarding the creation of sustainable communities and to determine the type of physical environments needed for their development. This is on the belief that housing regeneration can contribute to improve the physical,

social, environmental and economic conditions of neighbourhoods and communities, promote community participation, and provide affordable housing to all.

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# **Affordable Housing**

**GREGOR HERDA**

*Affordable housing* can be broadly defined as housing that is “adequate in quality and location and does not cost so much that it prohibits occupants from meeting other basic living costs or threatens their enjoyment of basic human rights” (UN-Habitat, 2011a). Affordable housing covers the provision of both private and public housing.

As a generally accepted guideline for housing affordability, many countries have determined that housing costs should not exceed 30% of a household’s gross income (Tilly, 2006). It is necessary to highlight that housing costs include several expenses beyond the purchase price of a house or monthly rent, such as the ongoing costs of utilities and maintenance (UN-Habitat, 2011a). The location of affordable housing and associated costs related to mobility also directly affect people’s capacity to cover other living costs.

Societal trends such as accelerating urbanisation have reduced the availability of affordable housing worldwide. Rapid urbanisation places a growing demand on access to land, thus resulting in high land prices in many urban areas. For example, in African countries, high land prices, difficulties to access housing credits, and unsupportive financial terms directly result in a lack of affordable housing options (UN-Habitat, 2011a). Lack of affordable and accessible housing creates numerous socio-economic problems, such as inadequate housing conditions, the emergence and expansion of slum and informal settlement areas, homelessness and unsustainable commuting patterns.

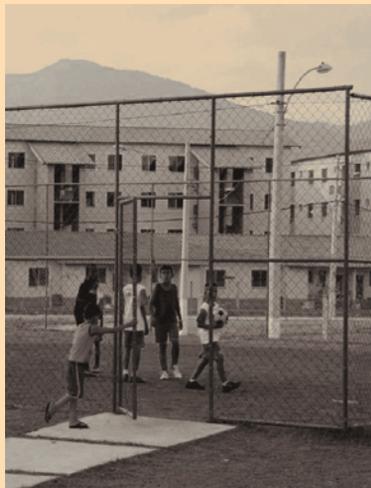
Access to adequate housing is considered a basic human right under international law. Affordability is mentioned as one of the core dimensions of adequate housing within the *Universal Declaration of Human Rights* (United Nations, 2009). Moreover, ensuring universal access to adequate as well as affordable housing by 2030 was recently reinforced

in *Sustainable Development Goal (SDG) Number 11, Target 11.1* (United Nations General Assembly, 2015). In addition to being a legal right of all individuals, access to affordable housing can also enable various positive societal contributions. Whereas, affordable housing is often seen primarily as a social welfare instrument (Tibaijuka, 2013), it should also be considered as a productive asset that can make an important contribution to national economic development (UN-Habitat, 2012).

Affordable housing measures can address affordability either as an income problem (demand-side) or a problem related to the production of housing (supply-side) (Bredenoord, Van Lindert, & Smets, 2014). Local housing markets should be regulated to ensure different housing options, tenure choices, and that a sufficient number of units are available to different income levels. Some practical strategies to improve affordability include: Reducing housing construction costs, providing subsidies to both producers and consumers of housing (Bredenoord et al., 2014) and facilitating more inclusive housing finance options. It would also be worth exploring the synergies between affordable and green housing solutions, such as the use of more affordable local materials and labour as well as green housing principles and systems, such as renewable energy and waste water recycling, to reduce operating costs (UN-Habitat, 2012).

**RELATED CASES****Brazil's Affordable Housing Programme: Minha Casa Minha Vida**

*Minha Casa Minha Vida* (MCMV) is an affordable housing programme that was launched by the Brazilian government in 2009 as one of the packages of Brazil's *Growth Acceleration* programme. The objective of the programme is to scale up housing production and to have a positive impact on the national economy and job creation. The programme aims to build homes for 3 million low-income households in just five years by providing incentives for housing developers, provided they offer new homes at a government-approved cap price. Households are eligible to receive a flexible allowance to buy these homes if their income is under the national minimum wage. A further aim of MCMV is to make affordable housing a part of the environmental programmes (UN-Habitat, 2012; UN-Habitat, 2013).



MCMV housing units and community facility in Rio de Janeiro. Source: Fernanda Lonardoni (UN-Habitat)

## **Condominium Housing in Ethiopia: The Integrated Housing Development Programme**

*The Integrated Housing Development Programme (IHDP)* is a government-led and financed housing provision programme that has been implemented in Ethiopia since 2005. The programme aims to address the current housing deficit, the poor quality of the existing housing stock, and in particular, targets low and middle-income households. With its initial goal to construct a total of 400,000 condominium units, the ambitious scale of the IHDP represents another example of a shift in government policy towards a more active role in the provision of low-income housing. In addition to constructing the housing units, the programme has facilitated access to credit for the low-income section of the population. During the first five years of the programme, a total of 171,000 housing units were built (UN-Habitat, 2011b).



The pilot project for the *Condominium Housing* programme built in Bole Gerji, Addis Ababa. Source: Katherine Hegab (UN-Habitat)

## RELATED CASES

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### **Affordable Apartment Block** Seán Harrington Architects

In 2000, Dublin City Council (DCC) ran an open international competition for an affordable apartment block that was meant to explore economical methods of construction, represent sustainable building design and be energy efficient in use. Seán Harrington Architects<sup>1</sup> won this competition. The scheme encountered delays and the procurement system was later changed to a public-private partnership where by a private developer/contractor constructed the block in 2008–2009, sold half of the apartments on the open market and returned the other half to the DCC for use as affordable rental housing. For a general overview of the challenges and achievements of affordable housing provision in the Irish context, please refer to McGauran and O’Connell (2014).

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1. See [www.sha.ie](http://www.sha.ie)



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Apartments at Holles Street for Dublin City Council. Source: Seán Harrington Architects

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# **Building Performance Evaluation**

**GREGOR HERDA**

*Building performance evaluation*—which originated from the aspirations of policy makers, building physicians, energy experts and sustainably-minded building professionals—, has witnessed a shift towards a more sustainable built environment within the complex, multi-stakeholder system, which is the contemporary building industry (UN-Habitat, 2017). The purpose of building performance evaluation is to provide information for sustainability-conscious decision-making which affects the performance of a building during the different phases of its life-cycle. This is done through the determination of quantifiable and sometimes qualitative indicators that cover expected environmental, economic and/or socio-cultural impacts. The identification and the analytical process of the relevant indicators is then converted into a sustainability rating or score that indicates how well the building in question performs in the different dimensions of sustainability (Bragança, Mateus, & Koukkari, 2010). Building performance evaluation and benchmarking serve to aid the design of successful sustainable building projects and to help to evaluate the performance of existing buildings.

Over the last two decades, building performance evaluation has led to various building assessment and benchmarking schemes in both voluntary and mandatory form. The evaluation methodology has been customised by different developers to suit a diversity of global contexts based on their priorities and specificities. The resulting schemes cover different phases of a building's life-cycle and take different sustainability issues into account. Some are global, national and, in some cases, local in terms of their focus and applicability (Haapio & Viitaniemi, 2008). Some of the more well-known commercial schemes include LEED, HQE and BREEAM. Open source initiatives like SBTool, SBAT or the

Common Carbon Metric and harmonisation measures like the European CEN/TC350 should also be mentioned.

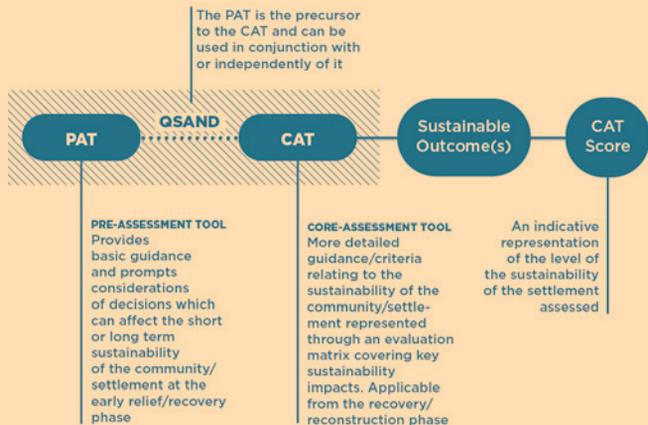
The benefits of building performance evaluation have been proven substantial, and there is much global interest in developing the methodology further. It has been argued that well-established assessment methods are capable of transforming generic sustainability goals into specific performance targets (Bragança et al., 2010), facilitating a recognisable environmental structure (Cole, 2005) and helping to raise awareness regarding sustainable urban development (Guy & Kibert, 1998). However, a number of caveats still exist on how accurately the different building assessment and benchmarking schemes can reflect the true sustainability of a building, and whether it is beneficial to even evaluate individual buildings without acknowledging their role as part of the larger urban context (Conte & Monno, 2012). Continuous efforts are therefore being undertaken to refine these approaches and create more integrated evaluation schemes.

RELATED CASES

**QSAND (Quantifying Sustainability in the Aftermath of Natural Disasters)**

The International Federation of Red Cross and Red Crescent Societies (IFRC) is a humanitarian network which provides, inter alia, humanitarian shelter solutions in the aftermath of disasters, which are not only intended to save lives but which also set the path for sustainable reconstruction. IFRC’s tool QSAND (Quantifying Sustainability in the Aftermath of Natural Disasters) is a free to use self-assessment tool to promote and inform sustainable approaches to relief, recovery and reconstruction after a natural disaster. As a part of its commitment to sustainable development, the IFRC, in partnership with the BRE Charitable Trust commissioned BRE Global Limited (2014) to develop the QSAND tool. Development of QSAND drew on the features of the BRE’s BREEAM standard.

The structure of the QSAND tool is organised into categories within which issues relating to the reconstruction of a sustainable community are assessed. These categories are shelter and community, settlement, material and waste, energy, water and sanitation, natural environment, communications, and finally transversal issues such as resilience and participation.



QSAND, self-assessment tool. Source: BRE Global Limited (2014)

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# **Community Participation**

**GREGOR HERDA**

As Arnstein noted a near half-century ago, the term *community* or *citizen participation* has been open to various interpretations as well as a degree of misuse. In its most ideal incarnation:

**It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future. (...) it is the means by which they can induce significant social reform which enables them to share in the benefits of the affluent society.**  
(Arnstein, 1969, p. 216)

Community participation in housing delivery, as in any other context, runs the risk of becoming an empty ritual, which allows the power-holders to claim that all sides have been considered, without any real redistribution of power. In this regard, Cooke and Kothari (2001) have argued that participatory processes are just marketing tools for “outsiders” to legitimise interventions. Opposing this view, Hickey and Mohan (2004, p. 3) considered participation to be a “legitimate and genuinely transformative approach to development”.

Community participation is crucial for the creation of socially and culturally appropriate housing which reflects the needs and preferences of the community. By consulting and involving residents, the needs, opportunities and threats affecting the community emerge. For instance, use of local construction techniques, cultural traditions to be preserved, group discrimination, security risks and disaster mitigation and prevention, all of which could be considered in the design process. Community participation can create a sense of ownership, which in turn can increase subsequent prospects for the adequate maintenance of the housing stock.

In certain contexts, especially in developing countries, training community members in sustainable construction techniques can help them to acquire marketable skills which in turn leads to an increase in social capital and to improvements in local economic development. Local carpenters and masons can assist in community training as well as in the supervision of construction activities. In addition, community members can assist in assessing the safety of building materials as well as their storage and distribution. In post-crisis contexts, early intervention recovery is the right time to initiate participatory processes to guide reconstruction and provide durable and sustainable housing solutions.

## RELATED CASES

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### Consultations and Information-Sharing

Information sharing is the first step of participation and should be facilitated by project staff or through appropriate channels such as community-based organisations or municipal resource centres, with information flowing in both directions.

There are different methodologies for field consultations such as street and household surveys, focus group discussions, in-depth interviews or workshops related to specific themes, which can suit different target groups.



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Meeting stakeholders at Pamoja Trust, Nairobi, Kenya. Source: Frediani, French, and Ferrera (2011)

## Participatory Design and Planning Workshops

Participatory design and planning workshops should preferably be conducted in small groups of 10–20 participants and make use of visual material as well as physical models of housing proposals that non-professionals can easily understand. The results of workshops should be clearly analysed to guide the design and implementation process.

It is important to engage community leaders such as elders as early as possible in the participatory process. Furthermore, measures should be taken to ensure that all the social, cultural and economic groups, especially those which are considered vulnerable due to age or gender, are included in the process. These consultations are especially important during the design and planning phase, but can in fact add value during all project stages to respond to emerging views and new circumstances.



Public consultation in Mathare 3A, Nairobi, Kenya. Source: Gregor Herda (UN-Habitat, 2014)

## RELATED CASES

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### **Change by Design Project in Mashimoni, Nairobi, Kenya**

The *Change by Design* project was co-facilitated by Architecture Sans Frontières (ASF), Pamoja Trust and UN-Habitat Housing Policy section in Nairobi, Kenya in June-July 2011. The overall objective of the *Change by Design* methodology is to improve current slum upgrading practice by investigating the opportunities of design and community participation in unlocking the hidden resourcefulness within informal settlements.

The chosen case settlement of this project in Kenya was Mashimoni, a village in the Mathare Valley located to the north of the Nairobi Central Business District. The lessons learned from Mashimoni are intended to provide insight into practices that could be transferred to other slum upgrading projects globally.

The methodology used during the *Change by Design* project was developed previously by the ASF in Brazil. The integrated methodology of the project seeks to explore slum upgrading by undertaking analysis and developing solutions at a range of urban scales: The institutional, regulatory scale; the neighbourhood, community scale; and the household dwelling scale. The project thus consisted of workshops where stakeholders and participants discussed the proposals at different scales and later compiled their findings into a matrix called “portfolio of options”. The specific objectives of *Change by Design* in

Kenya were to pilot the participatory design methodology created by ASF, as well as to raise awareness on slum proliferation and participation at a broader level. The project itself did not include the physical implementation of upgrading measures in Mashimoni, but was meant to support the Pamoja Trust in their quest to develop a feasible settlement upgrading plan for the area to be implemented in subsequent stages (Frediani, French, & Ferrera, 2011).



Public consultation in Mathare 3A, Nairobi, Kenya. Source: Gregor Herda (UN-Habitat)

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# Gentrification

GÁBOR CSANÁDI, ADRIENNE CSIZMADY

The term *gentrification* was first used in 1964 by Ruth Glass to describe the process of occupation of the working class inner city districts by the middle class (Glass, 1964). New residents bought the dwellings or even whole buildings of working class tenants as their contracts run out (Atkinson & Bridge, 2005). The process affected whole neighbourhoods of London, changing the social character of the city.

Gentrification conveys social, physical and economical transformations. A combination of changes in the population composition, the condition of the housing stock and the local real estate market makes gentrification an identifiable process. In general we can describe the process broadly as a change in land use, when higher status groups start to use the land instead of the former lower status users. In gentrifying areas land and property prices can increase due to the market and/or to the state interventions. As a result of these changes rents can become unaffordable for the former users or they can be displaced directly by planning measures.

The most widely used economic explanation of gentrification is the rent gap (Smith, 1979). Because the built environment and the given land use become obsolete after a while, if there are more profitable uses of a plot than the current ones, then the potential value of a property can increase and investors may see the chance of profit, so new investment and consequent displacement can start. However, the universal nature of rent gap explanation is questioned in less developed property markets and by the various forms of city development.

It is important to note that planning authorities, city municipalities or national governments can induce gentrification by spatial interventions and public investments that increase the (potential) real estate rents and prices and/or

change the complete function of the given area. Investors are often actively lobbying for these interventions. The changes are often welcome by governments striving for economic growth but the results can be also housing crises, increased commuting, overcrowding, displacement and homelessness.

Alternative explanations of gentrification also highlight the role of demand side effects (Ley, 1980) and the change of structure of production towards services, often concentrated in the inner cities. In many contexts the displacement is the result of state-led modernisation rather than driven by the land market. The dilemma for contemporary cities is to fund the refurbishment and maintenance of their housing stock and to attract investment and commercial activities, while keeping housing affordable.

## RELATED CASES

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### **From Working Class District to High-Tech University: Bicocca District, Milan, Italy**

In the Bicocca District in Milan, Italy, a regeneration process was driven by investment considerations (Yasar et al., 2007). The Pirelli company, which was in financial crisis in the 1980s, offered its terrains to the local planning authorities to create a new cultural centre and a university on the former industrial area. The demand for new uses of spaces in the neighbourhood increased the rents in the former working class area. As a result, the mostly market based rental market witnessed enormous rent increases. This project raises some questions regarding its long-term sustainability and about the social consequences of the cooperation between private and public forces.



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New housing in Bicocca District.  
Source: Gábor Csanádi

## Regeneration Projects in Budapest, Hungary

A different type of gentrification can be observed in some European cities where local municipalities are competing with each other to attract the interest of private developers. In Budapest, for example, local municipalities do not have the resources to refurbish the derelict areas and private investment does not arrive spontaneously to them. Local authorities try to change the potential land use of these neighbourhoods to make them attractive to investors. For example, by terminating the social housing policies in order to get rid of the low status residents with the ultimate goal of changing the stigmatised image of deprived neighbourhoods, or by giving permissions to build shopping malls instead of residential areas.



*Magdolna* redevelopment project in Budapest. Source: Gábor Csanádi

## RELATED CASES

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### **Gentrification by Global Investment in Istanbul, Turkey**

Another example of gentrification can be found in Istanbul, where large-scale interventions are displacing residents and substantially changing the urban landscape. In this case the state is acting as a key actor, as legislator and as a policy maker. By changing the legal frameworks, the former—partly illegal—poor areas are substituted by new high-rises built partly by foreign investors. These interventions increase the potential land value as well as the rents causing further displacement. As a result of the illiberal political programmes, the central state becomes an active player in the struggle for city space and it has a decisive role in city politics. The problem is that state intervention does not guarantee the provision of welfare for citizens but rather the realisation of politically relevant symbolic projects, or the unfolding of modernisation programmes, often serving the interests of property investors.



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New skyline in Istanbul.  
Source: Gábor Csanádi

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# Participatory Design

NADIA CHARALAMBOUS

*Participatory design* builds on the ideals of a participatory democracy where collective decision-making is highly decentralised throughout all sectors of society, so that all individuals can effectively participate in taking decisions that affect them in their daily environment (Sanoff, 2011).

Participatory design practitioners might vary with regard to their perspectives, backgrounds, and interests. However, they all share the view that design ideas arise in collaboration and that every participant is an expert in what they do. Therefore, it is important for all parties concerned to listen to each other's views and to work effectively as a multidisciplinary team, so that everyone's opinion is considered and integrated into the final design.

Community consciousness in the 1960s encouraged the direct involvement of the public in the definition of their physical environment. Subsequently decision-making processes were established offering services to enable citizens to participate in the design. In recent years, participatory design processes have been applied to a number of different fields, including housing design, and have been regarded as fundamental elements to achieve social sustainability and to deliver sustainable housing development policies.

Participation in design encompasses a diversity of decision-making forms involving different groups. Advocates of participatory design argue that a more democratic participation may raise awareness of the cultural and social qualities of localities at the policy-making stage, and consequently avoid conflicts that might later require greater policy implementation (Rydin & Pennington, 2000). Besides, it may contribute to promoting a sense of community by bringing together people who share common goals and facilitating what is referred to as collective intelligence (Fischer, Giaccardi, Eden, Sugimoto, & Ye, 2005). On the

other hand, some opponents to participatory processes contend that they produce consensus through the digestion or dilution of conflicts, thus preventing the system from changing and resulting in homogeneity (Miessen, 2011). Miessen argues that consensus can never lead to change or innovation and that every form of participation always carries a conflict within it. Therefore, he suggests that uninvited outsiders should intervene in a non-violent manner in political structures, systems and situations to create the necessary conditions for meaningful change.

**RELATED CASES****Incremental Housing Strategy, India**

Architects: Filipe Balestra and Sara Göransson

A housing project was developed in Bombay with the intention of promoting the cost-effective improvement of some of its districts without uprooting their communities. The architects developed strategies in collaboration with the existing communities to build houses that not only address today's necessities, but houses that the inhabitants can transform over time as their families grow, by themselves and without architects. In this way, houses can evolve "organically" while they preserve the existing social fabric. In this continuous adaptation process, the users do almost all of the construction work: Families help by fitting windows and doors, painting the house the colour they want, and placing floor tiles.



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Participatory process. Source: Filipe Balestra & Sara Göransson/Urban Nouveau AB

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Implementation in Yerwada's Netaji Nagar, Pune (India). Source: Filipe Balestra & Sara Göransson/Urban Nouveau AB

## Houses in Quinta Monroy, Iquique, Chile

Architects: Elemental  
—Alejandro Aravena,  
Alfonso Montero,  
Tomás Cortese, Emilio  
de la Cerda

The purpose of this project was to accommodate 100 families of the Quinta Monroy, in the same site that they had illegally occupied for thirty years, thus avoiding their relocation to the periphery of the city. This experimental project was conceived as a formal, high-density neighbourhood that could grow upwards filling in the gaps between the built units with the participation of the inhabitants. The belief that citizens should have some power in the decisions made on their living environment was essential to the project. Every house could be extended in order to accommodate the future growth of the families.



Housing units completed by residents.  
Source: Ludovic Dusuzeau, Sara  
Maestrello

Personalization of the inner spaces.  
Source: Tadeuz Jalocha & Ludovic  
Dusuzeau

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# Passive Design

EDGARS BONDARS

Regardless of the part of the globe in which a dwelling might be located, one of its key functions is to protect dwellers from climate conditions. Due to innovations brought about by the Industrial Revolution in the 19th century and thanks to the rapid development of HVAC systems, buildings in the first half of the 20th century became more technically sophisticated than ever before. Indoor climate in buildings was typically regulated by advanced building systems, which actively used energy for heating or cooling purposes. However, in the second half of the last century our societies began to face a number of global economic and ecological problems, including the 1970s oil crisis and the environmental pollution created by the burning of fossil fuels. The building industry began to look for other solutions in line with the greater sensibility to sustainability. The aim was to provide a comfortable indoor climate primarily by taking advantage of the physical properties of building materials and secondly through improvements in building design (Olgyay & Olgyay, 1963; Burberry, 1978; Szokolay, 1986). Such solutions became known as *passive design*. Then, active energy-consuming engineering systems became a secondary component in ensuring the building indoor climate.

The goals of a passive design can be summarised as follows. The first goal is to minimise heat losses. This can be achieved by creating a well-insulated building shell and applying airtight measures to prevent the uncontrollable air exchange between indoor and outdoor spaces, as well as by making the building form as compact as possible (i.e., building surface-to-volume ratio must be as low as possible). Heated areas of a building must be separated from unheated ones (e.g., staircases, garages, etc.) in order to diminish thermal bridges. The second goal of a passive design is to maximise solar heat gains during the winter by increasing

south-facing glazing areas and reducing north-facing ones. This is carried out by sizing and arranging windows according to solar angles, thus avoiding shadows created by nearby buildings or vegetation. The third goal is to ensure a consistent indoor climate by using building materials with a high thermal capacity in order to minimise temperature fluctuations, thus providing the necessary window shading (e.g., by means of overhangs and blinds) to avoid overheating in the summertime, and to buffer humidity by applying absorbent indoor materials.

The concepts of *passive design* and *passive house* are not quite the same. Passive design is meant to be a set of design principles and methods that can be used to design any energy-efficient building, without necessarily having to reach the passive house standard. The application of passive design measures enables designers to obtain significant energy savings during the lifespan of the building. The effectiveness of these measures can be significantly improved with building energy performance calculations (using, for instance, the software PHPP—Passive House Planning Package at the building design stage), which help designers comply with the energy-efficiency requirements of a passive house, that is, of a building without a conventional heating system (Feist, 2013). The challenge for architects, however, is to balance the aesthetical, technological and ecological criteria and translate them into a contemporary architectural language.

## RELATED CASES

## Lielkalni. Energy-Efficient Building in Ģipka, Latvia

Architect: Ervins Krauklis

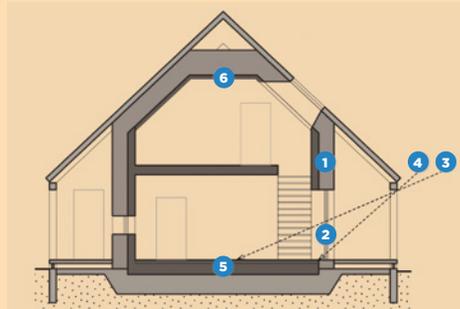
The design of this residential building located in a temperate continental climate reflects some features of the local architectural traditions in the form, proportions and sloped roofs. It is an energy-efficient, highly-insulated building with an airtight shell. Its main features can be seen in the cross-section: **(1)** prevents heat losses, **(2, 3)** large south-facing windows ensure solar heat gains in winter when the sun is at a low angle, **(4)** it has large overhangs to prevent overheating in summer when the sun is at a high angle, **(5)** materials with high thermal mass are used in floors and walls to absorb and later release the heat energy, and **(6)** moisture absorbing materials are used in the ceiling to help to keep the indoor relative humidity constant.

Load-bearing exterior walls consisted of lightweight ceramsite concrete blocks, while the roof structure was built of nail plate timber trusses. Glass wool was the main insulation material for the walls and for the roof. The building's annual energy demand is 26 kWh/m<sup>2</sup> (not reaching the passive house standard which is 15 kWh/m<sup>2</sup>), while construction costs were 1,520 €/m<sup>2</sup>.

LIELKALNI BUILDING:  
WEST FACADE



CROSS SECTION



## Ezernieki. Passive House in Jaunmārupe, Latvia

Architect: Ervins Krauklis

This single-family residential building has small windows on the northern facade to diminish heat loss. The heated residential part **(1)** is compact to ensure the best area-to-volume ratio in order to minimise heat loss through the building shell. The unheated parts, like the garage and auxiliary rooms **(2)**, and the covered terrace **(3)** are integrated in the mass of the building, but at the same time, they are thermally separated from its heated core. The large southern glazed area provides enough light and energy and the movable shades prevent the room overheating during the summertime. Sealing tapes on all structural joints ensure the airtightness of the building. The structural system is made of a laminated timber frame, filled with insulation. The specific annual energy demand for heating is 14 kWh/m<sup>2</sup> (reaching the passive house standard), while construction costs are 1,000 €/m<sup>2</sup>.

"EZERNIEKI" BUILDING: NORTH FACADE



SOUTHERN GLAZING

SEALED JOINTS



Ezernieki, passive house in Jaunmārupe, Latvia (2016). Source: Edgars Bondars

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# **Social Housing**

**LAURA NEIJENHUIS**

There is no single definition of *social housing*. In the European context social housing is generally seen as serving a common interest, which is needed to increase the supply of affordable housing. It is specifically targeted to those vulnerable groups within society, whose socio-economic conditions would otherwise hinder their access to an adequate home (Scanlon, Fernández Arrigoitia, & Whitehead, 2014). To cover social housing needs, several models have been implemented in Europe. These models can broadly be divided under *universalistic* or *targeted* (Malpass, 2011). The universalistic model views housing as a public responsibility and hence the whole population has the right to affordable and decent housing. This model was mostly applied in the former communist regimes and in some northern and western-European countries. In these countries, there were no restrictions or limits set on the target group of social housing programmes and so for decades they effectively promoted and supported social housing at all levels of society. The countries in which the universalistic model prevailed still have a large share of social housing as part of their overall housing stock (Malpass, 2011).

When looking at the situation of social housing in the developing world, the European model is not always applicable. Therefore, one must form a common definition that can be applied to all countries, for example:

**Social housing is the provision of a formal housing solution, in principle by the market but with government incentives (or in some cases by government directly) targeting and reaching the lower and middle-income segments of the population. So social housing is in particular aimed at providing, stimulating and enabling housing solutions for low- to middle-income households**

**that can afford a formal solution but cannot access housing in the formal housing market without support. (Geurts, 2015)**

This definition omits informal housing, that is to say, slum upgrading or incremental housing which is most often a housing solution for the poorest social groups.

Over the last decade, the neo-liberal agenda of the “enablement paradigm” has dominated the political and economic thinking in governments, especially in The Global South. The key objectives of enablement are to improve living standards through participatory development strategies, targeted at urban productivity, land delivery for low-income household, housing programmes, and poverty alleviation (Wakely, 2014). This paradigm has influenced government-supported housing projects in the region through measures such as privatisation. It has also led to a renewed interest in the acquisition of social housing. However, more recent discourses are advocating housing rights and a pro-poor approach.

**RELATED CASES****Social Housing  
in South Africa**

Social housing is one of the public housing programmes in South Africa. According to Huchzermeyer (2014) it is a relatively small public housing programme compared to other ones. The target population is relatively broad as it encompasses a wide range of income groups. In its current format, social housing programmes have been implemented since the new democratic government came to power in 1994. This means that the institutional, legal and policy frameworks have all been developed in just twenty years (Tissington, 2011). Social housing is predominantly a rental option managed by institutions such as the National Social Housing Association (NASHO). The Social Housing Regulatory Authority (SHRA) regulates the activities of these institutions (Huchzermeyer, 2014).



A social housing project in Cape Town, South Africa. Source: Ellen Geurts, Institute for Housing and Urban Development Studies, Rotterdam

## Social Housing in Guatemala

Guatemala is combatting its severe housing shortage with different initiatives, among them social housing policies. One of the social housing systems is based on a successful housing cooperative in Uruguay, known as Federación Uruguaya de Cooperativas de Vivienda por Ayuda Mutua (FUCVAM), which received the 2012 World Habitat Award and consequently has been emulated in other Latin American countries (Bredenoord, van Lindert, & Smets, 2014). It is a mutual aid model which helps low-income households to build their home. Participants dedicate a part of their working day to building homes for each other. Although these types of cooperatives are becoming widespread in Guatemalan cities, the legal framework that regulates their activity needs to be clearly defined.



A neighbourhood in Guatemala City where a mutual aid model is used for home improvements. Source: Alonso Ayala Aleman, Institute for Housing and Urban Development Studies, Rotterdam

## RELATED CASES

### Social Housing in Romania

Since the start of the 1990s, Romania has undergone an institutional overhaul, and the change from a socialist to a market-based system has directly affected the operation of the housing systems (Tsenkova, 2009). Romania's current housing policy is defined by the *Programme for Housing Construction* (a cooperative of the Ministry of Regional Development and the local governments) which mainly provides financial support to local initiatives. The Romanian National Housing Agency (RNHA) also works together with municipalities to implement a *Programme for Rental Housing for Young People*. The main goal of the national programmes is not so much constructing new dwellings, but promoting the usage and refurbishment of existing buildings. However, the responsibilities of the actors involved in the implementation of the programmes are unclear to many (Neijenhuis, 2015). Access to social housing for national minorities such as the Roma, who make up a disproportionately high share of the vulnerable households in Romania, is practically impossible as they often cannot access social housing programmes and end up in informal housing.

Apartment blocks from the communist era converted into social housing in Bucharest, Romania. Source: Laura Neijenhuis, Institute for Housing and Urban Development Studies, Rotterdam



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# **Sustainable Housing Design**

**KARIM HADJRI, ISAIAH OLUREMI DUROSAIYE**

Sustainability is the balancing act of harmonising human activities and potentials with the finite resources offered by nature. As defined by Brundtland (1987, p. 16), the human ability “to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” sits at the core of sustainable development. Rightly so, the provision of contemporary housing should be conceptualised beyond meeting the needs of the present users, to span resource management that cuts across social, economic and environmental domains of all human activities through various generations. This ethos should help ensure sustainable design is a key component of future housing provision.

*Sustainable housing design* is usually associated with the efficient use of energy of residential buildings. Hence, an increasing political and economic pressure to reduce domestic energy consumption, combined with the potential effects of climate change on the built environment have contributed to a rapid change in legislation for housing design and provision across the European Union (EU) (European Commission, 2013). Nevertheless, sustainable design constitutes far more than the EU agenda on the reduction of greenhouse gas emissions (European Commission, 2010). According to Manzini (2007), sustainability requires a systemic thinking approach in which current practices of “production and consumption are discontinued” in order to pave the way for improved quality of the social and physical environment. A sustainable housing design, thus, has more to offer than aesthetics and functionality (Farmer, 2013).

There are a variety of approaches to foster sustainable housing design. First, sustainable design in contemporary housing procurement and regeneration is expected to

apply cradle-to-cradle design concepts, in which the construction technology supports the reusability of the materials (Monahan & Powell, 2011). Also, a sustainable design should encompass not only the construction phase but also the deconstruction of the building into parts, as opposed to its simple demolition at the end of its useful life. This favours reuse of existing building components, which has a better environmental impact compared to recycling or even final disposal. Contemporary housing provision must then consider the whole building life-cycle, and measures should be taken to ensure that the building's environmental impact is reduced to the minimum possible. There are advanced methodologies, like Life Cycle Assessment (LCA) to assess the environmental impact of a building throughout its life-cycle (Basbagill, Flager, Lepech, & Fischer, 2013; Basti, 2010). Such an assessment would consider not just the energy embodied in the materials used to construct the building (including the energy used in their transportation to the site and in the recycling of these materials), but also the energy consumption of the building throughout its lifespan and the adaptability at the end of its useful life for other purposes. Furthermore, there is a school of thought that suggests that the term *sustainable design* must embrace a whole ecosystem including the interaction between humans and the built and natural environments (Tippett, Handley, & Ravetz, 2007). Such ecological approaches to defining sustainable design inadvertently suggest that the status quo of this interrelationship may be maintained in equilibrium over an extended period of time, through design (Cole, 2011).

Finally, a sustainable design will consider the social aspects and consequences of achieving economies of scale through compact building. Thus, intensifying land use

in the form of high-rise, high-density residential housing can help achieve sustainability in urban areas (Ancell & Thompson-Fawcett, 2008). However, such intense use of space within the built environment will, inevitably, result in the reduction of the constituent individual's access to the encompassing natural environment, which some social and environmental scientists identified as a source of social conflicts in neighbourhoods a few decades ago (Baum & Davis, 1980; Freedman, Levy, Buchanan, & Price, 1972; Gillis, 1977).

Incorporating sustainable design into everyday design thinking cannot be achieved in isolation. Therefore, to ensure social equity, sustainable design would embrace the principles of universal design. Furthermore, the ability of the design community to learn from an existing building through post-occupancy evaluation of the building's performance is a prerequisite to an all-inclusive sustainable design. Environmental conservation, on the other hand, can be achieved through brownfield regeneration, while compact design could help to achieve economies of scale in urban planning and development. Being oblivious to sustainable design has long-term global ramifications, as the consequences of greenhouse gas emissions cannot be contained within national borders.



## RELATED CASES

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### **BedZED, London, UK**

Beddington Zero Energy Development<sup>1</sup> or BedZED was initiated by sustainability experts BioRegional and architects ZEDfactory, and developed by housing association Peabody. Completed in 2002, BedZED was the UK's first large-scale mixed-use sustainable community. Sustainable design is built in through the use of passive solar heating, high insulation, natural ventilation, a communal boiler, photovoltaic panels, and water saving appliances. The development was also built using low impact construction and materials sourced locally therefore reducing environmental impact.

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1. See [bioregional.com/bedzed](http://bioregional.com/bedzed)

## Vauban, Freiburg, Germany

The Vauban district<sup>2</sup> in Freiburg is a model for sustainable living, combining cohousing approaches with ecological design. In 1996, it was presented as a German Best Practice on the UN HABITAT II conference. Between 1997 and 1999, Forum Vauban coordinated the EU funded LIFE project *Realisation of the Sustainable Model District Vauban*. The project's results include a large car-reduced residential area, all houses with low-energy standard, several passive houses, many cooperative building projects with ecological measures, and a market place with a community centre.

2. See [vauban.de/en/topics/history/276-an-introduction-to-vauban-district](http://vauban.de/en/topics/history/276-an-introduction-to-vauban-district)



Residential buildings at Heinrich Mann street. Source: Leandro Madrazo

Market square and community centre. Source: Leandro Madrazo

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# Urban Greening

SAŠO MEDVED, CIRIL ARKAR, SUZANA DOMJAN

*Urban greening*—the greening of urban surfaces—has recently gained the attention of urban planners and architects because green roofs or green facades have a significant influence on the mitigation of urban heat islands and storm-water retention which in turn help to improve the microclimate (Barardi, Ghaffarianhoseini, & Ghaffarianhoseini, 2014; Gagliano, Detommaso, Nocera, & Evola, 2015). Such building elements also improve the air quality and thus contribute to a reduction of health problems, by capturing CO<sub>2</sub>, heavy metals, volatile organic compounds and other air pollutants. Green spaces also have positive impacts on the quality of social life because they can be used as community gardens or recreational areas. Another environmental advantage is that they contribute to enhance urban biodiversity.

Green roofs are the most common solution to make urban areas green. Intensive green roofs require a deep layer of soil to grow plants like lawns, bushes and small trees. However, they need frequent irrigation, maintenance of the vegetation layer and a solid roof construction. In an extensive green roof the soil layer can be replaced by a thin layer made of a mineral-wool substrate and a vegetation blanket consisting of sedums, mosses and herbs. Such plants are very light weight, demand little maintenance and only occasional irrigation, even in hot and dry climate conditions.

Green roofs can substantially decrease the energy demand for cooling and heating. During the summertime, the roof's thermal resistance and the high share of absorbed solar radiation by the vegetation layer help to reduce the heat gains.

Evapotranspiration cooling considerably decreases the surface temperature in comparison to traditional roofs (Gagliano et al., 2015). Green roofs also reduce the heat

losses during the winter because of their enhanced thermal capacity (Ouldboukhite, Belardi, Jaffal, & Trebelsi, 2011) and the stored heat from solar radiation (Jaffal, Ouldboukhite, & Belardi, 2012). Besides the improved thermal performance of the building envelope, the main benefit of green roofs is their rainfall-water retention. It was found that up to 40% of the annual rainfall in a mild climate and almost all annual rainfall in a hot climate could be retained with extensive green roofs (Arkar, Domjan, & Medved, 2015).

## RELATED CASES

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### **Model of Energy and Hydrological Performance of Extensive Green Roofs**

Despite widespread awareness of the importance of urban greening, optimistic predictions about its effectiveness are very frequent. To avoid incorrect decisions of urban planners, computer tools for heat and water transfer prediction in urban green areas should be used in the decision-making process. These computer tools can take into account detailed structure and properties of green areas and other important factors such as local hour-by-hour climate conditions. Such a tool was developed for the modelling of extensive green roof thermal and hydrological response by the Laboratory for Sustainable Buildings, at University of Ljubljana. A numerical model was created using multi-annual in-situ measurements on test polygon. Based on this model, a computer tool enables the calculation of heat and water transfer in green-roof construction by using local meteorological data in the form of the Test Reference Year, the heat losses and heat gains of the green roof, the amount of retained rainfall, and the reduced needs for irrigation. As a case study,



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Extensive green roof on residential building in Brasschaat, Belgium.  
Source: Knauf Insulation

performance of extensive green roofs in cities with different climate conditions were analysed. The results of the study showed that, in comparison to common roof constructions, there is a decrease of the building heat gains in the summertime between 75% in a hot climate (Athens) and 55% in a mild-climate (Ljubljana). The all year rainfall retention is between 40% in Ljubljana, and up to 100% in Athens. Finally, water need for irrigation is reduced by 75% in mild-climate conditions and 10% in a hot climate. All the values significantly depend on the thickness of the substrate layer—between 2 and 8 centimetres—, a dimension which needs to be set in accordance with local climate conditions.



Extensive green roof on industrial building in Škofja Loka, Slovenia.  
Source: Knauf Insulation

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# **Urban Heat Islands**

**SAŠO MEDVED, SUZANA DOMJAN**

The majority of people in developed countries live in cities. A city's growth not only influences the appearance of the landscape, it also changes the characteristics of the environment (Oke, 1973). One of the most noticeable changes is the formation of specific microclimatic conditions, which means that the temperatures in cities are warmer than in the surrounding rural areas. This phenomenon is known as the *Urban Heat Island* (UHI) (Bowler, Buyung-Ali, Knight, & Pullin, 2010; Santamouris, 2006). An UHI is a consequence of the lower reflectivity of the solar radiation in urban areas; the increased atmospheric longwave thermal radiation due to the photo-chemical smog and airborne particles; the reduced latent-heat storage because of the smaller green areas and changes in the rainfall due to the more intense runoff and the large anthropogenic heat sources. The effect of UHIs can cause temperature rises of up to 10 °C in a metropolis, a change which is particularly noticeable in summer months.

The UHI effect influences the comfort in both indoor and outdoor environments as well as energy use, especially for the cooling of buildings. Therefore, UHI mitigation must be considered in the planning of urban areas. The following measures have proven to be the most effective:

- to increase the longwave radiation losses by radiation heat exchange between buildings and the sky by lowering the screening of the skyline;
- to decrease the stored sensible heat of solar radiation by means of surfaces with a higher albedo; and
- to increase the latent heat storage with grass and water surfaces, as well as parks.

The integration of urban parks into the urban environment can significantly decrease the UHI effect. The potential

for a UHI decrease is commonly evaluated with computer tools, like ENVI-met.<sup>1</sup> The heat transfer and evaporative cooling of the grass layer and the trees are modelled for a growth period by means of empirical models, using the tree crown size and shape as a function of the tree age, in combination with evapotranspiration models based on the leaf area index. During the summer, the maximum air temperature difference between a park and the surrounding urban area can be as high as 3-5 °C. Furthermore, the cooling effect of the parks can be observed up to 500 metres away in the surrounding built environment.

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1. See [envi-met.com](http://envi-met.com)

## RELATED CASES

## Study of the Mitigation of the Urban Heat Island Effect in a Built-Up Environment with Urban Parks

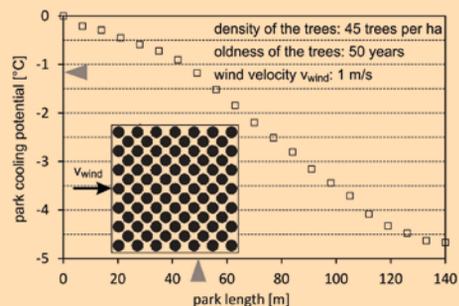
The Computational Fluid Dynamics method is most often used to calculate the cooling potential of water surfaces, green areas and parks in urban areas. This method was used to predict the Park Cooling Potential (PCP) of the Zvezda Park and its surrounding built environment (Vidrih & Medved, 2013). A PCP analysis was made taking into account the area, planting density and age of the trees.

IMAGE ©2016 DIGITALGLOBE, MAP DATA ©2016 GOOGLE



Zvezda Park in the city centre of Ljubljana. Source: Google Maps (2016)

Park Cooling Potential prediction of Zvezda Park. Source: Vidrih and Medved (2013)



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# **Urban Regeneration**

**NADIA CHARALAMBOUS**

*Urban regeneration* is primarily concerned with the upgrading of inner city centres, former industrial or residential areas facing periods of decline due to major short or long-term economic problems, deindustrialisation, demographic changes, social tensions, physical changes and deterioration, among others.

Urban decay has initially been addressed through economic and planning policies geared towards physical and economic renewal and revitalisation of the affected areas. A recognition that successful regeneration should also include social and environmental policies resulted in a shift from specific urban renewal and revitalisation techniques to more comprehensive urban regeneration strategies (Couch, 1990). Those strategies encompass action plans to solve urban deterioration through a lasting improvement in the economic, physical, social and environmental conditions. A strong emphasis is placed on creating links between the physical transformation of the built environment and the improvements of the social conditions. The outputs of such a comprehensive regeneration process can be grouped in five headings: Neighbourhood strategies, training and education, physical improvements, economic development, and environmental action (Roberts, 2000).

Urban regeneration projects need to face a number of complex and diverse issues such as social cohesion, housing supply, economic development and affordability. They also need to address needs for infrastructure investments such as new roads and public transport, public realm improvements and the refurbishment of existing buildings.

The spatial scale of urban regeneration programmes varies from local area-based projects to broad national policies. Different kinds of problems need to be dealt with at different spatial levels. Likewise, each policy level

should be considered while working on a specific scale. Further challenges might stem from the tensions between top-down regeneration policies and bottom-up community needs, expectations and initiatives. It is widely accepted in democratic societies that urban regeneration processes should involve multiple stakeholders, including residents, in order to stimulate local economies and prevent the displacement of inhabitants from one area to another (Roberts & Sykes, 2000).

Housing revitalisation and improvement of the physical and built environment of neighbourhoods are often high in the agenda of urban regeneration projects aiming at supporting the creation of enduring local communities.

## RELATED CASES

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### **Zirmunai Triangle Project, Vilnius, Lithuania**

Zirmunai is one of the oldest and most deteriorated districts of Vilnius, a neighbourhood of 12,000 residents. The aim of the project was to find ways to regenerate a district with little space for new construction and apartment owners not willing to invest in their rapidly deteriorating homes. In 2013, the municipality joined the URBACT RE-block network in order to start a regeneration process with the goal to improve houses, public spaces and the social environment in general. A comprehensive plan for the regeneration of the large-scale housing neighbourhood was drafted as a joint endeavour involving the municipality, residents, representatives of local businesses and institutions. Initially, the group helped to identify the main problems to be addressed according to the residents. Later on, they collaborated in the preparation of design proposals and a regeneration plan for the area.

## Taht-el-Kale Neighbourhood, Nicosia, Cyprus

The quarter of Taht-el-Kale is one of the traditional neighbourhoods of the walled city of Nicosia, situated very near the buffer zone that divides the city into two sectors. The shrinking and ageing of the population, the reduction of the productive base, the lack of open public spaces, and the deteriorating conditions of housing were some of the most important problems to be solved. There were also major problems of traffic and accessibility mainly due to the dependency on private cars. The plan for a socio-economic regeneration of the area includes housing revitalisation, improvement of the physical and built environment of the neighbourhood, restoration of historic buildings and upgrading of public spaces. The proposed actions comprise the restoration of facades and fences of buildings facing the roads; the refurbishing of buildings of significant architectural value; the redesign of public spaces and roads in order to improve pedestrian accessibility, particularly for disabled people, including lighting and urban equipment; the creation of small public open spaces; the rearrangement of common service infrastructure and upgrading of the sewage system, and new traffic arrangements.



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# **Moving Targets: Practice, Architecture and Urban Shrinkage**

**Adam Evans**

## INTRODUCTION

Students studying on courses central to the various fields connected to spatial practice almost exclusively envision their future as designers and creators of spaces and places; but what about places that are shrinking? The aim of this chapter is to locate a particular future spatial pedagogic/andragogic and practice-based agenda within the context of the shrinking city, by discussing the challenges of spatial practice within the realm of the shrinking city from two positions. Firstly, it introduces and critically outlines the issues facing practitioners that might work within the context of urban shrinkage. Secondly, and in more depth, the chapter addresses the teaching and learning of architectural practice in terms of shrinkage, and proposes a system to reimagine the shrinking city in the context of academia. From both positions these issues are more than purely spatial and pragmatic; somewhat of a shift in approach is required whether teacher, student, or practitioner, to undertake a different kind of spatial practice.

In recent years, the phenomenon of urban shrinkage has more presence within architecture, planning and urban design discourse. As people relocate—often from smaller, quieter towns and cities to larger, growing and expanding urban areas in search of better prospects—spatial practitioners, urban designers, planners, and architects are repeatedly provided with opportunities to rethink place and space in order to deal with this growth and shrinkage. So closely linked to these forms of spatial practice is the notion of urban growth and shrinkage that patterns of economy are often indicated within industries linked to construction and the built environment. Unsurprisingly then, the issues of growth and urban expansion are clear themes introduced into design studio within the academy as vehicles for student design projects, to equip aspiring architects and designers with the critical skills for them to develop into their future lives as spatial practitioners. Complementary to this, dealing with themes of urban growth and expansion enables the design teacher to assess the student's ability to think, develop, design and ultimately build, whilst the themes of urban shrinkage are avoided by many. Drawing on *The Production of Space* (Lefebvre, 1991) and investigating comparable issues in practice and academia, this chapter aims to provide a set of propositions for a kind of practice, where a shrinking context can act as agency to empower graduates with the confidence and ability to deal with urban shrinkage.

## MOVING TARGETS

In order to theoretically explore and help substantiate the positions outlined in the introduction, this section will primarily draw upon Henri Lefebvre's theories surrounding the production of space. Production, as the term suggests, deals with making, manufacture, and creation through particular processes, which in turn result in product that adds to the physical world and

contributes to life. Lefebvre's model for three moments of space defines spatial production as (a) spatial practice; (b) representations of; and (c) representational; or (a) the perceived; (b) the conceived; and (c) the lived (Lefebvre, 1991). By considering Lefebvre's spatial triad within the context of spatial praxis, and in particular a spatial praxis that dominates modes of spatial production within the expanding city, it can be assumed that conceived spatial moments define those moments within the design of space in terms of a traditional and conventional western approach to architecture. Conceived production of space is imagined by the professional practitioner and building projects are proposed via a series of drawn and modelled representations which once approved by the various authoritative bodies are executed in full-scale, as three-dimensional, physically constructed spatial interventions.

And how is this architecture perceived? The notion of the perceived is both predictive and reflective. The conceived moments of space are those moments when one might be reflecting on a place one has passed, occupied or experienced somehow in the physical realm, equally it may be some place which has not been experienced directly but experienced through a narrative, images or stories, some place where we have to interpret and form our own representation based on particular information. This perceiving is what we decide about a place; sometimes even before our direct experience we will have a clear representation in our mind about the value the place holds for us. Lived space, or social space, are those moments within which we carry out direct actions in space. We make autonomous and spontaneous spatial moves that might seem very insignificant; the everyday, mundane and ordinary practices and rituals carried out to operate within the built world. These moves are at times particular and bespoke and at others cyclic or rhythmic. These operations are social-spatial practices, which we carry out through our lives in the built world. Lefebvre's three moments of space of course do not act independently. There is hierarchy attached to these moments depending on context and situation, and they synergise and clash, complement and contradict, mix and separate.

In terms of urban expansion, it may be quite obvious how Lefebvre's spatial triad can be explored to understand the city. For example, throughout the rapid economic growth of the previous decade there remain the representations of these actions, their presence clearly apparent in the result of new corporate and public buildings together with different typologies of housing stock built to meet the demands of expanding city life. The Grand Canal Commercial Development in Dublin (Figure 1), with Daniel Libeskind's Bord Gais Energy Theatre as its central architectural piece, is a clear example of conceived urban design driven by economy. How we now perceive built projects such as this following the aftermath of the economic crisis may be for discussion elsewhere, but it is important to acknowledge the potential relationship between the success or failure of building projects in areas of economic and urban growth with the success or failure of shrinking cities. What further relates to this situation is the idea of social

space, and how the spaces of these completed projects are inhabited, used and occupied once the spatial practitioners have moved onto the next project. These dynamics of direct engagement with space and place are a form of spatial practice in its own right, and how one reacts, redefines and reorganises space may be variably informed by desire, need, use and perception of built representations. Furthermore, these actions may be intentional or passive to greater or lesser extents.



FIGURE 1. An architectural celebration of the economic boom represented in Grand Canal Commercial Development, Dublin. Source: Adam Evans

### Shifting Production, Shifting Perception

Lefebvre's spatial triad has previously been interrogated and framed by many scholars, in particular Borden (2001), Coleman (2011) and Stanek (2011) respectively in the context of spatio-economic and spatio-cultural production as well as architectural practice.<sup>1</sup> These interpretations have critically advanced the discourse surrounding spatial production, but what of the shrinking city, what of "unproduction"? By critically considering a shift in how Lefebvre's spatial triad is explored begins to inform ways in which the shrinking city can be reconsidered as a condition that demands and deserves a different kind of engagement. Within the context of the Bauhaus work, and in particular the study of objects in social space, Lefebvre (1991) discusses the notion of global space as "a void waiting to be filled, as a medium waiting to be colonised" (p. 125). He offers houses, the palace, and public buildings as potential objects for analysis as objects of representation, perceived in terms of a neo-capitalist political structure. When objective study becomes fuelled by government driven capitalist investment—and here a direct parallel can be drawn with the practice of the developer-led architectural projects of the past twenty years—the voids that one might consider through social engagement become consumed by buildings produced for further acts of economic consumption, additionally and more perverse, the production of buildings results in leftover spaces and voids which rather than give back to the city for some social use, become private, secured, out of bounds spaces fenced off to protect from public invasion. These spaces are rarely used, and become urban no person's lands and achieve nothing more than to become spatial metaphors for an increasing divide between ownership and authority and everyday urban inhabitation. The result of these of actions devalues, for the majority, social representations of the city. Ironically, the construction of purely economically driven architecture will socially devalue its own

1. The three moments of space underpin much socio-spatial dialogue, and Iain Borden's *Skateboarding, Space and the City* (2001) is of particular value when considering the shrinking city as the text explores the qualities of existing redundant, unused and undervalued urban space.



**FIGURE 2.**  
Developed by  
P&O Estates and  
Morgan Stanley  
Bank, now British  
Land owned  
Drake Circus  
shopping mall  
in Plymouth,  
designed by  
Chapman Taylor  
and completed  
2006. Source:  
Adam Evans

context, and then, in turn, devalue itself. Drake Circus, Plymouth, UK is one such project, completed in 2006 and now owned by British Land, the once open public space is closed up at night, turning its back on the city outside (Figure 2). Since its completion, more than sixteen shops have become vacant in the west end, mixed-use residential and retail area, between Cornwall Street and St. George Street.

### No Person is an Island

Bellevue, Islandbridge is a large, medium-rise private developer-led housing project in Dublin, Ireland built in the last economic boom and illustrates the above argument clearly. The estate comprises a mixture of 1, 2 and 3 bedroom apartments, arranged in five blocks around a man-made pond with an underground car park sandwiched between Phoenix Park and Memorial Park to the west of the city's edge. The steel frame, brick clad blocks range between four and five storeys high, and whilst not enormous are large enough in the context of suburban Dublin. All apartments are occupied, although this is not evident as there is no public space within which to socialise, or even to meet. No benches overlooking the man-made lake, no walls to lean on, nowhere to talk to neighbours. To the east of the complex of buildings is a garden, and sits well by the side of where the canal and the River Liffey meet. Bizarrely, this green space is also unused, and furthermore only three apartments are afforded even a view of these gardens (Figure 3).

It is commonplace for estate agents to advertise these types of dwellings by promoting private parking and travel distance to amenities as selling points, diverting consumer interest away from their poor spatial design resolution. Whilst the young professionals that these kinds of property aim to attract is increasing in Dublin, there is much displaced growth, depopulation and out-migration in rural areas of Ireland (Daly & Kitchin, 2013) as well as relocation of inhabitants from the city to the suburbs. To the outside face of Islandbridge, the perception of Bellevue is a representation of successful housing, accommodating an increasing population demand, but when one interrogates Bellevue through experience, the social life of the place is vacant. A consequence of the unsatisfactory space outside is the increase in warning signage and CCTV (Figure 4), which do nothing more than instil a false sense of insecurity and dissuade people from attempting to engage

**FIGURE 3.** With  
routes formed by  
narrow  
walkways, one  
can look but  
not occupy the  
external space.  
Source: Adam  
Evans



in the space; and as a result inhabitants hurry into their apartments under the illusion that they are now safe from the outside world (Figure 5). This is further reinforced by the circulation strategy, which enables one to drive into the underground, hidden car park and enter an elevator straight to one's apartment without even having to use the front door of the building. One opposing position to the developer-led, economically driven large-scale housing complex is to embrace the small-scale, which can offer appropriate solutions within a shrinking context. Projects of small-scale are not restricted to the domestic, but can also address the problems of the public and urban realm. With reference to Guzmán de Yarza's latticed sports centre in Zaragoza and the adaption of Can Tacó Roman ruins by Toni Gironès in Barcelona (De Molina, 2014) suggests that a true change in attitude in what size and scale represents can allow practitioners to remain working in the urban environment. What begins to be clear from this discussion is that the lack of financial luxury leads to more spatio-culturally engaged projects.

### SHRINKING PRACTICE

What are the problems facing practitioners in cities that are shrinking? In a shrinking city, it may not be that the voids are waiting to be filled, but rather waiting to be consolidated, anxious to become dispersed, yearning for dissolution. In the UK, there is a very clear divide between the north and the south, where in terms of population the ten city regions that have grown the most are southern (Telford being the most northern, just to the north-west of Birmingham) and the ten that have decreased are all north of Stoke (which lies approximately thirty miles north of Telford). The major city regions of Liverpool, Tyneside and then Manchester have suffered shrinkage the most, Liverpool decreasing from a population of 1,200,900 in 1971 to 975,200 in 2009 (Webber, Larkin, Tochtermann, Varley-Winter, & Wilcox, 2010). The UK is not alone; other EU countries are experiencing urban shrinkage on a huge scale, particularly Germany and Romania largely due to deindustrialisation, reallocation and redistribution of industry (Popescu, 2014).

Within shrinking contexts, architects and urban designers may migrate to growing cities, contribute to urban expansion programmes and lead build projects to accommodate the influx of visitors, commuters, and those who choose to relocate. Others might attempt to remain in the shrinking region and reduce both their practice and their ambition, gratefully accepting small



FIGURE 4. Vast amounts of CCTV, privacy notices and railings protect every piece of private space. Source: Adam Evans



FIGURE 5. The extreme privacy implemented at Bellevue adorns each apartment block. Source: Adam Evans

projects or offering to carry out feasibility studies for no fee or reward. What is critical here to note is that practitioners who remain in a shrinking region continue to operate as they would if they had relocated to a place of growth, which is to say that their attitude to praxis remains about adding to, building up, and enlarging the city. Whilst a domestic extension may add a small contribution to a local economy and is not to be dismissed, these projects are almost always exclusive and private, and rarely transparent. The main problem with practicing in a conventional manner in a shrinking city is that these small projects remain hidden away and uncelebrated; the majority of the cities inhabitants are unaware of the actions of making. In the projects discussed by De Molina (2014) and additionally the work of Assemble in the UK, Elemental in Chile and other lo-fi architecture (Till, 2009), a fundamental shift in practice approach is required for the shrinking city that includes an attitude to transparency, inclusion, contribution and socio-cultural practices and rituals.

### **A Temporal Permanence of Design**

A city struggling with its local economy, housing stock, commercial and social spaces might also be suffering an identity crisis. The traditional solution is to introduce a large project in a bid to primarily stimulate the economy, but also attempt to regain some form of spatio-cultural identity. However, it is rare that a large conventionally conceived building or engineering project of this nature would successfully address the city's issues as these types of initiatives lead to a deeper sense of confusion once the project fails (Schlappa & Neill, 2013, p. 13). At this point a broader, lateral, and pluralist form of engagement that might be alien to spatial practitioners, planners and local government parties is suggested.

The beauty of the shrinking city is its potential as a laboratory, a contextual test bed for new ideas and methods of spatial engagement which also affords time for reflective practice, which is rarely possible under the constraints of working in a growing city where the emphasis is on product rather than process. Schlappa and Neill (2013) discuss the importance of leadership through citizenship, and drawing from the reenvisioning initiatives in Detroit, set out in the *Detroit Future City Plan* (January 2013) and their own case study of Altena, Germany, make a series of strong recommendations based on critical perceptions and actions which can be polarised as denial and recreation, discussion and collaboration, and transparent small moves and engagements. Once the city comes to terms with the fact that to merely recreate its past periods of success and growth will not lead to a sustained future, inclusive dialogues must take place which involve all parties. These discussions, together with collaborative spatial and socio-spatial experiments, may result in small moves, which are transparent to all parties and support the physical enhancement of the urban fabric thus driving a positive shift for the city's identity and value over time.

Additionally, these small moves that end up marking the cyclic and linear rhythm of the city<sup>2</sup> could be directly linked to the notion of the dwelling, that familiar place where social practices and rituals are carried out.

## PEDAGOGIC STRUCTURES

Within the pedagogical structure of any spatially oriented design discipline, the design studio lies at the heart of study. To critically engage with designing—that is to critically, thoughtfully and reflectively generate and produce—is what academics, teachers and visiting critics advocate on almost a daily basis from day one of the first year. The urge to produce, to undertake a rigorous design process, and generate a finite and highly resolved spatial and material product at the end of the project belies almost every celebrated design portfolio, regardless of the studio agenda. It is natural to assume that this desire to create, to build, to make, is what drives many students to study spatial practice courses. Traditionally, such courses have successfully supported the direction of spatial practice in various guises since the inception of the design professions themselves. This paradigm, however effective as providing a series of markers for measuring achievement and evidencing validation, struggles with the important issues of urban shrinkage.

### Design and the Unprocessed

A typical pattern of design project is for students to comprehend and respond to the brief by: Carrying out site investigations, evaluating a series of design ideas and propositions, developing a reflective and positive design process, and producing a final set of drawn and model representations. Then, the question to be asked is, what happens when students attempt to undertake similar praxis in a shrinking city?

During discussions with third year architecture students over the past academic year, it was observed that when they were faced with dealing with a shrinking neighbourhood in Preston, UK, their immediate design approach was to introduce some kind of architectural landmark. Many ideas were vocalised on how these landmarks would be realised from proposing a sports centre to building sculptural gateways, and the one common denominator was that all these proposals would involve a great deal of building construction. When the students began to understand that the design proposals they were suggesting were strikingly similar to those executed by certain famous practitioners during the last economic boom (in particular Frank Gehry's Guggenheim at Bilbao and Rem Koolhaas's Casa da Musica at Porto), a sense of unfulfilment and dissatisfaction became

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2. Lefebvre discusses the phenomena of urban rhythms in great detail within *Rhythmanalysis* (2004).



FIGURE 6.  
Frank O. Gehry's  
Guggenheim,  
Bilbao from  
La Salve Bridge.  
Source: Dorota  
Moskal

evident after it was realised that “the search for a cultural or architectural fix following the now well-known model of the Frank Gehry-designed Guggenheim Museum in Bilbao or the dozens of repetitive projects by other ‘starchitects’” (Soja, 2013, p. 281) was not going to work (Figure 6). The alternative ways of practicing which reflect on and draw from the small-scale, the vernacular, appropriation of methods, techniques and materials, understanding of cultural production and local people are what our young aspiring student architects should be equipped with.

### Teaching and Learning Studio Programme

In order to train students in these alternative approaches and attitudes, what is required is a design studio programme that supports these other ways of practice, and what follows below is an outline of how one might consider this. Within a complex architectural/urban/spatial design project, there are four common markers of measurable output: (a) Site Investigations; (b) Concept/Design Intention; (c) Scheme Design; and (d) Final Resolution. The success of each one of these common markers relies on the student generating insightful responses to the context of the project, driven by a series of accumulative investigations, research, analysis, experimentation and reflection. The overarching approach to a design studio programme dealing with a shrinking context might be one that investigates the cultural content of the existing and works with its inhabitants to embrace cultural production through action. One example that has evolved in the past fifteen years is connected to the developing agency context, championing a grass roots approach to spatial practice, working directly with communities to establish proposals driven by need rather than desire. San Vicente provides a thorough overview of an informal and rethought series of architectural techniques, and discusses diverse projects including Buckminster Fuller’s Drop City in Colorado (1965), and various bamboo buildings by Simón Vélez in Colombia to the timber structures of Rural Studio as work with “‘open source’ cultural context” (San Vicente, 2014). In these examples, a reexamining of appropriated and vernacular materials and building techniques are investigated, leading to new forms of architectural space.

Other adaptations within the context of the design studio include a social approach advocating John Turner’s work in Peru,<sup>3</sup> based on his “philosophy of aided-self help and dweller control of housing” (Bromley, 2003, p. 288) and the more theoretical work of Lefebvre and De Certeau’s “ordinary

3. John Turner worked extensively in the squatter settlements of Peru from 1957 to 1965, which informed his poignant texts *Freedom to Build: Dweller Control of the Housing Process* (1972) and *Housing by People: Towards Autonomy in Building Environments, Ideas in Progress* (1976). Within both texts Turner explicitly calls for a shift in spatial agency in how dwellings are procured.

practitioners of the city” (De Certeau, 1988, p. 93). Accepting these, and many other nuances within studio agendas, does provide a diverse accessibility for students to discuss spatial practice through their actions—yet these still remain very much in the realm of construction—which is not to purely contain the work within the physical construction of materials coming together to form space, enclosure and places, but also in constructing representations, identities and values linked to the physical building of architecture. If associations with value are linked to representations of physical intervention (architecture, urban or spatial design), the fruition of a project that is then assessed (through whatever process), can be determined by the quality and quantity of the student’s made work.

Within the shrinking city, where from the early stages of student engagement it becomes evident that to physically construct, build or add to the urban fabric is perverse, alternative means and methods of learning, teaching and evaluation must continue to evolve and be delivered in mainstream courses. What is required is to take a lead from two existing attitudes to space—underprivileged architecture and the power of the small-scale—with an onus on cultural production. To focus attention on the concept of undesigning requires a revisiting and shift in the four common points of measured outputs outlined above. A parallel series of markers might comprise of: (a) Place Investigations and Dialogues; (b) Intention; (c) Scheme Development; and (d) Sustained Design. These proposals are explained in detail in the following subsections.

### **Place Investigations and Dialogues**

Within a shrinking city, the idea of the site investigation may not seem too dissimilar to that of a city experiencing growth. However, upon closer analysis, it can be seen that extraordinary phenomena are evident and require extensive exploration. The qualities of the broader context and the city as a whole are of primary concern to any place investigation. Conventional practice calls for intense study of a particular area to determine what might be required for the site, which although expects a broad reading of context, dissuades students from diversion tactics such as abandoning a particular site in favour of another, perhaps more forgiving, or, often through the eyes of the student, more appropriate to their reading of the project brief. What I suggest here is that employing a kind of diversion tactic may be, in fact, exactly what analyses of a site in a shrinking city deserves. A given site may act as a starting point, but to encourage diversion through close reading of a range of place qualities may reveal a deeper questioning of site and city. Furthermore, it is critical to discuss a range of issues with local citizens to reveal the hidden and expel assumptions. Paramount to the usefulness of this dialogue is to continue these conversations throughout the remainder of the process.

## Intention

Once a firm position is attained at the close of place investigations stage, a series of intentions should be cemented based on evidence from place investigations, continuing dialogue and any other relevant conceptual drivers (as one might expect, these will depend on the student/practitioner's own line of inquiry). These intentions, these desires to contribute in some way to the future of the shrinking city, is not a desire to build, to leave one's mark or to hand over a finished project, but rather a desire to support a socio-spatial, a spatio-political and a spatio-reductive strategy for the consolidation of space and place. The strategy may also contain a reimagining of identity. This consolidation strategy is paramount to the success of the project, requiring meticulous handling of the range of spatial qualities identified through site investigations. The strategy might demand categorization, prioritization and promotion of extremely fluid variables, and ultimate assiduousness and empathy in working with all stakeholders is fundamental.

## Scheme Development

Where under the common design paradigm the design development period is rich with sketch models, process drawings and refining spatial solutions, this is somewhat subverted here. The relationship between intents and process demands ultimate synergy, and there requires a constant reflective process to be undertaken as the strategy matures. Priorities may change, as might categories and stakeholders, although if these factors are experienced it may suggest to the student/practitioner that a reevaluation of the core strategy is needed, and some constants are determined.<sup>4</sup> Establishing constants or strategic benchmarks could help inform the longer aims of the strategic intentions, and it is critical that these are carried out in participation with citizens and municipalities.

## Sustained Design

Finalisation or concluding a design project is clearly sought, attained and measured through completion of portfolio (in the case of the student) or in the completion of built work (in the case of the practitioner). The final stage when working within the shrinking city is trickier to assume, as no definitive concrete outputs are represented or constructed. Concluding a project of this kind demands working closely within the idea of the unproduction of space, inasmuch that a conclusion which is not finite, but continual,

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4. In *Civic Housing: Empowering Dwellers to Shape their Living Environments* (Madraza, Martin, & Robert, 2014), dwellers and students are engaged in discussion with the help of communication tools designed by students and used by dwellers, the results of which support a more insightful and reflective analysis and understanding of the dwellers needs and desires.

or initiates the continuation or indeed the start of a different kind of process is a success. Through this process, design means to make and produce through spatial actions and cultural production, which may lead to synergies between the present divide of *radical* and *conventional* practice.

## CONCLUSIONS

The future of the shrinking city is dependent on its present, rather than its past. The identity and purpose of a city, much dependent on economic cycles, must be prepared to depart from previous incarnations in order to enter a period of stability through a shifting nature. It is these shifts where spatial practitioners can have a positive effect in supporting the shrinking city to reclaim a set of values. These values must reimagine, reinvigorate and reestablish the shrinking city, which will only be successful when undertaken in collaboration with its citizens. In parallel, spatial practitioners also must reimagine three key moments connected to their own practice trajectory that echo Lefebvre's spatial triad: (a) the perceived; (b) the conceived, and (c) the lived. The image of the city perceived by spatial practitioners, their journey to and from site, place and city, is constructed of many perceived spaces resulting from the conceived spatial interventions of various architects and urban designers which must be both reflective and projective, and must also be re-imaginative. This reimagining, reinterpreting and rethinking the values of the shrinking city must also be determined through the lived experience, that is, by the familiar and intimate realms that create "skillful space" (Hall, 2013, p. 96). By very definition of these actions and perceptions, spatial practitioners urgently need to engage in discourse and practice in a multidisciplinary and collaborative manner.

Although the visual evidence of the shrinking city may be apparent in voids, chasms and gaps in the urban fabric in terms of commodity and retail spaces, the key issue to reimagining the city is to champion the city's dwellings as agents for change. To consider dwellings as actors in a network of city stuff is to reintroduce life to the vacancy of public and semi-public space. These considerations, discussed within forums which include citizens, inhabitants, tenants, property owners, municipalities and policy makers from the micro to macro scale of neighbour, street, neighbourhood, district and city need to remain modest to sustain the future of the city.

In terms of academia and practice, there is much work to do. Whilst teachers rigorously and intensely test, interrogate and examine students to ensure that graduates are produced that satisfy all benchmarking criteria from the various professional and academic bodies, these criteria have been designed to suit conventional production of space. It seems perverse when one ruminates on this situation, that there is no clear agenda for students to develop forms of spatial responses appropriate to the shrinking city. Whether it is the responsibility of the teacher, the institution, or

the professional and academic bodies charged with benchmarking and determining assessment criteria, the process of reimagining education is paramount to the future success of the shrinking city. The story is much the same for practitioners. A transparent, almost anarchic form of practice may be required, which might result in strategies for occupying empty homes, commercial premises and public space. Disconnection, vacant space, urban deterioration, social displacement, loss of cohesion, loss of identity, loss of activity and action, loss of palimpsest, less public money—all of these negative attributes found within the shrinking city must be seen as opportunities to reinvent rather than to reestablish—.

Whilst the issue of shrinking cities is widely discussed in contemporary debate and there is important literature emerging about their future, spatial practitioners must engage wholly with these discussions; and equally there needs to be a cultural move away from the negative connotations a shrinking city carries. If one reflects on the description of Bellevue in Dublin, one of a vast amount of similarly built housing projects across many countries, one can see that the growing city is not always the successful place it seems, at least not in terms of architectonics. The shrinking city can and should empower spatial practitioners to make better spaces than those in the expanding city, and affords us the time and space to discuss, consider and reflect on our everyday and practice-based actions, rituals and events. When these reimagined spatial interventions begin to take shape through rhetoric and physical assemblage, society can begin to perceive and socially engage with the reinvigorated city. Then, students, educators and practitioners will need to think more pluralistically and inclusively, whilst continuing to build a slow revolution.

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# **The Challenge of Change in Living Environments: Implications and Opportunities for Architectural Education**

**Nadia Charalambous**

## INTRODUCTION

Cities around the world have become radically altered in the past few decades as a result of globalization, increased mobility, massive internal movements of labour, technological developments, economic fluctuations and terrorism. These changes have had an impact on living environments—the built environment and the interwoven living patterns—and currently pose increasingly complex challenges including housing accessibility and affordability, homelessness, overcrowding, inequalities and social integration.

The changes affecting contemporary housing entail a respective transformation of architectural practice and questions the architects' ability to handle such complex challenges. This has direct implications on architectural education and on the profile of future graduates. Design studio culture and pedagogy need to be reviewed to proactively address these global changes in order to form architects who are able to effectively deal with complex, multi-layered and unstable living environments. The need to address contemporary living environments collaboratively, through a multidimensional and multiscale perspective encompassing all the factors which condition the various forms of dwelling in today's societies—architectural, urban, environmental, economic, political, cultural and social—emerges, and leads to an enormous increase in the complexity of the issues which housing actors in general and architects, in particular, have to deal with.

However, the dynamic and ubiquitous changes taking place in our time are not reflected in design studio pedagogy. In line with a number of studies on contemporary studio pedagogy one could argue that the housing studio is in many cases an isolated island in the middle of a complex reality. The need to overcome the insularity of the housing studio comes from the aspirations of the users and society at large, as well as from the need to bring the architectural profession up to date.

Alongside these reflections, a number of key issues concerning architectural education in the globalized society are explored in this chapter in an attempt to address the apparent gap between the traditional housing studio and the complex, dynamic world. The topics discussed include multidisciplinary approaches in studio pedagogy, going beyond disciplinary and academic boundaries, and cancelling out the tensions between global dynamics, cultural diversity and local realities. The chapter concludes with the identification of the need for housing studio practices to embrace a culture of “interfaces” between different disciplines; between academia, the profession and the community; and between global driving forces and local contexts in order to proactively address, adapt and respond to change.

## **GLOBAL PATTERNS, SOCIAL CHANGE AND TRANSFORMATION OF LIVING ENVIRONMENTS**

Contemporary cities are complex entities in which demography, social structures and urban form are constantly changing. Over the past few decades, cities around the world have become radically altered in their scale, scope and complexity as a result of globalization, increased mobility, massive internal movements of labour, climate change, technological developments, economic fluctuations and terrorism (Marcuse & Van Kempen, 2000). Migration flows as well as internal population displacements and the movement of refugees have also had profound consequences on city life and have created an increasingly diverse urban society, opening up a discussion on how to deal with urban multiculturalism, diversity and coexistence between communities. Discussions on social inequalities, urban segregation, social justice and the right to the city as well as a strong critique of unfair development patterns have become prominent, fuelling debates over power relations in times of rapid urban and societal transformations, instability and crisis.

These changes entail a respective transformation of living environments, where the everyday life of the diverse groups living in cities unfolds and poses increasingly complex challenges. These include housing accessibility and affordability, homelessness, overcrowding, social integration and community building, among others. Questions of identity, voice, inclusion, access and opportunity have been negotiated in the context of globalization, changing forms of production, declining welfare and developing technologies. Patterns of residential segregation and unequal access to housing are discussed in the context of dynamic urban growth. Demographic, spatial and socio-cultural changes have a direct impact on everyday patterns of living, domestic activities and family structures (Fokkema & Liefbroer, 2008). Traditional concepts of housing in general and the dwelling in particular, are challenged and questioned. The experience of urban life in the 21st century—transient, fragmented, changeable and unpredictable—contrasts to concepts of dwelling based on stability, permanence, locality and a sense of belonging.

The current debate on the global dimension of housing focuses on issues such as gentrification, mobility, economic and social restructuring and sustainability. Interestingly enough, without denying the existence and the importance of global driving forces, researchers have illustrated that in cities around the world there are often alternative local contingencies which contrast with the globalized, abstract theoretical approaches (Maloutas & Fujita, 2012). Such studies argue that one-sided reasoning—leaning towards either global or local—fails to capture the inherent complexity of local socio-spatial realities.

The changes characterizing contemporary housing are closely linked with an emerging social responsibility, with digital technologies affecting the design, management and construction of the built environment, as well

as with a wide range of expanded services delivered by architectural firms and demanded by clients. Architectural practice is undertaking significant transformations and the architects' ability to handle such complexity is becoming a prominent issue.

Considerable challenges are thus posed to the architecture profession which can no longer be what it once was. This has direct implications on architectural education and the profile of future graduates. Since the design studio is still the backbone of architectural education, it is indeed imperative to encounter design studio pedagogy in its broadest sense. A number of studies argue that any ongoing changes in architecture education are not aligned with today's rapidly changing world, especially in the context of architectural practice (Koch, Shwennsen, Dutton, & Smith, 2002; Tzonis, 2014). Through it all, the cultural values and practices underpinning architecture studios seem to have largely withstood change. Despite the dynamic and ubiquitous changes taking place in our time, respective changes in architectural education and studio pedagogy have been rare,<sup>1</sup> apart from minor transformations which are not enough to address a rapidly changing world of unprecedented technological innovation, economic might, global accessibility but also cultural, social, economic and environmental crises (Tzonis, 2014).

According to a report prepared by The American Institute of Architecture Students (AIAS), contemporary studio pedagogy cannot effectively cope with the changing nature of the built environment or the transformations undergone in architectural practice (Koch et al., 2002). In many cases, architectural educators continue designing and teaching the studio on the basis of what an architect currently is or was, focusing on what is considered to be the essential knowledge of architecture (often referred to as core knowledge) with the aim of developing individual skills and critical thinking abilities which together do not seem to respond to the transformed and expanded demands placed on the profession by society which will determine the future role of the architecture profession. As Tzonis (2014) points out, however, the challenge which architectural education faces today is not to enrich and adapt the core knowledge to the changing world, but to reformulate the studio framework.

Within this framework, we need to rethink the object of architecture studios in general and the housing studio in particular, as well as the very nature of the tools and methods studio education needs to create in order to meet current housing challenges (Dorst, 2008). The studio structure has its own culture, patterns and values which are passed on over the years, through generations of students, educators, and practitioners and are

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1. One needs to mention the important pedagogical experiments which played a crucial role in shaping architectural discourse and practice in the second half of the 20th century. According to Colomina, Choi, Galan, and Meister (2012), these radical practices paved the way to a new *modus operandi* for the discipline which could only be created if "traditions were questioned, destabilized, undermined or even destroyed". These initiatives challenged normative thinking in postwar architecture, but have been neglected in recent years.

highly influential in a student's education and future practice (Dutton, 1991). At its best, studio pedagogy has many strengths: It can promote and support critical, analytic and synthetic thinking through the exploration of the relationship between design and the cultural context, and it can convey, transmit or even transform the values of the design profession and society at large. At its worst, it may facilitate isolation from the real world, conserving, sustaining and reproducing existing preconceptions and stereotypes and resisting change.

A prevalent pedagogic approach based on theories of learning and established pedagogical models of design studio education detached from the reality of the built environment does not help to overcome the gap between academic education and our dynamic and complex world. Studio culture and pedagogy need to be questioned and revised to proactively address changes in the world and in the architectural practice and to produce engaging and well-formed graduate architects who are able to deal effectively with a complex, multi-layered and unstable built environment and profession (Koch et al., 2002).

Alongside these reflections, a number of key issues concerning architectural education in globalized society need to be explored. Addressing the apparent gap between the traditional housing studio and the complex, dynamic world involves going beyond disciplinary and academic boundaries, and cancelling out the tensions between global dynamics, cultural diversity and local realities.

## **CHALLENGES AND OPPORTUNITIES FOR THE HOUSING STUDIO**

In line with a number of studies on contemporary studio pedagogy we could argue that the housing design studio is in many cases an isolated island in the middle of a complex reality (Koch et al., 2002; Boyer & Mitgang, 1996; Tzonis, 2014). The need to address the insularity of the housing studio and the architecture student from the needs and goals of the users and the society at large, as well as from advances in the profession itself, emerges. Boyer and Mitgang (1996) expressed such concerns in the 1990s pointing out a disconnection of the design studio from society as well as a sense of social, physical, and intellectual isolation of architecture schools on their own campuses. As Anthony (1991) pointed out, the studio has gradually acquired such a central role in students' social lives that it has reduced the importance of the world outside.

Tzonis (2014) traces the blame on top-down educational initiatives that still base their thinking on abstract theories of learning. Other scholars argue that studio pedagogy has placed emphasis on representationally based form-making for a rather long time, ignoring the reality of the professional practice as well as the reality of the world and the desires and aspirations of the dwellers. Schools of architecture around the world

need to choose between educating future star-architects by focusing on form-making or equipping architects with the skills to respond to ordinary life needs with efficiency and sensitiveness (Tzonis, 2014).

A call for change in all these studies indicates a general agreement on the need for the reorientation of the housing studio education towards an engaging approach that also considers the social responsibility of future architects. The need to instil a sense of involvement in the students emerges. This involvement refers to not only the community they will eventually serve but to their future professional activity, drawing on knowledge which supersedes the disciplinary boundaries and the academic limits.

### Overcoming Disciplinary Boundaries

The explosion of differentiation and specialization of architectural practice as a result of technological, epistemological, economic, and social forces gradually demands a corresponding change in the curriculum and the housing studio (Tzonis, 2014). The discipline of architecture needs to stake its claims amid a new territory by articulating its relationship with the technological, socio-political and cultural transformations of the time. Nevertheless, few schools make serious efforts to expose students to other disciplines. The current conception of housing design needs to move towards a discourse that uncovers latent possibilities within the complex and fluid interaction of a number of factors with the participation of a growing number of agents and stakeholders in the creation of living environments. New types of interdisciplinary knowledge arising from all these driving forces in different realms (sociological, political, economic, environmental and ecological, among others) are needed to reevaluate and transform the way we create, preserve, and alter living environments in our time.

As Cunningham (2005) notes, design is an activity not a subject and its practice many times requires borrowing knowledge, theories, techniques and methodologies from other disciplines. At different stages of the design process it might be necessary to turn to “any information, knowledge, theory or technique from other disciplines which the designer may select as being relevant to the task on hand” (Cunningham, 2005, p. 424). Owing to its potential to gather a heterogeneous set of discourses and types of knowledge, the housing studio can then provide opportunities for an integrated approach from the early stages of the design process to explore the multidimensionality of living environments and thus to facilitate the merging of inputs coming through research, the profession and the community. Such a multidisciplinary design studio could intertwine research, profession and community to overcome the lack of connection between architecture and other disciplines as well as the inflexibility of the curriculum (Boyer & Mitgang, 1996).

Housing studios need to be scrutinized to find out whether students are indeed exposed to the complex set of issues that they will be asked to address once they graduate. For instance, a major challenge that the housing studio

faces today, is to expose students to the knowledge required to deal with rapid and complex demographic and socio-cultural changes which have a direct impact on everyday patterns of living, family structures and living arrangements. In the last forty years, large-scale demographic changes have occurred across and beyond Europe. People live longer, they have fewer children and there are more single parents; they live in multicultural environments and are much more transient than ever before (Billari, Kohler, Andersson, & Lundström, 2007; Bongaarts, 2006). The growth in the number of young adults who stay in the parental home and the decrease of men and women in their thirties and forties who live with a partner and have children seem to reflect the deteriorating financial position of young adults and the difficulties faced by couples to combine their aspirations for parenthood with a satisfying working life.

Furthermore, although these changes occur globally, the direction and extent of the changes varies by country, by age group and by gender. The differences in living arrangements across Europe are pronounced along geographical divides and might have grown larger in the last fifteen to twenty years. The changes undergone by living patterns and household types in different contexts are discussed in numerous sociological, economic and other studies. Conclusions from these studies should be conveyed to the housing studio in order to facilitate a more nuanced understanding of housing contexts in the real world. Similarly, a major challenge that architectural educators are confronting is to link the housing design studio with other subjects in the curriculum and with other disciplines, in novel ways.

### **Overcoming Academic Boundaries**

Besides breaking the isolation of the housing studio within the architectural curriculum, it is also necessary to overcome its distancing from the professional world and from local communities. Bridging these gaps through meaningful and constructive interaction with both the profession and the community should be a major objective of design studio educators.

#### INTERACTING WITH THE PROFESSION

Housing studio education needs to instil in students a sense of involvement with their future profession, cutting across academic and disciplinary boundaries and engaging more effectively with the reality of architectural practice. Advanced digital technologies, globalization and the recent financial crisis among other factors, have affected the design, management and construction of housing. Housing studios can encourage projects in collaboration with the profession and thus enrich student learning, create new knowledge for the discipline, and strengthen ties with architectural practitioners through construction visits and participation of practitioners in studio crits, lectures and workshops (Koch et al., 2002).

Furthermore, in current professional practice, architects need to deal with complex collaborative processes, involving a number of actors representing a vast range of knowledge, experiences and agendas. It is gradually becoming acknowledged that the complexity of contemporary practice needs to be addressed through collaborative efforts and critical collaborative skills. The significance of contributions from all involved users, consultants and relevant stakeholders in the design process needs to inform housing design projects in the studio, fostering collaborative and team-building skills (Charalambous & Phocas, 2012; Charalambous, 2014). Therefore, a further challenge we face as educators is the development of a studio environment that promotes collaborative knowledge, skills and a set of shared values and practices.

#### INTERACTING WITH THE COMMUNITY

Inextricably linked to the issues discussed in the previous sections is the need to focus on the everyday user and the society at large and reach out to the community. There is a growing awareness that the housing studio needs to recognize the aspirations and desires of people by facilitating their participation in the design process. The house is rightly considered as one of the most important means of exploring the social and experiential dimensions of architecture. Houses are a complex expression of the everyday life of their inhabitants and, of the different cultures, ethnicities and social groups; they are sociograms which reflect the activity of individuals and society (Hanson, 1998). Now, more than ever, societies are confronted with complex issues and future architects need to take responsibility and address them effectively and efficiently. The housing studio should be concerned with the responsibility of future architects towards the community, with the social and cultural implications of designing for the society.

Students can gain a valuable experience working with the communities they will eventually serve, learning first-hand about the social issues that need to be addressed. Community outreach activities, involving residents in the process, help to expose students to the real living conditions and provide hands-on and informal learning, collaboration and interaction with all actors involved. A number of housing studios have already undertaken such initiatives fostering a participatory design approach that engages students with communities and the respective users, agents and stakeholders. Such efforts need to also focus on educating the community involved. Education needs to be extended to all relevant actors in the community in order to facilitate an efficient and fruitful interaction between future architects and potential users. To achieve this goal, conversations among students, scholars, policy makers, practitioners, and community representatives can be initiated through participatory workshops and lifelong learning activities.

An efficient interaction with the community can foster an understanding of their needs by making their experiences, interests and their own efforts to improve their housing more salient to future architects. Such outreach activities have the potential to broaden the knowledge base of the housing studio beyond the academic boundaries on one hand and reveal the specific shape of local contexts, on the other hand.

### **Addressing Global Forces and Local Socio-Spatial Realities**

A further serious challenge that the housing studio faces today is the need to train future housing actors in dealing effectively with the increased tensions between global forces and distinct local contexts. Nowadays, the identification of dwelling with a permanent place of residence is being increasingly questioned. Theorists point out that the demands of mobility, the vast number of possible choices, and massive waves of refugees—resulting from political decisions such as the unification of Europe—, have undermined our inclination and abilities to form ties with a place (Lefas, 2009).

Although houses everywhere serve the same basic needs and activities, a glance at the architectural record reveals an astonishing variety in the ways in which these activities are accommodated in the houses of different cultures and places (Hanson, 1998). Cultural diversity and the significant differences observed in housing around the globe highlight the inherent complexity, context-bound nature of everyday environments. Therefore, we need to educate future practitioners to serve local communities drawing on essential “local” knowledge which needs to be taken into account in architectural education (Lefaivre & Tzonis, 2012). The ability to deal effectively with such tensions does not stem from either a balance between local and “core” knowledge or from merely gathering relevant information about a local context. It is rather about fostering appropriate design thinking skills which will facilitate students’ ability to design housing taking into account the potentials and constraints of a particular context.

### **Housing Design as a Process of Thinking**

Therefore, the pedagogical challenge to renew housing education is not about adding more subjects to the programmes but on how to integrate them at different phases of the design process (Tzonis, 2014). The understanding of design as a process of thinking rather than as an outcome may facilitate this aim. Studio practices that promote the learning of process as a main objective rather than on form-making, may succeed in preparing students to effectively address rapidly changing and complex living environments in a context of collaboration and interaction with other subject-matters, disciplines and actors.

In an integrative and open design studio environment, architecture students can develop skills and abilities to integrate knowledge derived

from different fields, disciplines, and scales which will gradually inform their design proposals. They can also establish multiple lines of inquiry through a rich approach that draws on a variety of sources. Housing studio education can then address questions posed by society not as fixed and well-defined problems, but as a way to investigate how social and life patterns evolve, for then intervening with their designs.

## CONCLUSIONS

All the challenges that the housing studio faces today may not necessarily be a threat to the architecture profession but rather a positive evolution, an opportunity for reflection and renewal. The overwhelming changes undergoing both profession and academia create a common ground for experimentation. There is an obvious need for creative alternatives to current architectural education, for learning environments which can bridge across disciplinary and institutional boundaries and can facilitate an open, flexible and integrative design process which takes into consideration the diversity of factors, different types of knowledge, values and stakeholders involved in the creation of contemporary living environments (Charalambous, 2014).

Studio educators need to identify ways through which current housing studio practices can embrace a culture of “interfaces” to proactively address, adapt and respond to change. This way, the future generation of architects can acquire the design thinking skills needed to deal effectively with a complex, multi-layered and unstable living environment and profession. The housing studio needs to provide interfaces between the individual student and the team, between different disciplines, between academia, the profession and the community, and between global driving forces and local contexts. Emerging concerns on current educational approaches in the housing studio in particular, but also the studio culture in general, present new and exciting opportunities for educators and institutions to respond to the ongoing changes in the living environments and to contribute to the transformation of the architectural profession.

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# **The Challenges of Social and Demographic Change for Urban Planning and Housing Design: Examples from Lisbon, Dublin, Paris Region and Saint-Étienne**

**Adriana Diaconu, Jim Roche, Paulette Duarte,  
Sandra Marques Pereira**

## INTRODUCTION

Demographic growth and decline, changes in household structure, and the lack of affordable housing rank among the most important challenges for public action on housing today. Problems arise especially in the disparities between demographic changes and the characteristics of the existing housing stock. In this chapter, we analyse some strategies adopted in four urban areas in Europe—Lisbon (Portugal), Dublin (Ireland), Paris Region and Saint-Étienne (France)—which exemplify different levels of involvement of public authorities in housing supply and urban renewal.

In the first part of the chapter, we will analyse the demographic trends in the four areas with regard to the evolution of the population in terms of average household size and the ageing phenomenon. In the second and third sections, we will discuss the various forms of interventions which are being undertaken by public authorities in the four areas to address the challenges derived from the current demographic trends.

A critical examination of the strategies adopted in the four urban areas will reveal the differences in the political and urban traditions in each country when it comes to finding solutions to common demographic changes. It is our premise that opening up the study of housing design in architectural and urban planning schools to social and demographic changes can help future architects and planners to better understand the social impact of their work as professionals.

## CURRENT TRENDS OF DEMOGRAPHIC AND SOCIAL CHANGE IN LISBON, DUBLIN, PARIS REGION AND SAINT-ÉTIENNE

An analysis of the statistical data in the four urban areas considered—Lisbon, Dublin, Paris Region and Saint-Étienne—reveals some common demographic trends. Firstly, as the statistics reflect, while the average population in the four areas has slightly increased or decreased (Table 1), in all of them the number of persons living in the same household has steadily decreased (Table 2). Likewise, the statistics show that the percentage of elderly people is increasing in the four areas considered (Figure 1), with Lisbon having the largest proportion of people over 65, Dublin the smallest, and Paris and Saint-Étienne being situated between the first two (Figure 2).

### Demographic and Social Changes in Portugal, and Lisbon

Deep differences distinguish the social, economic and demographic development of the Portuguese regions. The two metropolitan areas of Lisbon and Porto, which are the territories in which most of Portugal's economic development is concentrated, comprise a large part of the country's population. Unlike the rest of the country, at present both areas are witnessing

	1996	1999	2006	2011	2012	2013	2014
<b>PORTUGAL</b>			10,511,988	10,572,721	10,542,398	10,487,289	10,427,301
GREATER LISBON			1,801,940	1,863,069		1,849,472	
LISBON			509,751	545,245		524,282	
<b>FRANCE</b>		60,122,665	63,235,742	64,932,339	65,241,241	65,525,420	65,800,694
PARIS REGION		10,946,012		11,852,851	11,898,502	11,952,061	12,005,077
SAINT-ÉTIENNE		180,438	177,480		174,587		
<b>IRELAND</b>	3,626,087		4,239,848	4,588,252	4,582,707	4,591,087	4,605,501
GREATER DUBLIN	1,058,264		1,187,176	1,273,069			
DUBLIN	481,854		506,211	527,612			

TABLE 1. Evolution of overall population in the areas of study. Sources: European Statistical System, Eurostat<sup>1</sup> estimations, Institut National de la Statistique et des Études Économiques (INSEE<sup>2</sup>), Central Statistics Office (CSO 1996-2016<sup>3</sup>), and census by the Instituto Nacional de Estadística (INE<sup>4</sup>)

	1960	1968	1999	2001	2007	2011
<b>PORTUGAL</b>	3.7			2.8		2.6
GREATER LISBON	3.3			2.6		2.4*
LISBON	3.1			2.4		2.2
<b>FRANCE</b>		3.08	2.42		2.30	2.26
PARIS REGION			2.38		1.9	1.9
SAINT-ÉTIENNE					2.2	2.2
<b>IRELAND</b>	4*	4*	3.1*	2.9*	2.75*	2.7
GREATER DUBLIN			2.65*	2.6*	2.48*	2.4

TABLE 2. Evolution in the number of persons living in a household. Sources: Portadata/Portuguese Statistics, INSEE, CSO (1960-2011). \*Approximation based on Duffy, Byrne, & Fitzgerald (2014)

1. See [ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)
2. See [www.insee.fr](http://www.insee.fr)
3. See [www.cso.ie](http://www.cso.ie)
4. See [www.ine.pt](http://www.ine.pt)

a slight growth in population. The Lisbon Metropolitan Area (LMA) has almost 30% of Portugal's population, that is to say, 2,815,851 inhabitants according to the 2011 census. The city itself has 545,245, which equates to 19% of the LMA's population.

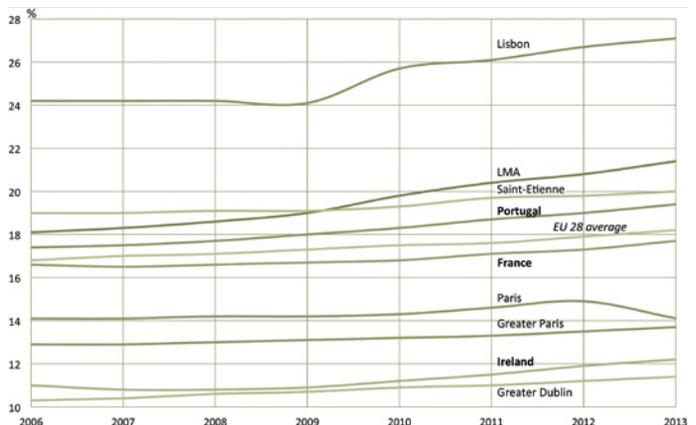
Representative of the ageing phenomenon affecting the European continent, Portugal is the fourth country in the European Union with the highest proportion of elderly people after Italy, Germany and Greece (INE, 2014). Almost 20% of the country's population are over 65 years old (Figure 1). However, in Lisbon, after an early phenomenon of population ageing and decrease in the 1980s and 1990s, the pace of ageing is slowing down. Ageing is especially affecting the inner city of Lisbon and to a lesser extent its suburbs.

As a result of the long-lasting right-wing dictatorship (1933-1974), the country experienced a late process of modernisation, mainly during the 1990s and 2000s, after becoming member of the European Union. In statistical terms, family life and household structures in Portugal are following the trends towards individualisation that we are witnessing in Europe (Nunes, 2014; Aboim, 2014; Wall, Cunha, & Ramos, 2014). Nowadays, the average household size is dropping more rapidly than in other western European countries, such as France. This phenomenon is concentrated mostly in the city of Lisbon, with a proportion of 35% one-person households, whereas the percentage is 26% in the rest of the LMA and 21% for the entire country. One-person households represent to a large extent elderly people, but also the young. In addition, the end of the dictatorship, during which time the majority of couples were married under the Catholic Church, saw a rise in the number of couples without children, single parents, blended families, and informal cohabitation. Nevertheless, traditional households, that is, couples with children, are still dominant in a country that preserves family ties as a support for daily life. For the same reasons, living nearby immediate family members remains a common practice among the Portuguese.

FIGURE 1. Graph showing evolution of the percentage of people over 65 in the overall population (vertical axes) in the case study areas and countries, metropolitan areas and countries, as well as the EU average. Data source: Eurostat, 2006-2013

### Demographic and Social Changes in Ireland, and Dublin

Ireland has a population of about 4.6 million that is slowly but steadily increasing. Compared to other European countries, the country has a young population: Only 12.6 of the population is over 65 years old (Figure 1), and the median population age is



about 34 years old, compared to 41 in Portugal (Figure 2). However, this percentage is constantly increasing with predictions that by 2031 the number of people over 65 years old will have almost doubled in all regions (Skehan, 2015, p.25).

Just as in Portugal and most other European countries, marriage is not as prevalent in Ireland as it used to be and couples are older than in the past. Irish women thus have children later; the birth rate is falling and divorce rates are increasing. For all these reasons, the number of people living alone is growing rapidly and the average household size is decreasing. In 2011, one-person households represented 23.6 per cent of the total households in Ireland (CSO, 2015). As in other European contexts, higher rates of people living alone are observed from the 2011 censuses in the cities being considered here. In Dublin it is 30.5%, in Paris it is 51% and in Lisbon it is 35%. This is highlighted with a tendency for a denser concentration in the city cores (European Commission, 2007). As in the southern European countries, Ireland presents an extremely fast decline in household size, with estimates of nearly 60% of one and two-person households in Dublin by 2018 (Sirr, 2017).

Ireland witnessed an outward migration of 144,000 mainly young people in the period 2010 to 2014 (CSO, 2014). Arriving inward migrants are to a large extent young workers mainly in the IT sector who prefer short-term renting (Sirr, 2017), thus further highlighting the need for smaller dwellings, as well as for a sufficient stock of available housing and flexible tenure solutions.

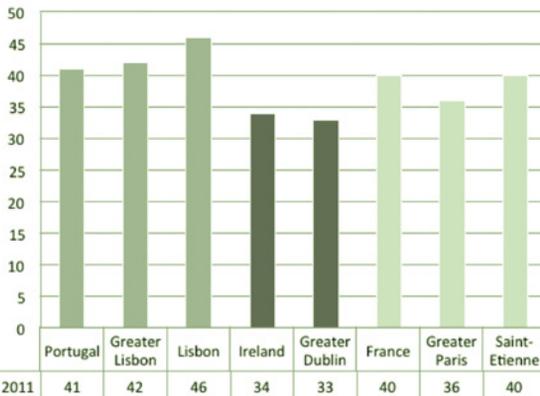
FIGURE 2. Median age of the total population in 2011 (i.e. half of the population is younger and half of the population is older). Data source: Eurostat

### Demographic and Social Changes in the Paris Region, and Saint-Étienne

As in Ireland, a similar tendency of continuous population growth can be observed in France. In 2015, the country's population was 66.3 million inhabitants (64.2 in metropolitan France) and it is increasing by 0.4% each year (INSEE, 2015). The population is ageing at a similar pace. The percentage of the population aged 65 and over in 2015 is 18.4% and constantly increasing,

thus approaching the European average (Figure 1). However, there are strong regional differences, especially between the Paris Region (Île-de-France) and the other French regions, as well as between the larger cities and medium-sized ones, such as Saint-Étienne.

The Paris Region has a population of about 12 million that is growing at a yearly rate of about 0.5%, due



to natural increase (that is, the birth rate is higher than the death rate). Its population is rather young, with a median age of 36 years, and the number of births is high compared to other French regions (Figure 2). Indeed, the Paris Region is especially attractive for young people and for foreigners. This is noted as mostly older residents move out, mainly to other French regions (out migration accounts for a yearly decrease of about 0.4% of the population). Nevertheless, the inward migration and the high birth rate exceed the number of departures and this compensation gives the overall demographic growth trend.

The percentage of one-person households and of single-parent families is higher in Paris than in other French regions. However, the household size is decreasing at a slower pace than in the Irish case although it did witness a faster decrease in an earlier period, from the 1960s to the end of the 1990s. The average Parisian household size is smaller than the French average and important dissimilarities bear between the inner city (1.8 people average), the first suburban ring (2.4 average) and the second one (2.6 average).

Saint-Étienne presents an opposite demographic trend to the case of Paris and resembles Lisbon to some extent. In the last 40 years, the city has lost almost a quarter of its population and projections point to a further rise in the migration rate to about 1,800 people per year. With its 174,587 inhabitants in 2012, it is the second largest city in the Rhône-Alpes region, after Lyon and ahead of Grenoble (Agences d'Urbanisme Lyon et Saint-Étienne, 2015).

The decline of the population correlates with the phenomenon of population ageing. However, the percentage of people over 65 years old is higher than in other French regions and constantly increasing (Figure 1). Young people tend to leave the city, whereas the percentage of people over 60 grew by 0.5% from 1999 to 2006, reaching 25% of the population. Among them, persons over 75 years old account for 11% of the city population. These phenomena are due to a loss of economic and residential attractiveness of the city. With the disappearance of its industrial fabric and, in spite of its reconversion in the tertiary sector and the development of a new city brand as a "city of design", Saint-Étienne is still struggling to attract dwellers (Masbouni & De Gravelaine, 2006; Bonneville, 2008). These trends negatively affect the housing stock, which is increasingly vacant and constantly degrading.

From these demographic tendencies observed in the four European cities under scrutiny, two types of problems concerning housing emerge. First, in the cases of Lisbon and Saint-Étienne, there is a lack of attractiveness and an obsolete housing stock that does not suit the needs of the current population (for example, large apartments designed for families and now inhabited by one person). In these cases, the challenge for planners is to carry out initiatives to adapt the existing housing stock to the new needs. In the cases of Paris and Dublin, the main problem is the housing shortage related to demographic growth and to the increase in the number of households, closely connected to the general decrease in household size. In Paris, therefore, planning and policy efforts are mostly concentrating on building more housing rather than on adapting the existent stock, while in Dublin action

is taken in both areas. This brings us to the question of the role of public authorities in defining appropriate solutions to these housing challenges.

### **STRATEGIES FOR HOUSING PROVISION IN RESPONSE TO SOCIAL AND DEMOGRAPHIC TRENDS**

Having observed the demographic trends in the four urban areas, we will further examine the implications for public authorities and planners. With this purpose, we will draw some correlations between the strategies put forward in comparable situations: firstly, the cases of Lisbon and Saint-Étienne, where the population is shrinking; and secondly, Dublin and the Paris Region, where it is growing.

#### **Possible and Actual Strategies for Housing in Lisbon and Saint-Étienne**

Like in Ireland, in Portugal public initiatives for housing provision are very limited. Privately owned housing is the dominant tenure type. Since the 1980s, a neoliberal trend in public policies in European countries has reduced both public funding for housing and direct public intervention in housing projects (Whitehead & Scanlon, 2007; Houard, 2011). In this situation, adapting housing to the social and demographic trends becomes imperative. The example of Portela estate within the Lisbon Metropolitan Area shows the possibilities of intervention where there is reduced or non-existent public support. On the other hand, Saint-Étienne, in a political context where there is a higher public intervention on the housing market, provides an example of a public-private partnership involving public stakeholders, homeowners and landlords.

#### PORTELA HOUSING ESTATE WITHIN LISBON METROPOLITAN AREA

Portela is a suburban housing estate of about 11,000 inhabitants located in the northeast of the city of Lisbon. It is representative of the suburbanisation of the metropolitan area carried out from the 1960s to the 1980s. High-rise housing estates were built to cater for the masses of migrants coming from rural areas and the ex-colonies, and from Lisbon itself. The population increase was not always accompanied by a sufficient housing supply (Pereira, 2011). At that time the provision of social housing was insufficient and remains so today. Consequently, the private sector established itself as the major housing provider.

The master plan of Portela was developed in 1969, during the dictatorship. The construction of most of its almost 200 buildings in less than one square kilometre was completed during the second half of the 1970s. This was also the period when the majority of its inhabitants arrived, most of them from the upper middle class. At present, a large

part of the population (about 45%) was born in the housing estate.

Portela's architecture is characteristic of the 1960s mass housing typologies and construction techniques (Figure 3). Because of its distance to the centre of Lisbon and its architectural and urban design features, which no longer meet the current standards and demands, Portela has lost more of its attractiveness to new residents in comparison with other housing estates in the metropolitan area. These phenomena of symbolic or ideological ageing occur in parallel to the ageing of the population. However, since Portela is a middle-class area, built by the private sector and now in possession of private homeowners, it is not considered socially problematic by public authorities, unlike other housing estates and illegal settlements.



FIGURE 3. Portela housing estate, 2013. Source: Jim Roche

#### RENEWING A HIGH-RISE ESTATE AT THE END OF ITS LIFE-CYCLE

The professional expertise of architects and planners can play a key role in adapting housing estates like Portela to the needs and lifestyles of its inhabitants and of the possible newcomers. This requires both the transformation of existing dwellings and the preservation of the social fabric and lifestyles that have become rooted in the physical structures. Therefore, designing housing adaptations requires an in-depth understanding of today's lifestyles. Existing living patterns need to be preserved and reinforced because they are important for the inhabitants' well-being, to support family ties and to foster social relationships.

Existing apartments could be redesigned maintaining the existing structural shells or slightly transforming them, in order to alleviate the rigidity and homogeneity of the original slab housing blocks. In this way, a morphological diversity of layouts and spaces could be furnished that can better adapt to the variety of household types. More versatile apartment layouts would help to accommodate dwellers of different age groups, especially the elderly, and to adapt to household changes (Figure 4). In the same vein, the social interaction between residents could be favoured by providing collective spaces, the use of which could be defined by the residents.

#### A PUBLIC STRATEGY FOR URBAN RENEWAL IN THE CENTRE OF SAINT-ÉTIENNE

Unlike the example of Portela, in which the adaptation to the needs of the today's population is left in the hands of the private sector, in the French city of Saint-Étienne the public sector leads the urban renovation process

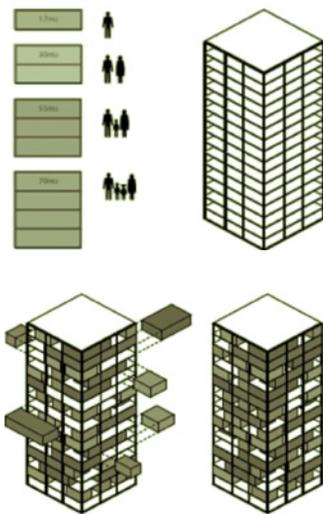


FIGURE 4. Students' proposals for transforming the Portela tower blocks by adapting them to residents' current needs. Source: OIKONET Lisbon Workshop. Students: Milos Jelisavcic, Lukas Kolb, Carlos Ochando Seva, Afonso Patinhas, Evi Stavradi, Bruno Trabut

to adapt housing to demographic shrinking. In line with the French tradition of an interventionist state, actions guided by public authorities aim to adapt urban areas to present social needs in order to attract new inhabitants.

In Saint-Étienne, population decrease and ageing is unequal in different areas of the city, although it is particularly visible in the urban core. Consequently, city centre housing suffers from a lack of maintenance by private owners and an increasing number of dwellings remain unoccupied, thus becoming dilapidated over time. In 2010, city authorities recorded 10,403 vacant housing units out of 95,706 which represents a vacancy rate of 10.87% compared to the national average of 7% (INSEE, 2010).

In recent years, the city of Saint-Étienne has developed a policy of housing improvement and urban renewal, in order to respond to the demographic turnabout. In the 1980s and 1990s public interventions focused on the rehabilitation of old private rented housing and of social housing.

From the middle of the 2000s, such area-based interventions consisted of replacing existing buildings with better quality new housing (Epures & Saint-Étienne Métropole, 2016).

As in other French cities, the model adopted for urban renewal in Saint-Étienne is a public-private partnership consisting of several public stakeholders, namely, the French state, the city of Saint-Étienne, and private companies; in this case housing home owners or landlords (Beal, Dormois, & Pinson, 2010). In order to accelerate social and urban transformations, an organisation for planning and project guidance was created in 2007: The *Établissement Public d'Aménagement de Saint-Étienne* (EPASE). The goal of this organisation, which is jointly financed and under the control of the local authority and of the French state, is to foster housing renewal in order to make the living environment more attractive by providing new services and activities.

#### TOOLS FOR NEW HOUSING AND URBAN REGENERATION IN THE JACQUARD DISTRICT

The urban renewal led by EPASE concentrated on several old districts of Saint-Étienne, especially the Jacquard District. This district, which is now located at the centre of the city, developed throughout the 19th century as a suburban development of the former city core. At the end of the 2000s, an urban analysis led by EPASE and its partners (city of Saint-Étienne and the association *PACT de la Loire*) showed that the district had many derelict buildings, small housing and mostly vacant commercial premises on the ground floor of apartment buildings.

In order to increase the appeal of the area, in 2009 the city decided to restructure an urban block along with a square situated in the middle of the district (Figure 5). In the former urban block named Gachet,

situated next to Jacquard Square, a public garden was planned to provide more green space to inhabitants and to consolidate public facilities by demolishing and then reconstructing some of them. In addition, 190 new housing units were built around the garden, one third of the apartments being social housing.

Another form of multi-partnership to improve buildings inside delimited boundaries was developed after a national policy for urban regeneration of old housing called *Opération Programmée d'Amélioration de l'Habitat de Renouvellement Urbain* (OPAH-RU). On the basis of a contract concerning the area covered by the OPAH-RU programme, a total of 387 derelict or unfit housing units were transformed or demolished and a total of 306 new units were built. In the less degraded buildings, new and better apartments were built by merging existing units. Apartments for the elderly were designed by taking into account the particular needs of this age group, especially in terms of physical accessibility. The newly refurbished buildings met sustainability standards for energy efficiency. Besides, the renovation of the buildings provided an opportunity to upgrade the adjacent public spaces too.

This case suggests some implications for professional architects and planners involved in the adaptation of housing to social evolutions. Financing, managing and programming these interventions with the stakeholders is an integral part of the project. Therefore, a capacity to integrate these economic, social, and political aspects in an urban renewal project should become an objective of the training of urban planners and architects.

### Addressing Housing Shortage in Dublin and in the Paris Region

Dublin and the Paris Region, though of vastly different scales, are two urban areas in which the needs for housing provision are growing as the population increases. The specific needs of the new population further accentuate the housing problem. Even though the two urban areas face similar problems due to demographic growth, the strategies adopted to confront them differ.

#### IRISH HOUSING PROVIDERS AND THE NEW DEMOGRAPHY

In Ireland, the housing market is seriously undermined by a deep crisis. The delivery of both private and social housing is currently stagnated, particularly in Dublin, as much vacant development land sits idle and many buildings remain empty. After a difficult economic recession since



FIGURE 5. Project for the Gachet Garden and housing in Saint-Étienne that replaces a former urban block. Source: Asylum, Architecture, Atelier de Ville en Ville et L'EPASE Saint-Étienne

2008, property prices and rents are on the increase—the latter by 20% in a 4-year period to 2016—while homelessness grows at a rapid pace.

By December 2015, at least 90,000 households were on the social housing waiting lists nationwide (Focus Ireland, 2016) while by August 2016, there were over 6,600 people actually homeless, 2,360 of these being children and almost 3,800 (57%) of these in Dublin alone (PMV Trust, 2016). Many homeless people are in costly emergency hotel accommodation.

Meanwhile, there are over 200,000 empty dwellings (not including holiday homes) throughout Ireland (CSO, 2016) with over 38,500 of these in Dublin, representing a vacancy rate of 8% for the city (Skehan, 2016). In addition, though reduced from 3,000 between 2010 and 2015, almost 700 unfinished housing estates (commonly referred to as “ghost estates” because they are mostly empty) still pepper the countryside (Housing Agency, 2015), the result of the wrong housing typologies built in the wrong locations, in a context of unregulated market-driven policies.

The National Asset Management Agency (NAMA), established by the Irish Government in 2008 to administer the bad loans of liquidated developers, including those related to ghost estates, slowly morphs into a proto-development agency, but prioritises collaborating with global financial firms to build offices rather than addressing the housing crisis. It controls 75% of the ghost sites in Dublin’s Docklands and is planning four million square metres of commercial offices but only 2,000 homes, most of which will be high-end apartments (Byrne, 2015, October).

Local strategies for housing in Dublin thus need to be considered in this context of market-driven housing policies. Even in productive times, housing provision in Ireland is sporadic, relying primarily on an unregulated private sector market for the delivery of both private and social housing units with the government and local authorities providing only for the most vulnerable. Limited tenure options exist—you either own or rent—and there are very few professional landlords, with a high majority (90%) of them owning only three or fewer properties. Housing associations and related housing provider activity are not commonplace.

In the current housing crisis, private developers refuse to build the most needed housing types in the substantial numbers that are required, on the grounds of the increased prohibitive costs. In defiance of approved master plans, they regularly propose more profitable alternatives, usually the low density, three-bed semi-detached house, for example, as highlighted in a report on national television (Raidió Teilifís Éireann, 2015) on the new Adamstown outside Dublin, a solution destined to continue Dublin’s characteristic suburban sprawl, lack of amenities and car dependency. Meanwhile the Dublin City Council (DCC) slowly builds temporary modular housing units on empty sites in futile attempts to ease the crisis.

In addition, in December 2015, the government issued new statutory regulations that reduce space standards considerably, (for example, a one-bedroom unit is reduced from 55 to 45 square metres and a new controversial 40 square metre studio unit is introduced). This incentive action claims to reduce construction costs and thus encourage developers to start building housing again. Other government agencies, such as the Economic and Social Research Institute (ESRI), and many commentators meanwhile propose a site value tax on vacant undeveloped land. Housing charities and campaigners for the homeless such as Peter McVerry call for empty properties, both residential and commercial, to be utilised for social housing.

Recent research undertaken by the Housing Agency claims that 16,000 new housing units will be required annually across Ireland's urban settlements for the period 2014-2018, with 7,500 of these needed in the Dublin Region (Future Analytics, 2014). The building effort is considerable (about 3.5 new housing units for 1,000 inhabitants), and the needs increase monthly as previously set targets are not met. Following recently published statistics, in addition to accelerating housing provision, Irish government agencies and housing experts have noted that changes in the types of housing units are also needed, both to meet a rapidly increasing supply demand and accelerating demographic change.

The foreseen applicants for social housing in Dublin will predominantly be single people (at 42%) and single parents with one child or children (at 35%), thus giving a remarkable figure of 77% families with one single adult (Figure 6). Therefore, it is estimated that only 23% of all social housing will be for families of two or more adults with or without children (DOECLG, 2014; LGMA 2014). Given the Housing Agency predictions (Future Analytics, 2014), the challenge for Irish policy makers and housing providers should be to provide more single occupancy units, more flexible housing systems and varied tenure possibilities. However, many policy makers and providers are in denial about the need to revisit already approved planning applications in order to respond to the recent Housing Agency data.

The increased demand for more flexible tenure types, quicker and easier access to housing and increased residential mobility (that is, for divorced people, immigrants, etc.) represents another challenge for Irish policy makers and housing providers. Tenure patterns have changed in recent decades

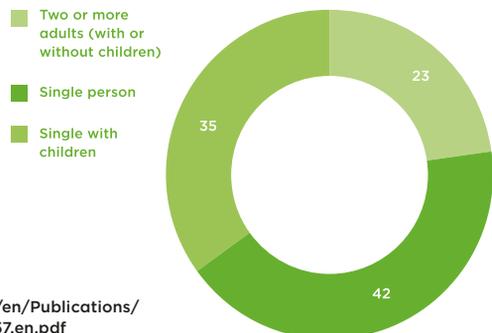


FIGURE 6. Household Type in Dublin (% of total) Based on analysis of Summary of Social Housing Assessments. Key Findings 2013<sup>4</sup>

4. See [housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Housing/FileDownload,34857,en.pdf](http://housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Housing/FileDownload,34857,en.pdf)

with home ownership now below 70%, which represents a liberal trend away from perceiving the dwelling as an icon of social stability (Sirr, 2015, October). Despite this change, an unregulated rental market means uncertainty and insecurity for renters. Buying is deeply constraining with the cost of a typical family home now six to ten times the average annual income. According to Sirr, “the increase in one-person households puts an extra demand on housing supply as well as limiting personal affordability where there will typically be one income applying for mortgage finance instead of two” (Sirr, 2015, October).

ALTERNATIVE ANSWERS TO THE CHANGING DEMOGRAPHY  
AND HOUSING SHORTAGE IN DUBLIN

In short, despite useful work by the Housing Agency, there is no coherent Irish Governmental policy for either addressing housing supply or demographic change. In February 2016, in response to the crisis, the new Irish Government created a dedicated portfolio for housing within a newly aligned Department of Housing, Community and Local Government which subsequently published a five-pillar strategy to tackle the emergency (DoHCLG, 2016). Entitled *Rebuilding Ireland*, it focuses on addressing the lack of supply in the rental sector and although it promises much, it completely ignores changing demographics and the needs of the new housing typologies which have emerged.

In addition to building new housing by extending the city, urban renewal, existing housing adaptation, retrofitting and upgrading can be an answer to housing shortage situations. For such actions, the changing demographic trends which call for predominantly single-occupancy units and the regulatory compliance with the maximum surface allowed per apartment should inform architectural design. However, the pedagogy of housing needs to respond to actual, real-world challenges while also exploring alternative new housing systems that are not determined solely by current political and economic prerogatives (such as fluctuating housing regulations) or by stereotypical preconceptions about how we might dwell in the future.

PUBLIC STRATEGIES FOR ANSWERING SOCIAL AND DEMOGRAPHIC  
CHALLENGES IN PARIS REGION

Traditionally, in the Paris Region public authorities have played a key role in housing provision (Dumont, 1991; Butler & Noisette, 1977). The most recent general spatial planning document for the Paris Region was adopted in 2013: The *Schéma Directeur de la Région Île-de-France* (SDRIF), which will guide the development of Île-de-France up to 2030. At present, the main aim of spatial planning in the region, as is generally the case in France, is the alignment of urban planning with sustainable development. Furthermore, mobility and transport networks are reinforced at the regional level to continue supporting economic and social development.

Housing provision plays an important part in this strategy, since housing availability is scarce and prices rise continuously in the region, thus making the housing stock on the free market highly inaccessible for a large part of the population. The main objective of the SDRIF is to build 70,000 new housing units in the region, which means doubling the present construction pace. According to the SDRIF, densification should bring a diversity of housing types (different size, individual and collective, etc.), housing tenures (for rent and owner occupied) and financing systems (from social to controlled and free market prices). From this perspective, a diverse offer could allow inhabitants to change residences in accordance with their evolving needs and preferences. It would also bring in a sufficient supply in order to diminish rents and prices and to overcome housing crises.

However, following sustainable development incentives, one of the main objectives is to limit the footprint of new urbanisation in the growth process. Therefore, the scheme aims to densify the existing urbanised areas in order to preserve agricultural land and natural reserves from urban sprawl. Further contradictions make the task of urban planners and architects particularly complex. Local authorities in municipalities have the responsibility to drive and coordinate the densification process. However, public opinion in many municipalities is reticent, if not actually in opposition to, densification, seeing it as a threat to the present quality of life. Densification is often associated with high-rise development and seen as contrary to the ideal of a village-like environment; an environment the bourgeoisie followed by the working and the middle class had been seeking in Paris suburbs, since the end of the nineteenth century.

Moreover, many residents of more affluent municipalities also perceive densification as a gateway for introducing social problems and poverty on their territory. The negative experience of the high-rise housing estates built from the end of the 1950s to the 1970s, that have become areas of poverty, unemployment and sometimes delinquency, is often evoked in the debates about densification. Because of such negative mental representations, a national policy that imposes a minimum of 20% social housing in all towns of more than 2,000 inhabitants encounters a lot of resistance.



FIGURE 7. Excerpt from the SDRIF that shows priority densification areas from a regional perspective (big dots). These are mainly situated around suburban train stations (large white circles). Architects and planners working for suburban municipalities in the Paris Region use this guidance plan as a starting point for an in-depth morphological analysis of the urban fabric and of its evolution potential. Source: SDRIF (2013)

#### DENSIFICATION STRATEGIES AND CHALLENGES FOR HOUSING DESIGN AT THE MACRO SCALE

In order to overcome this strong resistance to densification, regional public authorities and municipalities use new provisions or upgrades



FIGURE 8. An example of densification carried out by the municipality of Bagneux and SEMABA. Excerpt from the impact study of the project ZAC Ecoquartier Victor Hugo. Source: Arte Charpentier Architects/CODRA

of existing public transport systems as a lever to increase density. Deriving its inspiration from the principles of New Urbanism (Calthorpe & Fulton, 2001), densification around public transport hubs and along main transportation axes became a core principle of the SDRIF (Figure 7), thus making densification a driver to improve public space in suburban areas, favour the mixing of activities and intensify the use of space. Therefore, urban designers and architects are expected to focus on the areas around the train, metro and tram stations in order to nourish local debates with design proposals to foster densification in connection to public space redesign. Concrete design proposals help residents to better understand the impact of densification on the city's evolution and on their daily

lives. Furthermore, such prospective designs can contribute to engage local communities in spatial planning decision-making processes.

Architects and urban designers are called to play an important role in preparing and implementing strategies and plans to densify and renew existing urban areas. This requires an in-depth analysis of existing housing typologies, of unused and underused urban plots, and of land tenure. Furthermore, these local strategies could entail innovative architectural solutions to build low-rise housing to be integrated in the suburban towns, thus preserving their image and the qualities of single-family housing (IAU, 2013). In more heterogeneous areas, new housing units could be built as part of mixed-use developments, particularly along the transport routes and nodes as part of the strategies to foster densification (Figure 8).

As in the Irish case, building regulations at national and regional levels have recently been modified to promote the construction of new housing. In 2014, the building legislation in France suppressed the use of the floor-area ratio as well as the requirement for a minimum size of a buildable plot. Such measures are meant to allow more building within the same built footprint, to encourage initiatives such as Build In My Back Yard (BIMBY) and to favour a smooth densification that is better integrated into the existing urban or suburban fabric. This legislative change also aims at encouraging private homeowners and small developers to contribute to alleviate the housing shortage.

## CONCLUSIONS

The initiatives undertaken by public authorities to adapt the housing and urban environments to the current demographic trends suggest that architects and planners will need to play new roles in the design and implementation of plans and projects which take into account the integration of

multiple spatial dimensions (building, public space, regional transport). Furthermore, future professionals should acquire the necessary skills to analyse the social, economic and demographic trends in order to extract the issues for which they have to provide spatial and formal solutions.

Planning regulations along with the role of urban planners and of architects who implement them, have become crucial for steering and monitoring densification and land consumption for urbanisation. As in the Paris Region example, it appears that these professionals acquire new roles in understanding existent urban forms and housing typologies and their potential for evolution, including the possibilities of small-scale densification strategies involving local stakeholders to achieve a balanced development. For this reason, a multiscale approach to the design of new interventions in the existing urban fabric becomes essential to envision an urban coherence through densification that can ultimately benefit the common good.

Moreover, by integrating both demographic trends and challenges that arise from social and political drivers, urban planners and architects can play the role of mediators between the planners, communities and decision-makers at different administration levels and development and housing agencies, by proposing visionary prospective design solutions. Their contribution becomes essential not only to provide ideas and visions about urban renewal, but through concrete design solutions for retrofitting and adapting buildings to evolving social needs, as the examples of Lisbon, Saint-Étienne and Dublin show.

The role of planning and design professionals increasingly evolves beyond their traditional areas of expertise to embrace building management and urban transformation processes involving different stakeholders (as in the example from Saint-Étienne), the study and monitoring of mutable properties and of derelict or underused areas that allow for urban growth and the improvement of public space (as in the Paris Region).

The opening up of architectural and planning practices to the demographic and social studies, as well as to policy and decision-making for planning, can eventually help to find innovative solutions for the housing provision in sustainable social and physical environments.

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# Intertwining Community and Academy



# **Community Participation in the Design and Construction of the Built Environment in Puerto Rico and Chile: Intertwining Community and Academia**

**Omayra Rivera, Viviana Fernández**

## INTRODUCTION

As stated in the *Draft New Urban Agenda* which UN-Habitat prepared for the HABITAT III Conference in Quito, cities are “places that strive to guarantee a decent and full life for all inhabitants” (UN-Habitat, 2016, p. 1). We inhabit a city not only when we perform our daily activities, but when we have the capacity to transform it, that is, when we exercise our *right to the city*. This right has been defined by Brown and Kristiansen as:

**A vehicle for urban change, in which *all urban dwellers* are urban citizens; it creates space in which citizens can define their needs but, in order to appropriate substantive citizenship, citizens must claim rights of participation, and allow others the same rights. (Brown & Kristiansen, 2009, p. 7)**

Consequently, our main goal as academics is to teach architecture students the importance of shared responsibility in the design and construction of the city. This is necessary to foster a participatory culture and to reinforce the idea that a city is the product of those who live in it. Therefore, it is important for architecture students to learn how to communicate with the people for whom they design, and help them to convey their ideas and needs so that they can contribute to shaping their living environment. In this context, citizen participation becomes another element of the design process. To contribute as professionals to this participatory environment, students should not only acquire the skills to perform site analysis, but also develop the capacity to communicate with people and to learn from their experiences about the spaces they inhabit.

Participatory processes to transform the living environment—both in refurbishing and new projects—can be initiated in a number of ways. For example, residents organized in boards or associations can take the initiative to make improvements in their community and then look for technicians, designers, and mediators who will help to carry them out. Alternatively, experts can help residents to shape a project by acting as mediators and facilitators who define priorities and find ways to obtain governmental support. Participatory processes may also be started by non-profit or non-governmental organizations or by academia. Another form of launching participatory processes is through local administrations, as in the case of participatory budgeting. One more form of participation involves the collaboration of different actors at specific stages of the process. An example of this might be an organization or a governmental unit taking over a process started by residents, by another organization or by higher education institutions.

The collaboration between various governmental and non-governmental organizations, residents, technicians and mediators is necessary because each group has expertise in a specific area of knowledge or control over the resources that are needed to improve the city. According to McCarty:

What is now required is an enlarged design perspective that involves questions of land security, affordable economics, clean water and sanitation, overall site design, energy use, and climate change on the one hand; and healthcare, education, and community organization on the other. Citizens cannot achieve this vision on their own. It requires the contributions of design specialists educated not only in the theory and practice of the economically endowed cities of the world, but also in the experience, ingenuity, and lessons of the cities of the Global South. (McCarty, 2011, p. 9)

In sum, residents of communities know the space they inhabit, their needs and aspirations, but they need experts to help them find design solutions.

### **EXPERIENCES FROM ACADEMIA: DESIGNING AND BUILDING WITH COMMUNITIES**

A university cannot be an isolated institution; it should be part of the community. Through community development projects, residents and students can exchange knowledge, thus enriching the education of future architects and benefiting the community. Universities can bring their research methods and tools to these projects. Besides, students can learn that as architects they will have an ethical and social responsibility in the transformation of the built environment.

Many schools of architecture and urban planning in Latin American countries offer programmes and courses for students to work directly with communities in the task of improving their built environment. This can occur through the design and/or construction of architectural projects or by means of interventions and events which take place in the communities.

In this chapter, we will present some experiences with community planning projects carried out as collaboration between academia and communities in Puerto Rico and Chile.

#### **Experiences from Puerto Rico**

In the late 1960s, architect Edwin Quiles and urban planner Lucilla Marvell started to work with community design projects at the School of Architecture of the University of Puerto Rico. However, it was not until the mid-1990s when these projects became part of the academic programme. Currently, there are two courses being offered at the two schools of architecture in Puerto Rico in which students work with communities and help them to develop projects to improve the built environment. These are the *Community Design Studio* (Taller de Diseño Comunitario) that started in 1997 in the University of Puerto Rico and the *Collaborative Design Studio and Evolutionary Habitat* (Taller de Diseño Colaborativo y Hábitat Evolutivo) which started in 2013 in the Polytechnic University of Puerto

Rico. In addition to this, students and former students of architecture of the University of Puerto Rico in San Juan, Polytechnic University of Puerto Rico in San Juan and the Pontifical Catholic University of Puerto Rico in Ponce collaborated in the development of schematic designs for a participatory budgeting project for the municipality of San Juan, carried out in 2015.

#### THE COMMUNITY AND COLLABORATIVE DESIGN STUDIOS

The *Community Design Studio*, founded by the architect and professor Edwin Quiles in the University of Puerto Rico, provides assistance to residents of low-income communities who turned to the school for support, as they needed architects— in this case, students of architecture—, to help them design projects of collective spaces or housing. Indeed, they looked for students because they could not afford to pay an architect. Students designed the plans and discussed them with the members of the community.

Inspired by this model, the *Collaborative Design Studio and Evolutionary Habitat* was set up in 2013. Unlike in the previous *Community Design Studio*, students are expected to outline a communication plan which will help dwellers to describe their needs and aspirations before starting to design a project. The plan includes the methods and tools to be used in the meetings, interviews, surveys, games, or other participatory activities. Besides, students can take part in the execution of the works together with the inhabitants. In this way, students and dwellers can learn from each other: students can learn from the skills of the residents with experience in construction, who in turn receive some technical knowledge from students.

The *Collaborative Design Studio* was created with volunteers and as part of a university curriculum in the Polytechnic University. The course focuses on the design of collective spaces in collaboration with inhabitants. Students learn from the experience of the dwellers and take into account their needs, aspirations and expertise when elaborating a proposal to transform the existing places. At the same time, community members receive some technical knowledge from the students, and this knowledge helps them to continue maintaining and developing the spaces in which they reside.

The specific objectives of this course are:

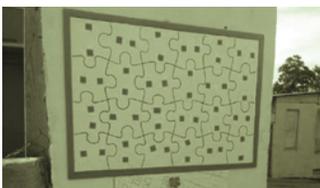
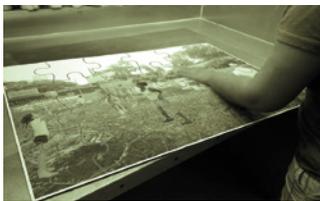
- to bridge the gap that often exists between academia and practice, as well as that which happens between the academic knowledge of the architects and the experience of the inhabitants;
- to create an environment in which experts and dwellers collaborate in the process to shape the built environment;
- to train students to work as counsellors and mediators in collaborative planning;



FIGURE 1.  
Participatory  
process in Buena  
Vista, Santurce.  
Source: Marcos  
Caballero



FIGURE 2.  
Participatory  
process in Alto  
del Cabro, San  
Juan. Source:  
Kiara Marina



- to empower the inhabitants to become aware of the space they inhabit so that they can take care of the maintenance and continuous improvement of their living spaces; and
- to encourage students to design spaces that can evolve over time and adapt to the changing needs of the inhabitants.

Before students start a dialogue with the inhabitants, they are required to observe how spaces are inhabited, to find out user behavioural patterns and to derive spatial qualities from them. The term *collaboration* is used for this studio because, unlike *participation*, it suggests equal conditions in the work to be performed by all involved. Therefore, a project is not just *for* the community but is done *with* the community. Keeping this in mind, students design the procedures to interact with residents. This process should

be interactive and inclusive so that the largest number of people are involved. After processing the inputs from the residents, students design and build a project together with the community. This methodology based on observing and discussing, designing and building with the community helps to bridge the gap between academy and practice.

In the year 2012, a first project of the studio was conducted outside the university in conjunction with a public-private entity that helps residents of the eight neighbourhoods that surround the Caño Martin Peña in San Juan, Puerto Rico, to improve their living conditions. Volunteers from different fields of study—such as design, graphic design, urban planning, architecture, landscape architecture, engineering or sociology—, mostly college students, developed a participatory process (using photomontages, images, clue words and questions) to help neighbours of Buena Vista, in Santurce, to communicate their needs (Figure 1). At the end of the project, the residents and volunteers painted all the houses of a street—with the colours they chose—, built urban furniture and a garden in an underground landfill using recycled materials.

The second project in the studio was an initiative of the School of Architecture at the Polytechnic University of Puerto Rico carried out in 2013. Students helped residents of Alto del Cabro neighbourhood, also in San Juan, to improve unused and deprived spaces. In this case, there was no support from other organizations. Students also designed a participatory process to obtain ideas from the neighbours. In this process they used a blackboard on which people could write their aspirations regarding the neighbourhood and a puzzle with which they could describe the potential for development that an abandoned space could have (Figure 2).

The third project took place in 2014. It was an initiative of the municipality of San Juan to renew an abandoned bridge in the *Tras Talleres* neighbourhood, a place where the trains that once crossed the island with goods and passengers used to get repaired. Students devised an interactive timeline in which residents of nearby neighbourhoods could post their memories of the train (oral history) on a map based on the elements of Kevin Lynch (paths, edges, districts, nodes and landmarks) which was put up near the bridge. With this information, students made a preliminary design, using the bridge as landmark, portal and meeting place (Figure 3).

The initiative to carry out the three projects described above did not come from community residents, but from an organization (public-private entity, university, and municipality). In the first two projects, in *Buena Vista* and *Alto del Cabro* neighbourhoods, residents were involved in the whole process, from the design to the construction of the proposals.

A fourth project carried out in 2015 emerged from an initiative of the community association *Machuchal Revive* in San Juan. One of the main purposes of this association was to rescue an abandoned house, called *Casa Taft 169*, in order to convert it into a civic centre. Students created four game booths, which residents visited to express their ideas for the development of the civic centre. Then, they made an architectural model of the house with interchangeable parts that could be combined in different ways by the participants (Figure 4). Finally, students built two of the proposed interventions with the help of community members: A wall in the backyard, which separates the neighbouring yard, and a door that facilitates access to the backyard.

These four projects were completed with a small budget and limited time, typically, a quarter, a semester or an academic year. Their results can be considered an example of the *tactical urbanism* that is characterized as:

**A deliberate, phased approach to instigating change; the offering of local solutions for local planning challenges; short-term commitment and realistic expectations; low-risks, with possibly a high reward; and the development of social capital between citizens and the building of organizational capacity between public-private institutions, non-profits and their constituents. (Lydon, 2015, pp. 1-2)**

The interventions proposed by the students, although small in scale, helped residents of communities to rediscover the value of their living environments. In addition, these projects have helped to establish links



**FIGURE 3.** Participatory process in *Tras Talleres*, San Juan. Source: Omayra Rivera



**FIGURE 4.**  
Participatory process in Casa Taft 169,  
San Juan. Source:  
Omayra Rivera

between academia and the public and private sectors and to create a collaboration space to which everyone can contribute with their knowledge and resources. Some of the benefits of these collaborative projects involving academia and communities have been the mutual trust developed between teachers and students of architecture and residents, and the establishment of social networks for future collaboration. Residents' confidence grew when they realized that the students had discovered and designed both with and for the community, and even more when they saw how the deprived spaces had improved.

#### THE PARTICIPATORY BUDGETING PROJECT

Participatory budgeting is a process of consultation and dialogue between citizens and local governments whose aim is to decide the priorities of community investment. With participatory budgeting, the residents of a community can decide how to use a part of the municipal budget to improve their living environment. The city administration determines which communities are given the opportunity to participate in this initiative.

Typically, a participatory budget is organized in several stages. First, there are assemblies in which all residents are invited to make proposals. Then, community delegates are chosen to further develop the proposed projects in several meetings with experts from the municipality and mediators of a non-governmental organization. Finally, the residents can vote for their favourite projects. Participatory budgeting was first carried out in Porto Alegre, Brazil, in 1989. Since then, it has been implemented worldwide. The participatory budgeting in San Juan is inspired in the model adopted by New York city.

The first communities in San Juan in which this process was implemented in 2014 are very diverse: A residential neighbourhood, a suburb, a rural area and a self-constructed district. The reactions and participation of residents in each community were also diverse. In the self-constructed district, for example, residents were more inclined to take decisions based on a consensus while in the residential neighbourhood they argued that decisions should only be taken by the government. It is necessary to take into account that the needs were different in each case. In the rural context, for instance, the residents demanded the construction of bridges and roads while in the suburban area they were more concerned with creating recreational facilities. However, all the communities coincided in the need to make more spaces available for sports and community gardening.

Students of the three schools of architecture in the country, the University of Puerto Rico, the Polytechnic University of Puerto Rico and the Pontifical Catholic University of Puerto Rico, helped in one of the

most important stages of the first Participatory budgeting process held in San Juan in 2014. This involved architecture professors and mediators of the municipality and the non-governmental organization Cumbre Social who helped the delegates to spread information about the projects by means of posters describing the project location, objectives, benefits, challenges, users and activities (Figure 5).

The last participatory budgeting process performed in San Juan in 2015 counted on the collaboration of a team of young architecture and engineering graduates who helped the delegates of the communities to convey their ideas. The inclusion of the young professionals was very effective given that in the previous processes the delegates had experienced difficulties imagining how the projects would look, which in turn hindered decision-making. They also found it difficult to estimate the costs of the projects. The architects developed a participatory process to help residents to codesign using basic tools such as cut-and-paste drawings and images. Finally, they produced computer graphics, schematic drawings and cost estimates for each project. Thanks to their work, the delegates could visualize future designs and meetings became simpler, faster and more effective.



FIGURE 5. Preparation of posters for participatory budgeting in San Juan. Sources: Pedro Ortiz, R. J. Muñoz

### Experiences from Chile

There are currently more than forty faculties or schools of architecture in Chile and each of them has a different academic structure. Participatory design is part of the academic programmes in some of these schools. As an example, we will refer to the course *Multiscale Participatory Processes: Housing, Neighbourhood and City* (Procesos Participativos en la Multiescalaridad: Vivienda, Barrio y Ciudad) which is taught at the Department of Urban Planning of the Faculty of Architecture and Urbanism at the University of Chile.

The participation of citizens in the interventions aimed at transforming the territory at its various scales is considered a basic condition of a democratic society, a mechanism to support social integration and inclusion. As a matter of fact, citizen participation strengthens the identity of people with the places they live in and reinforces their ties with the members of the community. Participatory processes offer community members the opportunity to exercise their rights to influence the development of the places they live in, and also to take control of their responsibilities with the neighbourhood contributing to the solution of the problems.

We think that one of our goals as academics and researchers is to make students aware of the importance of shared responsibility in the design and construction of the city. This in turn contributes to promoting and

enhancing participatory culture in the future with the involvement of citizens, authorities, civic organizations, private companies and professionals.

MULTISCALE PARTICIPATORY PROCESSES: HOUSING, NEIGHBOURHOOD AND CITY

This urban planning course, which started in 2013, is offered to third-year students on a five-year architectural programme. The aim of the course is to review and analyse the institutional and legal frameworks in order to foster effective citizen participation in urban development at its various scales. The main objective of the course is to identify the key factors that condition the success or failure of participatory processes, to understand and assess the interactions among the different actors involved and to apply participatory methods based on local and foreign experiences.

The course runs for one semester (18 weeks). Two exercises are carried out during that period:

1. **WITHIN THE UNIVERSITY CAMPUS.** The first six weeks of the course are dedicated to the implementation of a participatory design in a space within the campus. Each team of students (maximum four) chooses a space which is deteriorated or unused and then develops a participatory process to recover, improve or intensify the uses of that space. The team describes the problems to be solved in a particular space, identifies the stakeholders who will take part in the participatory process and prepares a participatory strategy. This strategy includes processes to gather information which are discussed with invited participants. As a result of this process, designs for a project idea should arise. In order to introduce the students to the different participatory processes we asked them to read some handbooks (Romero & Mesías, 2004; MOP, 2008) to then summarize the main ideas in a short paper which was distributed to the rest of the class.
2. **WITH THE COMMUNITY.** As in the first exercise, in the second one each team of students plans a participatory process. This implies developing a strategy that takes into account the scale, the actors that will be invited to participate, the person(s) who will be leading the process, the level of involvement that can be expected from the participants taking into consideration the time they have available and, finally, the participatory mechanisms to be put into action.

Unlike the first exercise, this second exercise deals with a real problem in the community. The teaching staff propose a case study every semester which enables students to collaborate with communities and municipalities and involves multiple stakeholders in a community planning process. As an example, during the second semester of 2014 we worked in the city of Valparaíso, with the community of Cerro Merced, and in the second semester of 2015 in Santiago, with the community of Madrid Street.

PROJECT 1: “REHABITAR EL CERRO”, CITY OF VALPARAÍSO, 2014

In April 2014, a fire devastated some of the hills of Valparaíso, one of them being Cerro Merced. The purpose of our collaborative project was to facilitate a reconstruction process of the neighbourhood, not just of the physical spaces but also of social and cultural fabric in order to strengthen the sense of identity and belonging of the neighbours.



FIGURE 6.  
Participatory  
process in  
Cerro Merced,  
Valparaíso.  
Source: Viviana  
Fernández

The tasks performed by students were the following:

- to collect graphic and written testimonies that will be displayed to the residents of Cerro Merced in an exhibition;
- to recognize the relevant facts from the history of the place and their permanence throughout time from the information collected, as well as what needs to be improved today and what could be built in the future; and
- to identify spaces which have symbolic significance for the community.

These tasks were conducted in three steps:

1. **CREATING A MEMORY REGISTER.** In this first stage, students explored different ways to create a memory register. They considered different techniques and methods of narrative research and looked at the documents produced within the *Neighbourhood Recovery Programme* for which:

**The neighbourhood stories are part of the process of improving neighbourhoods and quality of life of its inhabitants. They described what they were, are and intend to be. They are neighbourhoods located throughout the country, with different characteristics that are inherent with disparate developments, but with the common pride to relate fragments of individual and collective histories that have cemented the building of their living spaces.<sup>1</sup>**

Students also consulted documents produced by other organisations that worked with communities as *Fundación Proyecta Memoria*<sup>2</sup> and *Iconoclasistas*.<sup>3</sup> Based on all the information they gathered and their own interest on the issues, students produced different kinds of registers to record the memories of the places: An audiovisual with testimonies from neighbours, a memory album, a story competition

1. See [www.minvu.cl/opensite\\_20110324155731.aspx](http://www.minvu.cl/opensite_20110324155731.aspx)

2. See [proyectamemoria.cl](http://proyectamemoria.cl)

3. See [iconoclasistas.net](http://iconoclasistas.net)

for children (Figure 6), a mapping of the major milestones identified by residents and a walk around with the neighbours to identify the paths people use to move around.

2. **RECOGNIZING THE PLACE: CERRO MERCED AND SURROUNDINGS, IN THE CITY OF VALPARAÍSO.** At this stage, students analysed all the information provided by the municipality of Valparaíso, specifically, the diagnosis for the reconstruction of the city<sup>4</sup> and the municipal plan for rebuilding it.<sup>5</sup> After this analysis, the students and teachers met the community leaders to walk around the neighbourhood. They explained the issues that concerned the neighbours and the situation of the neighbourhood, in particular the situation of the people after the fire. This first visit to Cerro Merced in Valparaíso gave the students the opportunity to affirm their initial perceptions of the community, their residents and their concerns.
3. **APPLYING TECHNIQUES FOR REGISTERING MEMORIES.** First, the students reviewed different techniques of recording memories of a place, and then they proposed an action plan. Then, the proposed actions were put into practice. Each group produced graphics and written and audiovisual documents to record their findings. Coinciding with the visit to Valparaíso, they socialized and shared some recreational activities with the community (Figure 7). For example, a group of neighbours painted a mural in the Club Deportivo Pajonal. The director of the club received the results of the students' work with the community: Audio-visuals, stories, and maps. Finally, the students presented one of the pieces which had been best received by the community: An audiovisual with interviews and testimonies from neighbours and residents of Cerro Merced.

FIGURE 7.  
Participatory  
process in  
Cerro Merced,  
Valparaíso.  
Source: Viviana  
Fernández



The work done in this project was very significant for both the community and students. Neighbours were very grateful to the students for the work they had done. They appreciated the opportunity of becoming actors of a process. They all contributed to helping the community to recover part of their memories of the area before the fire, and to finding out what should be preserved. Building a feeling of trust was fundamental for students to get feedback from the residents. On the other hand, students had to overcome the inconveniences that working with a distant community involves: Travelling to the place, participating in the meetings with the neighbours, identifying the key persons in the community, spending time to create the feeling of mutual trust which is necessary to get their support.

4. See [issuu.com/unadeuno/docs/dagnostico\\_reconstruccion\\_valpara\\_\\_](https://issuu.com/unadeuno/docs/dagnostico_reconstruccion_valpara__)

5. See [issuu.com/unadeuno/docs/plan\\_municipal\\_reconstruccion\\_valpa](https://issuu.com/unadeuno/docs/plan_municipal_reconstruccion_valpa)

PROJECT 2: "PARTICIPATORY DESIGN PROCESS IN MADRID STREET",  
MATTA NEIGHBOURHOOD, SANTIAGO, 2015

This project was developed during the second semester of the academic year 2014–2015 and was carried out in collaboration with the municipality of Santiago.

The programme *Revitaliza Santiago* is part of a comprehensive neighbourhood rehabilitation and infrastructure programme initiated by the municipality of Santiago in 2015 with the support of the Inter-American Development Bank. The objective of this programme is to revitalize selected neighbourhoods and prevent urban deterioration by encouraging a social mix that promotes socio-cultural integration and the economic recovery of the area.<sup>6</sup> To achieve these goals, the team in charge of the municipality proposed five lines of action: Recuperation of public spaces, rehabilitation of old buildings, rebuilding of the local economy, strengthening of the governmental institutions and fostering citizen participation.

In order to promote citizen participation, a multi-actors table—the Programme's Participation Unit—was set up with the purpose of facilitating the implementation of the programme. This table was composed of four groups:

- citizens and social organizations of the neighbourhood;
- public sector at regional and local levels and other public services;
- private sector, entrepreneurs, investors and trade unions; and
- universities and research centres.

The members of the table suggested that students undertook some of the tasks of the programme, in particular those related to the recovery of public spaces and citizen participation. Before the course started, the municipality had already developed a master plan which had been approved by the community. One of the projects included in this plan was the upgrading of two streets: Cuevas and Madrid. We decided to concentrate on the development of a participatory design process to renovate Madrid Street since the works in Cuevas Street were on the point of completion.

The field work started with a preliminary survey of the area to initiate contact with the community. The municipality team in charge of the programme presented the history of the neighbourhood and the master plan to the students. Afterwards, three workshops were conducted:

**WORKSHOP 1. "PARTICIPATORY ASSESSMENT".** The first workshop was held in a place near to Madrid Street. Its main purpose was to discuss with residents the positive and negative aspects of their daily life in the neighbourhood and to identify places and buildings which were meaningful for them.

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6. See [youtube.com/watch?v=GMrf-X3bJTC](https://www.youtube.com/watch?v=GMrf-X3bJTC)



FIGURE 8.  
Participatory  
design process  
in Madrid Street,  
Santiago.  
Source: Viviana  
Fernández

The workshop started with a presentation of both the municipal team and the course. The work to be done by students was agreed on with the representatives of the city. Afterwards, we organized the neighbours in three groups. A team of students worked with a group of neighbours to find out what were the most significant issues in the neighbourhood while another team recorded the conversation. This work culminated with a presentation of the findings in each discussion group. The main issues identified by the residents were lack of security, deterioration of public walkways, and scarcity of street lighting and trees (Figure 8).

**WORKSHOP 2. "MAKING PROPOSALS".** The second workshop followed a similar methodology as the previous one. Citizens proposed various solutions to the problems identified in the previous session, using stickers and other materials to pinpoint them in a map.



FIGURE 9.  
Participatory  
design process  
in Madrid Street,  
Santiago.  
Source: Viviana  
Fernández

**WORKSHOP 3. "ANALYSIS OF DESIGNS".** Finally, in the third workshop the student teams presented the preliminary designs they had developed for the public space of Madrid Street. These designs had been elaborated considering the contributions that the community had made in the previous two workshops. As this was the last activity, we decided to hold it in the public space, in a more festive atmosphere (Figure 9). The four teams set up tables in the middle of the street and explained to the residents how they had interpreted their ideas and transformed them into design proposals.

In one team, there was a conflict with some of the neighbours who had not been in the previous workshops and who disagreed with the proposals. The neighbours did not understand that the proposals were the result of a collective reflection and that their aim was to benefit the community as a whole rather than each particular person. Although this generated some tensions between the students and the neighbours, the situation helped students to realise that working with the community is not always as easy as it seems, and that it is always possible to learn something even from conflictive situations.

As in the project in Valparaíso, students felt that it was a very positive experience. They had the chance to create and work through a participatory process in real conditions, with all the difficulties and complexities that this brings. However, they also recognized the value of incorporating the community in the physical and social construction of the spaces they inhabit. In fact, they learned the difference between making a design as an individual and working with the community to find solutions to the problems which they had helped bring to the surface.

In these two projects, we realized that time plays a crucial role. Planning a participatory process requires time to build confidence among the actors and to consolidate the teams of students and neighbours. In both projects, we would have needed more time to complete the participatory processes properly. The academic schedule affords little flexibility to adapt to the more flexible timetables of the community; the interactions with the residents run at their own pace, without pre-established timetables.

Through these two projects, we could confirm certain hypotheses regarding citizen participation in urban planning and design. First, there is not an established methodology to develop a participatory process with a community. Each process depends on of the motivation and commitment of the neighbours and their leaders, the level of organisation of the community, the role of the municipal team, and the social conditions of the neighbourhood, among other factors.

In the next collaborative projects to be developed as part of our courses, we plan to introduce the techniques of tactical urbanism (Lydon, 2015) applied in the projects of Puerto Rico, to carry out actions in a short period of time which give rise to long-term changes.

## CONCLUSIONS

By working together with citizens, listening to their needs and problems, architecture students can better understand the implications of the design decisions they make. However, there are some challenges which need to be faced to carry out community development projects within academic programmes: The limited time of an academic programme which makes it difficult to continue with the initiated works, obstacles that need to be overcome to find funding to implement the projects, and the distances to the communities. Participatory processes generally take time, the time which is necessary to get inside a community and live with their members, to share their problems and hopes. Many of the projects stop because the time for the course has run out, even though the dynamics of the initiated process would require prolonging the activities. Funding is important because it gives students the opportunity to build the projects—an important part of their learning process—, even using recycled materials incurs some expenses. Similarly, the residents, after seeing something built or renovated have more confidence on the process and are encouraged to continue working to improve their community. Finally, many communities are not accessible by public transport making it difficult to visit them frequently. One way to overcome this problem is to connect courses, in a way that the work initiated in one course is continued by the next.

The exchange of knowledge between students and citizens is one of the many valuable outcomes of these collaborative community projects.

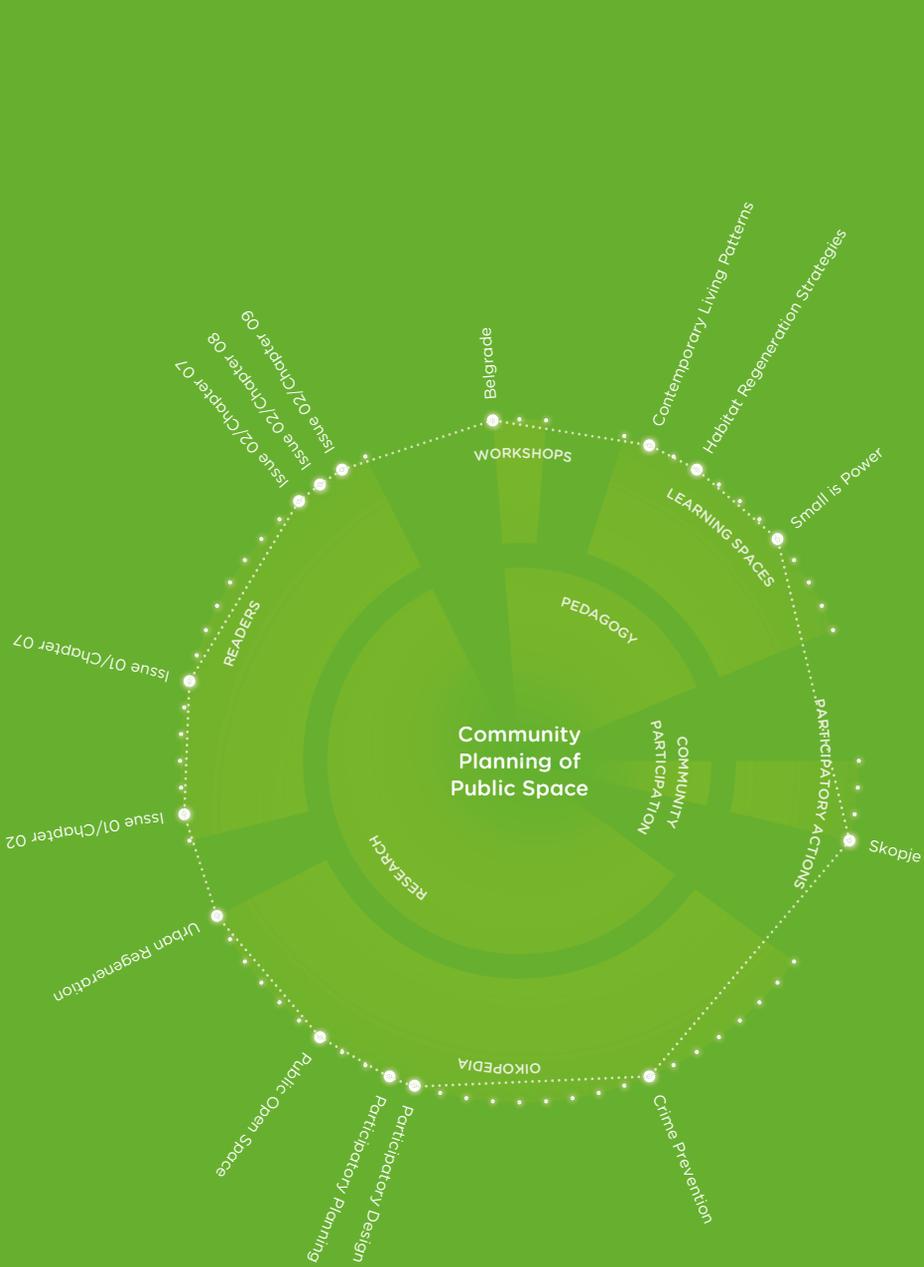
Students learn about the history of the place through the stories the inhabitants tell them. Conversely, students pass on their knowledge about site analysis—for example, introducing to the residents the terms used by Kevin Lynch—so that they could name the elements of their environment as landmarks and nodes. Neighbours also passed on their experience to students telling them, for example, about successful spaces in the neighbourhood, and explaining why some of them work well while others do not.

In the courses carried out in both countries, Puerto Rico and Chile, the aim has been to encourage students to work as counsellors and mediators in collaborative design processes. Students have played the role of designers, but they have also been able to develop communication skills in order to talk and get close to people, to learn from their knowledge and experience, to take into account their needs, demands, aspirations and dreams and to help to make them reality.

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# **Integrating the Community in the Planning and Design of Public Space in the Balkan Region**

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## INTRODUCTION

Community participation in the planning and designing of public space implies the direct involvement of community members or representatives in local planning and governance to improve and enhance decision-making processes. According to Creighton (2005) and Sanoff (2000), public involvement in planning would reduce citizen scepticism toward local governments and help to build larger consensus on government actions. Public participation can be seen as a logical extension of the democratic process, albeit in a more local, direct, and deliberative way (Pimbert & Wakeford, 2001). Participatory planning is an integral part of sustainable development and an essential component of good governance, especially in western countries, where there is a consolidated culture of participation of the civil society in decision-making processes affecting common interest.

In contrast to western countries, the nations of Eastern Europe under the rule of communism, such as those in the Balkan countries, did not have a civil society, this means, a society in which “individuals and groups are free to form organizations that function independently of the state and that can mediate between citizens and the state” (Wedel, 1995, p. 323). Such a civil society could only be gradually built following the advent of the democratic system. In the transition period to democracy, the planning and design of public spaces in the Balkans were usually reduced to performative political gestures confined to the most representative public spaces of the city. During that period, these public spaces were accepted without contestation by citizens. After the advent of democracy and the free-market economy that came with it, public space started to be perceived as nobody’s space thus favouring its gradual degradation and decline. Citizens were not interested in participating in the decision-making processes to renovate and reuse these public spaces because they felt they were not “theirs”. On the other hand, local and central governments were only interested in representative public spaces, those which conveyed a symbolic value.

Over the past few years, however, and as a result of the gradual empowerment of the civil society, people have become more aware of the need for a qualitative public space. As a result, they have begun to express their opposition to top-down planning and claim their right to be heard when it comes to deciding on public space. In a way, what citizens are claiming is their *right to the city* (Lefebvre, 1986), this means, their share of the power to make decisions which concern the spaces they live in.

In order to have an inclusive and sustainable planning of public space, new practices to involving citizens and communities are being developed both in Albania and in the Republic of Macedonia. The planning legislation of both countries has recently recognised the right of the communities to be informed, to participate and to interact in planning and design processes. As a result, local administrations are now obliged to inform citizens about projects that are being drafted. Nowadays, in the Balkans, citizens

are increasingly better informed about the urban development initiatives in their communities. They receive information from public gazettes and the web page of the municipality. However, residents are not surveyed to find out their needs, wishes and visions for the future development of the public spaces they inhabit. It is assumed that the government officials involved—politicians, planners, and other experts—know better about the wishes of the citizens and the planning and design options to satisfy them (Pencic, 2015). Besides, there is mistrust of the civil society regarding the value of participatory processes. Consequently, citizens show little interest in taking part in them and in contributing to public consultations. Furthermore, the fact that citizens' proposals are rarely materialized contributes to the lack of public confidence in community action (Toto et al., 2013).

However, in recent years, non-governmental organisations and universities, in collaboration with local governments, have undertaken some initiatives with the aim of taking community involvement beyond the informing and consultation stages. In view of the particular historical, social and cultural context of spatial planning in the Balkans and the current retrenchment of public space, these initiatives are contributing to enhancing community interest and to raising awareness and fostering the engagement of citizens in the process of transforming public spaces.

## **HISTORICAL OVERVIEW OF THE ROLE OF COMMUNITY PARTICIPATION IN THE PLANNING AND DESIGN OF PUBLIC SPACE**

In this section we will present a summary of the historical conditions of the planning and design of public space in the Balkan Region—Albania and the Republic of Macedonia—in order to understand the specific social and political conditions and the cultural background that influence the involvement of the community in the planning and design processes.

### **The Involvement of the Community in the Planning Processes in Albania**

Community participation in the design of public spaces in Albania is a relatively recent endeavour. The National State Institute of Town Planning and Construction (ZUP) was the only institution in Albania during the communist and socialist system responsible for producing urban plans and architectural projects. In this period, urban plans and architectural designs were mainly influenced by ideological, social and economic values. In fact, since the movement of the population was controlled, transformations in the cities were easily predictable. Consequently, the central government as part of the national programme established the community facilities in advance. In this political context, architects and urban planners of the Institute had a free hand in transforming and designing public spaces (Aliaj, Lulo, &

Myftiu, 2003). Moreover, given that private property ownership was banned in the communist regime everything was considered state property. Under these circumstances, community participation in the design of urban spaces was not an option.

In the newly planned residential areas—such as Partizani, Laprak, Allias, Vasil Shanto and Ali Demi—public spaces were designed following some technical and spatial regulations. Spaces between housing blocks were well-designed but usually poorly equipped. Likewise, at the end of 1970s, municipal funds for public space maintenance were cut. This gave rise to a gradual degradation of the public spaces. In response to this situation, the inhabitants, who had developed a strong sense of community during the recent communist period, voluntarily participated in the maintenance of the spaces in their neighbourhood.

After the collapse of the communist regime in the 1990s, the most significant urban transformations that took place in Albania until the early 2000s were predominantly informal, that is, they did not take into account the regulatory plans of the time. During this period, the design of public space was entirely neglected by local authorities. The few interventions to improve public space had a minimal cost and were limited to upgrading streets and public lighting. Due to the political and ideological changes, public space was no longer seen as shared space, but as ownerless space. In these conditions of dereliction and poor administration, public space underwent a process of degradation which in turn favoured illegal occupations (Figure 1).

However, a turnaround occurred in the city of Tirana at the beginning of the 2000s when the mayor in office, Edi Rama, led a plan to improve the capital's image by transforming the spaces that had been illegally occupied into new public spaces (Figure 2).

The plans for renewing the city mainly consisted in enlivening the public spaces by painting the dull residential buildings of the communist period in vibrant colours. In addition, small public spaces and parks were created in the city centre and in the neighbourhoods. Although these actions seemed very effective at the time, bringing about a new positive image of the city and helping the mayor to gain international recognition, there was no comprehensive approach to planning and design. In fact, the renovation plans were led by independent foreign artists commissioned by the city planning office, a top-down approach that overrode the consultations with the community. As a result, these renovation actions had a short-term impact as they



FIGURE 1. Informal housing inside a residential block in Tirana, legalised after 2000, now a hotel. Source: Xhoana Kristo



FIGURE 2. Sheshi Shtraus (Xhamlliku), a public space in Tirana, designed in 2009. A rehabilitation of the surrounding facades was carried out as part of the project. Source: Sotiri Dhamo

**FIGURE 3.** Revitalization of Lushnja city centre, a large-scale urban intervention which was part of the *Urban Renewal* programme (2014–2015). Source: Dea Studio, Elkeda Kalaci



**FIGURE 4.** Iliria Square in Durrës is considered the centre of the city by the citizens. It holds the Town Hall, the Palace of Culture, the Prefecture and a mosque. The rehabilitation was part of the *Urban Renewal* programme (2014–2015). Source: Xhoana Kristo



were limited to enhancing the city image, rather than addressing the aspirations of the community.

In recent years, the most representative public spaces in the main cities in Albania have undergone a process of renovation thanks to central government subsidies through the governmental programme *Urban Renewal* (*Rilindja Urbane*, in Albanian), whose goal is to renew the most representative public space in the main cities of Albania. Projects to renovate public squares were usually selected through international competitions (Figures 3, 4). However, despite attempts to develop an open, transparent informative and participatory process, there

was no real involvement of the community. Moreover, even in the preliminary phase of the competition calls, there were no preparatory meetings or discussions involving community members.

Small public spaces in the neighbourhoods have been excluded from this renewal programme. There is no political will to positively intervene in the neighbourhoods to deal with conflictive situations by fostering the collaboration between local administrations and communities. In the representative public spaces in which political influence in the design process is higher, some initial efforts to involve communities in the design have been made without significant results. As a result, local communities are becoming more sensitive and open to active participation in the planning, reorganisation and design of their living space. In this endeavour, they are usually guided by civic organisations, universities and research centres that help to activate bottom-up urban planning and design processes at the neighbourhood level.

### The Changes in Public Space Policies in the Republic of Macedonia

The involvement of the citizens in urban planning and design has a long tradition in the Balkans, although it is not necessarily an example of community participation as we know it today. Even since the time of the Socialist Federal Republic of Yugoslavia and the Socialist Republic of Macedonia, the state has taken responsibility for the decision-making processes concerning public space. Even though citizen participation was postulated, it was still the socialist state which directed all the planning and design policies on behalf of the citizens. Namely, the provision of public spaces, the preparation of urban plans, as well as the design and construction of residential areas were entirely undertaken by the state-led

urban planning offices. The design of these spaces was regulated by standards. Accordingly, all residential areas were equipped with open spaces, mostly children's playgrounds, parks and squares. In urban plans at a neighbourhood scale, citizens could exercise their right to participate in decision-making through public debates. They acted as representatives of local communities, which were at the core of the socialist state.

Hence, the cities of the Republic of Macedonia and, in particular the capital Skopje, have a significant number of well-developed public spaces, at community, city and regional levels. The state, proclaimed as "socialist" and as a "state concerned with the socialist worker", strove to provide adequate living conditions to citizens—particularly in the large residential complexes built by the state—which included resting places, and areas for recreation and for socializing (Figure 5). These spaces had to be developed and later maintained. For this purpose, cities counted on the Public Communal Enterprises that were responsible for their maintenance, a task which requires significant financial means, work force, and organisation. Unfortunately, a large number of the planned public spaces have been left unfinished, and with the shrinking of the state, the resources to take care of them have also been reduced.

After the dissolution of Yugoslavia, the Republic of Macedonia like all the other republics of the former socialist state, faced a painful transformation into a democratic society based on market economy. The Constitution of 1991 endorsed individual ownership. As the land was denationalised it then became harder to implement state-led urban planning regulations and to secure the stock of well-maintained public spaces. This represented the end of the system upon which the cities were functioning. Thus, the shift towards a market economy contributed to the decline of the well-established framework of urban planning and design which had been founded on the nationalised city-owned public land.

On the other hand, the expectations raised after the advent of the democratic system concerning the active participation of citizens in the planning of public spaces have not been fulfilled. Even today, the only way for the citizens to be engaged in the planning process is during public presentations and public surveys organised in the early phases of an urban plan. There are no other possibilities. There used to be a participatory body to facilitate the participation of citizens, but it was withdrawn. Mayors used to have meetings with citizens to discuss their needs and aspirations. However, in most cases this was done more for appearances' sake rather than to foster efficient participation.



FIGURE 5. Residential blocks in Karpos 2, Skopje. Source: Wikipedia<sup>1</sup>

1. See [upload.wikimedia.org/wikipedia/mk/3/39/Karposh\\_2.jpg](https://upload.wikimedia.org/wikipedia/mk/3/39/Karposh_2.jpg)



**FIGURE 6.**  
The main squares  
in the city of  
Skopje, part  
of the *Urban  
Renewal pro-  
gramme*.  
Source: Olgica  
Nelkovska

Today, in the Republic of Macedonia the development and maintenance of public spaces are managed by the local governments through their annual programmes. Given the positive image that these initiatives transmit to the inhabitants, they are often considered as an effective tool for the promotion of political interests (Figure 6). Thus, mayors seem more and more interested in providing the neighbours (and potential voters) with squares, parks, children's playgrounds, sports fields and so on. Nevertheless, these types of actions are sometimes only for show; in fact, they are often inappropriate and sometimes entirely wrong. The citizens are not truly involved in this process, even though they are obliged to be present in public hearings.

### **URBAN PHENOMENA CHARACTERISING THE DECLINE OF PUBLIC SPACE IN ALBANIA AND THE REPUBLIC OF MACEDONIA**

In recent years, due to the lack of power, the lack of will of the public administration and the downturn in public engagement in both Albania and the Republic of Macedonia, a process of degradation and shrinking of the public space is taking place which is characterized by the following phenomena:

1. **LACK OF PUBLIC SPACES WITHIN THE NEW NEIGHBOURHOODS/RESIDENTIAL BLOCKS.** Nowadays, in the new neighbourhoods that are undergoing intensive processes of construction, public spaces do not comply with current regulations: their surface has been reduced, they are not properly designed, and they are poorly equipped. In fact, developers are not willing to invest in public space, even though it may contribute to increasing the market value of their property. On the other hand, municipalities do not play an active role in reinforcing the obligation of private investors to contribute to the provision of public space or even in raising awareness of the benefits that quality public space would have on the property value.
2. **LACK OF MAINTENANCE AND SECURITY; INCREASE OF VANDALISM IN PUBLIC SPACES.** The public spaces in both old and new neighbourhoods, and even in public buildings such as schools, cultural or health centres, are under constant threat because the community and the local governments are losing interest in maintaining them.

Due to the loss of expert staff and financial support, the public communal enterprises cannot allocate resources to public spaces and hence no longer feel responsible for their maintenance. On the other hand, the municipality is predominantly investing in large representative public spaces. Thus, due to the absence of maintenance and the lack of adequate urban furniture and greenery, people are no longer using them. Moreover, there are concerns about insufficient street lighting in spaces

surrounded by high-rise buildings which makes these spaces appear unsafe and dangerous, particularly during the night. This increases the chances of vandalism, which in turn accelerates decay.

3. **CHANGING THE USE OF PUBLIC SPACES.** A common trend in all cities is the change in the use of public spaces, from recreational to residential. This makes these areas susceptible to commercial development.

In the Republic of Macedonia, most of the public spaces are owned by the state and can be easily transferred to private owners with the excuse that the municipalities and the state need the money for other activities. Thus, there are cases in which green areas within residential complexes, so-called urban greenery, become parking spaces or building plots. This situation is repeated in many public residential complexes in which new buildings and parking areas have been inexplicably added. The streets, which were once attractive public spaces, have now been transformed into traffic lanes, which has meant an increase in the surface dedicated to vehicles at the expense of the pedestrian areas.

In Albania, the change of use of the public spaces can be explained in two ways. Firstly, due to the change from the communist to the democratic system, many public spaces are now privately owned. In light of the inability of public administrations to preserve public spaces via expropriations, and because of the emergent need to fulfil increasing housing demands, the owners exercise pressure to change the land use. The result is the gradual occupation and shrinking of public space. Secondly, during the transition years, many residential buildings were illegally built on public space. Most of them are still subject to a regularisation process and cannot be demolished without expropriation. Therefore, a long bureaucratic process is necessary to recover the occupied public spaces. Simultaneously, the free market has conquered public space, particularly in Tirana (Stiller, 2010) and many private activities such as shops, bars, and retailers have been placed along the roads, in public spaces or inside the neighbourhoods. In recent years, a gradual process of reappropriation of public space can be observed. One of the first successful attempts in this direction was the revitalisation of the area next to the Lana River, where a series of illegal buildings were removed so that public space could be regained for the community.

4. **FENCING OF THE PUBLIC SPACES.** A large number of public spaces are being fenced and, with that, they are losing their public character. Kindergartens and schools are often surrounded by high fences, which are usually locked after working hours. Once, they were the centre of the neighbourhood activity in the afternoon and evening hours. Understandably the biggest concern is safety. University campuses as well as other public buildings such as religious and cultural centres, are

also fenced, even though they were meant to be free and open public spaces. Rather than being open spaces, these fenced public buildings appear as enclosed enclaves.

5. **POOR DESIGN OF PUBLIC SPACES.** Nowadays, public areas are being constantly refurbished. Changing the pavement, adding light fixtures and water fountains are easy ways to make everyone see that the public space has been improved. However, mistakes are often made: Soft green areas in residential areas have been replaced by hard concrete surfaces; playgrounds have been rebuilt by placing soft rubber plates over a concrete base, and then filled with equipment that is inappropriate for the age of the most frequent visitors. In many cases, they have been replaced by parking lots.
6. **LACK OF SECURITY AND ACCESS DUE TO THE WALLS SEPARATING PRIVATE PROPERTIES.** A large number of private houses, especially within self-constructed areas, are protected with high surrounding walls. This physical separation has a significant impact on the access and safety of public space, in particular in neighbourhoods characterised by narrow, irregular street patterns.
7. **ILLEGAL OCCUPATION OF PUBLIC SPACE.** Because of the lack of control from the local authorities, public spaces have been illegally occupied by private residential buildings (new ones or additions to existing ones) or by commercial activities. Recently, they are being used as improvised parking areas. Thus, their original recreational purpose has been lost. As a result of the recent regulatory process, some buildings have been legalised, while others have been demolished, thus recovering part of the public space. In some neighbourhoods, particularly in the city centre, municipalities have carried out revitalisation projects which usually help to change the image of the city, rather than responding to community needs. The involvement of the community in these projects could bring about a more substantial transformation, subsequently attracting a broader support.

### **COMMUNITY PARTICIPATION CASES IN THE BALKANS**

Over the past eighteen years, our universities have been involved in community development projects in Albania and in the Republic of Macedonia which have been carried out within the framework of academic programmes and applied research projects. These initiatives have contributed to raising awareness of the importance of protecting public space and the need to count with the community to achieve this goal. It has been our belief that architects, academia, and civil society should not act in isolation, excluding community from decision-making. Rather, we believe the active participation of citizens is necessary to respond to the challenges of sustainable urban development.

### Community Participatory Actions and Projects in Albania

In Albania, Co-PLAN,<sup>2</sup> a non-governmental organisation, has initiated a programme to protect the urban environment and green spaces. Co-PLAN is a strategic partner of Polis University. It helps the University in its commitment to involve students in applied research work in the field of community participation. Staff and experts of Co-PLAN, together with students and teachers, carry out initiatives with the purpose of bringing the concerns of the community to the political agendas: Organising public performances, “urban provocations”, open workshops, and debates with the participation of experts, governmental representatives and local communities.

An early experience of community participation in Albania was undertaken by Co-PLAN between 1995 and 1997 in Breglumasi, an informal and chaotic neighbourhood near the north-western part of Tirana. This neighbourhood was part of an informal settlement which arose as a result of the massive inner migration in the early 1990s. Actions needed to be taken because of the difficulty to access the area due to ownership conflicts. Through the contribution of Co-PLAN, along with other actors working with the community, the neighbourhood became a liveable place. This was achieved by involving neighbours in small-scale actions such as moving fences or straightening walls; actions which were adopted following a bottom-up decision-making process. Later on, in 1998, this early experience of community participation was acknowledged by the *United Nations Development Programme* (UNDP) and the World Bank for being a positive example of the integration of an informal area into the urban structure of Tirana; an integration which was intended to comply with the requirements of infrastructure, water supply, and public services provision. The Breglumasi pilot project became a reference model of urbanisation for other informal areas of Tirana.

### Community Participatory Actions and Projects in the Republic of Macedonia

In the Republic of Macedonia, the local authorities are undertaking a series of actions related to the planning and construction of public spaces. For example, the municipality of Karposh in Skopje has created a department specifically dedicated to the design of public spaces. The Municipality Centre of Skopje, with the authorisation of the department for land regulation, construction and environmental protection, is

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2. Co-PLAN is a non-profit organisation that has contributed to sustainable development since 1995 by enabling good urban and regional governance, tackling key environmental issues and influencing policies, while promoting community participation. Based in Tirana, Albania, it has developed a network at a national, regional, and international level, including many of the local government units in Albania, as well as numerous organisations in the Western Balkans Region, in Europe, and beyond.

building playgrounds and small squares, among other facilities. Aerodrom is one of the most active municipalities in furnishing squares, fountains, playgrounds, and so on. Similarly, other cities, such as Makedonska Kamenica, Pehchevo, Delchevo, Ohrid, Kichevo, and Gostivar, have developed programmes aimed at increasing the quality of the public spaces. With this purpose, municipalities have organised public competitions, have launched public procurements, or have conducted the design directly by themselves. However, communities are not being involved in this transformation process.

Universities and civil society groups are sensitive to the ongoing urban transformations that might undermine the quality of public spaces. To prevent this risk, they are collaborating with the municipalities in projects aimed at involving the community in the transformation processes. One such example is the cooperation between the municipality of Gjorche Petrovand and the Faculty of Architecture from Skopje. Students carry out designs for the public spaces as part of the curriculum. A number of designs have been prepared within the “Urban Design Studio” in cooperation with the municipal centre Public Spaces in Skopje. An increasing number of workshops<sup>3</sup> are being organised on the topic of public spaces, as part of international research platforms with the participation of citizens, students, and NGOs. It can be contended that, in the Republic of Macedonia, academia is playing a key role in involving citizens in the urban transformation processes.

### Stages of Participatory Processes

These positive experiences of community involvement in Albania and in the Republic of Macedonia show a way to foster civic engagement in the revitalisation of public spaces. Based on our experience, this engagement can be achieved along this sequence:

1. **MAKING PEOPLE TAKE THE INITIATIVE.** It is important that the community itself points out the places that need urgent requalification. As mentioned above, in Albania and in the Republic of Macedonia there are only two levels of community participation, that is, at the informing

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3. Those workshops were carried out as part of the following projects: *Revival of City Squares in Balkan Cities*, which was carried out by the Coalition for Sustainable Development (CSD) from Skopje (Macedonia), Co-PLAN and the University Polis from Tirana (Albania) and Expeditio—Centre for Sustainable Spatial Development from Kotor (Montenegro); *NAUTILUS CONSTRUCT: Building An Open Stage In Skopje*, led by the City Creative Network (CCN) from Skopje together with TEN Zurich; *The Initiator, the Artist, his Advocate, and the Urbanist (IAAU)*, a collaborative project funded by the Balkan Arts and Culture Fund (BAC) and supported by the European Cultural Foundation (EFC) which was implemented by the Coalition for Sustainable Development (CSD) from Skopje, Co-PLAN, the Institute for Habitat Development, from Albania, Urbego, a platform for Young Planning Professionals (IFHP) from Denmark, School of Urban Practices (SoUP), from Serbia, and Blok 74, from The Netherlands.

and consultation phases. To start these bottom-up processes, urban provocations can play a role in the creation of a culture of participation. Urban activism performed by students served to awaken the community from their passive state, showing that with modest actions—for instance, cleaning green spaces, greening unused spaces, and improvising sitting areas—they can enhance the quality of their environment. Such provocations can also help to motivate citizens to collaborate on the solution of particular problems. Once the initiative has started, then the next levels of interaction with the community—consultation, inclusion, cooperation, and strengthening—can follow. At the core of these participatory actions lies the need of the community to claim its role and responsibility in the city-making processes (Ciro & Dajko, 2014).

2. **UNDERSTANDING THE LOCALITY.** It is necessary to observe the existing conditions of a community to find out its transformative potential. Local habits, needs, and opportunities can be identified using different techniques: Open discussions with the inhabitants, surveys, observations, interviews, and conceptual maps. Residents can best define the characteristics and possibilities of the spaces they inhabit. They need to be actively involved in this stage, working together with students and experts in the process to identify the needs of the community.
3. **ENGAGING PEOPLE.** In order to foster citizen participation, it is important to create a formal structure of the community. This can be achieved by creating residents' groups with their respective community leaders, and by bringing respected stakeholders such as educators, health care providers and parents to these groups. Through group actions, a community could develop strategic plans which can serve to facilitate the dialogue between the different stakeholders.

Increasing the sense of belonging of the different actors involved in a participatory process helps to improve the results. This can be achieved by assigning tasks to suit each participant. For example, assigning a leading role to young members might be helpful since they embody an energy that can be used in benefit of the community. The engagement of the young residents in open forums, seminars and round tables could also be a good way to attract more participants. Furthermore, involving the media, either mass or social media, helps to extend the scope of the community's initiatives.

4. **DEFINING A SHARED VISION AND AGREEING ON A COMMON PLAN.** After ensuring community engagement, a common programme can provide a joint vision furnished by the participating actors: Community, local or central governance, civil society, academia, and professional experts, among others. Such a programme would be the outcome of a long, complex, technical process of data collection (including images, documentation, interviews, and so on), which helps the involved parties to

discuss ideas and make proposals. Probably, this is the most difficult stage of the process since not all participants, including people living in the area, have the same ideas, interests, and background.

5. **IMPLEMENTING THE ACTIONS.** During the preparation of the design, citizens can give their comments and feedback in public hearings. After this phase, they can also engage in the execution of the project. It may even be the case that a part of the community offers financial support.

Following the aforementioned stages, it is possible to accomplish a transformation of shared spaces in dialogue with the community. A transparent step-by-step process prevents the unfortunate cases of potential manipulation, bribery, and passiveness likely to happen in a participatory process.

## **CONCLUSIONS**

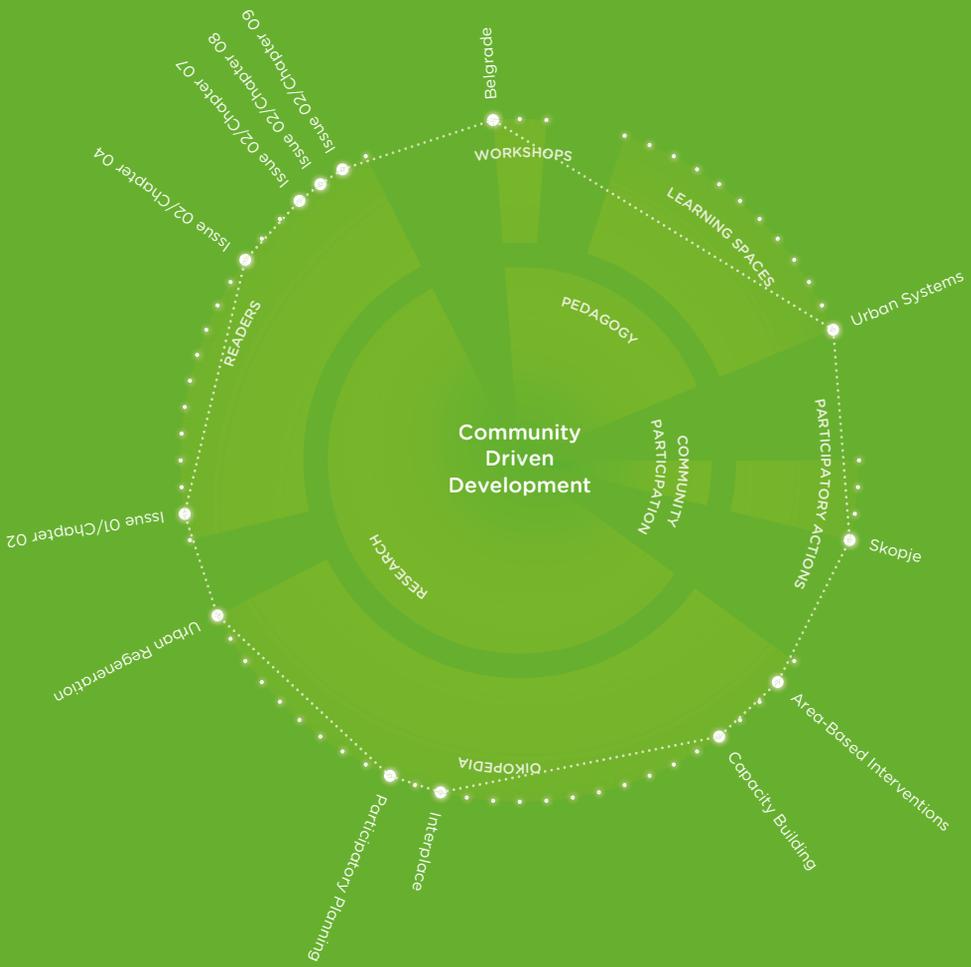
Public space in post-communist countries has undergone many changes. Decades of deprivation of private property have given rise to an individualistic society, which perceives public spaces as areas to be used for private purposes. A way to oppose this trend in the privatisation of public space is by encouraging community participation. Successful experiences have demonstrated the value of participatory actions that promote civic engagement in the design of public space by acknowledging and devising a role for citizens. The citizens can be key players in policy and decision-making processes concerning the planning, building and management of public spaces. As a matter of fact, citizens do not just have the right to be part of these processes, but they also have the responsibility and obligation to participate.

In the context of the Balkans, despite several attempts to create links between community and decision-makers, there is still a gap which professional organizations, higher-education institutions and civil society can help to bridge. Besides being responsible for designing plans, architects and planners are expected to assume a leading role in the process that brings together the different actors involved in community development projects. Universities can play a catalytic role to supersede the self-regulated system inherited after the fall of the communist regime, by being involved in community planning projects that bring together multiple actors, fields and interests.

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# **Can Top-Down Policy Meet Local Diversity in Urban Transformation Processes?**

**Jenny Stenberg, Maria Zwanenburg, Lasse Fryk**

## INTRODUCTION

Since the 1990s, participation has become part of mainstream policy for urban transformation in Europe and developing countries. National governments have adopted community participation as part of their urban transformation strategies, both in renovation and densification processes. Participation is high on the agenda because politicians and public administrators consider it to be of great value when citizens serve as key actors in governance processes aimed at developing the city (Swyngedouw, 2005; Faga, 2006). The aim of these participatory policies is to facilitate the direct inclusion of the voice and knowledge of citizens in public policy. The process of changing the balance of power in the relationships between governments and citizens with greater participation is often referred to as *community empowerment* (Andrews, Cowell, Downe, & Martin, 2006).

In this chapter, we will reflect on two community participation models which can unlock the transformative potential of participation in urban development processes. In this context, transformative refers to the potential a participatory process has to shift the existing power balance between citizens and authorities, that is, the capacity to empower. First, the *Community Driven Development* model, a large-scale, national government-led participatory development policy that is implemented by an increasing number of governments throughout the world. Second, a locally based, small-scale model being implemented in a stigmatised suburb in Gothenburg called Hammarkullen, whose objective is to develop new types of relationships between city institutions and inhabitants.

## TRANSFORMATIVE PARTICIPATION AND THE IMPORTANCE OF INSTITUTIONAL CHANGE

There is extensive academic debate on the purposes and the outcomes of citizen and community participation. In this section, we will introduce *transformative participation* within this debate.

In her classical text *A Ladder of Citizen Participation*, Arnstein (1969) ranked the different degrees of citizen participation in a ladder to show when and by who decisions in planning processes are made. The lowest level is *manipulation*; the highest, *citizen control*. At the lowest level, power and decision-making remain with the authorities, while at the highest level a power shift between citizens and authorities takes place in favour of the citizen.

Dalal-Clayton and Bass (2002) developed a similar classification where *interactive participation* is seen as the second highest level of participation and *self-mobilisation* is the highest. Interactive participation takes place when:

**People participate in joint analysis, which leads to action plans and the formation or strengthening of local groups or institutions that**

**determine how available resources are used. Learning methods are used to seek multiple viewpoints. (Dalal-Clayton & Bass, 2002, p. 180)**

Finally, White (1996) classifies the forms of participation according to the interest of the initiators (authorities) in the process. She identifies four types of participation: (a) *nominal participation* to legitimise decisions already taken, (b) *instrumental participation* to increase efficiency in project implementation, (c) *representative participation* to create sustainability and avoid dependency, and (d) *transformative participation* to promote empowerment which in turn enables people to make their own decisions, work out what to do and take action (White, 1996, pp. 8-9).

On comparison of the three identified classifications, we can concur that White's *transformative participation* is similar to *interactive participation* as defined by Dalal-Clayton and Bass, insofar as empowerment leads citizens to take actions, and that both would correspond to the highest level in Arnstein's ladder, that is, citizen control. Among the three, we have chosen White's transformative participation to describe the process of power shift between local government and citizens, since the term "transformative" best describes the changing relationship between citizens and government.

Another way of approaching transformative participation is to distinguish between first and second order change, as introduced by Petit and Olson (2013). First order change is suitable for ordinary and well-known problem solving situations while second order change is more appropriate for complex problems. These concepts stem from Bateson (1972) who argued that reality is a semantic and social construction and there is no neutral and objective world outside to be observed. Petit and Olson contend 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 this social construction is undertaken collaboratively, as in a participatory process, developing and promoting trust and confidence among participants is paramount. Moreover, this construction process should encompass all participant's perspectives and should assure that these are taken into account.

In the debate about the transformative character of participation, some argue that strengthening participatory processes would be sufficient to unlock its transformative potential. Others argue that institutional change towards more responsive and accountable government institutions is a precondition for transformation to take place (Gaventa, 2004). Cornwall (2008) points out that the intentions of the initiators of participatory processes do not always determine the outcomes. The activities of *informing* or *consultation* (both assigned to "tokenism" in Arnstein's ladder) could be the spark for self-mobilisation. On the other hand, transformative participation may fail to fulfil the expectations citizens have about the obligations that the state has to them. As Cornwall contends: "When 'empowerment' boils down to

‘do-it-yourself’, and where the state abnegates its responsibilities, then resistance rather than enthusiastic enrolment might well be the result of efforts to engage citizens” (Cornwall, 2008, pp. 272-273).

An important agent in institutional change may be the opening of *black boxes* (Callon & Latour, 1981). A black box refers to modes of thoughts, habits, forces and objects, which are present in the relationships between institutions, organizations, social classes and states (macro-actors) and the individuals and groups (micro-actors) that interact with them. The difference between macro-actors and micro-actors lies in the capacity each one has to build power relations. A macro-actor operating under the premises contained in a black box does not need to renegotiate its content with the micro-actors, rather it takes for granted the assumptions hidden in it. Callon and Latour (1981, p. 286) conclude then that “macro-actors are micro-actors seated on top of many (leaky) black boxes.”

If institutions (macro-actors) follow a strategy of openness and transparency, that is, of opening the black boxes, this can be an important step in enabling the citizens (micro-actors) to change usual procedures, for example in planning, and thus make a real contribution in the search for solutions to serious contemporary social problems.

In the following comparison between the top-down, national government-led *Community Driven Development* and the locally initiated participatory experience in Hammarkullen, we will discuss the extent to which each approach contributes to the opening of black boxes.

#### **COMMUNITY DRIVEN DEVELOPMENT: A NATIONAL GOVERNMENT-LED APPROACH**

For decades now, community participation has figured in development policies and studies. For a long time, it was propagated and implemented by non-governmental organisations as an alternative to the common state-led centralised policies. During the 1990s, the neoliberal development paradigm moved from a market-oriented towards a more people-centred philosophy. The *World Development Report of 2000/2001* (World Bank, 2001) mentioned community participation and empowerment for the first time, besides the usual call for economic growth. The most recent development in this line is *Community Driven Development* (CDD), promoted by the World Bank and several other donor organisations and adopted by the national government of several countries. CDD has been defined in the following terms:

**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. CDD is a way to provide social and infrastructure services,**

**organize economic activity and resource management, empower poor people, improve governance, and enhance security of the poorest. (Dongier et al., 2002, pp. 303-304)**

CDD supports transformative participatory process through the transfer of financial resources and decision-making power to community organisations in low-income settlements. Bennett and D’Onofrio (2014, p. 29) state that “Community-driven development aims to bring about change at the individual, group, institutional and systemic levels”. CDD projects are expected to lead to the empowerment of the poor and to increase their social capital. The question is whether returning to these population segments the decision-making power and control over public resources leads to a transformation in the power relation between authorities and less favoured urban citizens. Moreover, there is no evidence that the support organisations that Dongier et al. (2002) refer to (NGOs or the private sector) in their definition of CDD are *demand-responsive*. We will further address this question in the following discussion about institutional change and the notion of community.

### **Institutional Change**

The issue of power differences in participatory processes is complex. Power differences occur not only between government institutions and communities, but also within each of them. Community development projects have often been criticised for this neglect, however addressing this issue in policy design proves to be difficult. For a long time, the debate on community participation has very much focused on methodology, that is to say, on how to implement participation (Cooke & Kothari, 2001). Guidelines and sourcebooks are important instruments in the implementation of participation policies. Guidelines exist on a national level but international organisations also produce manuals and recommendations. *The World Bank Participation Sourcebook* (The International Bank for Reconstruction and Development/The World Bank, 1996) is one example. However, by focusing on the “how to”, the “what for” is often neglected. Cleaver (2001, pp. 38–39), referring to Biggs (1995), observes that traditional participatory methods fail “to address issues of power and control of information and other resources and provides an inadequate framework for developing a critical reflective understanding of the deeper determinants of technical and social change.”

Once they have experience with CDD, communities themselves demand a more responsive government (Bennett & D’Onofrio, 2014). Gaventa (2004) is of the opinion that waiting for community exigency to occur is not sufficient. Direct intervention in institutional change is also required in order to reach a stage of transformative participation. Given this, the earlier mentioned black boxes (Callon & Latour, 1981) have now to be reconsidered.

A signal of the opening of a black box could be a change in position of those government officials that actually work at the interface with local communities. Their role is crucial, since they inform and interact with citizens and facilitate the participatory process. For local communities, they are the face of the government. When institutional change takes place within governments, favouring interaction with local communities, it is then reflected in the position and authority of these facilitators. In general, little attention has been paid to what happens at the interface between community and government institutions or to the civil servants that operate at this interface. As Vasan (2002, p. 4125) observes “development literature has surprisingly neglected the characteristics, social conditions, perceptions and attitudes of field-level implementers of policy.”

According to Mansuri and Rao, this neglect is also apparent in the implementation of CDD projects:

**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, break through 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 generalizable evidence on their role. (Mansuri and Rao, 2004, p. 24)**

### The Notion of Community

Many participatory development projects see the community as a homogeneous, egalitarian group, whose members make use of their social capital to collectively express their views and needs. This concept of a community is one that has much been criticised on frequent occasions. Cleaver shows how this assumption of commonality of interest among individuals obscures the complex reality of a community “as the site of both solidarity and conflict, shifting alliances, power and social structures” (Cleaver, 2001, p. 45). In another study, Cleaver (2005) also shows that the assumption that poor families have equal stocks of social capital might be erroneous. Power differences between individuals and households often create relations of dependency. Similarly, Mansuri and Rao (2004) note that dependency on powerful groups prevent people from genuine participation. They may consider that the insecure outcome of a participatory process is not worth the cost of losing a proven beneficial relationship.

In their study on *Community Driven Development* in Indonesia, Dasgupta and 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 their own interests. An alternative is elite control, whereby elites decide on projects that benefit a majority, or even the poorest. However, these authors additionally note that more democratic decision-making does not always lead to inclusion of the poorest.

Community participation is often associated with decentralised decision-making and with the elicitation of local knowledge. In theory, local knowledge is rooted in a specific social, cultural and historical milieu. As circumstances are diverse, so is the local knowledge and the ways in which it may contribute to decision-making. However, when the CDD programme was implemented in Indonesia, we saw that the community organisational structure—a structure that each community should be able to benefit from—had to be elected following rather uniform guidelines. One could ask to what extent a uniform organisational structure that has to be applied in a similar way in all communities can actually reflect the existing local variations in culture and knowledge. The reason for approaching communities in a uniform way may rest with the practical capacity of a national government to deal with diversity. There is a trade-off between the efficient implementation of a nation-wide participatory programme and the inclusion of local diversity in this programme. The difference in organisational culture between community and government bureaucracy may also play a role. Establishing “community structures that most clearly mirror bureaucratic structures” (Clever, 2001, p. 40) is therefore the best solution. Finally, one could also question how the community can contribute to innovative development, when it cannot take advantage of its own potential because the prevailing power structures end up determining their local needs and corresponding actions.

### Conclusion and Points for Discussion

The analysis undertaken in the previous sections is based on a limited review of texts on community participation and particularly on CDD. Is CDD a form of transformative participation? If indeed this were the case, we could have expected to know more about the opening of the black box. Thus, the question remains: What happens at the interface between government and communities and within communities in the process of CDD implementation? In fact, we could contend that the dynamics at the interface between government and communities are unknown in a government initiated participatory programme, like CDD.

On the other hand, we know more about the effect that more democracy and empowerment have on communities. CDD programmes, as described by Dasgupta and Beard (2007), present a variety of outcomes, not all of which have a transformative character. On the contrary, given the heterogeneous nature of communities and the power differences that

exist within them, often—although not always—the poorest and most vulnerable among the population become excluded. Elite dominance and elite capture is a recurrent phenomenon in community participation. Therefore, we can say that CDD does not necessarily imply transformative participation, nor does it necessarily lead to a second order change. This brings us to the following point for discussion: How can government and institutions that deal with community participation actually take in consideration local needs and circumstances?

In the next section, we will describe a planning experience in Sweden—*Urban Empowerment in Hammarkullen*—which turns the issue of community participation in planning upside down: What if citizen participation is the starting point instead of the end point?

### **URBAN EMPOWERMENT IN HAMMARKULLEN: A BOTTOM-UP, EXPERIMENTAL APPROACH**

Contrary to CDD, the experiences in Hammarkullen represent a bottom-up approach to community participation and empowerment. This is not a drawing table prescription, like CDD, but an organically grown action research project.

The Hammarkullen initiative started as a response to the need to change renovation practices in Sweden, most specifically, those concerning the existing housing stock built in the 1960s and 70s. Currently, in Sweden, the work to renovate the 800,000 apartments which date back to this period is pending and will commence soon. At the outset, neglected maintenance has led to the need for renovation. There is also a considerable need to improve energy performance in order to meeting the climate objectives set up in global agreements. However, there are no resources set aside in renovation funds to upgrade the apartments. Whether this is because profits have been either incorrectly distributed or misspent because of bad administration is a matter which is still debated among scholars.

The renovation of these apartments is often also exposed to other problems. There are many areas like Hammarkullen, which suffer from a general lack of democracy and therefore pose a risk for gentrification and may even accentuate existing levels of social exclusion. Neglected maintenance has led to these areas being inhabited by socially excluded segments of the population. Consequently, these neighbourhoods often carry a stigma, significantly undermining the potential of the inhabitants to become community builders. With these issues in mind, the following considerations are needed to move forward: What must be put in place in order to adapt planning procedures to this reality? And, how can planning include these people in a dialogue about how the city should be developed? These are some of the challenges our society faces today.

In response to this situation, in 2010 the University of Gothenburg together with Chalmers University of Technology established a centre<sup>1</sup> in the suburb of Hammarkullen (8,100 inhabitants) with the purpose of facilitating access to higher education to residents with a foreign background and less economic resources. By intertwining research, education and civil society through community outreach,<sup>2</sup> the centre wanted to enable inhabitants to become knowledge producers in academic work. Simultaneously, their activities aimed at helping involved teachers develop higher education to better adapt it to the needs of the local society (Stenberg & Fryk, 2015). This discussion of how local work can influence norms, laws and regulations is particularly relevant. Top-down structures give rise to a society with a serious lack of democracy and this does not encourage citizens to act or take responsibility. Systemic change driven by co-creation and co-planning can be a clear indication that the authorities involved really have been responsive to the dialogue they invited citizens to (Stenberg, 2013). A changed balance of power namely implies new relationships between local stakeholders. It is not self-evident that municipal representatives really want to be part of this change of relationships, even if they may be obliged to do so in the policy documents. Then, they may choose to keep black boxes sealed (first order change), as it is faster and easier (not forgetting that if all tasks were seen as challenges to power, it would be too much of a waste of energy and financial resources). However, as research projects fundamentally exist to foster the development of society, we found it appropriate to investigate the circumstances which facilitate this kind of learning process, in which the balance of power between inhabitants and professionals develops in the direction of changing the balance of power.

### Learning Lab Hammarkullen: Codesigning Renovation

The experiences in Hammarkullen show the importance of approaching a local area with a genuine desire to share power. In the case of housing and the regeneration of housing areas, in particular, there is an increased awareness of the need to develop more participative renovation policies. In our current research, we investigate how this may be carried out. Precisely, the purpose of the programme *Sustainable Integrated Renovation*, funded by the Swedish research programme *Formas* (2014–2018), is to help the community by developing knowledge and awareness of sustainability in order to

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1. See [urban.gu.se](http://urban.gu.se), [chalmers.se/urban](http://chalmers.se/urban)

2. See [urbanempower.se](http://urbanempower.se) for a description of the first experience of such an integration since the centre started. Hammarkullen was chosen to start a common higher education centre in 2010 because teachers and students from the Department of Social Work, Gothenburg University, had been successfully collaborating with the municipality for the last 25 years. Chalmers University joined with an annual place-based Master course in 2008 as well as other courses taking place in the area on temporary basis.

radically change building renovation practice at the national level through collaboration and participation. The programme involves researchers from different fields and its final aim is to propose innovative renovation models that can be widely used on a large scale.

One of the Living Labs in the programme—*Learning Lab Hammarkullen: Codesigning Renovation*—is carried out in the suburb of Hammarkullen where buildings with 900 rented apartments will soon be renovated.<sup>3</sup> The goals of this Learning Lab are: (a) developing methods for integration of knowledge from the tenants early in the renovation process; (b) discussing the different lifestyles involved in the context of sustainable renovation with all the actors, and (c) finding forms for tenants to participate in the decision-making process in renovation. Subsequently, the programme aims at bringing about a power shift through a collaborative learning process. The involved actors are academics, property owners (Bostadsbolaget, a municipal housing company) and The Swedish Union of Tenants. All actors meet on a regular basis to plan, implement and to learn one from another through these experiences.

One obvious way forward for a transdisciplinary<sup>4</sup> research project like the *Learning Lab Hammarkullen*, is gathering participants in a room managed by the local actors, taking advantage of the experience accumulated by several of the participants in previous area-based development projects. Still, these activities have to be financed and scheduled in a shared time plan. A partnership between the local community and higher education institutions has made it possible that every year, approximately 25 full-time master students participate in the Learning Lab over a three-month period. Their assigned task is to create design proposals for the area, based on dialogues with the inhabitants.<sup>5</sup> The tasks for these students have been collaboratively devised by teachers, researchers, and local actors so that their outcomes could be useful both for the community and for academic purposes. In the context of these learning process, every year students dedicate time to communicating with inhabitants in a structured way, with supervision, and on themes which are valuable for ongoing research projects.

### Transformative Participation and Systemic Change

A learning process in which employees from the local housing company and the tenant organisation participate together with academics, empowers inhabitants to understand and to challenge the content of the black boxes. An example of such a black box is the dialogue between tenants and property owners in the course of a building renovation process. When

3. See [learninglabhammarkullen.se](http://learninglabhammarkullen.se)

4. In short, this means to develop academic knowledge in collaboration with actors from different disciplines and from various stakeholders in society. See Hadorn et al. (2008).

5. See [suburbsdesign.wordpress.com](http://suburbsdesign.wordpress.com)

that black box is opened it reveals what happens when tenants, despite their legal rights, are ignored (which is often the case). Rent prices have increased by as much as 65% due to the renovations of the apartments, even though most of the tenants do not want them. Furthermore, as part of the research project, tenants are empowered to reconsider other black boxes. For example, the rent negotiation process is not as transparent as tenants would like it to be. It is also based on a utility value system, a system which compares nearby rent levels, which is a black box in itself. Additionally, it is a black box that measures which levels are considered to raise the living standard and subsequently the rent. There are some factors which always influence the rent (e.g., security door to the stairwell) while other amenities do not (e.g., replacement of pipes). On many occasions, the owner does not acknowledge this black box and keeps it sealed in order to make as much money as possible.

With help from these learning processes, the actors involved in the research project are then able to access a second order change transformation. This involves identifying the institutions or organisations and the systems with which they operate, in the building renovation process. In Hammarkullen, we have discovered three systems:

1. **THE MODEL FOR LEGAL TENANT DIALOGUE.** This national model has been developed by The Swedish Union of Tenants which signs contracts with property owners before each renovation. We have had such a dialogue model for a long time and it has recently been updated. After the last changes, it delegates significantly more power to the tenants. Even so, there is still considerable room for improvement. As an active participant of the research project, the Union participates in the learning process and drives the development of the new model at the same time as they are applying it.
2. **THE PROCESS OF LEGAL TENANT DIALOGUE IN HAMMARKULLEN.** The Swedish Union of Tenants and the property owner Bostadsbolaget will soon start a dialogue with the tenants of the 900 apartments to be renovated, using the above mentioned dialogue model. As both are partners in the research project, they have the possibility to bring about a second order change while carrying out this process (developing the process while working on it). Thus, we await the future outcomes of the project to assess the results.
3. **SOCIALLY RESPONSIBLE PUBLIC PROCUREMENT.** Public organisations in Sweden are obliged to make market-oriented procurements when building. As Bostadsbolaget is a partner of the research project, they have the possibility to contribute to a second order change while designing the new procurement conditions for the renovation in Hammarkullen (e.g., including the obligation to employ people from the area). Again, we are waiting for the results of this project to learn from them.

Hence, these are three examples that show that second order change can take place thanks to the transformative participation of the actors involved in community planning. It is important to note that this kind of participation requires learning processes which include the relevant local actors (civil servants, professionals, employees). In order to carry out a true transformative process, interaction between local inhabitants is not enough. They also need to have clear communication channels and proactive dialogues with relevant local actors so that the knowledge they possess contributes to transforming the existing systems.

Additionally, there is a fourth system amenable to be changed which was revealed as a result of the activities in the *Learning Lab*, thanks to transformative participation:

4. **INNOVATIVE RENOVATION MODELS.** The research programme will result in renovation models covering all aspects of sustainability. The actors in the *Learning Lab Hammarkullen* will contribute to second order change in the research programme: Researchers from various disciplines will help to bring the experience of the actors involved into a renovation model, and will facilitate its implementation in society.

In sum, the *Learning Lab Hammarkullen*, with its transdisciplinary approach, will contribute to the creation of a new national policy for building renovation projects. Without a transformative participation, the research project would probably have concluded with the renovation of these housing areas built during the 1960s and 70s, and thus the actors involved in the participatory process would not have been aware that the rent increases contributed to the social exclusion of vulnerable people. The strategy of opening up black boxes to give rise to second order changes implies a real transfer of power from authorities to inhabitants while placing the emphasis on shared learning. Altogether, the outcomes of the research project will propitiate a systemic change in the existing power relations governing the building renovation processes.

## CONCLUSIONS

In this chapter, we have discussed the relevance of *Community Driven Development* programmes and their limitations to foster a shift of power from institutions and organizations to individuals and groups due to their lack of transparency and openness. Therefore, CDD programmes may actually be described as a type of black box. Nevertheless, CDD is usually presented as the obvious best solution in community development projects, and inhabitants and other local actors are not given the opportunity to question it.

A lack of interface between government and community is also noticeable in CDD programmes. The creation of this interface, a task which relies

on government employees, requires considerable skills and creativity (Mansuri & Rao, 2004, p. 24). Giving more attention to these frontline workers, helping them to improve their skills, labour conditions and authority, would be a first step towards opening the CDD black box.

A consequent application of the principles of transformative participation could lead to systemic changes in national policies aimed at supporting participation in urban transformation. However, we still do not know if a widely accepted national policy—for example, about housing renovation—would actually favour sustainable building renewal everywhere, as intended. In this regard, some questions remain to be answered, such as: Can detailed top-down policies really meet local diversity in urban transformation processes? Is it not in the very nature of top-down policies and strategies to be challenged and changed for the sake of diversity? Additionally, we pose this question: Can governments produce a set of guidelines that will facilitate a collaborative learning process in urban transformation instead of designing an explicit and detailed participatory policy?

We believe that with this way of thinking it may be possible for governments to formulate top-down policies and, at the same time, initiate fruitful strategies which will lead to increased citizen participation in urban transformation processes, for example, in the renovation and densification of housing areas. A greater engagement of citizens will help to face current serious societal problems, and to continue developing new top-down policies and strategies on urban transformation. With this said, there is a great need for a similar approach in other European countries where there are areas in need of investment and renovation, which suffer from a general lack of democracy, a risk of gentrification and increased social exclusion, like the case of Hammarkullen.

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# **Public Participation in the Regeneration of Large-Scale Housing Estates**

**Sandra Treija, Uģis Bratuškins, Edgars Bondars**

## INTRODUCTION

Over the years, the participation of residents has become an indispensable instrument to facilitate a sustainable bottom-up implementation of housing regeneration initiatives. Participatory processes are expected to contribute to identifying the needs of the people, empowering local groups, integrating local knowledge systems in the design and planning, reinforcing a variform learning process and to ensuring political support. The list of possible objectives to achieve with these participatory processes (such as generating ideas, identifying attitudes, disseminating information, reviewing and implementing design proposals) can differ at every place and time. Once the objectives of community participation are stated, it then becomes possible to determine the type of participatory process and the people involved (Sanoff, 2005).

Participatory actions in the regeneration of residential areas are of special importance because they strengthen community spirit and consequently intensify the sense of place. The engagement of inhabitants can significantly enhance the efficiency of planning proposals and facilitate other viewpoints that are normally not considered in a formal planning process. If sustainable development is a main objective, then it should include participatory processes to organise and manage the continued demand for effective solutions to housing regeneration (Laws, Scholz, Shiroyama, Susskind, Suzuki, & Weber, 2004).

After the Second World War, large-scale housing estates were built in many countries in Europe. Small-size apartments were integrated into large-scale blocks surrounded by vast green areas. A large part of the population lives in these housing estates which constitutes up to 40 or 50 percent out of the total housing in some of the former communist countries. However, this kind of habitation has become unattractive among residents. Besides, the attitude towards “saving-of-energy-resources” has changed. Nowadays, the challenge is to improve the spatial attractiveness of these areas through urban regeneration programmes which usually have two goals: Firstly, to improve the conditions of buildings; secondly, to increase the quality of the surrounding space.

In post-communist Eastern Europe, participatory planning is mandatory and it is regulated by the planning legislation. However, due to the relatively little experience in participatory planning, its implementation has become a major challenge. Community-driven initiatives, NGO-led actions, as well as pedagogic activities can bring together the different actors involved in housing regeneration processes. Several case studies collected in this chapter exemplify a variety of collaboration models for participatory planning, design and implementation.

## HOUSING REGENERATION AS INTEGRAL PART OF SUSTAINABLE URBAN DEVELOPMENT

Urban regeneration is typically carried out in urban areas undergoing economic development, deindustrialisation, demographic changes,

underinvestment, structural or cyclical employment, political disenfranchisement, racial or social tensions and physical deterioration (Czischke, Moloney, & Turcu, 2015). As part of a sustainable urban development programme, housing regeneration is a complex system of actions embracing spatial and economic development, social and physical improvements, environmental plans, as well as training and education programmes. Since a major issue of sustainable development is the purposeful use of resources, urban and housing regeneration through the reorganization and upgrading existing places is an alternative to planning new urbanisations (Coach & Dennemann, 2000; Turcu, 2012; Balaban & Puppim de Oliveira, 2013).

In many western European cities, housing regeneration takes place in large-scale housing estates, usually publically owned, which are perceived as degraded territories generally inhabited by deprived social groups. Such districts face a range of problems such as poverty and high-crime rates, among others. To avoid the complete degradation of those areas, the responsible authorities have to invest resources not only in the renovation of buildings, but also in the revitalisation of the public open space. In Eastern Europe, where large-scale housing accounts for the majority of the housing market, these large-scale housing states attract a more diverse population. In the communist era, these housing estates were built to differentiate the East from the West (MacArthur, 2001). While in western countries, centrally planned suburbs often began as welfare projects for low-income families, in the eastern countries large-scale housing was more egalitarian since it was also built for the middle-class and educated citizens. However, as these estates deteriorated and a new richer middle class emerged, wealthier families started to move away, subsequently starting the cycle of decline.

#### **PARTICIPATORY PLANNING: FROM TOP-DOWN TO BOTTOM-UP**

Public participation has not always played a key role in urban planning as it does today. A broader discussion on public participation, both among the scientific community and the public began only in the second half of the twentieth century, becoming more intense at the end of the 1980s. Nowadays, planning implies the involvement of inhabitants at various stages, from early conception to the implementation of the measures (Treija, Bondars, & Bratuškins, 2014)

Two basic trends in the urban planning theory and practice of the second half of the twentieth century can be observed with regard to participatory planning (Healey, 1992). One of them advocated the centralised planning practice, entrusting all planning decisions to experts. A second one postulated a greater public participation in planning. These two mutually contrasting trends are characterised as top-down and bottom-up planning (Murray, Greer, Houston, McKay, & Murtagh, 2009).

Public participation in urban planning became more urgent in the second half of the twentieth century as a reaction to the rational planning theories that were prevalent in the late 1950s and 1960s. Rational planning was distinguished by functional and aesthetic uniformity, the application of a mono-functional zoning principle, and large-scale buildings laid out in an open grid that ignored existing urban structures. Planning decisions were based on scientific facts and comprehensive data analysis, thus excluding the participation of inhabitants. This top-down planning increasingly received criticism from professionals and organisations, as well as from the population at large. Critics of the rational comprehensive planning argued that the analytical methods used in the preparation of plans were based on incomplete information. One of the recommendations to deal with the lack of information was to involve diverse interest groups in the planning process. Arguments for the involvement of inhabitants in the urban development were formulated by several authors (Arnstein, 1969; Pateman, 1970; Macpherson, 1973). The impact of public participation on the planning process was reflected in Arnstein's seminal work, *A Ladder of Citizen Participation*, published in 1969. In this paper, she contended that there is a fundamental difference if participation happens as a formally organised routine procedure, or if it aims at transforming the planning process.

Communicative planning appeared in the 1980s and was influenced by the work of various theorists, mainly by Jürgen Habermas (1981). Communicative planning was comparable to the pluralistic urban planning concept that promoted the idea of the inclusion of various interest groups in planning (Davidoff, 1965). One of the participatory planning objectives is to understand the needs of the inhabitants. With this purpose, the authorities can invite representatives of the inhabitants to take part in a decision-making process. This public participation can bring new points of view that the authorities had not considered; it can facilitate equality and help to reach more effective decisions. Additionally, the discussion and advocacy can help to build trust among the players, which in turn helps to reach a consensus (Sakakibara & Genkai, 2005). Nowadays, public participation in housing and urban development is actively promoted by international agencies, as well as from a variety of state and local government authorities.

According to top-down planning practice, the planner is the person who provides a vision of the future built environment. In a bottom-up planning process, on the contrary, a planner is not the only one who plans and designs. The role of professionals in the bottom-up or participatory planning is to coordinate the overall process including the negotiation with residents (Innes, 1998). This requires a capacity to interact with the inhabitants and an ability to explain to them the strengths and weaknesses of a project (Forester, 1989).

Information on decisions related to community-oriented design must be presented to the public in an easily understandable and appealing way.

Therefore, efforts should be made to go beyond the traditional format of public meetings and to find alternative ways to promote inhabitants' involvement. Various activities and types of communication (open discussions, city games, arrangement of exhibitions, etc.) and the involvement of third parties (universities, NGOs etc.) can contribute to attracting the interest of citizens.

One of the possibilities is the involvement of university students in projects in some short-term or small-scale urban regeneration activities. In this way, architecture schools can contribute to the knowledge creation and sharing between all the parties involved. This offers a unique learning opportunity for students, who are given the chance to learn new skills which can be applied later when they, as qualified professionals, facilitate participatory processes.

In some cases, participatory processes can be performed for purely formal reasons only. For example, if the funding of a project is granted on the condition of the involvement of inhabitants, public participation tends to be implemented only formally (Burgers, 2004). Under certain conditions, residents might refuse to participate as they might think that their opinion will not be taken into account (Gustavsson & Elander, 2016).

#### **PARTICIPATORY DESIGN: PERSONALISATION OF SPACE**

In contemporary planning practice, the fields of design and social studies are getting closer to each other. An important goal of the cooperation in development projects is to reach a common understanding of the role of each of the stakeholders in the overall process. The views held by urban planning professionals might differ from those of the residents. For example, the owners of a car might want to park as close as possible to their apartment block, a wish which in many cases is not shared by professionals. At the same time, professionals need to take into account the needs of local residents who know their living spaces much better than they do, and in this vein, they can help them to take better informed decisions. In addition, residents might contribute with their ideas and with their actions to endow their environment with a personal touch.

Cooperation among various stakeholders is particularly important for housing projects. Housing is the built expression of a civilisation, a way of being in the world; it is the manifestation of the relationship between people and their environment. People contribute to giving form to the built environment by constructing, decorating, furnishing, maintaining and restoring their homes. This way, they identify themselves with the places they inhabit. The identification is based on the desire to be the creators of their living space, to live in a personalised environment (Habraken, 1999). During the pre-industrial period, communities and individuals were actively participating in the processes to give form to their living spaces. However, their role has diminished in today's large-scale housing estates. After the Second World War, in most European countries, a significant part of the housing stock was

designed according to similar architectural, spatial and construction principles. The dwellings in these housing estates were once appreciated as modern, spacious, luxurious, and egalitarian. Nowadays, they are often seen as monotonous, uniform, dull, and small (Wassenberg, 2013). Because of this negative image, these districts have not become popular among residents (Dekker & Van Kempen, 2005; Van Kempen, Dekker, Hall, & Tosics, 2005).

Some renovation projects carried out in the former Eastern Germany have attempted to solve the problems caused by uniformity and repetition in these large housing estates, with the participation of inhabitants. Hellersdorf is one of the large estates in Berlin where cooperation with the residents played a key role in the regeneration strategy (Figures 1, 2). In order to meet the needs of the residents, public open space has been transformed into a controlled semi-public open space excluding car traffic. Residents have been involved in the design, development and construction of courtyard utilities. Moreover, on the initiative of residents, private open spaces were created in the ground level of housing blocks, as extensions of the apartments. These spaces improved the level of privacy and gave a personal touch to the homes. This kind of intervention strengthens the sense of belonging to the place, creating ties between members of the community, and protecting dwellings from intruders. In this way, a high-density housing estate was turned into a sustainable part of the viable city with satisfied people, who are actively involved in all stages of participatory design (Williams, 2009).

There are different types of public participation, at different stages and with different levels of involvement. Public participation is not limited to the planning and design phases. The public also have an opportunity to undertake responsibilities when the ideas are put into practice, and even afterwards, when they inhabit the spaces. An optimal participation process would be one which engages the people in the definition of the problem, seeking the solutions, and collaborating in the realisation of the proposals. In the future, we could envisage residents taking a more active role in the maintenance of their living spaces because they will devote more time and material resources to their development. This would lead to greater independence from the housing managers, increase their desire to get involved in the development of their housing and strengthen the ties among the neighbours.

#### **PARTICIPATORY IMPLEMENTATION: REDEVELOPMENT OF PUBLIC OPEN SPACE**

Public open spaces are an essential component of a home (Madanipour, 2003; Belanger, 2007). In large housing estates, public spaces give inhabitants



**FIGURES 1, 2.**  
Personalised open space in Hellersdorf, Berlin. Source: U. Bratuškins

an opportunity to expand their homes beyond the domestic realm, by carrying out some of their daily activities outdoors. However, in most of today's large-scale housing estates it is difficult to make public spaces part of the living space due to social and economic reasons (Treija, Bondars, & Bratuškins, 2012). It may generally be observed that in most of these estates public spaces have been poorly maintained. As a result, they are seen as unsafe places and have a negative image (Sendi, Aalbers, & Trigueiro, 2009). Different initiatives have been adopted to improve the quality of open spaces and thus enhance the image of neighbourhoods, such as involving inhabitants in the furnishing and greening of open public spaces.

Generally speaking, the implementation of housing regeneration projects is a multilateral process involving parties with differing or conflicting interests. For the participants the implementation process should create the confidence that the plans will be introduced since they have been involved in the decision-making process. This ultimately means that the participants are responsible for the decisions taken. During the implementation phase the efficiency and adequacy of solutions can be tested, something that is not possible at the design stage.

One of the ways to engage residents in the transformation of open spaces is gardening. In urban garden projects, inhabitants can participate in different ways. It can be a small-scale garden such as a community kitchen to fill wasted spaces, or a rooftop to foster mutual communication and community education. Urban gardening facilitates the creation of emotional connections between people and their environment (Turner, Henryks, & Pearson, 2011). Community gardens bring residents together in common activities and can contribute to their environmental education (Comstock et al., 2010). For example, in Malmö, Sweden, community gardens facilitated the revitalisation of public open spaces (Figures 3, 4). Although urban gardening has enjoyed a long tradition in the city, community gardening is a recent trend. Malmö's experience confirms that urban gardening might have a positive impact in the revitalisation of residential areas through the promotion of social engagement and an intensification of the usages of open space (Koroļova, 2015).

FIGURES 3, 4.  
Urban gardens  
in open space of  
the neighbour-  
hood in Malmö.  
Source: A.  
Koroļova



#### **PARTICIPATORY MANAGEMENT: BUILDING RENOVATION**

In recent decades, housing policies in European countries have undergone significant changes with the purpose of facilitating the liberalisation of the housing market and the privatisation of the housing stock. Overall, these changes have given rise to a substantial increase of apartment owners. However, the property management system has failed to

respond to these rapid reforms. Therefore, housing privatisation has created new challenges for housing management (Gruis, Tsenkova, & Nieboer, 2009).

As a result of the privatisation of the apartments, residents are responsible for the building maintenance, and for getting the financial resources to undertake the reforms of their dwellings. In order to ensure an efficient management of the housing buildings and also to meet the quality standards required nowadays, local authorities need to find ways to have positive, clear and open dialogue with the apartment owners to encourage them to cooperate in the renovation of the buildings. This is not a task that can be done in a short time, but rather a long-term programme (Turkington, Van Kempen, & Wassenberg, 2004; Nieboer, Gruis, Van Hal, & Tsenkova, 2011).

To facilitate the renovation of the building stock, many countries have started to adapt their legal frameworks to the current socioeconomic conditions (Palacin & Shelburne, 2005). Therefore, some countries have abandoned their previous structures and created new ones, while in other countries the new institutional structures coexist alongside the previous ones. For example, in Riga, Latvia, the current property management system is unable to facilitate the necessary improvement in the quality of the living environment (Figures 5, 6). Most of the buildings consume large amounts of energy and have poor thermal insulation. Building renovation has become an urgent matter; otherwise, a considerable part of the housing stock is going to be at risk of degradation. One of the reasons for this situation is that the individual ownership structure hinders the adoption of measures to protect the common interests. State institutions have adopted a legislation aimed at promoting the renovation of buildings and the real estate management process improvement. With this purpose, the Ministry of Economy and other institutions have carried out awareness campaigns. In addition, there has been funding available for building renovation (Slava & Geipele, 2012). However, the number of renovated apartments is still very small. Despite all of the above, the engagement of apartment owners in the renovation processes remains low. Furthermore, they still do not understand their roles and responsibilities in those processes.

## CONCLUSIONS

Public participation is an essential part of sustainable development, and it spans over the stages of planning, design, implementation, and also management. Participatory planning plays a fundamental role in the sustainable regeneration process of large-scale housing estates which needs to



FIGURES 5, 6.  
Renovated  
buildings in Riga.  
Source: S. Treija

bring together multiple interests of a large number of involved parties. The extent to which the residents are aware of the importance of their participation affects the result of the regeneration process.

Quality of communication between the various actors involved in the urban regeneration projects is crucial to make participants aware of the value of their participation at each stage of development. A developer, a planner or any other specialist in charge of a public participation process should have the skills to communicate with the various groups of people involved in the process in a language understandable to them, particularly with those who do not know the technicalities used to describe projects.

The uniformity of the large-scale housing states does not promote a sense of belonging among residents. Thus, a housing regeneration process is easier to implement in smaller-scale urban structures like neighbourhoods or residential estates. The urban regeneration of small-scale areas, in which inhabitants can participate not only during the planning but also in the implementation phase, contributes to the formation of a sense of belonging and identity. In small-scale settings, people have a better perception of the problems and feel more motivated to participate in their solution. Smaller projects require fewer resources, they can be carried out in a shorter time and their outcomes can be quickly perceived. Besides, these small interventions can serve as a springboard to foster public involvement in large-scale projects, and to give value to participation in urban regeneration processes.

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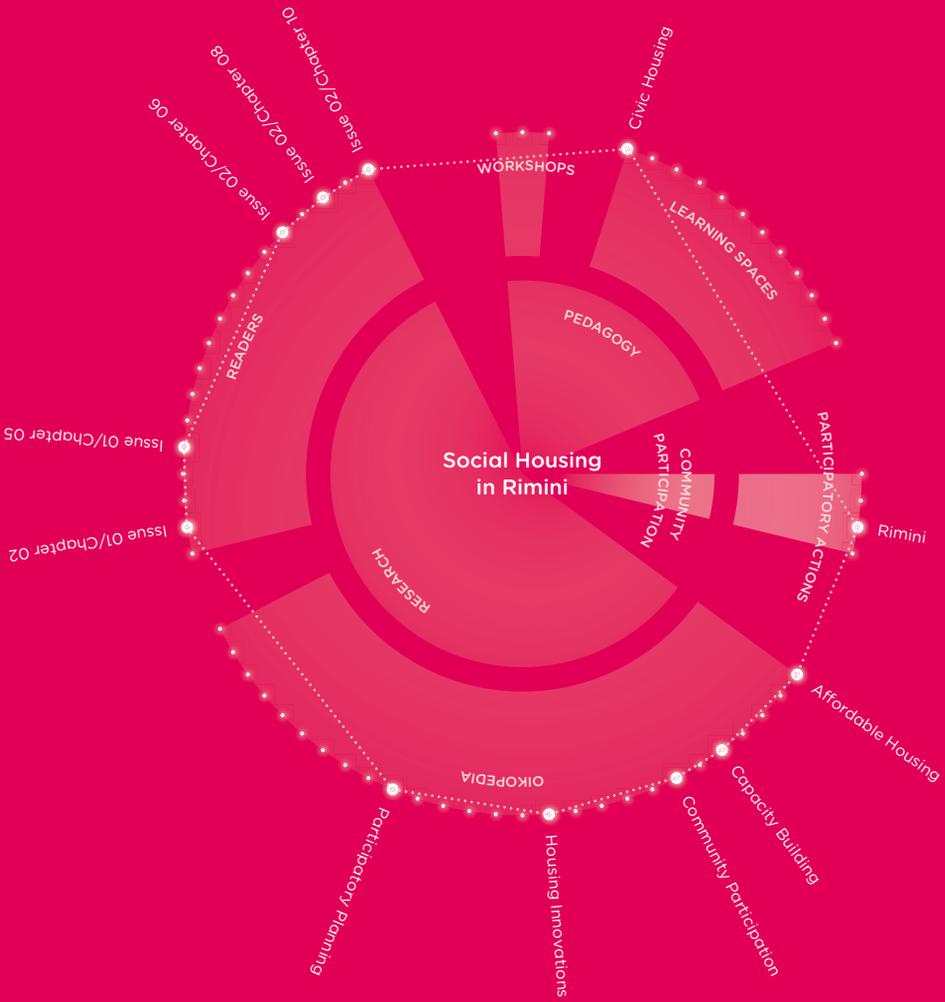
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# **Participatory Strategies to Facilitate Access to Social Housing in Rimini**

**Filippo Boschi**

## INTRODUCTION

From June 2014 to March 2015, a community action project aimed at involving social and political stakeholders in the provision of social housing in the city of Rimini was carried out by the Heriscape Association and the Ordine degli Architetti di Rimini (Chamber of Architects). The activities involved private stakeholders and public institutions and were aligned with the Strategic Plan of Rimini.

The main purpose of the action in Rimini was to define possible and feasible strategies to support solutions for the social housing problems in this medium-size city, with the collaboration of the private and public sectors.

## SOCIAL HOUSING IN ITALY

Social housing is part of welfare and planning policies in many European countries. Despite this shared interest, there is no agreed definition of the term *social housing* across Europe and no common policy. As a result, each country has developed its own way of facilitating access to housing. The differences encompass the legal status of the landlord, the rent regime, the funding method and the target population (Braga & Palvarini, 2013).

The house price escalation in Italy since the mid-1990s has not been accompanied by a comparable rise in household incomes, which have only experienced a modest increase. This phenomenon started in the metropolitan areas and has then spread to smaller cities like Rimini. In the process, housing needs have changed and become more complex and diversified. In fact, today the problem of accommodation not only concerns the weakest members of society, but also people who, even though have relatively regular and stable incomes, find it very difficult to access the housing market.

Historically, the provision of affordable housing in Italy has been the task of public institutions with the limited support of the private rental sector (Atzei & Fabbri, 2001). This subsidised housing was assigned to the population following specific rules and procedures based on income ceiling. Overall, the rate of social housing provision in Italy, as compared to the total housing stock, is quite marginal, accounting for approximately 5% of the housing available in the market.

The recent economic crisis has had a strong impact on social housing provision leading to a higher demand for affordable housing and social allowances; including demands from potential buyers who are unable to access the housing market because the prices are too high. For this part of the population (defined as the “grey area”), a mortgage or rent has a significant impact on their annual living expenses. In 2012, 10% of the families surveyed indicated that more than 30% of their income was used to pay for housing, a threshold usually considered as a distinction of economic disadvantage. Thus, the crisis has had two negative consequences: An increase in the demand for social housing, particularly

among the middle-class households and workers with atypical contracts, and a reduction of the public resources to finance the housing sector. In fact, the traditional public programmes, such as the *Edilizia Residenziale Pubblica* (ERP), have proved insufficient in providing an adequate response to the shortage of social housing (Van Riel & Semprini, 2004).

After years of political support for home ownership, with an incidence of 70% (one of the highest rates in Europe), new needs for flexibility, increasing difficulties in securing mortgages and a growing demand for temporary housing (caused by an elastic labour market) have brought about an emergent necessity to extend the availability of social housing to the rental market.

Nowadays, numerous public and private organizations operate in the social housing sector. However, even though these organisations try to offer solutions to different segments of the population in need of social housing, they act without the coordination and cooperation that is necessary to identify social demands, to define the roles for each organisation and to establish a joint policy to provide effective answers to the lack of affordable housing. The diversification of actors, policies, programmes, tools and projects, and the lack of collaboration between the public and private organisations dealing with social housing, hinder the effectiveness of any action. In addition, new recently emerging challenges are affecting urban policies, among them, the rehabilitation and redevelopment of run-down urban areas, control soil sealing and land take, urban quality and social facilities requirements, the promotion of participation and the search for environmental and sustainable solutions.

Overall, the described situation, in part motivated by the present economic crisis, has resulted in the need for new policies and innovative tools to provide an effective answer to the housing problem (Braga & Palvarini, 2013). As a partial answer, the programme called *Piano Casa*, the institutional and ordinary model to the current system of public residential housing ERP, has been developed to provide a constructive response using economic and financial tools like property investment funds and ethical funds. Furthermore, the lack of public resources to sustain housing policy has resulted in improved cooperation between individuals and public institutions, both at national and local levels, in a joint effort to deliver expert and actionable responses.

### **Rimini Situation: Needs and Opportunities**

The conditions of the housing market in Rimini do not differ substantially from the general situation in the rest of the country.

According to a report prepared by the Cassa Depositi e Prestiti (Carriero, Russo, & Screpanti, 2014), there is too much rigidity and not enough liquidity in the rental market to meet current supply and demand. With regard to the available housing stock, there is a significant amount of unofficially used

or unused properties which constitute potential new accommodation. This vacant stock (appraised in 15,000 units, only in Rimini), represents an important opportunity for housing policies but it is also a potential risk for urban decline in specific areas. Alongside the difficult economic situation, Rimini has been facing a steady demographic increase over recent years; a positive trend which is exceptional if compared to other similar regions in Italy.

Even though the general situation is similar and comparable to other cities in Italy, there are three elements which characterise the housing market in Rimini: An increase in housing demands; a competition for the housing market driven by tourism and university accommodation needs; and a significant presence of non-profit organisations in social housing provision.

#### HOUSING DEMAND

The demand for affordable housing has grown exponentially over the last three years from 900 to 1,600 annual requests for 1,600 available public housing units which have a turnover of only 3%. This situation is further confounded by the fact that there is an income ceiling to access affordable housing. The current ceiling is too high and enables people who could theoretically afford a home in the controlled or free rent market to apply for social housing, thus hindering the access to those who really need it. Thus, the situation in Rimini can be summarized as follows: Empty houses, citizens requesting rent controlled homes who cannot get one, and citizens living in affordable housing who could access the real estate market.

The housing problem in Rimini is also very well depicted in the annual report drawn up by Caritas Diocesana Rimini (2013). According to this report, due to the worsening of the economic crisis, more and more people have started to request first aid housing services. In addition to the homeless, the new applicants for social help are people with homes who cannot afford to pay the rent, the utilities and sometimes the mortgage. Therefore, a new type of population segment is asking for help and support; people who would never have thought of being in a position of need, among them many families with children. According to Caritas, the number of evictions is increasing, even for those who live in public housing. There is also a growing population who live in holiday apartments during the winter and are unable to find affordable accommodation during the summer as prices rise significantly in this period. At the same time, the number of homeless people has increased.

#### TOURISM AND UNIVERSITY

The tourism sector strongly spurs the economy of the area, even during the economic crisis. However, it also affects the housing market. In fact, part of the touristic demand for housing interferes drastically with the housing market thus influencing rents and house prices. In

addition, the university affects the housing market, since the lack of affordable student housing forces students to compete in the same free market. Currently, there are more than 6,000 registrations at the university campus in Rimini of which more than 50% are from applicants outside Rimini. The university is struggling to find appropriate accommodation for them.

#### THE NON-PROFIT SECTOR

The non-profit sector (or third sector) plays an important role in supporting the city's welfare state. In particular, many non-profit associations and organisations support and manage projects and programmes to help and reintegrate socially marginalized people. In 2011, there were almost 130 active voluntary organisations in Rimini in the health and social sectors, working on social integration, training and environment (Rimini Municipality, 2011).

### **A COMMUNITY ACTION PROJECT**

In the current social housing context, a community action project—involving the municipality of Rimini and other private and public stakeholders—was carried out to improve access to affordable housing.

#### **Objectives of the Project**

For the reasons previously explained, housing demand in Rimini has become higher, more complex, and increasingly diversified. Furthermore, the applicants for social housing respond to a variety of social groups which were not the typical beneficiaries of social housing in the past: Singles, single-parent families, immigrants, temporary workers, and off-campus students. Sustained by this new atypical demand, the need for social housing is also affecting intermediate segments of the population (grey area) who are no longer able to satisfy their housing needs on the free market, either for economic reasons or due to the lack of appropriate options available. In this context, a goal of the social housing programmes is to improve the conditions of these people by favouring the creation of dignified social and living conditions; this means, not only facilitating access to suitable dwellings, but also nurturing rich and meaningful human relations.

The cooperation between citizens, private associations, and public institutions is necessary due to the lack of public resources to sustain a social housing policy. For this reason, Heriscape and Ordine degli Architetti di Rimini have designed and implemented a community action project involving different partners and institutions to set up some criteria to overcome the difficulties of the social housing sector. The aims of this action have been:

- to identify social housing problems and opportunities, to set a baseline for future actions and policies;
- to create a permanent round table involving local associations and institutions committed to facilitating access to housing and to assuring the welfare of the population;
- to foster the collaboration among the partners in order to provide effective answers to the social housing needs of different sectors of the population;
- to outline possible solutions and pilot actions carried out with the participation of the involved stakeholders;
- to come up with a methodological approach which contributes to establishing a broader housing policy at local and national levels;
- to disseminate the outcomes of the action at national and international levels, and to evaluate their possible application to different European contexts; and
- to set up criteria for future actions and policies that have to be developed by the participants.

### Participatory Process

The community action was implemented in three stages: Analysis of the context, selection of the stakeholders and creation of the round tables.

#### ANALYSIS

After collecting data and information about the situation of social housing in Italy, research was conducted on the conditions in Rimini by analysing different information sources, such as reports, statistics and interviews. The first findings showed opportunities and synergies that, in a second phase of the process, were shared with the involved stakeholders with the objective of verifying and putting into practice joint strategic actions.

#### SELECTION AND INVOLVEMENT OF STAKEHOLDERS

One of the goals of the action was to encourage, promote and define strategies to facilitate the realisation of a social housing programme, which was to be developed through an integrated approach involving public institutions and private organisations.

With this purpose, ten stakeholders were selected on the basis of their role in the social housing field. The participating organisations were the following:

- Public institutions: Municipality of Rimini (Housing Policies Department, Youth Policy Department, Urban Planning and Territorial Management Department).
- Housing associations: ACER Rimini (Emilia Romagna Affordable Housing Agency).

- Financial institutions: Carim Foundation (Bank Foundation).
- Non-profit social welfare associations: Papa Giovanni XXIII Association, San Giuseppe Foundation, Slash Association, Caritas, Fratelli è Possibile Social Cooperative.

Firstly, these organisations were approached in an interview conducted by researchers from Heriscape. The purpose of the interviews was to gain first-hand knowledge of the working methods and activities carried out by the stakeholders in the field of social housing. Secondly, the information collected in the interview created the basis for the round tables, and subsequently helped structure and formulate possible strategies.

#### CREATION OF ROUND TABLES

In the third stage, two round tables with representatives of the organisations were set up in the seat of the Strategic Plan of Rimini. These meetings were an opportunity to discuss possible solutions to be carried out by the involved participants. In the first meeting, the discussion focused on the presentation of four projects proposed by the stakeholders with the aim to find synergies and joint strategies for their development: *Housing First*, *Experiential Housing* (Housing Esperienziale), *Three Tents* (Tre Tende) and *Fondo Emilia Romagna Social Housing* (FERSH).

**HOUSING FIRST.** In this programme, the house plays a primary role in the reintegration of homeless people. The house is thought of as a tool of individual empowerment and social commitment. Among other aids, the beneficiary receives an apartment and can then have access to health and social services in the area where the house is located.

The dwellings are found in the real estate market. The associations responsible for finding them are trying to set up rental agreements with the owners of 30 to 35 square metre apartments. According to the original project, the tenants should pay a percentage of the living expenses that may be around 50% or 30% of the overall cost for renting and utilities. If this is not possible for them, then the municipality of Rimini has allocated funds to cover arrears or the costs of up to one year.

**EXPERIENTIAL HOUSING.** The goal of this project is to recover and reuse unused or abandoned hotels, in order to provide beds and meeting places at reduced rents for students, and additionally for tourists during holiday periods. The business plan also includes a provision of meals for homeless people.

**THREE TENTS.** Three buildings have been designed and will be built alongside the existing Casa Bronzetti on land owned by the San Giuseppe Foundation, in Rimini. The target group is constituted by adults with moderate to severe disabilities, unaccompanied young migrants, and social and economically marginalised people. The

houses are designed according to the needs of the future users; they are integrated into the surroundings and include different social facilities. To this end, the various partners participating in this project will provide the following services:

- Housing assistance.
- Personalised courses aimed to help people to be independent and to increase their social skills.
- Parenting and family support in the process of social integration.
- Educational activities and workshops.
- Social and conflict mediation.
- Recreational activities.

The permanent presence of a social mediation service will act as an element of social cohesion by developing a social and supportive network in the area.

**FONDO EMILIA ROMAGNA SOCIAL HOUSING.** It is a financing tool created by a group of bank foundations to support the social housing projects. To be financed, the projects have to fulfil some urban, social and financial requirements. Interventions should be placed in areas with strong housing potential, which are well connected by public transport and have commercial and public services (schools, hospitals, green areas, recreational facilities, etc.).

Interventions should be made in a variety of building types to meet the needs of different groups of users and to foster and adequate social mix. Also, there should provide social support to facilitate the inclusion of the disadvantaged people (for instance, social and health assistance, support to find a job, etc.). Buildings should conform to the principles of environmental sustainability and energy saving standards, using sources of alternative energy wherever possible. Initiatives must be sustainable from an economic and financial point of view: The package of intervention should be robust, financed by the banks, and with an aggregate performance in line with the objectives of the Fund. Typically, each project should furnish at least 100 housing units with a total value of at least 10 million euros.

The analysis and discussion of the projects by the participants revealed some critical points: Lack of economic resources, need for better communication between public institutions and non-profit organisations, and a stronger collaboration for the implementation of the projects.

In the second round table, the discussion focused on the feasibility of two of the projects: *Experiential Housing* and *Three Tents*. At the end of the two round tables the possibility of creating a permanent steering committee on social housing in Rimini, starting from the participants in this community action, was discussed. The participants agreed that one organization should lead the committee and define the general aims and objectives for future projects.

## CONCLUSIONS

Each participation process is unique and requires a specific design process, tools, and methods. Therefore, it is difficult to come up with a generic methodology that can be replicated in different cases. Nevertheless, it is possible to derive some conclusions from the community action project carried out in Rimini, which can be useful the future. To summarize, these are:

- Interviews are helpful to identify and collect information both on the stakeholders' activity and on the proposals to design the participatory process.
- Round tables could be considered an incisive and effective way to create a common space to integrate all various stakeholders concerned with social housing in a particular community. They have been able to share problems, experiences and know-how, which in turn might benefit the development of the projects. In this regard, the first round table was particularly successful to define critical aspects and opportunities. In fact, the promoters of a project often could not come up with specific solutions because they did not have a whole picture of the social housing situation in the city. The meetings enabled them to gain this overall view.
- It is important that round tables are considered not only a sharing space but also a place where the participants are motivated to work together, to develop projects conceived as part of a network and to find ways to solve difficulties encountered by the stakeholders.
- Even if all the stakeholders were acting on the same problem (shortage of social housing) and possibly due to their different competences and approaches to the problem, it was important to define shared languages (verbal or graphical) to facilitate the communication and the debate among them.
- Lastly, the participation in this action helped stakeholders to gain a deeper insight into social housing problems and helped them to define and consolidate their project.

Other conclusions that can be derived from this experience are the following:

- Creating a network of all the stakeholders involved (institutions, organizations and associations, public and private) really helps to develop social housing projects effectively, providing a diversity of options that respond to multiple needs.
- A steering committee on social housing, with representatives of the various organisations, was considered as positive by the participants because: It brings together the local associations and institutions; it constitutes a place where everyone involved is informed of the latest initiatives and can share experiences and promote new practises; it helps to optimise resources, and it contributes to developing a joint strategy.

In conclusion, this action could be considered a positive experience and a really useful and successful process. But, looking specifically to the social housing issue, some limits can be observed.

In the area of Rimini, as in other medium-size cities in Italy, there is a large number of players involved in projects dealing with social housing programmes. Despite the importance of the problem, the municipality of Rimini does not have a precise picture of all the players acting in the social housing field. This lack of knowledge, partially filled by this action, testifies the lack of preparation of the municipalities to lead the community responses to the social housing problem. It also reveals their lack of predisposition to create partnerships among public and private organizations. This partial inability of the public sector to cooperate with private organisations has a historical background, since typically the provision of affordable housing was a specific and sole assignment of dedicated regional and national public agencies.

Looking at the projects, it is clear that many of them are concerned with very specific target groups and often linked to those in critical or emergency situations. Very few projects are actually dealing with the emerging target group referred as the grey area. This is probably due to the fact that at the local level only specific needs could be really dealt with, and a generalist answer for social housing should be pursued only at the regional or national level. Furthermore, the experience of this participatory process shows the limits of acting on a small scale. In fact, a typical investor in social housing performs real estate transactions on a scale that cannot be compared to that of a medium-size city like Rimini. Therefore, for such cities it is necessary to work on different types of financing solutions that facilitate access to housing.

It is also necessary to mention that many initiatives presented and discussed in the participatory process face economic difficulties: Public resources are very limited and often private stakeholders do not have enough funds to sustain and carry out the projects. The situation is paradoxical. On the one hand, the lack of public funds, the credit crunch and the market crisis have affected private developers. On the other hand, there is an increasing and significant number of unsold and vacant houses in the housing market. A situation like this calls for action to use the existing stock, to incentivise renting and selling, rather than building new houses, as some of the projects proposed. But the difficulties to act in this direction lie in the fragmented ownership of the housing market and in the weakness of local governments, due to the lack of legal instruments and financial resources.

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Designing  
a Cohousing  
Process

RESEARCH

PEDAGOGY

COMMUNITY  
PARTICIPATION

LEARNING SPACES

WORKSHOPS

PARTICIPATORY ACTIONS

Barcelona

Affordable Housing

Capacity Building  
Codeign  
Community Participation

Housing Regeneration

Participatory Design

OIKOPEDIA

Issue 01/Chapter 02  
Issue 01/Chapter 03  
Issue 01/Chapter 07

Issue 02/Chapter 07  
Issue 02/Chapter 10

READERS

Civic Housing

Housing Systems

# **Civic Housing: Designing Participatory Processes for a Cohousing Project**

**Leandro Madrazo, Ángel Martín Cojo**

## INTRODUCTION

Cohousing started in Denmark during the 1960s as a reaction to the standardized and anonymous modes of living that had become commonplace with the construction of post-World War II housing estates. It was an attempt to recover the sense of place and the feeling of belonging to a community which had traditionally characterized living in towns and villages or, in other words, to restore the lost ties between building and dwelling that had been lost with modern housing. Since then, the cohousing movement has been steadily spreading over the world (McCamant & Durrett, 2011). Nowadays, we can find organizations and professionals in many countries that provide support to carry out cohousing initiatives.

In a cohousing project, the future residents can collaborate in the design, building, use and maintenance of their homes in different ways: Specifying the characteristics of the future dwellings, selecting materials and building components, collaborating in the construction, sharing the common facilities and looking after them once they live in the houses. This way, a sense of community emerges throughout the different stages of collaboration, from defining housing needs to sharing amenities (kitchen, children's playgrounds, etc.) which helps participants to build trust in one another. Besides the future residents, other professionals can be part of a cohousing project acting as designers, contractors, counsellors or mediators, in different stages of its development.

Participating in a cohousing initiative means taking part in a learning process which also spans throughout the different stages, from the design of the future homes—learning to identify the housing needs, to discussing and negotiating them with other participants—, to the construction of the buildings—acquiring skills from construction workers—, to the use and maintenance—understanding how building systems operate and helping to repair them.

Some learning models, such as *project-based learning*, *action learning* and *action research* which are at the core of the architects' design education and practice, underpin the learning processes within a cohousing project. Architects are familiarized with project-based learning during the studies by being confronted with problems in the design studio for which they have to find solutions with the support of other peers and critics, or even with the collaboration of users. Action learning "means learning from action or concrete experience" and then taking new action as a result of the learning, while action research is "a cyclical iterative process of action and reflection on and in action" (Zuber-Skerritt, 2001, p. 1). Action research is particularly relevant in the context of a collaborative design process, such as the one that takes place in cohousing, since "[it] requires the research process to be made visible. It demands public accountability and visible self-evaluation, an issue that is assuming increasing importance for current professional design practice" (Swann, 2002, p. 57). Both action learning

and action research can become closely knitted in the development of a design, particularly in one carried out in a socially delimited context such as a cohousing project which is precisely aimed at transforming an existing reality, socially and physically.

Jeremy Till has contended that “The architect (as citizen-expert) needs to listen to, draw out and be transformed by the knowledge of the user (as expert-citizen)” (Till, 2005, pp. 33-34). This requires creating spaces to foster the dialogue between experts and non-experts, and having appropriate languages to facilitate the communication between them. Furthermore, Susanne Hofmann argues that “The precise exploration of users’ needs and ideas regarding the use of buildings, as well as effectual communication between laypeople and architects are important foundations for the design quality and sustainable use of buildings, which is expressed by the satisfaction of their users” (Hofmann, 2015, p.9). To understand the users’ needs in the context of a participatory design process involving laypeople, architects need to have specific communication skills and tools that help them to establish a fruitful dialogue with non-experts using a common language.

With the purpose of facilitating the acquisition of these skills, the School of Architecture La Salle and Sostre Cívica— an association that promotes cooperative models to facilitate access to housing—organized a seminar titled *Civic Housing* in the academic year 2013-2014 which enabled undergraduate architecture students and members of the cooperative to collaborate in the early phases of a cohousing project in the historical centre of the city of Barcelona. The initial task for students was to design the communication tools that would enable dwellers to make explicit the knowledge they possess about the spaces they inhabit. At the end of the seminar, students provided a range of architectural responses to the issues identified in the dialogue with dwellers.

FIGURE 1. Building to be refurbished in El Born neighbourhood, Barcelona. Source: Ángel Martín Cojo



### A COHOUSING PROJECT: RENOVATION OF AN EXISTING MULTIFAMILY BUILDING

Sostre Cívica had reached an agreement with the planning authorities of the city of Barcelona to refurbish a five-story building located in El Born neighbourhood, in the old historical centre (Figure 1). This case offered an opportunity to create a project-based learning space in which students from the School of Architecture La Salle would play the role of experts supporting a cohousing initiative. The task of students was to design the methods and tools that would enable dwellers to express their experience about the living environment. In this context, students played multiple roles: As design researchers, as designers of the design process, and as facilitators who helped dwellers to express their thoughts and to elicit the knowledge they possess.

The learning activities planned in the seminar had a pedagogic value for both architecture students and dwellers. We expected architecture students to develop the skills necessary to derive a knowledge about living and dwelling from laypeople which they could subsequently incorporate into a collaborative design process. Members of the cooperative, on the other hand, would have a chance to reflect on the qualities of their current and future living environments, and to express their views with the communication tools devised by the students.

In particular, through the learning activities carried out during the seminar architecture students had the opportunity to develop their abilities:

- to engage dwellers in a reflective process on their present and future living place;
- to design the tools and methods that would enable users to express their knowledge and needs;
- to learn from users—rather than from the building regulations or from established architectural models—the needs of the future dwellings; and
- to analyse the insights obtained from the interaction with dwellers and then take them into account in the design process.

Furthermore, dwellers participating in this learning process could develop a capacity:

- to express and communicate their experience about the spaces they live in;
- to assess their living environment in qualitative terms, by describing what they consider good or bad about the places they live in; and
- to envision the qualities of their future living environment.

As a result of the interaction between experts (students and teachers of architecture) and non-experts (members of the housing cooperative), we expected that the “problem” of the renovation of the building would be formulated in different terms as in the briefs—prepared by developers, and planning authorities—that are customary in the design of multifamily housing, briefs that are mostly based on stereotyped models of living and in the application of housing regulations and standards. Thus, the purpose of the collaboration with the members of the cooperative was to help them to formulate an idea about their future housing which would emerge from their own needs and visions, and from their understanding of the building to be refurbished and its context.

## **LEARNING ACTIVITIES**

The learning activities (LAs) carried out by students in the 14-week seminar were the following:

- Reflecting on the need for citizen participation in architecture.

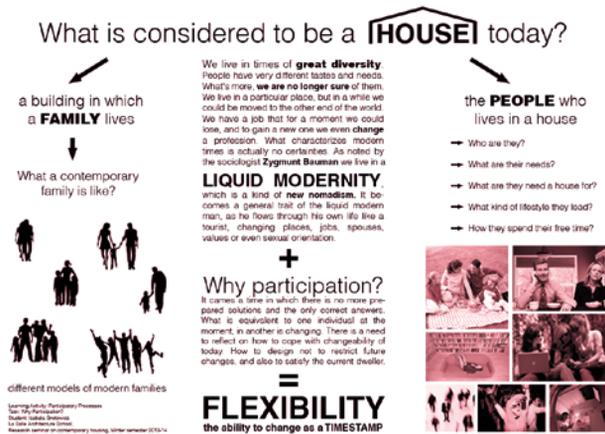
- Designing a participatory process: Analysing existing methods and tools.
- Implementation of the participatory process: First working session with dwellers.
- Evaluation of inputs obtained in the first participatory session.
- Redesigning of the participatory processes: Improved methods and tools.
- Implementation of the participatory process: Second working session with dwellers.
- Creating a design brief based on answers from participants.

Within every learning activity, a series of tasks (TKS) were carried out. Learning activities and tasks were organized according to the structure provided by OIKODOMOS Workspaces<sup>1</sup> and carried out in this web-based learning environment. In this way, other students and teachers from partner schools of the OIKONET network could follow the course development and had access to their outputs. The scope of every learning activity, the tasks in each one and the outputs produced by students are presented in the next sections. At the start of the learning activities, Sostre Cívic representatives were invited to present in the classroom the objectives of the organization and the plans for the renovation of the multifamily building.

### LA “Reflecting on the Need for Citizen Participation in Architecture”

The purpose of this preliminary activity was to find out why participation plays an important role in architecture, particularly in contemporary housing. Some examples of participatory projects were gathered by students and presented in the classroom and in the on-line learning environment (Figure 2).

FIGURE 2. Preliminary reflections about the significance of citizen participation. Student: Izabela Grotowicz



1. See [www.oikodomos.org/workspaces/civic\\_housing](http://www.oikodomos.org/workspaces/civic_housing)

LA “Designing a Participatory Process: Analysing Existing Methods and Tools”

This learning activity consisted of two tasks: 1. To analyse some of the methods and tools used in participatory processes and 2. To design the tools and communication procedures to enable the dialogue with the members of the cooperative.

TK “ANALYSING EXISTING METHODS AND TOOLS”

Students analysed some of the works from Giancarlo De Carlo (2005), Christopher Alexander (1977), Ralph Erskine (1987), John Habraken (1972) and Henry Sanoff (2006) to learn about the means and goals of participatory processes in housing design. From the study of these precedents, they understood the importance of having appropriate means of representation to facilitate the dialogue between experts and non-experts, between architects and dwellers. The findings were presented and discussed in the classroom and in the on-line learning environment (Figure 3).

To work **WITH** people, not only **FOR** them



SUCCESSFUL EXAMPLE OF PARTICIPATION: **Zambujal Melhora!**

Zambujal neighbourhood, Amadora, Lisbon

- |   |   |
|---|---|
| <p><b>PROBLEMS TO SOLVE:</b></p> <ul style="list-style-type: none"> <li>- derelict buildings and public spaces</li> <li>- segregation</li> <li>- unemployment</li> <li>- insecurity</li> <li>- social alienation</li> <li>- low level of educational and professional qualifications</li> </ul> | <p><b>IMPLEMENTED METHODS &amp; EFFECTS:</b></p> <ul style="list-style-type: none"> <li>- interact with local residents with different backgrounds</li> <li>- better insight into the thoughts and needs of different groups</li> <li>- higher efficiency in addressing the problems of spatial segregation (age/identity)</li> <li>- key role of local organisations and citizens</li> </ul> |
|---|---|

See: The Public Participatory Process: The Participatory Design of Amadora, Student: Izabela Grotowicz, LA State Architecture School, 2006-2007, Architecture Faculty, 2010, 11



REHABILITATE THE NEIGHBOURHOOD  
THREE CONCERNS OF REHABILITATION

- HOUSING
- ENVIRONMENT & PUBLIC SPACE
- ECONOMIC & SOCIAL DEVELOPMENT



- ACHIEVED RESULTS:**
- strenght of community action
  - reducing the gap between public authorities and local actors
  - establishing a dialogue among local residents with different backgrounds
  - better mutual understanding
  - undertaking different initiatives to stimulate social itegration and economic development
  - development of urban enviroment (technical gardening and landscaping courses, rehabilitation of recreational public spaces)
  - decreasing vandalism because of a communal sense of responsibility

FIGURE 3. Preliminary research on participatory methods and case studies. Student: Izabela Grotowicz

TK “DESIGNING COMMUNICATION TOOLS”

During the discussions about the participation methods and tools of the previous task, it was concluded that with simple utensils—such as paper sticks, needles, threads and cardboards— it would be possible to create tools for the participants to express and represent their knowledge and experience of living in a more intuitive manner. Thus, the next task was to design and produce the communication tools which would then be used in the meetings with the residents (Figure 4).

**FIGURE 4.** Proposal of communication tools based on simple techniques. Students: Jeanne Scholtz, Beatriz Ferrão, Sebastian Baier

The slide is titled "Present HOUSE - Future HOME" and "Implementing Participatory Methods of Communication". It is divided into three vertical panels, each representing a step in a participatory process. The top right corner contains text: "Learning Activity: Participatory Processes", "Task: Implementing Participatory Methods of Communication", "Students: Jeanne Scholtz, Beatriz Ferrão, Sebastian Baier", and "La Salle Architecture School, Research Seminar on Contemporary Housing".

- STEP I: Post-It-Wall**  
Question: "What do you like about your current housing and environment?"  
Image: A wall covered with numerous small, handwritten notes on post-it notes.  
Text: "The aim is to highlight positive aspects of the dwellers' current living setup, written on post-it notes that are arranged together on a wall. To be viewed, discussed etc."
- STEP II: Collage**  
Question: "What is your ideal home?"  
Image: A person looking at a wall where various images and text are pasted together to form a collage.  
Text: "The aim is to provide images and create an emotional depiction of the ideal home environment of the dwellers through assembling a collage."
- STEP III: Building-Blocks**  
Question: "How would you like your home to function?"  
Image: A diagram showing several small, colored rectangular blocks on the left, an arrow pointing to the right, and a larger, more complex arrangement of these blocks on the right, representing a floor plan.  
Text: "The objective is to provide different colored blocks, representing different room types and sizes, i.e. livingroom, kitchen, bedroom, bathroom. Individuals assemble the blocks according to their individual needs."

The tasks to be conducted with dwellers in the participatory sessions were also planned and discussed with the students. They were finally structured in the following way:

- “DESCRIBE THE SPACE YOU LIVE IN”. Getting to know the experiences of dwellers with the spaces they inhabited by means of interviews, observations and questionnaires.
- “IMAGINE YOUR IDEAL LIVING SPACE”. Letting participants to express their visions and aspirations about their future homes with drawings, images, and words.
- “PLAN YOUR FUTURE HOME”. Arranging the spaces and activities in the dweller’s envisioned homes, with their collaboration.

#### LA “Implementation of the Participatory Process: First Working Session with Dwellers”

The communication tools which were devised in the previous learning activities were first implemented in a participatory session that took place at the premises of Sostre Cívic in Barcelona on October 29, 2013. Forty members of the association and ten students participated in this session (Figure 5).

The aim of this meeting was to obtain from dwellers some ideas about the places they would like to live in. The students acted as facilitators of the process. For the dwellers, this action was the starting point of their participation in the design process of their future home.

The tasks that dwellers carried out in this session were the following:

TK “DESCRIBE THE SPACE YOU LIVE IN”

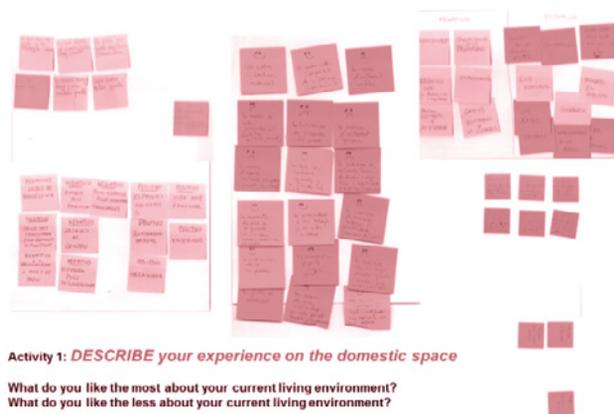
Students asked dwellers about their experience in their current living environment. The future residents had to describe in their own words what they liked most and least about their current living places. The texts were written in post-its and shared with the rest of participants (Figure 6).

What came out from this activity was a vocabulary of the domestic space as described with the language of the dwellers, rather than with the architects’ jargon. These are some examples of the descriptions provided by participants: “Living in a building with plants and flowers gives vitality”, “I would love to have enough space and tranquillity to be with my daughter”, “We should have rooms with different functions according to the activity wished to be done at that moment”, “A cosy place to work and read”, “To make it feel like home, I would like to have my own private space but also a space to have some friends over, share a meal and talk without having to rush”. These statements were analysed by students in order to define the “problem” to be solved. In this way, the building programme was not formulated in advance in professional terms—functions, building regulations and standards—but it was derived from the inputs of the dwellers.

For the members of the cooperative, the participation in this activity was an opportunity to make a critical reflection about their current living environment. Even though most of them had joined the cooperative because they were not satisfied with their dwellings, they still lacked the instruments to articulate their critiques. Carrying out the activity enabled them to identify what they liked or disliked about their current living conditions and to communicate them to other people.



**FIGURE 5.** First participatory session with members of the housing cooperative. Source: Ángel Martín Cojo



**FIGURE 6.** Task “Describe the space you live in”. Source: OIKONET Seminar



**FIGURE 7.** Task “Imagine your ideal living space”. Source: OIKONET Seminar

**TK “IMAGINE YOUR IDEAL LIVING SPACE”**

Participants were asked to reflect on the visions and expectations of their future home by means of a conceptual map made up of images that illustrated domestic spaces. They had to choose some of the images that students selected for them and then make a collage which represents their ideal living place (Figure 7). Through this activity the future dwellers could visualize the kind of domestic spaces they had in mind.

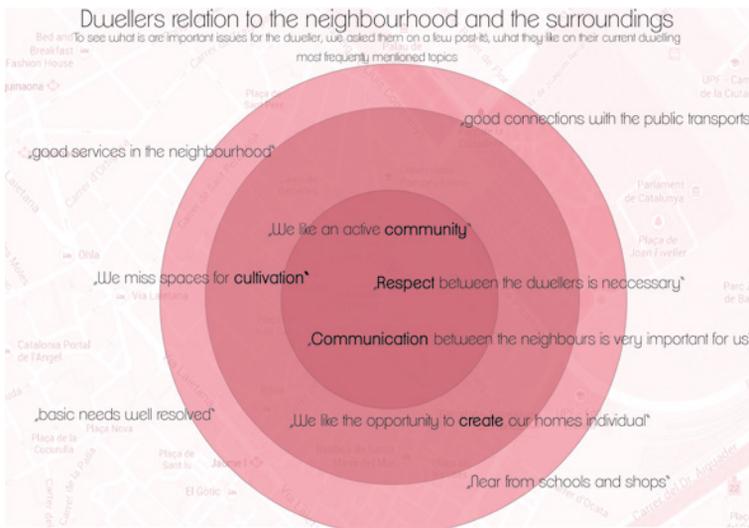
This activity exploits the capacity that images have “to evoke deeper elements of human consciousness that do words” (Harper, 2002, p. 13). The technique known as photo or image elicitation has been used since the 1950s by sociologists and anthropologists, in combination with interviews, to know the meanings or values that people associate to images. In this session, participants were asked to describe the ideas that the photographs evoked. Their words revealed the hidden meanings of the images, but also their “idea” of home built in their memories (Rivera, 2011).

**LA “Evaluation of Inputs Obtained in the First Participatory Session”**

The objective of this learning activity was to start aligning the dwellers’ visions with the design proposals that students had made in response to their demands, based on the inputs received in the previous participatory session.

The output of this activity was an A3 sheet where each student classified the inputs obtained from dwellers under different topics: Sociability, privacy, community, respect, comfort, identity, relation with nature, and integration within the neighbourhood (Figure 8).

**FIGURE 8.** Analysis of dwellers’ inputs. Student: Raphaela Buchberger



## LA “Redesigning of the Participatory Processes: Improved Methods and Tools”

After evaluating the results of the first participatory session, students were asked to prepare a second session which would enable to get a better understanding of the needs and visions of dwellers with regard to their future homes. Two new activities were proposed to be carried out in a second participatory session: Plan your future home (Part 1) and Plan your future home (Part 2).

## LA “Implementation of the Participatory Process: Second Working Session with Dwellers”

Task “PLAN your future home” was carried out in a second participatory session that took place on January 14, 2014.

### TK “PLAN YOUR FUTURE HOME”

This activity was carried out in two steps, each one using a different representation technique:

**PART 1.** The future dwellers named the eight most important activities they do at home and then placed them on a board with concentric circles, with the most important ones located at the centre. Afterwards, they connected the related activities with lines. Finally, they specified if the activities took place within the limits of the household or outside it (Figure 9).

#### Identifying activities

In this game, we ask you to complete the following tasks to tell us about what you do at home:

- 1 Write the most relevant activities you do at home, alone or with the family, roommates, friends, neighbours, ...
- 2 Place the activities in the circles: the most important ones should be placed near the centre; the less important ones, further away.
- 3 Create links between the activities and comment on them. For example: drawing a line between “Eating” and “Playing with kids”, and write a comment such as “We usually play with the children before eating lunch”.

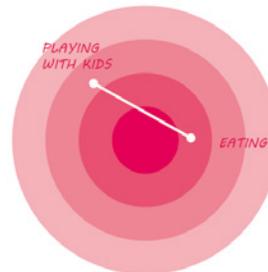


FIGURE 9. Task “Plan your future home” (Part 1). Source: OIKONET Seminar

**PART 2.** Participants selected some of the activities they had named and described them on a paper stick. The selected activity was broken down in smaller actions taken place at different times and places. The size of the paper stick represented the value that the dweller assigned to it (the larger the paper, the most important the activity). Finally, they specified whether these domestic activities were carried individually, with family members or with the community (Figure 10).

**FIGURE 10.** Task “Plan your future home” (Part 2). Source: OIKONET Seminar

**Laying out spaces**

In this game, we ask you to describe the four most important activities you carry out at home by completing these tasks:

- 1** Choose the four most important activities (from those described in the previous task).
- 2** Describe what you do in each activity in more detail.
- 3** Write the name of these activities in a square, selecting the size in accordance with the importance this activity has in your daily life.
- 4** Arrange the squares so that they represent the location of the activities inside the home, taking into account separations, adjacencies, overlapping, ...
- 5** Place a marker on each activity to specify if this is carried out alone or with the family, roommates, friends, neighbours, ...



By proposing participants to think about the “activities” they do at home, rather than asking them to place the “bedroom” or the “living room”, they could think about alternative spatial organizations derived from their living experience.

**LA “Creating a Design Brief Based on Answers from Participants”**

As a final step of the participatory process, students produced some design guidelines based on the insights of the dwellers. These guidelines were produced using a template which was structured in two areas (Figure 11): At the top, the inhabitant’s needs and expectations on their future dwelling; at the bottom, the response given by experts (in this case, the architecture students) to those needs. The architectural responses to the dwellers’ demands were described by means of a verbal and graphic language that should be understandable to non-professionals (Figures 12, 13).

Using this template, students had to provide the following information:

- Dwellers’ inputs: The information provided by participants, literally transcribed, and classified in themes.
- Description of the problem: A summary of the issues identified after analysing the inputs from participants.
- Context: Other themes related to the described problem.
- Architectural response: Proposed architectural solutions to issues that were raised by dwellers.

These are some of examples of themes that students derived from the inputs of the participants:

- Natural light: “Natural light, large windows and beautiful views were often mentioned”.
- Community: “Almost all of the participants mentioned that they wanted share their life with the community, not only rooms but also activities”.

THEME: Inhabitant's needs and expectations.

DESCRIPTION

RELATED THEMES

PROPOSAL

DIAGRAMS

DESIGN PROPOSALS

Architectural solutions which respond to the dwellers' demands were described in a verbal and graphic language understandable to non-professionals.

OIKONET Student Seminar, Subject of Architecture & Safety

FIGURE 11. Design brief template. Source: OIKONET Seminar

- Green housing: “Many dwellers would like to have green spaces in their houses. Some of them suggested having a place to plant fruits and vegetables” (Figure 12).
- Children development: “Families with children stressed that it would be important for them to have a special place for their children to play outside their apartments. This place would have different functions, for example: A place to draw and paint, to play with other kids and to do outdoor activities.”
- Productive space: “Many dwellers mentioned that they would like to have in their apartment a place of their own, to work or study, do their hobbies, to read, to relax and listen to some music.”
- Open kitchen: “Many people wanted to have a room to share with friends and family to do some basic activities like cooking, eating or just sitting together” (Figure 13).
- Relation with the exterior: “Outdoors is the space where most of dwellers socialize with their neighbours and where they can better develop the feeling of living together. Being outside also contributes to feel more in touch with nature.”
- Sustainability: “Growing fresh organic products reinforces environmental and social sustainability. Reusing old materials and sharing equipment helps to create a sense of community.”
- Comfort: “Users clearly identify their needs. Natural light, large windows and beautiful views are most often mentioned. Need for a warm, homely atmosphere. Collaboration in the design process also enables them to identify themselves with the place of residence.”

**FIGURE 12.** Design brief for the theme "Green Housing". Students: Alejandro Calleja, Beatriz Ferrão, Izabela Grotowicz, Jeanne Scholtz, Sebastian Baier

### GREEN HOUSING

DESIGN GUIDE - OIKONET SEMINAR - SOSTRE CIVIC

**USER'S INPUTS**

- "To share resources with my neighbours would also help me to feel better because I would be optimizing them"
- "Walk through the nature", "Collect my own food from the garden", "Utilization of natural material"
- "The life in a building with plants and flowers gives vitality", "To save resources"
- "My ideal place to live must have a place like a kitchen garden", "Green spaces to relax"
- "To cooperate with my neighbours", "Reduce, reuse, recycle"
- "To take care of the plants"

**9**

**DESCRIPTION** Many dwellers would like to have green spaces in their houses. Especially in urban areas like Barcelona, this seems to be a very important point of ideal living. Some of them mentioned that sharing a place to plant fruits and vegetables would improve their feeling of living in community and make them feel better through optimizing natural resources.

RELATED THEMES

ECOLOGY

NATURE

COMMUNITY

NEW RESOURCES

**PROPOSAL** For this very important aspect we propose that a part of the rooftops should be used as private gardens for the building. They could be used by everyone interested in cultivate vegetables and fruits for their own consume. As an addition, this place can be the section of the building where the cooperation can happen in an very intensive way, as the dwellers can work and take care of the plants together and by that can socialize and spent some time in group.

**DIAGRAMS**

**DESIGN PROPOSALS**

PROJECT  
E.L.  
B.O.R.N

**FIGURE 13.** Design brief for the theme "Green Housing". Students: Alejandro Calleja, Beatriz Ferrão, Izabela Grotowicz, Jeanne Scholtz, Sebastian Baier

### OPEN KITCHEN

DESIGN GUIDE - OIKONET SEMINAR - SOSTRE CIVIC

**USER'S INPUTS**

- "It could be versatile to give the rooms different functions according to the activity that is wanted to be done at the moment"
- "To invite people", "A social space", "Be with friends for all day and all night long", "To be with people"
- "To eat and drink", "Invite people and have a party at home", "To eat with family", "Have a dinner with other people"
- "A place to have meetings and to share food with friends", "Lots of people visiting and living"
- "I like cooking with my daughter because it's something that we both love and we have a lot of fun doing it together"

**7**

**DESCRIPTION** Many people wanted a room to share with friends and family for common activities like cooking, eating or just sitting together and talking.

RELATED THEMES

FAMILY

COMFORT

MULTIFUNCTIONAL SPACE

SOCIABILITY

**PROPOSAL** In our proposal, we want to get away from the widespread standard of kitchen and dining room as two separate rooms. We prefer a combination of both, inside of one single room, which can be used for a lot of activities, like eating, cooking or inviting friends and family. In this way, the social activity will be concentrated in the same space. The proposal is based on fluid space with approximately 24 square meters and in this space can be constructed a little lavatory to attend the invited people and to concentrate even more the social activities in this space.

**DIAGRAMS**

**DESIGN PROPOSALS**

PROJECT  
E.L.  
B.O.R.N

## CONCLUSIONS

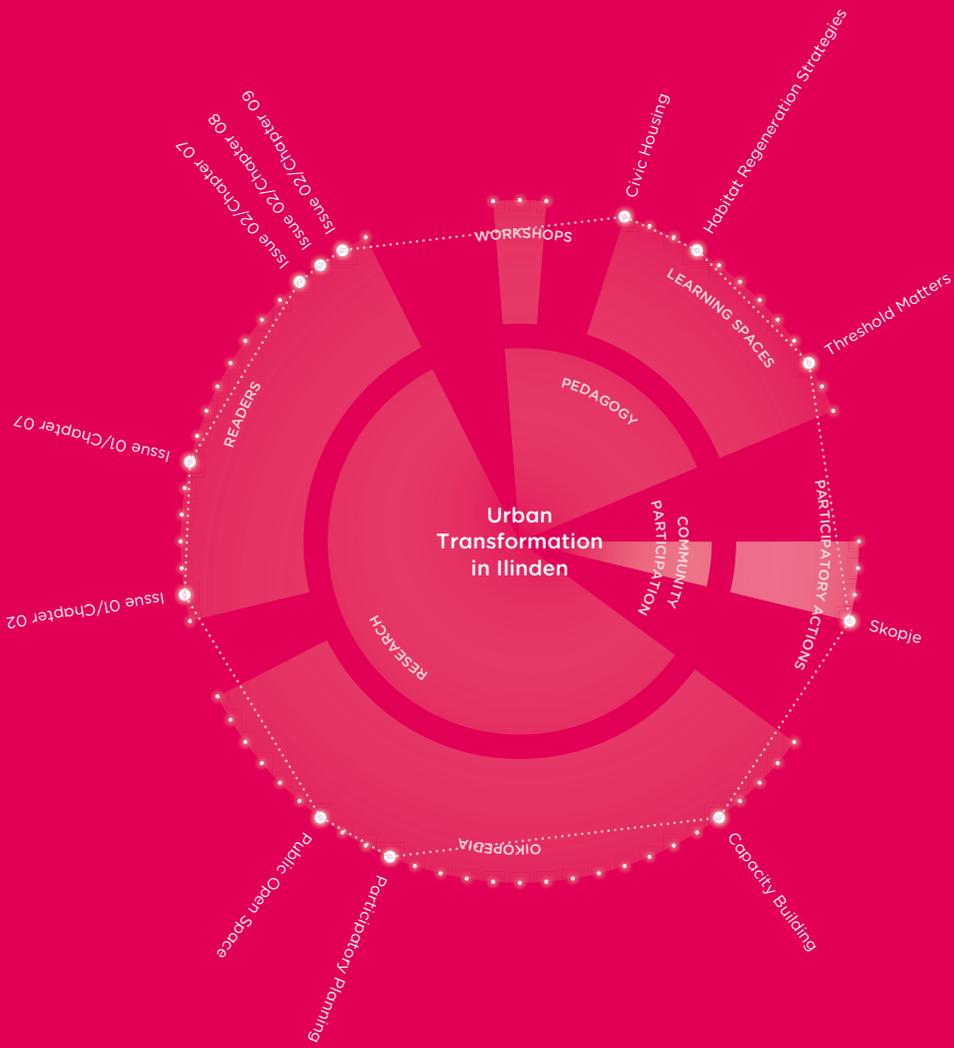
Every participatory process is unique and, therefore, it needs to be addressed much like any other design task: Understanding its specific context and objectives, using the resources at hand and recognizing the existing constraints. The fact that a participatory process is born from specific conditions also makes it difficult to come up with generic methods and tools which can be applied to different situations. The communication tools that the students designed for this particular cohousing project helped them to understand the needs of dwellers, and made dwellers reflect on the conditions of their current living environments. However, even though these tools were effective for this participatory project, this does not mean that their application in other contexts—other cohousing project, with other participants—would produce the same results.

The two participatory sessions helped to create a base to foster a dialogue between future dwellers and professionals, and also to start to build trust among them. However, the shared activities only covered a preliminary stage of the cohousing project which should further continue with the proposal of concrete renovation plans for the existing building. This design development phase was outside the scope of the seminar and its subsequent implementation would pose its own challenges: How to avoid turning to stereotyped formal solutions—influenced by trends or taste—during the design process? How to respond to the individual demands in the overall building design?

The main role for teachers in this pedagogic experience has been that of learning designers, that is, their task has been to create a learning space in which students can be the protagonists of their own learning; a learning space that transcends the boundaries between academia and society. Learning activities and tasks were continuously reformulated based on the responses given by the housing cooperative members in the participatory sessions. Through this participatory experience with cohousing, students have been able to develop some of the skills they need to play the role of “designers of design processes” rather than of “designers of architectural artefacts”, skills that they will need when they intervene as professionals in a participatory design process.

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# **Living/Dwelling: A Participatory Action in the Neighbourhood of Ilinden, Skopje**

**Mihajlo Zinoski, Ognen Marina**

## INTRODUCTION

With the purpose of fostering community participation in the urban development, three schools of architecture—from the University Ss. Cyril and Methodius, Skopje; Polis University, Tirana; and the University of Belgrade—collaborated in a community development planning project called *Living/Dwelling* carried out in the Ilinden neighbourhood, near Skopje, during the academic year 2014-2015. The programmes from the three schools became intertwined through the joint learning activities carried out in relation with the project. Current housing problems in Ilinden were jointly analysed by students and teachers, residents and local administrators. The underlying research issue was the process by which physical boundaries of public and semi-private spaces are negotiated. The participation of academic community members with expertise in various knowledge areas helped to create a new learning space around the project. Furthermore, researchers and teachers from the participating universities could interlink their research through the collaboratively designed learning activities. The ultimate goal of this pedagogic and research work was to embed learning processes in the social, cultural and economic milieu. Overall, this initiative has contributed to pedagogic innovation in the field of housing studies by engaging the academic community in the transformation of the social and physical environment.

## CONTEXT OF THE COMMUNITY ACTION: INTEGRATION OF URBAN AND RURAL ENVIRONMENTS, PRIVATE AND SEMI-PRIVATE SPACES

### “Rurban” Environment

Skopje has developed as a national, economic, social, and cultural capital adopting the model of socialist cities (French & Hamilton, 1979, pp. 195-261), although with some differences derived from its specific historical and urban conditions (Sýkora & Bouzarovski, 2012). The history of the production of urban space and urban form in Skopje has been a history of discontinuity, of fast changes which have led to questioning the essential premises of its previous urban structure and then to start over again. Until 1990, the development of the city was the consequence of state-controlled urban planning. With the shift to an open political and social system, the property started to be regulated by market laws and, as a result, the physical and social space has become more fragmented (Marina & Pencic, 2009, pp. 359-375). Besides, the slow pace of the necessary institutional and legislative reforms has affected the urban structure and prevented the involvement of public interest representatives in the new developments (Tosics, 2004). This process has brought about an unequal spatial transformation, and an uncontrolled and unsustainable urban development which have not taken into consideration the complexity of the city as a whole.

The municipality of Ilinden is located at 24 km from the centre of Skopje. It has evolved from a village to a newly emerging and vibrant suburban community which was rapidly populated by labour migrants arriving from different parts of the country in the 1960s. Ilinden has gained momentum as a place with an increasing potential for urban development due to the benefits of its proximity to the urban centre and the stimulating policies for private developers and business. A main challenge that this emerging suburban neighbourhood is facing is to drive the transformation from a traditional agricultural territory into a sustainable suburban area.

During the last two decades, the agricultural land in rural areas nearby Skopje has been transformed into parcels that have been integrated into the newly developed urban plans. As a result of this process, the vernacular type of housing and dwelling, which was the manifestation of an economy and culture based on agriculture, has been substituted with a hybrid type of urban house which exemplifies the new “rurban” (*rural* and *urban*) environment. A rurban territory is a transitional area between the city and the country which combines both types of dwelling, but cannot be characterized as one or the other. Guallart has referred to this hybrid territory in these terms:

(...) one way of breaking out of the city-country dichotomy is to generate places of transition between the two, to create ‘rurban’ territories with a view to integrate the culture of the *huerta* into the city, guaranteeing that certain values of the same are assumed as own of our culture and our time. (Guallart, 2004, p. 17)

The neighbourhood of Ilinden is a perfect example of this kind of transitional territory. As such, it offers an excellent opportunity to open a debate about the importance of counting on the knowledge and expertise of residents to legitimize the decisions about urban development and, as a result, to foster social cohesion.

Due to this coexistence of rural and urban elements, Ilinden cannot be considered neither a part of the city of Skopje nor a village on its own. The combination of the rural and urban components and practices have brought about new hybrid living patterns with great social significance for the future development of the community. Despite the urban character of the neighbourhood, the dwelling patterns are those of an agrarian community. At a time in which its rurban development still needs to be consolidated, the participation of the neighbours becomes particularly relevant to help preserve the best qualities of both environments, urban and rural, in the future development of the community. As Alexander stated:

People feel comfortable when they have access to the countryside, experience of open fields, and agriculture; access to wild plants and birds and animals. For this access, cities must have boundaries with the countryside near every point. At the same time, a city becomes good for

life only when it contains a great density of interactions among people and work, and different ways of life. For the sake of this interaction, the city must be continuous—not broken up. (Alexander, 1977, p. 22)

In Ilinden, both discontinuities and continuities between the city and the countryside could be integrated in a socially sustainable urban development model.

### Spatial Boundaries

In 1996, Ilinden and its surrounding areas gained the status of municipality and consequently became subjected to urban planning regulations. The urban planning legislation provides the legal framework for the spatial development of a community which still maintains its rural character. In the planning documents, real estate properties have become “parcels” defined by a “regulatory line” which separates them from the neighbouring plots. In turn, the building area within a parcel is delimited by a “building line” which determines the land which can be constructed on. The remaining area between those two lines is the yard, a semi-private space.

In the social theory of architecture, there is a clear distinction between private and public space. Typically, private space is understood as the world that belongs to the inhabitant, while public space is the world of strangers. A semi-private space, on the other hand, is a space for social interactions but nevertheless a personalized one. The spatial pattern of Ilinden is characterized by the yards, semi-private spaces that have not been programmatically defined but are socially distinctive. The genuine quality of the yards lies in the unexpected encounters that occurred in them. Ultimately, it is the dwellers who decide the extent to which a yard works as a private or public space. As Hillier and Hanson have argued:

Every building selects from the set of possible strangers a subset of “visitors” who are persons who may enter the building temporarily, but may not control it... (they) fall within this category of being more than strangers even that they have a legitimate reason to cross the boundary of the building, but less than inhabitants, in that they have no control over that building and their social individuality is not mapped into the structure of space within that building. In this sense a building also localizes the global world of strangers, by the same means as it globalizes the local world of inhabitants. It realizes a category order locally, and then uses the inhabitants to interface this category order with the rest of the social world. (Hillier & Hanson, 1984, p. 146)

As the semi-private spaces tend to become privatized, the social contact between neighbours is reduced or it becomes no longer possible. As a result, walled communities emerge and the yards end up becoming introverted spaces. Such appropriation of the yards perverts the meaning of

semi-private spaces which are meant to be spaces for the neighbours to share activities, places for socialization and for the production of social and cultural meaning. These social qualities of the yards in Ilinden have been recognized as a trait which could be extended to other public spaces of the neighbourhood, from pedestrian streets to places for social encounters.

### Community Participation

During the 1970s and 1980s, planners and decision makers began to realize that top-down policies and urban plans were deeply disconnected from the needs of the citizens. In this context, citizen participation in urban development was meant to be a reaction to the highly centralized planning strategies. The assumption was that participation would give citizens an opportunity to take part in the decisions that affected their lives, that is, the spaces they live in, thus helping to restore the lost link between the physical environment and its dwellers, which in turn—it was thought—would assure the sustainability of the urban development.

As a result of the rigidity in the housing developments built in post-World War II Europe which were dominated by the paradigm of rationality and functionality, a number of authors started to reject the standardization of housing contending that a dwelling was an act rather than an industrial product. Authors like Lucien Kroll highlighted the complexity underlying the historical towns which gave dwellers a chance to develop their own living space. Latter participatory design was not only applied to housing developments but also to large-scale planning. As the importance of citizen participation in the development of socially sustainable environments became widely acknowledged, it was incorporated into the urban planning process in many countries. However, the challenge of developing participatory methods to include the contributions of citizens in the decision-making process remained unsolved. Some authors have manifested their frustration with community participation since it has become a placatory gesture (Blundell Jones, Petrescu, & Till, 2005) whose goal is to get plans accepted by the public. Improving participatory methods also requires changes in the education of architects and planners, so that they can get the skills they need to effectively interact with citizens in a participatory design process (Schneekloth & Shibley, 2000).

One of the key objectives of community participation in urban development is to incorporate the knowledge and expectations of residents into the decision-making process. To make citizen participation effective, relevant and productive for all involved parties, the design of a participatory process which takes into consideration the conditions of each case is of utmost important. Halprin and Burns (1974) developed a framework for participatory workshops known as the *RSVP* cycle (Resources, Scores, Valuation and Performance). At the *resources* phase, participants collect information, facts and data from all relevant sources, from existing plans

and policies to surveys performed at the sites. The *scores* phase determines the way in which participation is performed in accordance to some specific guidelines and actions. The notion of open process is important in order to establish clear and effective communication mechanisms which take into consideration the different background of the participants. *Valuaction* is a term coined by the authors to refer to the evaluation, feedback and decision-making phase of the process. Finally, at the *performance* stage, the workshop results are assessed and systematized so that they become a resource for future actions, plans or strategies.

Within this context, the objective of the community action planned in Ilinden was to gain an understanding of the residents' experience of living in a mixed rural and urban environments, as manifested in the usages they gave to the yards.

### LIVING/DWELLING PROJECT

From September 2014 to November 2015, the Faculty of Architecture in Skopje and the municipality of Ilinden collaborated in a community project named *Living/Dwelling*. The objectives of the project were to set up a community action to foster social sustainability with the involvement of members of academia (students, teachers and researchers), residents and local administrators. The community participation included the elaboration of a survey to identify the qualities of the lived environment and the design of scenarios for the future development of the neighbourhood.

#### Learning Activities

The methodology used in the community action was based on the RSVP cycle. As part of the *resources* phase, students analysed the neighbourhood, in particular the living patterns associated with a rural environment, the use of semi-private spaces and the emerging building and spatial patterns. Then, they examined the living and dwelling habits of the neighbours. With this purpose, residents were interviewed and invited to propose future activities to hold in the semi-private spaces, that is, in the yards. The intention of the survey was to elicit the knowledge amassed by residents and to get suggestions from them about how to improve the social interaction in the yards. In parallel, students attended lectures to learn how to analyse the various usages of semi-private spaces by means of surveys.

The *scoring* stage was performed in a brainstorming session in which the issues identified through the interviews were assigned to categories: Identity, fence, sharing, community garden, social zoning, common elements, spatial compromise, patterns, and provocation (Figure 1). The conclusions of this phase were presented in front of the town hall where an



FIGURE 1.  
Brainstorming  
session. Source:  
Mihajlo Zinoski

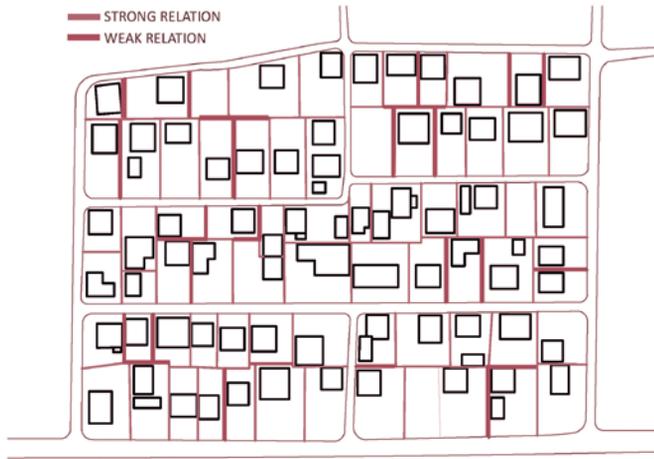
open discussion was held with the participation of students and lecturers from the schools of architecture of Skopje, Tirana and Belgrade, together with the local authorities and dwellers. In this session, some basic ideas about community participation methodology and the goals of social sustainability through urban planning processes were introduced to residents and local administrators. The students presented the results of the survey they had conducted. Altogether, this session contributed to gaining a better understanding of how the municipality could develop in the future by respecting the existing social and economic structure.

The next phase of the project, *valuation*, started off by organizing the data obtained in the survey in different groups. This analysis helped students to relate the habits and needs of neighbours with the social activities which could take place in the semi-private spaces. A set of maps was created to visualize the social sustainability patterns:

- A map in which the usages of the semi-private zones were structured in three layers: Agriculture, gardening and storage (Figure 2).
- A map in which the existing or non-existing relationships between the neighbours are reflected (Figure 3). The fact that most of the relations occurred between next door neighbours is noteworthy.
- A map indicating the typical structure of a household, the topological position within the parcel and the relationships between them. This map reveals the potential areas for social interaction in the neighbourhood (Figure 4).
- A sociogram that shows the social interactions of the inhabitants according to their age and personal relations. With this map, it is possible to redefine the actual semi-private zones by arranging them according to personal and social exchanges (Figure 5).
- A map representing the topological disposition of shared activities in the semi-private spaces. The social interactions are defined by the intensity of dwellers' social activities (Figure 6).

The final stage of the project is *performance*. The purpose of this stage was to build a sense of accomplishment among the participants by reviewing the results of the decision-making process. It was organized as a workshop session where participants were invited to explore different possibilities for future spatial development of the local community based on findings of the third phase. They were asked to develop different scenarios:

- **SCENARIO A. ACKNOWLEDGING THE EXISTING BORDERS AS A CLEAR LINE OF SEPARATION.** The purpose is to secure private interest over that of the public institutions; however, this limits the possibilities of the future development of common public spaces and infrastructures.

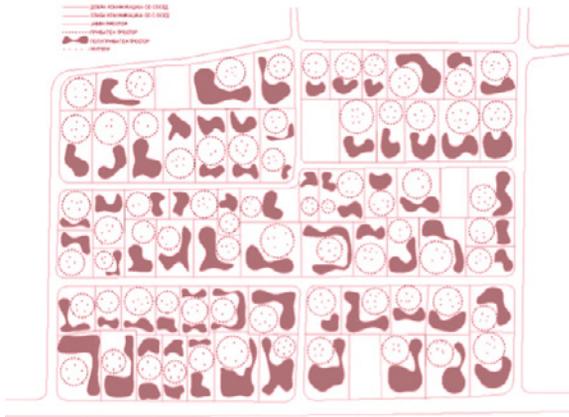


**FIGURE 2.** Map of usages of the semi-private zones. Source: Mihajlo Zinoski

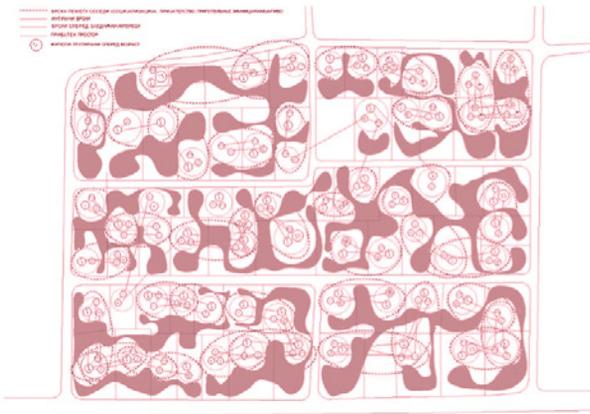


**FIGURE 3.** Boundaries and semi-private zones. Source: Mihajlo Zinoski

**FIGURE 4.** Shared zones between households. Source: Mihajlo Zinoski



**FIGURE 5.** Sociogram of shared semi-private spaces. Source: Mihajlo Zinoski



**FIGURE 6.** A frame from the map of shared semi-private spaces. Source: Mihajlo Zinoski



- **SCENARIO B. BORDERS AS A PLACE OF CREATIVE EXCHANGE.** This scenario is based on the idea that spatial boundaries become the subject of active negotiation and exchange among stakeholders. This facilitates the creation of new public spaces which can be used in variety of ways such as sidewalks or shared spaces.
- **SCENARIO C. CLEARING THE LINES OF SEPARATIONS.** This scenario considers the possibility of removing the walls that delimit the private properties, so that new forms of relation between neighbours can arise. This way, the shared use of semi-public and public spaces would contribute to the emergence of new social and spatial practices.

The scenarios developed in the fourth stage of the community participation action acknowledge the existing conditions in the community (Scenario A), explore the potential for future development with less intrusive actions (Scenario B) and pave the way for future possibilities (Scenario C). Through the community action citizens and students have been able to understand the present conditions in the neighbourhood and have jointly discussed the future development of the community.

## CONCLUSIONS

Through this community action in Iinden, citizens and students have been able to understand the present conditions in the neighbourhood and have jointly discussed the future development of the community. The main challenge was to grasp the multiple perceptions about the potential of the semi-private spaces. The results of the conducted survey highlighted the importance of public spaces in creating a more socially sustainable community. The survey also showed that most of the residents understood the yard as a private space attached to their home. Every inhabitant uses their yard differently. Unlike the private house which is a domain of intimacy and has a specific form, the yard is characterized by the event which happens in space and time and it does not have a fixed formal expression. The dynamism and mutability of the semi-private spaces is a direct manifestation of the social interactions.

A new learning space has been created in which different knowledge areas come together in order to understand a specific problem and to discuss the solutions for it. Both students and dwellers were learners in this space. The students have learned how to create and use surveys as tools to analyse the social dynamics of a community. Furthermore, they were confronted with the reality of people living in rural areas and they had to learn how to communicate with the dwellers. Students also became acquainted with the urban planning legislation and took it into account in their proposals.

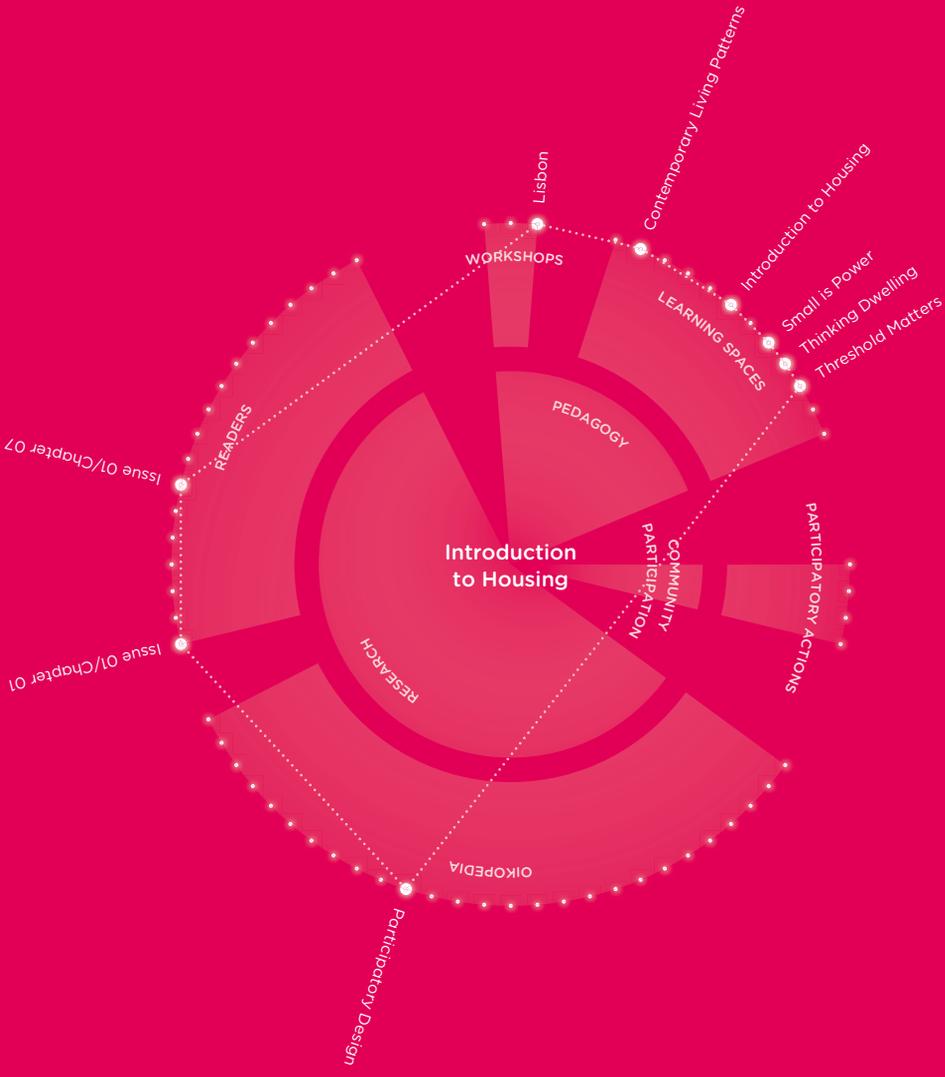
Citizens participating in this project became aware that semi-private spaces are places for social interaction. Their participation in the

discussions about the future urban development of their neighbourhood has contributed to creating a sense of community. Furthermore, neighbours have been able to better understand the role of the local administration in urban planning. Conversely, the municipal authorities have become more receptive to the contributions of citizens in the planning process.

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# **Introduction to Housing: A Collaborative Learning Space**

**Carla Sentieri, Nadia Charalambous,  
Yasemin Alkışer Bregger**

## INTRODUCTION

*Introduction to Housing* is a collaborative learning space created by a group of European schools to introduce architecture students to the fundamentals of housing design and architecture. A blended-learning approach which combines face-to-face teaching with learning supported by on-line tools was adopted to design and implement the learning space. A number of learning activities and tasks, supported by the ΟΙΚΟΔΟΜΟΣ Workspaces on-line learning environment, were designed to interlink with other activities carried out at the participating institutions in design studios, workshops and seminars over a period of three academic years.<sup>1</sup> A flexible learning structure was devised in which learning activities were organized as sequences that could be carried out synchronously or asynchronously by students from the participating schools. This chapter reflects on the design, development and implementation of this learning space, its effectiveness in relation to the desired learning outcomes and existing curricula as well as the challenges and implications for both tutors and students.

## CONTEMPORARY HOUSING ENVIRONMENTS

Cities around the world have been changing rapidly in the past decades in response to the processes of globalization, increased mobility, climate change, technological developments and economic crisis. Recent studies reveal that three quarters of the world population will reside in cities by 2050 while two billion will be living in squatter settlements by 2030 (Smith, 2011, p. 67). Migration flows and the movement of refugees have enhanced the diversity of the urban population, opening up discussions on how to deal with multiculturalism and coexistence between communities.

These changes entail a respective transformation of housing environments where the everyday life of the diverse groups living in cities unfolds and poses increasingly complex challenges, like those derived from overcrowding, homelessness, accessibility to and provision of adequate housing, social integration and sustainable development, among others (European Commission, 2010; UN Habitat, 2013). Socio-cultural changes mostly due to globalization and ease of mobility have a direct impact on family structures and living arrangements questioning traditional concepts of dwelling based on locality, permanence and a sense of belonging (Fokkema & Liefbroer, 2008).

Within this framework, a discussion on the global dimension of housing in contemporary societies has evolved based on the existence of common driving forces influencing the contemporary habitat in different cultures,

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1. See [www.oikodomos.org/workspaces/introduction\\_housing](http://www.oikodomos.org/workspaces/introduction_housing)

societies and places, including: Gentrification, affordability, mobility, sustainability, and economic and social restructuring. Without denying the existence of global forces that push towards the aforementioned changes, we also notice that in cities around the world such changes are related to the specific shape of local socio-spatial realities, acknowledging the increased tensions between global forces and local cultures. These issues are thus key themes of interest to all those concerned with the study and development of contemporary housing.

Furthermore, the house is rightly considered as one of the most important means of exploring the social and experiential dimensions of architecture. Houses are a complex expression of the everyday life of their inhabitants; of different cultures, ethnicities and social groups. Hence, they have been considered to be sociograms not only of their occupants but of society at large (Hanson, 2000).

Contemporary housing environments, therefore, need to be addressed through a multidimensional perspective by encompassing all factors underpinning the design of dwelling: Environmental, economic, political, cultural and social. Such an understanding poses considerable challenges as well as opportunities to housing actors, including architects, and has an evident impact on design practice and education (Dorst, 2008). The architects' ability to handle such complexity becomes a prominent issue, which is further fuelled by the rulings of the Bologna process that emphasize the development of critical thinking abilities for the future shapers of the built environment.

Within this framework, the learning space *Introduction to Housing* highlights an opportunity to rethink pedagogic approaches to the study of housing in response to the aforementioned challenges. The pedagogic purpose of the learning space is to introduce students to the basic principles of understanding and designing what a house might represent in our contemporary culture through the collaborative design and implementation of sequences of learning activities. These learning activities attempt to bring together courses in architecture schools which deal with the study and development of contemporary housing while adopting a blended-learning approach to overcome the boundaries between physical and digital learning spaces across the participating institutions.

A joint learning structure was initially designed and developed through the combination of components of a diversity of courses from three European schools of architecture, in Spain, Cyprus and Serbia. The learning structure was subsequently revised and enriched through the participation of two more schools of architecture in Turkey and another one in Lisbon. A number of learning activities and tasks, supported by the OIKODOMOS Workspaces on-line learning environment, were designed to interlink with other activities carried out at the participating institutions in design studios, workshops and seminars for a period of three years (2013-2016).

The following sections illustrate the process of development and implementation of the collaborative learning space through its various phases as well as the challenges and opportunities for the participating students and tutors.

## DEVELOPING A COLLABORATIVE LEARNING SPACE

Nowadays, there are considerable differences among schools with regard to the pedagogic model they adopt in the design studio, in general, and in the housing design studio, in particular. Each school endorses a particular pedagogical philosophy and operates within a specific cultural context; it has its own academic programme and timetable. Therefore, the first challenge faced in the design of the learning space *Introduction to Housing* was to agree on a common learning plan which would reflect the pedagogic objectives of the participating institutions.

### Step 1: Creating a Common Learning Structure

The methodology adopted to create a joint learning structure was based on the one created for the ΟΙΚΟΔΟΜΟΣ Virtual Campus (Madrado, 2011). Within this project, a learning platform which included the web-based environment “Workspaces” was created to facilitate the collaborative design and implementation of learning activities and tasks around a specific topic (Madrado, 2012). Following this model, learning activities (LAS) and tasks (TKS) were collaboratively designed in alignment with the common pedagogic goals set by their respective institutions.

In its first phase of implementation (spring semesters 2013-2014 and winter semester 2014-2015), the structure and contents of the learning space drew on the curriculum of the first year housing design studio of the School of Architecture of Valencia (ETSΑ-UPV) and the second year housing design studio at the University of Cyprus (UCY) and included work from a 3D *Visual Communication* course at the University of Belgrade (AF BELGRADE). Consequently, LAS included activities already being carried out at the participating institutions in housing design studios and other courses. TKS reflected the learning outcomes set by the participating institutions, including: Demonstration of knowledge of the relevant theoretical background, demonstration of coherence and continuity in the development of the design process, appropriate use of different representation techniques (verbal, textual and graphic; digital and analogue) in order to communicate ideas (concepts and design proposals) in an effective manner, ability to demonstrate team working skills and the ability to criticize one’s own work and that of others (Table 1).

Based on this initial joint learning structure, the activities in the learning space *Introduction to Housing* were implemented with the participation of tutors and students from ETSΑ-UPV, UCY and AF BELGRADE. At the end of the

LEARNING ACTIVITIES	TASKS
RECOGNIZING SPACE	"WHAT IS A HOUSE?"
	"THE OBJECTS"
	"THE ROOM"
	"THE HOUSE"
	"COLLECTIVE HOUSING"
	"PEOPLE AND OBJECTS"
INTERPRETATION OF A TEXT	"READING AND INTERPRETING"
	"MODELLING A PLACE"
	"CONSTRUCTING AN IDEA"
PRECEDENT ANALYSIS	"ANALYSIS OF COURTYARD HOUSES"
	"ANALYSIS OF RESIDENTIAL ARCHITECTURE (SINGLE-HOUSING)"
USER PROFILE ANALYSIS	"ANALYSIS OF USERS' NEEDS"
CONTEXT ANALYSIS	"VISUALIZING THE CONTEXT"
NEW DESIGN PROPOSALS	"INITIAL DESIGN PROPOSALS"
	"COURTYARD HOUSE PROJECT"

TABLE 1. Tasks implemented during the spring semester 2013-2014 and winter semester 2014-2015 (white colour, ETSA-UPV; pink, AF BELGRADE; and light pink, UCY)

first semester, the participating schools had the opportunity to reflect on the learning experience and identify the activities and tasks that could be shared as well as to think of new tasks that could be introduced in the second implementation phase in the spring semester 2014-2015.

Following a year of collaboration, ETSA-UPV and UCY were able to create a joint learning structure that reflected the pedagogic objectives of both institutions concerning housing design studio teaching and learning. The learning structure enabled organizing LAS and TKS in open sequences which could be carried out synchronously or asynchronously by students from the participating schools, from various courses and levels (from first to third year).

### Step 2: Creating a Collaborative Learning Space

After the experience of the first implementation phase, a simplified and more flexible learning structure was developed for the second phase (Table 2). The number of LAS was reduced from six to five, and the TKS from fifteen to seven.

Within each LA, TKS could then be added, removed and/or be revised to adapt to each school's educational and cultural context. The agreed tasks were formulated in a generic manner, so as to facilitate their integration with the

LEARNING ACTIVITIES	TASKS
RECOGNIZING SPACE	"WHAT IS A HOUSE?"
PRECEDENT ANALYSIS	"ANALYSIS OF RESIDENTIAL ARCHITECTURE (SINGLE-HOUSING)"
	"ANALYSIS OF RESIDENTIAL ARCHITECTURE (COLLECTIVE-HOUSING)"
USERS PROFILE ANALYSIS	"ANALYSIS OF USERS' NEEDS"
CONTEXT ANALYSIS	"VISUALIZING THE CONTEXT"
NEW DESIGN PROPOSALS	"INITIAL DESIGN PROPOSALS"
	"COURTYARD HOUSING PROJECT"

TABLE 2. Revised learning structure. Learning activities and tasks implemented during the spring semester 2014-2015

LEARNING ACTIVITIES	TASKS
RECOGNIZING SPACE	"WHAT IS A HOUSE?"
	"EXPERIENCING THE HOUSE"
PRECEDENT ANALYSIS	"ANALYSIS OF RESIDENTIAL ARCHITECTURE"
USERS' NEEDS	"ANALYSIS OF POTENTIAL USERS"
CONTEXT ANALYSIS	"FIRST IMPRESSIONS"
	"SITE ANALYSIS"
	"VISUAL MAPPING OF THE CONTEXT"
DESIGN PROPOSALS	"INITIAL DESIGN PROPOSALS"
	"COLLECTIVE HOUSING PROJECT"

TABLE 3. Tasks implemented during the autumn semester 2015-2016 (dark pink, tasks introduced by ITU and GTU)

curricula of each school. These tasks offered students an opportunity to integrate theoretical subjects with the design studio work, and to use a variety of representation techniques (verbal, textual, and visual; in digital and analogue formats) in order to effectively conceive and communicate design ideas. At the same time, students were expected to develop team-working skills and the ability to criticize their own work and that of others. This cyclical process of development, implementation and critical evaluation of the learning activities and outcomes facilitated an improved subsequent edition of the learning space.

### **Step 3: New Contributors Enrich the Learning Space**

The open learning structure implemented in the second phase revealed the potential of a collaborative learning process which could develop asynchronously, in a non-linear manner, thus making it possible to overcome the restrictions imposed by the timetable of each school. This encouraged three new schools to participate in the collaborative learning space: Istanbul Technical University (ITU) and Gebze Technical University (GTU), from Turkey, and the University Institute of Lisbon (ISCTE-IUL), from Portugal. Under the guidance of ETSA-UPV staff, tutors from the three schools familiarized themselves with the pedagogic objectives of the learning space and with OIKODOMOS Workspaces well before the start of the learning activities. The curricula and learning objectives of the three new schools were discussed with the rest of the participants and new tasks were consequently added within the existing framework of learning activities (Table 3).

## **CONSOLIDATING THE LEARNING SPACE**

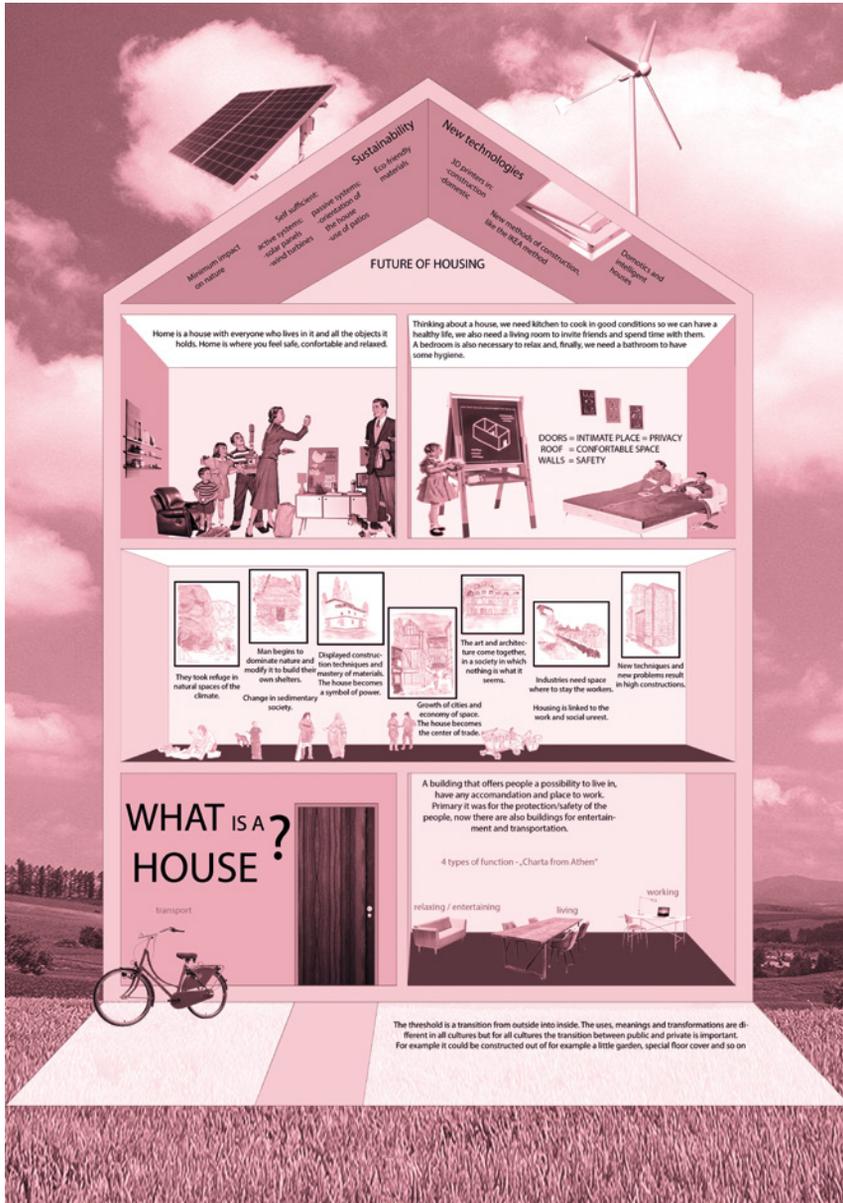
The last edition of the learning space in the autumn semester 2015–2016 encompassed five LAS (Recognizing Space, Precedent Analysis, Identifying Users' Needs, Context Analysis and Design Proposals) and their respective TKs which are summarized next.

### **LA "Recognizing Space"**

The aim of this activity is to introduce students to the ways of understanding, perceiving and representing the spaces we inhabit. Students can develop this capacity through analysis and observation. The tasks focus on the analysis of domestic spaces.

#### TK "WHAT IS A HOUSE?"

It aims at developing an understanding of the concepts of home and house. Students are expected to reflect on these two concepts and present their ideas in an A3 document utilizing a variety of media and techniques (texts, drawings, photographs).



**FIGURE 1.**  
Task "What is a house?".  
Students: Miguel Beltrán, Miriam Feshe, Celia Vanaclocha, from ETSA-UPV

TK “EXPERIENCING THE HOUSE”

To produce a short film which represents their everyday experience in a house.

**LA “Precedent Analysis”**

The purpose of this activity is to learn from precedents, to understand the factors that influence residential architecture, to identify solutions derived from previous designs and to apply them to new ones.

TK “ANALYSIS OF RESIDENTIAL ARCHITECTURE”

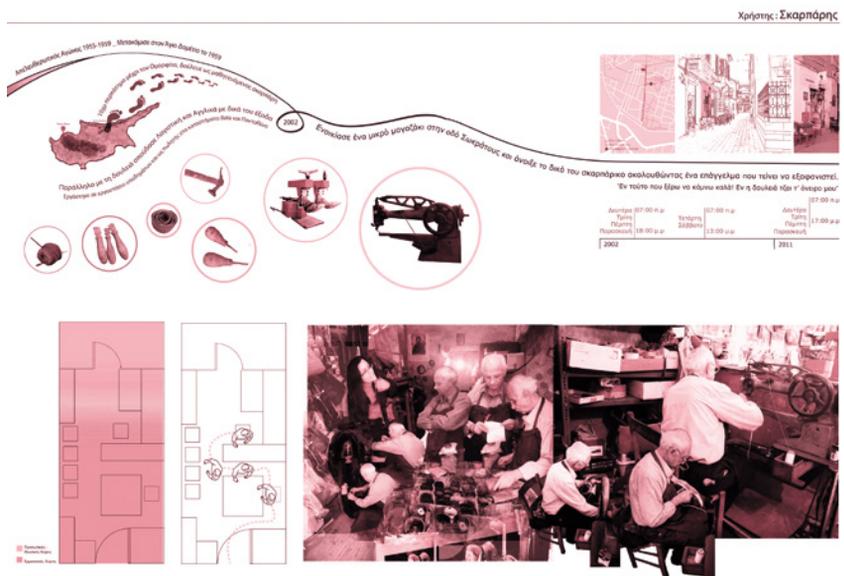
Analysis of examples of residential architecture, single and collective housing (site, users, social and economic environment).

**LA “Users’ Needs”**

In the design of a house it is necessary to consider the practicalities of everyday life while responding at the same time to the owner’s idiosyncrasies, personality and aspirations.

TK “ANALYSIS OF POTENTIAL USERS”

To describe the personality, hobbies, daily activities and needs of a dweller at home.



## LA “Context Analysis”

Following a visit to a residential building, the characteristics of the site and the context are explained and depicted in an A3 poster.

### TK “FIRST IMPRESSIONS”

The students visit the site and express their impressions by means of a poster in A3 format.

### TK “SITE ANALYSIS”

To survey and analyse the building (terrain, surroundings, orientation, among others).

### TK “VISUAL MAPPING OF THE CONTEXT”

To analyse the cultural, social, and environmental conditions of the residential building and represent them graphically.

## LA “Design Proposals”

Once the preceding tasks have been completed, students design a house in a specific context taking into account the local conditions, the practicalities of everyday living and the personality and desires of the future residents. Understanding the relationships between the spatial structure of domestic space and the social milieu—in our increasingly fragmented societies—is one of the main goals of this learning activity.

### TK “INITIAL DESIGN PROPOSALS”

To develop a schematic design proposal for a multifamily residential building.

### TK “COLLECTIVE HOUSING PROJECT”

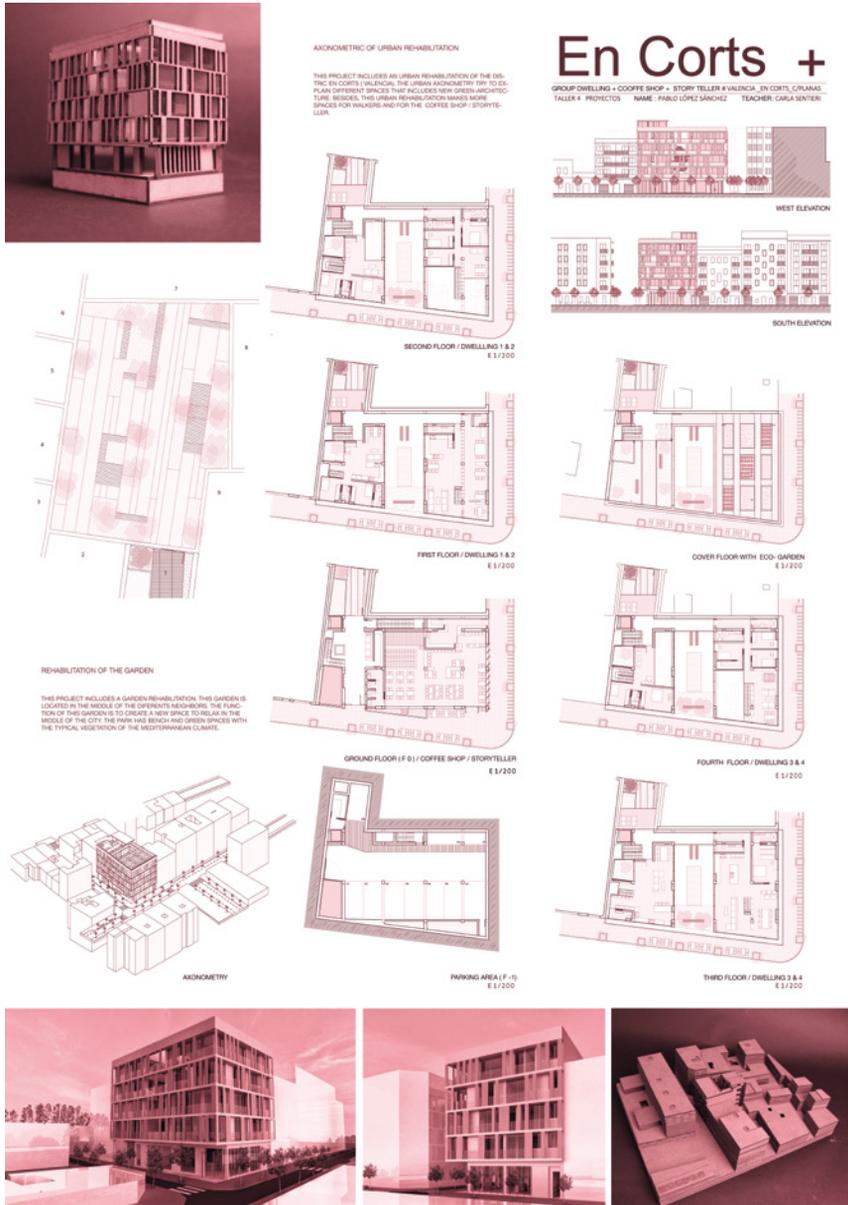
To make a design proposal for a multifamily residential building in a given context and for specific users.

## CONCLUSIONS

The design, development and implementation of the collaborative learning space *Introduction to Housing* has had important implications for both students and tutors from the participating schools.

The learning space enabled students to share their work with students from other schools, to comment and to participate in peer evaluations across institutional boundaries, to attend on-line lectures, to access and to share learning resources through the web-based learning environment. Evaluations of the learning activities conducted through on-line questionnaires given to the students, revealed that they had high expectations

**FIGURE 3.**  
Task "Collective  
housing project".  
Student: Pablo  
López Sánchez,  
from ETSA-UPV



regarding this networking and sharing. They also stated that their participation in the joint learning space had changed or refined their approach to design and that it was particularly useful for communicating with others, as well as for sharing projects, ideas and learning resources.

The whole process of developing and implementing a shared learning structure gave tutors the opportunity to collaborate with other universities, to get to know diverse teaching methods as well as the work done by students from other schools, to attend and also deliver on-line lectures and to share learning resources through a number of platforms (including ΟΙΚΟΔΟΜΟΣ Workspaces, blogs, Skype, and Google+).

The first implementation of the learning space proved that more time and better planning was required in order to make full use of its potential. A persistent problem was the difficulty in reconciling the collaborative learning activities carried out in the learning spaces with partners' regular activities at their institutions. Differences in schedules and learning approaches often hindered the harmonization of collaborative activities. The possibility of combining learning activities (both face-to-face and on-line) in synchronous and asynchronous ways was further explored. Thus, learning activities and tasks were sometimes carried out at different times and places and used various learning resources. Furthermore, it became clear that asynchronous cooperation can only be successful if there is constant communication throughout the period of activity of the learning space and if tutors are aware well in advance of each school's submission.

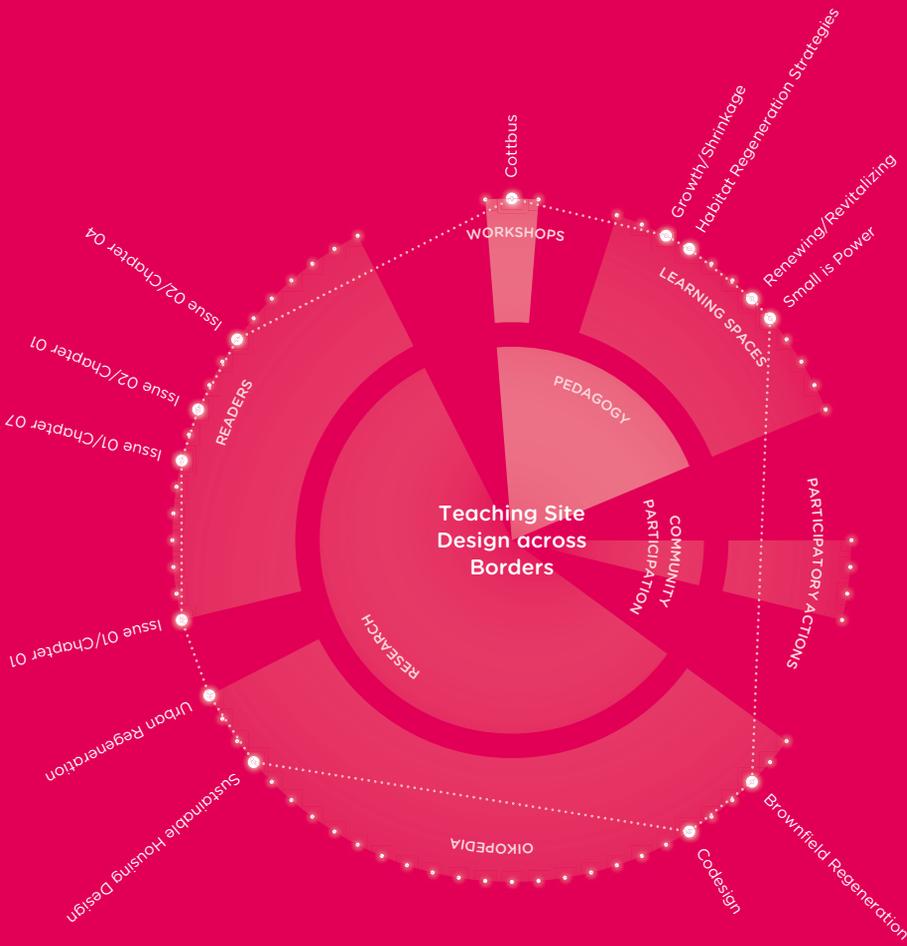
For both teachers and students an important challenge, as well as an opportunity, was to experience the potential of blended-learning (Garrison & Vaughan, 2008). The learning activities carried out in *Introduction to Housing* foster students' critical and creative thinking through a parallel use of digital modes of delivery, teaching methods and styles of learning (Madrado, Sentieri, & Charalambous, 2016). Students had the opportunity to share comments about their work both in the classroom and on-line and to be exposed to different types of teaching and learning. Teachers have incorporated new teaching methods and styles, resources and subject-matters into their teaching. The blended-learning model represents a challenge to both students and teachers. Students are expected to adopt a more active role and to interact effectively within a new and often unfamiliar learning context (tutors from different schools, contents from different programmes, on-line environments) while tutors need to develop their skills as learning designers in order to deliver novel learning plans and strategies to exploit the potential of the new pedagogic model.

FIGURE 4. ETSA-UPV design studio classroom



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READERS

# **Teaching Site Design across Scales and Borders: On-Site and On-Line**

**Nicolai Steinø**

## INTRODUCTION

Academic programmes of schools of architecture and planning are strongly influenced by the professional and cultural aspects of the environment in which they take place. When programmes from various schools and countries are integrated, students can benefit from a cross-cultural exchange. Similar problems may be approached from multiple perspectives, and the same body of theory may be understood and applied in different ways, leading to different solutions and conclusions. This may be more true in architecture and urban design than in other professional studies. Architecture and urban design relate to the physical world and the built environment. As a matter of fact, both must respond to the specificities of the locale in which their learning and practice are rooted. And this inevitably feeds back into the theoretical underpinnings of architecture and urban design education.

Architectural education has its own peculiarities which stem from a long-standing academic tradition. Most architecture programmes draw to some extent on the legacy of the *Beaux-Arts* tradition of the atelier—or studio—where a master architect taught the students, typically by way of precedents, having them develop designs. Yet, the most fundamental element of the architectural education is the design studio, in which students develop projects through various media, ranging from hand sketches and physical scale models, to computer-aided design applications.

As well as design studio teaching, another important component of architectural education is site visits, which give students the opportunity to gain first-hand experience of architectural examples, on a scale 1:1, thus experiencing their spatial, tactile and contextual aspects. Unsurprisingly, the notion of learning by doing (Dewey, 1974) is well-known to most architecture students. While studying architectural theory and methods from texts is not alien to them, reading and writing typically play a much less prominent role than learning by doing in their education.

## INTEGRATING URBAN AND BUILDING DESIGN PROGRAMMES

During the spring semester of the academic year 2014–2015, Aalborg University (AAU) in Denmark and the Brandenburg Technical University (BTU), Germany, carried out a programme of collaborative learning activities with the purpose of creating a novel learning space by overcoming cultural, geographical and disciplinary boundaries. The two programmes were based on the same design studio model, although they differ on a number of other accounts. The AAU programme focused on urban design, a discipline at the intersection between architecture and urban planning, in which learning is partly based on reading and writing texts. The BTU programme focused on architecture and is based almost entirely on design work. The purpose of bringing the students of both programmes together in a set of collaborative learning activities was to expand their respective

understandings of site design across scales, locations and theoretical approaches. While architectural design extends from the scale of the building to the scale of the site, urban design spans from the scale of the site to the scale of the city.

Although Denmark and Germany are neighbouring nations, they do not share the same professional culture with regard to the framing and understanding of architecture and urban design. And while much can be learned and understood from designing and reading/writing respectively, a richer perspective is likely to emerge when the learning mechanisms are exposed to each other. Therefore, a blended-learning format, which combines on-site and on-line learning activities, is likely to enhance student learning.

Working across borders raises the issue of distance—physical and cultural—and how to overcome it. Building physical and social presence is fundamental for the success of a blended-learning environment. Social presence can be described as the level of psychological connectedness, which is present in the relation between students and their peers and instructors (So & Brush, 2008). The emotional climate is important for the effectiveness of learning (Wu, Tennyson, & Hsia, 2010) and creating a sense of intimacy and immediacy is important for the success of collaborative learning (So & Brush, 2008). Since in this short shared learning experience physical presence was limited, it became crucial to construct a social presence with the involvement of students and teachers from the two institutions. Face-to-face encounters rather than on-line exchanges established a social contact which, in turn, became important for the students to emotionally engage in the shared work (short theoretical essays and conceptual site designs).

## LEARNING PROCESS

Setting up a collaborative learning space involving students from two countries encompasses both didactical and practical challenges. Differences in educational traditions mean that local practices should be taken into account. Therefore, a didactical common ground must be established for the collaboration to be meaningful for everyone involved. The AAU studio focused on urban design and the BTU studio on architecture. Site design is a shared subject in both studios. However, while the theoretical foundations for site design are general, their articulation is subject to local cultures. Hence, a shared learning activity between Danish and German students fosters intercultural learning.

The goal of the collaborative activities was to improve the students' site design skills in architecture and urban design by exposing them to a shared curriculum of four related subjects: Brownfield redevelopment, waterfront development, cohousing, and new forms of transportation. Students were expected to apply their knowledge about these four topics to site design.

This was done through interdisciplinary and intercultural learning in the form of joint study activities.

The collaborative learning activities were the following. First, the preparation of a joint reader covering the four proposed topics. Second, site visits in Berlin to see architectural and urban examples. Third, a face-to-face meeting held in Berlin gave Danish and German students the opportunity to discuss site design strategies. Fourth, short theoretical essays (AAU) and conceptual designs (BTU) were formulated and shared. Finally, an on-line student conference was organised to discuss the works carried out by each school.

The shared learning activities formed a logical sequence, building up knowledge, skills and competencies. Hence, the reader provided a shared theoretical basis, while the site visits and the joint meeting gave the students the opportunity to situate their theoretical knowledge as well as to harness it in discussions. Ultimately, the theoretical essays and the conceptual designs enabled the students to train their competencies in applying the theoretical concepts in design and design reflection.

While both AAU and BTU students were familiar with site visits and joint discussions, BTU students were less used to dealing with theoretical writings (as presented in the shared reader) than the AAU students, who—on the other hand—were less skilled in designing than the BTU students. Similarly, interacting in the format of an on-line conference—with papers, presenters and discussion panels—was a new experience for both groups of students, even though this was similar in format to a studio crit, in the case of the conceptual design presentations of the BTU students.

## LEARNING DESIGN

Setting up an international collaboration between two universities can be a tedious and time-consuming undertaking. Curricula and calendars must be aligned, joint learning material must be prepared, and joint learning activities must be planned. Besides, technological platforms must be set up to support distance collaboration and various forms of on-line communication.

There is no doubt that shared literature and lectures can be valuable and form a common base for cooperation. And it may be expedient to share such learning resources—which would have to be prepared anyway—among a larger group of students. But first and foremost, the added value which international collaboration may bring, as compared to other learning formats, is the possibility for students to interact and exchange views and understandings which are likely to differ across cultural, disciplinary and institutional borders.

In the AAU/BTU collaborative learning activities presented here, a number of overlaps made the cooperation possible:

- **TIME.** The calendar of the AAU studio was weeks 6–20, while the calendar of the BTU studio was weeks 15–26, offering a six week overlap between weeks 15–20.
- **CURRICULUM.** While the topic of the AAU studio was site (housing) design on a harbour front brownfield area, the topic of the BTU studio was housing design on a riverfront brownfield site. Even though there were differences in the size, scale, and detail in the assignment of each course, both studios dealt with cohousing, waterfront and brownfield redevelopment. In addition, the AAU studio also addressed new forms of transportation, which could be integrated into the BTU syllabus.
- **RESOURCES.** The AAU studio had funding for a six-day study tour. The BTU studio, on the other hand, did not have funding for travelling, but they were able to provide the valuable resource of working spaces on the BTU campus where all students gathered for a mini-workshop.
- **LOCATION.** As Aalborg is some 700 km away from Berlin, it was feasible to plan a study tour to Berlin. And as Cottbus is 80 km from Berlin, it was feasible to ask the BTU students to come to Berlin (where in fact many of them lived). Thus, it was possible to organise joint site visits in Berlin, as well as a joint student workshop in Cottbus, all within the time frame of the AAU study tour.

A reader covering the four topics was prepared in time to be shared at the beginning of the learning process in week 6 for AAU students and in week 15 for BTU students. The AAU study tour was planned for week 16 in order for the AAU and BTU students to meet in Berlin and Cottbus. Sharing of short theoretical essays and conceptual site designs was scheduled one week after the completion of the AAU study tour. The AAU students wrote short theoretical essays addressing the shared topics, while the BTU students created conceptual designs for their studio assignment. In week 18, an on-line student conference was organized for the students to present their work to each other.

On the AAU side, the alignment with other activities was achieved partly through incorporating the joint site visits and workshop into the study tour, and partly by asking the students to integrate the theoretical essays that were submitted to the on-line student conference as part of their studio project reports. On the BTU side, the joint activities in Berlin and Cottbus were meant to function as a jump start for their studio work (as it was only one week into their studio), while the on-line student conference was aligned to function as an (early) studio crit.

In this way, it was possible to establish cooperation within the given overlaps, in a way that enabled the interaction between AAU and BTU in terms of (a) the physical presence through joint site visits and a subsequent joint discussion, (b) the interaction with works of other students by sharing theoretical essays and conceptual designs, as well as (c) the distant interaction taking place in the on-line student conference.

## IMPLEMENTATION

The first joint activity of the AAU and BTU students was to participate in one of four site visits in Berlin (Figure 1). All the site visits were scheduled on the same afternoon. After a general introduction to urban planning and development in Berlin by the Senate Department for Urban Development and the Environment, the students carried out site visits related to the four subjects of study: Cohousing, waterfront development, brownfield redevelopment and new forms of transportation. Professionals—architects and planners—took mixed groups of students to three different locations in Berlin to see a cohousing project organised as a *building group* (Baugruppe), a large waterfront development scheme along the river Spree, and a brownfield redevelopment in the form of a public park on a former railway terrain. A fourth group of students attended a presentation about current issues concerning urban transportation in Berlin.

While the didactical purpose of these activities was to see real-life projects and planning examples related to the four areas of study, the social purpose was to enable the students across the two universities to get to know each other. Therefore, a short personal introduction event was arranged upon their first meeting. The students were also urged to mingle during the site visits and not just to stick to their own groups.

The next day, the students met again on the BTU campus in Cottbus south of Berlin (Figure 2). Here the mixed groups of students participated in a half-day brainstorming workshop on the topics they had been studying in the site visits the day before. At the end of the workshop, the students were asked to make a visual presentation of their findings, and to comment on each other's work. This completed the joint activities where the students of the two universities worked together on-site.

Two weeks later, all the students uploaded their work to a shared on-line platform (Google+): Short theoretical essays written by the AAU students, and conceptual design proposals from the BTU students. Based on the submitted material, an on-line student conference was organised. It was structured according to the four shared topics. Before the conference, students studied the work submitted by their peers so that they could formulate comments and questions about them during the sessions.

The on-line conference took place in the course of two consecutive afternoons. Each group of students was physically located at their home university, in both cases in a seminar room with two projection screens. On one screen, the students saw a live video of the students on the other place, with presenters at the front and the audience in the back of the video image. And on the other screen, both groups saw the presentation in real time (Figure 3). In each session, the presentations from one group were first presented in sequence, each followed



FIGURE 1. Mixed groups of AAU and BTU students on-site visit to a waterfront development on the river Spree. Source: Nicolai Steino



FIGURE 2. AAU and BTU students attending presentations of workshop results on the BTU campus. Source: Nicolai Steino



**FIGURE 3. AAU and BTU students attending the on-line student conference. Source: Nicolai Steinh**

by comments and questions from a panel on the other side. Once all the presentations from one group were finished, the stage changed and the same procedure was followed the other way around.

### **DIDACTICAL CONSIDERATIONS**

A potentially challenging aspect of the collaboration was the on-line student conference. Typically, live interaction through video conferencing is much less engaging than face-to-face interaction in a room. This is particularly true when there are technical limitations (for example, those concerning the bandwidth speed and the performance of microphones, cameras, loudspeakers and video projectors) and when participants have not had the opportunity to meet physically before.

Hence, the joint site visits and joint workshop in Berlin were not only important learning events; they also played an important role in establishing a feeling of belonging and of being connected, which were fundamental to establishing social presence during the on-line conference (So & Brush, 2008). In other words, it was important that the students knew each other, not only for the on-line conference event to be engaging, but also to awake interest in the study of the materials submitted by their peers.

The collaboration superseded the students' preconceptions about learning in a number of ways. First, they were asked to interact with other students from other fields in a foreign language (English). Second, they had to share their work in progress with these other students and to have them commenting on it. And third, they were exposed to different learning cultures: The AAU students had to deal with the BTU students' strong design orientation while the BTU students were exposed to the AAU students' focus on theory and reading and writing.

### **PRACTICAL IMPLICATIONS**

The quality of any learning activity is highly dependent on a successful implementation which, in turn, may falter due to details which at the outset appear to be of little importance. This is particularly the case for collaborative learning activities between higher education institutions. The organisation and implementation of such collaborations can easily become very time consuming, and the effort required to deal with even minor practical issues may prove burdensome for institutions.

While both time and communication went into organising the joint activities, they were made possible due to the extended use of already available resources and facilities and thanks to the support of student volunteers. This way, extra efforts on behalf of the two collaboration partners were kept at a minimum.

With respect to the students' perception of the added value of the collaboration, it was important that the workload assigned to them was aligned with the demands of their respective curricula, or kept within reasonable boundaries in relation to the requirements of other courses. Otherwise, they would have been unlikely to commit to the collaborative activities.

An important task is to explain the scope, content, and expectations of collaborative activities to students, as well as what they might gain from them in terms of learning which might not be obtained otherwise. In addition, it was important to incorporate the collaborative work into the workflow of the two studios which together constituted the framework for the collaboration.

## CONCLUSIONS

The design of collaborative learning activities involving institutions from different countries faces both didactical and practical challenges. In this collaborative learning experience, it was possible to take full advantage of a number of synergies which, along with a moderate extra effort, made the collaboration feasible.

Joint learning activities were carefully aligned with both didactical and practical demands. Thus, the activities were organised using available resources (study tour, school facilities) so as to cater for the students' immediate learning (site visits and joint session) as well as to foster the social presence required for subsequent activities (shared theoretical essays and conceptual designs, as well as the on-line conference).

Due to curricular and cultural differences between the two programmes involved, students were introduced to new ways of approaching familiar problems, both through physical and virtual peer-to-peer interaction, and through engaging with each other's written reflections and conceptual designs. These activities posed a challenge to the students who had to address differences in scale (architecture vs. urban design), location (an Aalborg harbour front site vs. a Berlin riverfront site), and approach (theory-based vs. design-based), as well as those intangible differences stemming from the diverse cultural and professional backgrounds in Denmark and Germany.

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# Formal and Informal Housing Patterns

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# **Lisbon Workshop: Contemporary Living Patterns in Mass Housing in Europe**

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## INTRODUCTION

The goal of the first OIKONET International Workshop which took place at ISCTE-IUL, in Lisbon, from July 14 to 19, 2014, was to examine the suitability of existing housing for current social and individual needs. The learning activities focused on two neighbourhoods in Lisbon, each one representing a housing pattern, formal and informal: Portela de Sacavém, a housing estate designed by Fernando Silva and built in the 1960s and 70s which then became a model for other housing estates; and Bairro da Liberdade, a self-constructed settlement which emerged around the same period.

The coexistence of informal and formal architecture is a global phenomenon manifested in many cities around the world. Informal settlements arise as survival mechanisms to answer the housing shortage and are built by the occupants themselves. On the other hand, the housing estates built during the twentieth century attempted to solve the housing shortage with the uniform repetition of standardized housing units for standard families. However, the subsequent social and economic developments have made these standardized solutions obsolete. Consequently, mass housing programmes based on the principles of modern architecture fell into disrepute and began to decline. In contrast, informal mass housing is now seen as a good model for living because it fosters diversity and it facilitates a bigger sense of appropriation and identification of the dwellers with their living place (Hernández, Kellett, & Allen, 2010).

A comparative study of these two housing patterns might help to reveal the advantages and the drawbacks of each one. Thus, it would then be possible to develop structured ways of cross-influencing both patterns in order to promote new housing design solutions. The contemporary social, economic and technological transformations in Europe demand more flexible housing design strategies that consider dwelling as a process, rather than a mass-produced object (Hamdi, 2011). In this context, user-designed housing methods seem more capable of providing the flexibility and greater sense of appropriation and identification that dwellers demand (Donath & González, 2006). The complexity that underlies contemporary housing and the current economic restrictions call for new approaches. Advances in design and production using digital technologies can help to face these challenges. Building components can now be mass-customized to respond to local conditions (Kolarevic, 2005). Computer-assisted design-to-fabrication workflows have emerged as a possible solution to produce sustainable buildings at a global scale. Today, versatile customized modular construction systems—which are socially, economically and environmentally sustainable—are possible thanks to the digital fabrication process. Computer Numerical Control (CNC) machinery makes it possible to design and build a house adapted to the demands of the occupants.

Considering these current trends in housing, the Lisbon Workshop aimed at providing answers to these two main questions: Do architects need to learn from informal housing? And, do we need to make a more social-oriented use of the technologies at our disposal? To address these questions, it is necessary to cut across specific disciplinary boundaries to address the problem of housing from a multidisciplinary perspective which integrates architecture, sociology, and technology. Furthermore, new architectural design methods and learning strategies are necessary to foster collaborative processes which bring together multiple actors and disciplines.

By putting together all of these issues underlying contemporary housing—demands for greater participation of dwellers, exploitation of available digital technologies to create mass customized houses—the Lisbon Workshop offered an opportunity to carry out a pedagogic experiment on global housing.

## LEARNING DESIGN

Through the workshop activities, learners were confronted with a complex set of issues which determine contemporary housing and living patterns, structured in four themes: Participatory Processes, Home and Social Change, Energy Efficiency and Construction Materials, and Computational Design (CAD/CAM tools).

- *Participatory Processes* play a key role in today's democratic societies. Since the 1960s there has been an increasing demand to involve inhabitants in the process of shaping their physical environment. Today, it is widely acknowledged that housing design needs to include users' experiences in the decision-making process. Fostering the relationship between inhabitants and their built environment is fundamental to create a sense of belonging. According to Sanoff:

**All designers who are concerned with improving the quality of their efforts and the quality of everyday life should consider participation through user involvement. (...) Participatory design is advantageous in that it increases people's awareness of the consequences of the decisions that are taken. (Sanoff, 1985)**

In practice, participation implies to move away from a traditional client-centred process to one focusing on the dweller's needs and aspirations.

- *Home and Social Change* looks at the social transformations and changes which occurred during the twentieth and early twenty-first centuries that are bringing about new ways of living. Family structures and living patterns are embedded in housing forms and spaces. According to Eleb:

**More and more it becomes necessary to work on the distribution in order to propose spaces better adapted to the new forms of**

domestic groups (cohabitation for example), to the modes of interaction between people that are evolving. One must reflect as well, on adapting the home to the present-day rhythms of daily life, on the forms of relaxing, of work and of consuming in mutation. (Eleb, 1996, p. 46)

- *Energy Efficiency and Construction Materials* strongly influence the environmental sustainability of housing buildings. As Schlueter and Thesseling state:

Due to the increased awareness of energy consumption and related CO<sub>2</sub> emissions, building regulations such as the European Buildings Directive in Europe, Minergie in Switzerland, or programs such as LEED in the USA have been established over the last years. Architects and planners are increasingly forced to consider energy consumption and the environmental impact of their building designs. (...) It is widely acclaimed that the most important design decisions concerning building sustainability have to be made in the early design stages. (...) In common architectural practice however, performance analysis to support design decision-making is only used for the few buildings facing engineering challenges or explicitly focussing on sustainability. The lack of integration into the design leads to extensive modifications afterwards to meet performance criteria. (Schlueter & Thesseling, 2009, p. 153)

- *Computational Design* techniques, such as parametric design and rapid prototyping, can provide novel housing design and construction solutions. The increasing availability of advanced computer modelling programs and digital fabrication machines enables the design and construction of housing units adapted to a specific programme (site, materials and budget).

These four themes were intertwined in the design process carried out during the workshop. The process started with an exercise in participatory design involving residents and ended with the construction of housing prototypes using digital fabrication techniques and wooden panels. In this design-through-production process, participants were challenged to rethink the concepts of living in interaction with the inhabitants (Paio, 2014).

## LEARNING IMPLEMENTATION

Following a pedagogic methodology previously developed in the OIKODOMOS project (Madrazo, 2011), before the beginning of the workshop, participating students and teachers carried out some preparatory activities to acquaint themselves with the topics to be addressed during the workshop and with the study areas. This preparatory work was done using the on-line learning

environment OIKODOMOS Workspaces.<sup>1</sup> The preparatory learning activities encompassed the various themes of the workshop programme. By means of recorded video lectures, maps, plans and photographs, students were able to understand the historical, sociological and morphological characteristics of the two sites. Then, the students presented the outcomes of the preparatory activities at the start of the workshop in Lisbon.

The activities carried out in the one-week workshop included site visits and meetings with residents, lectures by experts and local representatives, field studies, and design studio work including the construction of a full-scale housing prototype with digital fabrication techniques. Students met with citizens and visited the two housing developments which had to be upgraded and adapted to current needs. Introductory lectures on the four thematic blocks—Participatory Processes, Home and Social Change, Energy Efficiency and Construction Materials, and Computational Design—gave students the basic theoretical background. They were followed by thematic studios dedicated to each of the four themes:

- In “Participatory Processes” the studio objective was to analyse relationship between physical and social dimensions in the two housing areas. In the field work, students identified users’ needs, talked about their everyday living experiences and analysed how these could be part of the design process.
- In the theme “Home and Social Change” the objective was to understand the influence of social dynamics on residential architecture. Housing organization and form change over time, reflecting the evolution of prevailing social perceptions and values regarding the concepts of family and private life (Pereira, 2013). Since the beginning of the twentieth century, two main ideal family types can be sequentially distinguished in western societies (Roussel, 1992): A traditional model characterized by hierarchy, roles, gender division anchored in male power, formality and institutionalism; and a modern one, characterized by the deepening of the democratic relations among its members, the growth of informality and individualization as well as the reducing influence of the institutions in the individual behaviour. Likewise, the evolution of housing patterns confirms that family types can be better understood through the changes of dwelling configuration. In fact, it may be contended that modern housing is the formalized expression of a modern family ideal. However, it should be noted that the evolution of family types as well as of dwellings is quite complex, and that the transition from tradition to modernity is not shaped by rupture. At present, two of the main problems of Portela are the ageing of the original residents and the need to attract new inhabitants. How to adapt the existing housing to the new reality was the purpose of the exercise developed by the students.

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1. See [www.oikodomos.org/workspaces/contemporary\\_living\\_patterns](http://www.oikodomos.org/workspaces/contemporary_living_patterns)

- “Energy and Construction Materials” are essential to achieve energy efficiency on residential buildings. Students received training to calculate the embodied energy and the carbon footprint of construction components in order to evaluate their environmental impact. For this purpose, they used the University of Bath’s Inventory of Carbon and Energy (Hammond & Jones, 2008) and a spreadsheet-based calculation tool developed at ISCTE-IUL. This methodology is not as detailed as other Life Cycle Assessment (LCA) methods and tools but it provides a simple and effective way of estimating environmental sustainability of construction elements (Ashby, Ball, & Bream, 2011; Ashby, Miller, Rutter, Seymour, & Wegst, 2012).
- “Computational Design” thematic studio gave students an overview of the new challenges raised by the digital revolution (Kolarevic, 2005). Digital manufacturing processes and fabrication technologies were presented and the advantages and disadvantages of the CAD/CAM technologies in providing socially and economically sustainable customized solutions were discussed. The application of CAD/CAM techniques and physical computing processes, from the conceptualization phase (sketch and 3D modelling with generative and parametric parameters) to digital fabrication, implementation and product assembly, were introduced. CAD technologies (Rhino and Grasshopper plug-in) were used to generate design variations. The students fabricated a small section of a full-scale prototype to learn how to use subtractive procedures in a CNC milling machine.

The knowledge acquired in the four thematic studios was incorporated into the design studio work. Students developed solutions with customized prefabricated wooden panels to upgrade the housing in the two neighbourhoods, Portela and Liberdade. At this stage, the work was done by teams made of students from different schools to foster the exchange across countries, cultures and educational programmes. Teachers from OIKONET institutions followed the assignments, supervised the evolution of the design proposals and acted as design critics in the final presentation of the studio work. The students were frequently asked to evaluate whether their design proposal would be flexible and adaptable in order to suit several distinct household demands.

During the workshop, all the results of the tasks carried out were posted on an on-line public platform<sup>2</sup> and in OIKODOMOS Workspaces. Hence, these materials were available to the participants as a knowledge resource.

### Students’ Proposals

The proposals presented by the students at the end of the workshop exemplify the interweaving of the four topics introduced in the workshop. Diverse housing solutions were proposed and partially materialized in the

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2. See [oikonet-lisbonworkshop.blogspot.pt](http://oikonet-lisbonworkshop.blogspot.pt)

full-scale prototype, all of them based on the same modular construction system, which was adapted to the specific conditions of the programme.

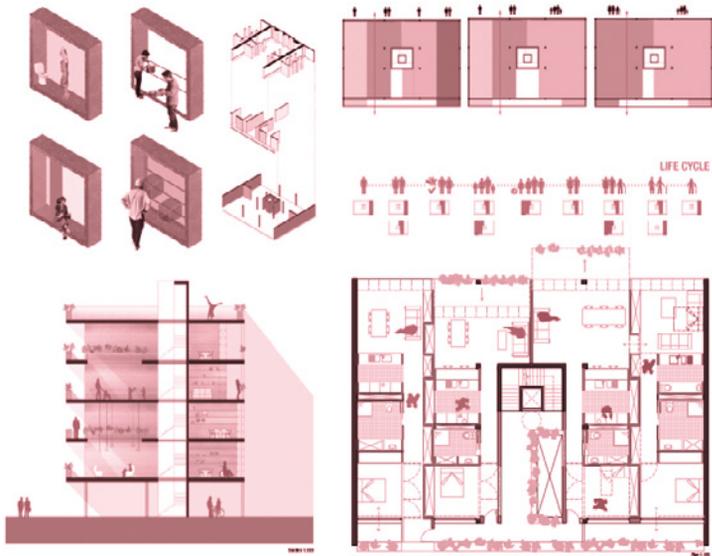
#### PORTELA DE SACÁVEM: RENOVATION PROPOSALS

The Portela housing estate is located in the northeast of Lisbon. It houses 4,500 dwellings in less than 1 square kilometre, with building blocks of a few types organized around a central core where a shopping centre and other public facilities are located. The majority of Portela's buildings were completed between 1973 and 1979. The housing units were designed for the first occupants who arrived at that time: Rising middle-class families coming either from the ex-colonies or from the city of Lisbon. Since then, the profile of the inhabitants has changed.

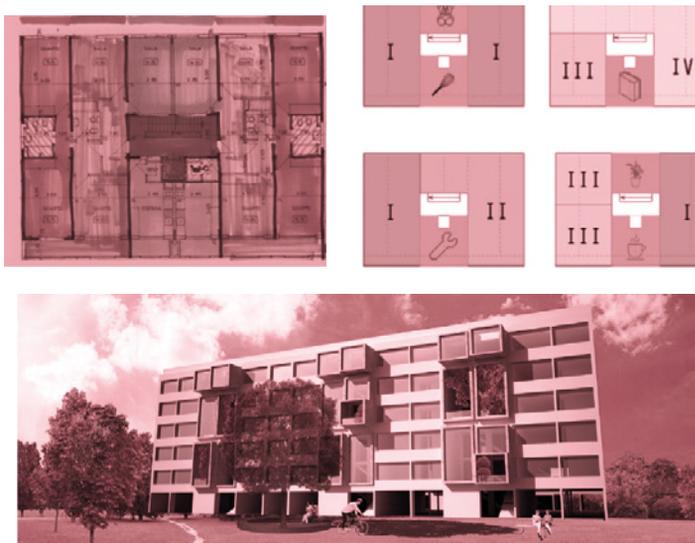
At present, two of the main problems of Portela are the ageing of the original residents and the need to attract new inhabitants.

How to adapt the existing housing to the new reality was the purpose of the exercise carried out by the students. Their proposals aimed at providing answers to problems such as an ageing community, the lack of common spaces, and the transformation of the dwellings over time. The four projects that they developed explored customized housing solutions adapted to the needs of today's dwellers:

- *Adaptable Living* aims at making the existing apartments attractive to younger dwellers. The structural components of the existing dwellings, the external walls and the location of wet areas are preserved. With this fixed structure, rooms and services can be placed in different ways. A kitchen can be easily replaced by a bathroom by removing panels. A one-bed apartment can be transformed into a three-bed one. Semi-private spaces can be added to the facade to expand the inner spaces and provide a place which can be used as a playground or as a terrace, thus promoting social interaction (Figure 1).
- *S.I. Box* proposes to separate the existing layouts in three zones: A central one for shared spaces, a semi-private one for services and a private one for the bedrooms. Modular units are embedded in the existing blocks to expand the dwellings with new spaces which can be used as shared kitchens and terraces. In this way the project aims at solving some of the problems of the blocks: The dark staircases, and the small rooms within large apartments (Figure 2).
- *A Contemporary Solution for a Modern Design* proposes to remove all the partitions and walls to have a free space which can be filled in with modular houses placed over a grid. The leftover spaces in between the units function as shared spaces. Each module provides a dwelling for different types of residents: An elderly woman living alone, an exchange student, a young couple and a family of 3 to 4 members (Figure 3).

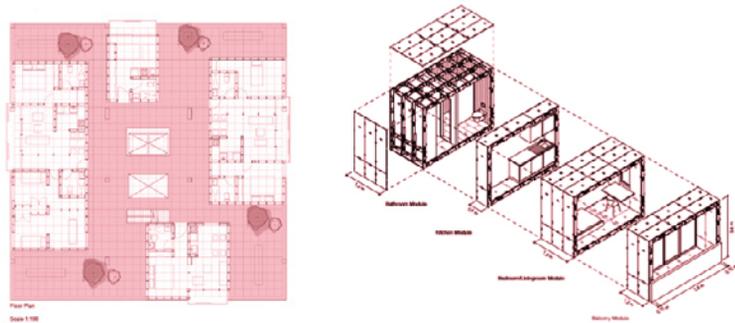


**FIGURE 1. Portela:**  
*Adaptable Living.* Students:  
Ilze Antonova,  
Clàudia Carreras,  
Frederik Peter  
Kæmsgaard,  
Yasemin Kiliç,  
Nele Santy, Ana  
Sofia Simões



**FIGURE 2. Portela:**  
*S.I. Box.* Students:  
Mónica Cardoso,  
Izabela Grotowicz,  
Dede Guclu,  
Leonie Hagen,  
Andronikos Kalli,  
Jan Wyszowski

**FIGURE 3.** Portela:  
*A Contemporary  
Solution for a  
Modern Design.*  
Students: Milos  
Jelisavcic, Lukas  
Kolb, Carlos  
Ochando Seva,  
Afonso Patinhas,  
Evi Stavrakí,  
Bruno Trabut



- *One Floor, One Family* proposes the transformation of the inner spaces by means of a do-it-yourself modular system to build furniture pieces in multiple ways. The system is based on two modules, vertical and horizontal. By combining the pieces, it is possible to create tables, wardrobes, drawers, shelves and empty spaces (Figure 4).

**FIGURE 4.** Portela:  
*One floor, One  
Family.* Students:  
Francisco Alves,  
Rémi Avril, Shilan  
Gharanfoli, Karol  
Görner, Chrysa  
Pierrakou, Inger  
Kirstin Rahbek,  
Héctor Ruiz



#### LIBERDADE: RENOVATION PROPOSALS

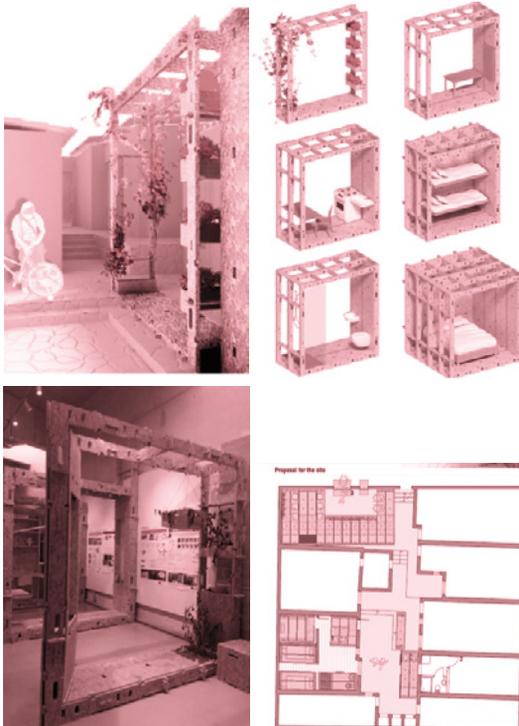
The “Bairro da Liberdade” is located between a protected green area and two adjacent transport lines, a highway and a railroad. It was built between 1969 and 1980 by immigrants from rural areas who came and built their own dwellings. Currently, the city is discussing strategies to redevelop the area, which combine the preservation of some of the characteristic patterns with the construction of social housing.

After meeting the neighbours and finding out about their needs, students’ elaborated four proposals with the aim of preserving some of the distinctive features:

- *Creating Patterns of Improvement* considered three scenarios: A house for a family, a house for an old lady, and a shared space. The design solutions were the result of the dialogue that students had with the residents as well as of a morphological analysis of the development patterns of the informal housing. The modular system is used in various ways: Embedded inside the units, and

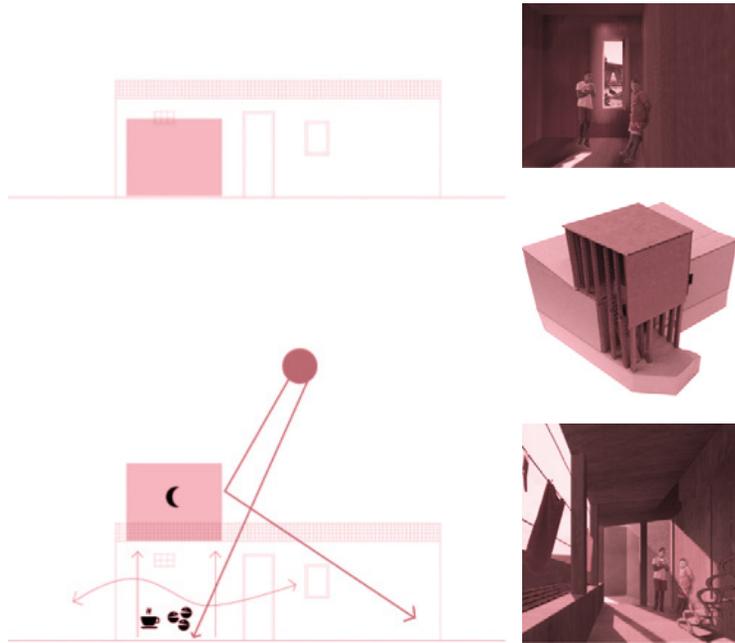
as extension of the inner spaces into the patio. The patios are also enhanced to reinforce their function as common spaces (Figure 5).

- *Garden of Eden* plans to demolish an abandoned unit to provide more room for shared, common spaces. A modular prefabricated unit will fill in the empty space, providing a seating area and a trellis for growing plants. Besides, the roofs of the dwellings will be replaced by new ones which will collect rain water and will be accessible through new staircases located in place of the toilets (Figure 6).
- *The Roofbox* seeks to give solutions to the problems students identified through their talks with a family living in one of the units, a couple with two boys. They found out that there was a doorway on the staircase, no shade in the terrace, no place to dry clothes, the bathroom was too small and an extra bedroom was needed. A solution to all of these problems is to build a new room on the roof which casts shadow on the patio, to change the position of the staircase to enable a new access, and to move the bathroom to another place (Figure 7).



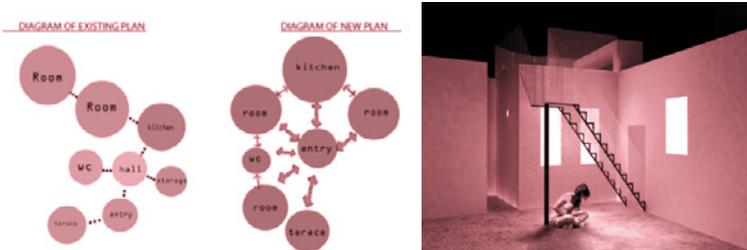
**FIGURE 5.**  
Liberdade:  
*Creating Patterns  
of Improvement.*  
Students:  
Marina Clusella,  
Aleksander  
Cosic, Orhan  
Kemik, Caroline  
Melders, Georgia  
Papasozomenou,  
Marek Sipko

**FIGURE 6.**  
 Liberdade:  
*Garden of Eden.*  
 Students: Serdar Aktan, Andrew Cleary, Alina Dimitroulopoulou, Pavol Dobšínský, Diana Gabão, Anton Kunau, Ana Lopes



**FIGURE 7.**  
 Liberdade:  
*The Roofbox.*  
 Students: Emmily Delbare, Léa Garcia, José Luis León Lora, Raquel Martins, Christopher O’Keeffe, Vasco Reis

**FIGURE 8.**  
 Liberdade: *House 7.* Students: Catarina Alvares, Eva Andrasova, Troels Broch, Malgorzata Budlewska, Tugba Cavusoglu, Gorkem Varlik



- *House 1* plans to rearrange the rooms by placing the entrance at the centre. The position of the staircase is changed to gain an extra room built with the modular system which is placed on the top of the roof (Figure 8).

## CONCLUSIONS

In the short span of six days, students were able to integrate the inputs they received from lectures, contacts with residents, and critiques from tutors, into their designs of the housing prototypes. The four proposed themes—Participatory Processes, Home and Social Change, Energy Efficiency and Construction Materials, and Computational Design—were integrated in a greater or lesser extent in the designs produced by the students. Furthermore, in the final presentation each team was able to deliver a full-scale model fabricated with digital prototyping techniques, together with a poster of the design proposal. The quality of the results produced, in a short time and working in an international context, suggests that the pedagogic approach could be replicated and even expanded to other pedagogic contexts, such as design studio within the undergraduate programme, or a one-year postgraduate course.



**FIGURE 9.** Lisbon Workshop: final presentation of design proposals, with posters and full-scale housing prototypes. Source: OIKONET

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READERS

- Issue 01/Chapter 01
- Issue 01/Chapter 02
- Issue 01/Chapter 03
- Issue 01/Chapter 04
- Issue 01/Chapter 05
- Issue 01/Chapter 06
- Issue 01/Chapter 07
- Issue 01/Chapter 08
- Issue 02/Chapter 01
- Issue 02/Chapter 02
- Issue 02/Chapter 03
- Issue 02/Chapter 04
- Issue 02/Chapter 05
- Issue 02/Chapter 06
- Issue 02/Chapter 07
- Issue 02/Chapter 08
- Issue 02/Chapter 09
- Issue 02/Chapter 10

WORKSHOPS

- Belgrade
- Cottbus
- Lisbon

LEARNING SPACES

- Civic Housing
- Contemporary Living Patterns
- Growth/Shrinkage
- Habitat Regeneration Strategies
- Housing Systems
- Introduction to Housing
- Renewing/Revitalizing
- Small is Power
- Thinking Dwelling
- Threshold Matters
- Urban Housing Regeneration
- Urban Systems

PARTICIPATORY ACTIONS

- Barcelona
- Bratislava
- Rimini
- Skopje

OIKOPEDIA

- Affordable Housing
- Area-Based Regeneration
- Brownfield Regeneration
- Building Performance Evaluation
- Capacity Building
- Codesign
- Community Participation
- Crime Prevention
- Gentrification
- Healthy Cities
- Hedonic Prices
- Housing Innovations
- Housing Careers
- Housing Regeneration
- Housing Rights
- Interplace
- Participatory Design
- Participatory Planning
- Passive Design
- Post Occupancy Evaluation
- Public Rental
- Sustainable Housing Design
- Social Housing
- Urban Heat Islands
- Urban Heat Greening
- Urban Regeneration

# Outputs

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**Oikopedia**

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**Readers**

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**Learning Spaces**

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**Workshops**

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**Participatory Actions**

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# Oikopedia

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An on-line multilingual dictionary about housing studies. It was started in the OIKODOMOS Virtual Campus project and it has been enhanced with the addition of new terms by researchers and teachers collaborating in the OIKONET network.

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## **Affordable Housing**

It can be broadly defined as adequate housing in quality and location, whose costs do not hinder dwellers from meeting other basic living costs or threaten their basic human rights.

[www.oikodomos.org/oikopedia/affordable\\_housing](http://www.oikodomos.org/oikopedia/affordable_housing)

## **Area-Based Interventions**

They are multi-sector, geographically concentrated efforts to simultaneously address urban problems such as poor housing, unemployment, poverty, crime, physical decay, and health and educational problems.

[www.oikodomos.org/oikopedia/area-based\\_interventions](http://www.oikodomos.org/oikopedia/area-based_interventions)

## **Brownfield Regeneration**

It is the upgrading of previously abandoned or underused residential, commercial or industrial facilities through redevelopment.

[www.oikodomos.org/oikopedia/brownfield\\_regeneration](http://www.oikodomos.org/oikopedia/brownfield_regeneration)

## **Building Performance Evaluation**

It is a process of evaluating whether a building performs according to the design intentions. It involves identifying deficiencies in the building as well as finding out the level of satisfaction of the occupants (post-occupancy evaluation).

[www.oikodomos.org/oikopedia/building\\_performance\\_evaluation](http://www.oikodomos.org/oikopedia/building_performance_evaluation)

## **Capacity Building**

It implies empowerment actions that help involve actors, especially dwellers, to increase their capacity to change their living environment both socially and physically.

[www.oikodomos.org/oikopedia/capacity\\_building](http://www.oikodomos.org/oikopedia/capacity_building)

## **Codesign**

It implies given power to citizens not just to change the appearance of buildings and public places, but also to modify the social structures and to envision a future for the city.

[www.oikodomos.org/oikopedia/codesign](http://www.oikodomos.org/oikopedia/codesign)

### **Community Participation**

It is fundamental to count on citizen participation to create socially and culturally adequate housing which reflects the needs and preferences of the community

[www.oikodomos.org/oikopedia/community\\_participation](http://www.oikodomos.org/oikopedia/community_participation)

### **Crime Prevention**

Crime Prevention Through Environmental Design (CPTED) aims to deter criminal behaviour by planning and designing spaces in which it is more difficult to commit an offence, thus creating living environments that are safe for the community.

[www.oikodomos.org/oikopedia/crime\\_prevention](http://www.oikodomos.org/oikopedia/crime_prevention)

### **Gentrification**

It is a result of the renewal of working class and abandoned housing and the consequent transformation of an area into a middle-class neighbourhood. It conveys social, physical and economical changes, simultaneously.

[www.oikodomos.org/oikopedia/gentrification](http://www.oikodomos.org/oikopedia/gentrification)

### **Healthy Cities**

The healthy cities movement is an initiative of the European Office of the World Health Organization

(WHO) to support public health through urban regeneration and development.

[www.oikodomos.org/oikopedia/healthy\\_cities](http://www.oikodomos.org/oikopedia/healthy_cities)

### **Hedonic Prices**

The value of a dwelling depends on qualities such as surface, design, materials, light and views, location and facilities in the surroundings. Even though market prices of the dwelling as a whole are observable, the prices of each of the characteristics are not discernible. These unobserved prices are known as hedonic prices.

[www.oikodomos.org/oikopedia/hedonic\\_prices](http://www.oikodomos.org/oikopedia/hedonic_prices)

### **Housing innovations**

They refer to new products, services and models that meet housing needs while bringing about new forms of collaboration among the stakeholders involved.

[www.oikodomos.org/oikopedia/housing\\_innovations](http://www.oikodomos.org/oikopedia/housing_innovations)

### **Housing Career**

It describes the process of adaptation of a household to the dwellings in which they reside throughout different periods of their lives.

[www.oikodomos.org/oikopedia/housing\\_career](http://www.oikodomos.org/oikopedia/housing_career)

### **Housing Regeneration**

It is a qualitative improvement of the residential building stock, with interventions at the building and/or urban scale. It might include physical, environmental, economic and social interventions.

[www.oikodomos.org/oikopedia/housing\\_regeneration](http://www.oikodomos.org/oikopedia/housing_regeneration)

### **Housing Rights**

As established by UN-Habitat, these are rights such as protection against forced eviction or against the demolition of one's home, choice of the residence and freedom to decide where to live.

[www.oikodomos.org/oikopedia/housing\\_rights](http://www.oikodomos.org/oikopedia/housing_rights)

### **Interplace**

An interplace is an in-between space where professionals and lay-people meet to learn from each other in order to understand an urban development process. It requires architects and planners to set aside their preconceptions in order to engage in an open dialogue with citizens.

[www.oikodomos.org/oikopedia/interplace](http://www.oikodomos.org/oikopedia/interplace)

### **Participatory Design**

It builds on the ideals of a participatory

democracy where collective decision-making is highly decentralised throughout all sectors of society, so that all individuals can effectively participate in taking decisions that affect them in their daily living environment

[www.oikodomos.org/oikopedia/participatory\\_design](http://www.oikodomos.org/oikopedia/participatory_design)

### **Participatory Planning**

It refers to the active involvement of the community throughout all the levels of spatial planning. This involvement is fundamental in order to achieve social sustainability through community building.

[www.oikodomos.org/oikopedia/participatory\\_planning](http://www.oikodomos.org/oikopedia/participatory_planning)

### **Passive Design**

A set of design principles and methods to design an energy-efficient building, by minimising heat losses, maximising solar heat gains, and using high-thermal capacity materials.

[www.oikodomos.org/oikopedia/passive\\_design](http://www.oikodomos.org/oikopedia/passive_design)

### **Post Occupancy Evaluation**

A process to measure the satisfaction of people with their living environment (e.g. thermal comfort,

indoor air quality, lighting quality, etc.) which requires the systematic collection of information about their behaviour.

[www.oikodomos.org/oikopedia/post\\_occupancy\\_evaluation](http://www.oikodomos.org/oikopedia/post_occupancy_evaluation)

### **Public Open Spaces**

They are essential components of a living environment, an extension of the personal living space which facilitates the livability in modern cities.

[www.oikodomos.org/oikopedia/public\\_open\\_space](http://www.oikodomos.org/oikopedia/public_open_space)

### **Public Rental Housing**

A type of rental which bridges the gap between the residual social rental housing and unregulated private rental housing market.

[www.oikodomos.org/oikopedia/public\\_rental\\_housing](http://www.oikodomos.org/oikopedia/public_rental_housing)

### **Social Housing**

The provision of a formal housing solution, in theory from the market but often with government subsidies, targeting and reaching the lower and middle-income segments of the population.

[www.oikodomos.org/oikopedia/social\\_housing](http://www.oikodomos.org/oikopedia/social_housing)

### **Sustainable Design**

A systemic approach to design to achieve the economic, social and

ecological sustainability of the living environment.

[www.oikodomos.org/oikopedia/sustainable\\_design](http://www.oikodomos.org/oikopedia/sustainable_design)

### **Urban Greening**

It refers to the landscaping of urban areas, for instance, roofs, sidewalks and streets, with the purpose of improving the environmental qualities while strengthening the community and bringing people together.

[www.oikodomos.org/oikopedia/urban\\_greening](http://www.oikodomos.org/oikopedia/urban_greening)

### **Urban Heat Island**

An urban area which is warmer than the surrounding rural environment due to its lower reflectivity of solar radiation and to the activities that take place in it.

[www.oikodomos.org/oikopedia/urban\\_heat\\_island](http://www.oikodomos.org/oikopedia/urban_heat_island)

### **Urban Regeneration**

It is primarily concerned with the upgrading of inner city centres, former industrial or residential areas facing periods of decline due to major short or long-term economic problems, deindustrialisation, demographic changes, social tensions, physical changes and deterioration, among others.

[www.oikodomos.org/oikopedia/urban\\_regeneration](http://www.oikodomos.org/oikopedia/urban_regeneration)

# Readers

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A collection of position papers written and debated by partners involved with housing research.

The two compendiums deal with some of the most outstanding issues in the contemporary housing debate, among them: sustainability, participation, energy efficiency, gentrification, regeneration and political and social policies.

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## Reader #1

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[oikonet.wordpress.com/2014/12/17/reader1](http://oikonet.wordpress.com/2014/12/17/reader1)

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### Chapter 1

"Contemporary Housing Issues" is a review of some of the issues discussed in the literature on contemporary housing research, in particular those regarding the needs of today's dwellers and the provision of environmentally sustainable, socially responsive and affordable housing.

### Chapter 2

"Interspace Thinking, Capacity-Building and Codesign" raises a number of critical questions about citizen participation in urban planning and development, and how these three strategies could help to make it effective: interplace, capacity building, and codesign.

### Chapter 3

"Advanced Concepts of Energy Efficient Buildings' Planning" summarizes the guidelines to plan energy efficient buildings. It argues that successful planning requires wider stakeholder participation, as

well as innovative pedagogic programmes to enhance interdisciplinary collaboration.

### Chapter 4

"The Process of Gentrification" is explained through the case study of Budapest. In particular, it highlights the role of investors, policy makers and the creative industry in the process of revitalizing the inner city.

### Chapter 5

"Housing Allowances—Housing Policy and Social Policy" discusses the role of housing benefits in socially oriented housing policies aimed at helping low-income households to improve their living conditions.

### Chapter 6

"Public Rental Housing Programme as Innovation" explains the public rental housing programme and associated social innovations implemented in Zagreb.

**Chapter 7**

"Research in the Design Studio: Types of Knowledge in Housing Studies" summarises design studio research at University of Cyprus. It critically discusses the relationship between design and research, and the knowledge construction process that takes place in the design studio.

**Chapter 8**

"Housing Research: Institute for Housing and Urban Development Studies" presents the housing research undertaken at the Institute of Housing and Urban Development Studies (IHS).

**Reader #2**

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[oikonet.wordpress.com/2016/01/18/reader2](http://oikonet.wordpress.com/2016/01/18/reader2)

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**Chapter 1**

"Brownfield Regeneration in the UK" discusses the redevelopment of abandoned industrial areas in the UK through brownfield regeneration programmes which include: Spatial Planning, Technical Support, Financial Support, and Direct Development.

**Chapter 2**

"Local Urban Heat Island (LUHI) Mitigation by the Whitening and Greening of the Settlement's Surfaces" summarizes a research study about the phenomenon of urban heat island and how this can be mitigated by the whitening and greening of urban settlement's outdoor surfaces.

**Chapter 3**

"Post-conflict Regeneration in the Historic Centre of Nicosia: Global Challenges and Local Initiatives" reviews post-conflict regeneration programmes in the historic

centre of Nicosia in Cyprus. It goes over Nicosia's master plan by focusing on urban development, social characteristics, urban regeneration, and housing regeneration in two neighbourhoods: Chrysaliniotissa and Taht-el-Kale.

**Chapter 4**

"Neighbourhood Regeneration: The Case of Oslo" introduces neighbourhood regeneration by analysing the development programme for Inner City East and Groruddalen districts in Oslo, Norway.

**Chapter 5**

"Regeneration of Multi-Family Buildings in Local Community of Zagorje ob Savi" reviews the 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 exemplified with some case studies.

**Chapter 6**

"Role of Participation in Management of Privatized Housing" discusses the challenge of privatised housing management across Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) countries. It is concluded that an active role of residents in the management of their housing is necessary.

**Chapter 7**

"Local Community Responses" presents the experience intertwining research, education and community outreach in the suburb Hammarkullen, in Gothenburg, Sweden, with the aim of engaging inhabitants in development planning.

**Chapter 8**

"Community Participation and Power Sharing: Lessons from Development Studies" discusses development policies directed at community participation and citizen empowerment which could potentially lead to a change in the power balance between citizens and authorities.

**Chapter 9**

"Urban Planning and the Role of Participation" considers the transformation of inner cities as the result of two actions: the plans developed from urban planning offices and the spontaneous initiatives from residents. The transformation of the Erzsébetváros district in Budapest is an example of these interacting driving forces.

**Chapter 10**

"Housing Regeneration Innovations" are initiatives which foment sustainable urban development. What makes housing innovation sustainable and affordable is discussed in regard to a housing programme for young academics in Zagreb, Croatia. Requirements for a sustainable housing regeneration are outlined.

# Learning Spaces

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Learning activities collaboratively designed and implemented by teachers from the schools participating in the network. The activities are built around a shared theme dealing with contemporary housing. Learning and teaching takes place in a blended-learning environment, which combines on-line work (video lectures, posting and commenting assignments, peer reviewing) with on-site courses in various formats (design studios, seminars).

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## **Civic Housing**

A participatory process involving members of a housing cooperative and architecture students to carry out a cohousing project to refurbish an existing building block in the historical centre of Barcelona.

[www.oikodemos.org/workspaces/civic\\_housing](http://www.oikodemos.org/workspaces/civic_housing)

## **Contemporary Living Patterns**

Preparatory activities of the themes included in the programme of the Lisbon Workshop, site analysis of the two case study areas, Portela de Sacavém (formal housing) and Bairro da Liberdade (informal housing); sociological studies; participatory processes; sustainable design and energy efficiency, and parametric modelling.

[www.oikodemos.org/workspaces/contemporary\\_living\\_patterns](http://www.oikodemos.org/workspaces/contemporary_living_patterns)

## **Growth/Shrinkage**

Preparatory activities of the Cottbus Workshop dedicated to exploring the duality of growth and shrinkage

in urban development and its reciprocal effects on housing schemes and urban strategies, exemplified in the cities of Berlin and Cottbus.

[www.oikodemos.org/workspaces/growth\\_shrinkage](http://www.oikodemos.org/workspaces/growth_shrinkage)

## **Habitat Regeneration Strategies**

Studying the role of housing in the development of regeneration strategies, by bringing together different domains —architecture, urban planning, geography—with the purpose of improving the liveability of urban environments.

[www.oikodemos.org/workspaces/habitat\\_regeneration\\_strategies](http://www.oikodemos.org/workspaces/habitat_regeneration_strategies)

## **Housing Systems**

A “housing system” embraces: 1. the components that make a particular system (not only the physical elements such as structural components, but also the dwellers that inhabit the spaces) and 2. the interactions between the components (for

example, between structural components and the building envelope, or between dwellers and spaces). This notion of housing system is applied to the analysis and design of residential architecture.

[www.oikodomos.org/workspaces/housing\\_systems](http://www.oikodomos.org/workspaces/housing_systems)

### **Introduction to Housing**

An introduction to some basic architectural principles of analysis and design through the study of what housing represents in our contemporary culture.

[www.oikodomos.org/workspaces/introduction\\_housing](http://www.oikodomos.org/workspaces/introduction_housing)

### **Renewing/Revitalizing**

Preparatory activities of the Belgrade Workshop dedicated to examining the multiple dimensions, scales and actors involved in the process of creating liveable cities. The area of study was Kosančićev Venac, a heterogeneous, mixed-use area next to the historical centre of Belgrade.

[www.oikodomos.org/workspaces/renewing\\_revitalizing](http://www.oikodomos.org/workspaces/renewing_revitalizing)

### **Small is Power**

An analysis of our contemporary way of spatially organising living space, specifically the transitions from the private spheres to the public realms, and vice versa. The purpose of the learning activities is to understand the relation of the private space with the collective space and how architecture plays a role in this spatial and social dialogue.

[www.oikodomos.org/workspaces/small\\_power](http://www.oikodomos.org/workspaces/small_power)

### **Thinking Dwelling**

A learning space where architecture students and teachers of the schools participating in the OIKONET network can share their ideas about dwelling in three ways: Finding representations of

inhabited space in the various art forms (painting, cinema, literature); expressing their personal spatial experiences (with texts, drawings, photographs or videos); and commenting on the spatial qualities of some relevant residential building.

[www.oikonet.org/index.php/thinking\\_dwelling](http://www.oikonet.org/index.php/thinking_dwelling)

### **Threshold Matters**

An exploration of the notion of the threshold, understood as an ambiguous zone in which the limits between the public and private domains are often ambiguous, with many layers and meanings across different cultures and climates. It is also part of the sequences of spatial transitions between public and domestic realms.

[www.oikodomos.org/workspaces/threshold\\_matters](http://www.oikodomos.org/workspaces/threshold_matters)

### **Urban Housing Regeneration**

Development of a social housing project in the inner city of Dublin, with the participation of architecture students, staff from the Dublin City Council, professional architects and residents.

[www.oikodomos.org/workspaces/urban\\_housing\\_regeneration](http://www.oikodomos.org/workspaces/urban_housing_regeneration)

### **Urban Systems**

Cities are complex systems made up of physical elements—buildings and streets, energy supplies and communication infrastructures—in which multiple actors—citizens, business companies and organizations—interact to carry out activities which connect the multiple subsystems, for example, economic development with transportation networks, and energy consumption with the energy performance of buildings. This notion of urban system is applied to the analysis and design of urban areas with the goal of making them more liveable.

[www.oikodomos.org/workspaces/urban\\_systems](http://www.oikodomos.org/workspaces/urban_systems)

# Workshops

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Workshops are dedicated to the study of a housing topic in a specific location in an interdisciplinary and collaborative manner, with the participation of students and teachers from the networked schools, as well as local stakeholders such as citizens, professionals and administrations. The one-week workshops are preceded by preparatory activities carried out in a learning space following a blended-learning approach.

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## **Belgrade Workshop: Renewing/ Revitalizing. Creating Liveable Cities**

Liveable cities provide physical, social, economic and political infrastructures that ensure the even distribution of wealth, affordable quality housing, health-care, cultural infrastructures, quality education, environmental resilience and easy accessibility within the city and with other cities in the world. The goal of the workshop is to propose strategies to revitalize Kosančićev Venac, a heterogeneous, mixed-use area connecting the Sava riverfront with the main pedestrian zone, next to the historical centre of Belgrade. Despite its excellent position and evident potential for revitalization, this area has been deteriorating for decades.

[oikonet-belgradeworkshop.blogspot.com](http://oikonet-belgradeworkshop.blogspot.com)

## **Cottbus Workshop: Growth/Shrinkage. Contemporary Living Patterns**

All over Europe, demographic change is shaping the development of urban areas. Both growing and shrinking phenomena are confronting cities with unprecedented

urban and architectural challenges. The workshop examines the growth of Berlin, a capital attractive to global investors and with a growing number of inhabitants, but also affected by housing shortage; and the shrinkage of Cottbus, a former industrial city in Eastern Germany, facing a population decline and economic stagnation.

[oikonet-cottbusworkshop.blogspot.com](http://oikonet-cottbusworkshop.blogspot.com)

## **Lisbon Workshop: Formal/Informal. Contemporary Living Patterns**

The coexistence of informal and formal housing is a global phenomenon manifested in many cities around the world. The workshop aimed to examine the suitability of existing housing for current social and individual needs by confronting two living patterns, informal and formal, represented by two neighbourhoods: “Bairro da Liberdade”, a self-constructed settlement, and “Portela de Sacavém”, a modernist housing estate.

[oikonet-lisbonworkshop.blogspot.com](http://oikonet-lisbonworkshop.blogspot.com)

## Participatory Actions

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Activities carried out with the collaboration of local actors—administrations, social organizations, housing associations, and citizen groups—to engage them in the discussion about housing related problems in their community.

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[oikonet-communityparticipation.blogspot.com.es](http://oikonet-communityparticipation.blogspot.com.es)

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### **A Cohousing Project in Barcelona**

This community project involving architecture students and teachers from the School of Architecture La Salle, and members of the cohousing association *Sostre Cívic*, took place during the seminar “Civic Housing” carried out from October 2013 to January 2014. An ongoing project promoted by *Sostre Cívic* to refurbish an existing building block in El Born neighbourhood in Barcelona provided an opportunity to bring together dwellers and architects in a participatory process aimed at defining the characteristics of the future dwellings.

### **Living/Dwelling: A Participatory Action in the Neighbourhood of Ilinden, Skopje**

With the purpose of fostering community participation in the urban development, three schools of architecture—UKIM, Macedonia; POLIS, Tirana; and Faculty of Architecture, Belgrade—collaborated in a community development planning project carried out in the Ilinden neighbourhood, near Skopje, during the academic year 2014–2015. Current housing problems in

the neighbourhood were jointly analysed by students and teachers, residents and local administrators. The underlying research issue was the process by which physical boundaries of public and semi-private spaces are negotiated.

### **Participatory Strategies to Facilitate Access to Social Housing in Rimini**

From June 2014 to March 2015, a participatory action aimed at involving social and political stakeholders in the provision of social housing in Rimini was carried out by the *Heriscape Association* and the *Chamber of Architects*. The activities involved private stakeholders and public bodies and were aligned with the *Strategic Plan of Rimini*. The main purpose of the participatory action was to define possible and feasible strategies to support solutions for the social housing problems in a medium-size city, while fostering the collaboration of the private and public sectors.

**Proposing Ideas to Transform the Zemnik Area, in Bratislava**

A participatory action carried out by the Department of Urban Planning of Bratislava from March thru June 2016, to bring together the views of planners, experts, citizens and community associations about the development of the area of Zemnik, on the west bank of the Danube, where the national centre of canoeing and rowing is currently located. An urban walk was organized as part of the participatory process.





# Authors

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AALBORG UNIVERSITY, DENMARK

He is an associate professor in urban design at the School of Architecture, Design and Planning at Aalborg University and earned a master of architecture (1993) and a PhD (2003) from Aarhus School of Architecture, Denmark. His current research focuses

on parametric urban design, urban density, and design pedagogy. Previously, his research interests encompassed participatory design processes, spaces for learning, history of urban design, form-making and design theory. He is currently a partner in an Erasmus+ KA2 Strategic Partnership for Higher Education together with Middle East Technical University, Ankara, and Alma Mater Studiorum, University of Bologna. He has taught at the Hochschule der Künste, Berlin, and at Aarhus School of Architecture and has been a visiting scholar to Columbia University, New York, and a visiting professor at Middle East Technical University, Ankara; Escola Tècnica Superior d'Arquitectura de Barcelona; l'École Nationale d'Architecture, Rabat; Bialystok University of Technology; and Chulalongkorn University, Bangkok, among others. He was the head of the Aalborg University Architecture and Design Programme in 2008-10 and currently coordinates the BSc level introductory studio to urban design and teaches parametric urban design and form-making. He was a representative of the Danish architects' association (1999-2015) and chairman of the editorial board of the Danish professional journal *Arkitekten* (2009-2011). He is a recurrent member of PhD and scientific committees and has been invited to the BraunPrize Forum.

### **Jenny Stenberg**

CHALMERS UNIVERSITY OF TECHNOLOGY,  
SWEDEN

Associate professor in urban design and planning at the Department of Architecture. Her research focuses on the education of social aspects of sustainable development and more specifically on citizen participation in planning—both in stigmatized and segregated areas—in Sweden and in European, Latin American and African contexts. As part of this work,

she has initiated a master course where design students learn codesign. She was also one of the initiators of a university centre which Chalmers and the University of Gothenburg started together in a stigmatized area, whose purpose was to create an innovative and creative platform for the research, development and implementation of professional programmes, in an effort to widen participation of the local community in higher education and to support citizen participation in community building. She has been involved in several community building and planning projects, among them, *Urban Empowerment: Cultures of Participation and Learning* ([www.urbanempower.se](http://www.urbanempower.se)); *How can citizen initiatives interplay with invited participation in urban planning?* ([mellanplats.se](http://mellanplats.se)); *Learning Lab Hammarkullen: Codesigning Renovation* ([learninglabhammarkullen.se](http://learninglabhammarkullen.se)); and *Compact Cities?—Exploring qualities, drivers and strategies for promoting mixed-use urban development*.

### **Sandra Treija**

RIGA TECHNICAL UNIVERSITY, LATVIA

Professor and deputy dean at the Faculty of Architecture and Urban Planning at Riga Technical University where she graduated as an architect (1992) and then earned a master of architecture (1997) and a PhD (2006). Her research areas include sustainable housing, neighbourhood regeneration, sustainable urban development, and quality of residential environment. She contributed to the textbook *Urban Sustainability and Governance. New Challenges in Nordic Baltic Housing Policies*, New York: Nova Science Publishers (2009), and is the author over 40 scientific publications. Member of editorial boards of the scientific journals *Architecture and Urban Planning* (Riga Technical University), *Landscape Architecture and Art* (Latvian University of Agriculture). She is a fellow of Latvian Union of Architects (LAS), European

Network for Housing Research (ENHR), and coordinator of the Latvian chapter of DOCOMOMO (International Committee for Documentation and Conservation of Buildings, Sites and Neighbourhoods of Modern Movement).

### **Mihajlo Zinoski**

UNIVERSITY SS. CYRIL AND METHODIUS, MACEDONIA

Architect and associate professor at the Faculty of Architecture of the Ss. Cyril and Methodius University in Skopje, where he received a PhD in engineering science. Since 2009, he has lectured in the design of public buildings in the Institute for Architectural Design where he is also acting as design studio coordinator. He was visiting researcher at the School of Architecture and Allied Arts, University of Oregon, as part of the Junior Faculty Development Programme founded by the us Department of State. He received an honourable mention at the Biennale di Architettura di Venezia for the collective project “City of possible worlds” in category of national presentation.

### **Maria Zwanenburg**

INSTITUTE FOR HOUSING AND URBAN DEVELOPMENT STUDIES (IHS), THE NETHERLANDS

She is a development sociologist at IHS, Erasmus University Rotterdam, working on social development issues and poverty reduction, with a special emphasis on the fields of employment, micro and small enterprise development and local economic development. She has been involved in a variety of local development projects in Latin America and Eastern Europe, collaborating with national and local authorities, business associations and NGOs. She has supervised numerous Master theses on community participation in Indonesia.



# Meetings

During the three-year project, OIKONET members have met periodically in the partner institutions to plan activities, exchange ideas, discuss results and decide new actions aimed at advancing in the network construction process. To this end, there have been six meetings within each sub-network, as well as three annual general assemblies.

In addition, three workshops have brought together students, teachers and researchers from participating architecture and planning schools to analyse, discuss and make proposals to address housing issues that have both a global scope and a local impact.

Finally, three international conferences have been organized to reflect on the global dimension of housing in contemporary societies, with the participation of OIKONET partners and speakers from other institutions.



19 DECEMBER 2013  
**First meeting of the sub-network Housing Research**  
 The Grenfell-Baines School of Architecture, Construction & Environment, University of Central Lancashire, Preston, UK

10 JANUARY 2014  
**First meeting of the sub-network Pedagogical Activities**  
 School of Architecture La Salle, Barcelona, Spain

7 FEBRUARY 2014  
**First meeting of the sub-network Community Participation**  
 School of Architecture La Salle, Barcelona, Spain

16 JUNE 2014  
**Second meeting of the sub-network Housing Research**  
 Faculty of Mechanical Engineering, University of Ljubljana, Slovenia

27 JUNE 2014  
**Second meeting of the sub-network Pedagogical Activities**  
 Strategic Plan Offices, Rimini, Italy

14-19 JULY 2014  
**First international workshop**  
 ISCTE—University Institute of Lisbon, Portugal

15/17 JULY 2014  
**Second meeting of the sub-network Pedagogical Activities**  
 ISCTE—University Institute of Lisbon, Portugal

25-26 SEPTEMBER 2014  
**First international conference**  
 School of Architecture La Salle, Barcelona, Spain

12 DECEMBER 2014  
**Third meeting of the sub-network Housing Research**  
 Eötvös Loránd University, Faculty of Social Sciences, Budapest, Hungary

30 JANUARY 2015  
**Third meeting of the sub-network Pedagogical Activities**  
 Department of Architecture, Istanbul Technical University, Turkey

27 FEBRUARY 2015  
**Third meeting of the sub-network Community Participation**  
 ARCHA—Centre for Architecture and Urbanism, Bratislava, Slovakia

1-6 JUNE 2015  
**Second international workshop**  
 Faculty of Architecture, Brandenburg University of Technology, Cottbus, Germany

31 MAY/3 JUNE 2015  
**Fourth meeting of the sub-network Pedagogical Activities**  
 Faculty of Architecture, Brandenburg University of Technology, Cottbus, Germany

5 JUNE 2015  
**Fourth meeting of the sub-network Housing Research**  
 Institute for Housing and Urban Development Studies, Rotterdam, The Netherlands

19 JUNE 2015  
**Fourth meeting of the sub-network Community Participation**  
 Polis University, Tirana, Albania

25 SEPTEMBER 2015  
**Second international conference**  
 Faculty of Architecture, Slovak University of Technology, Bratislava, Slovakia

20 NOVEMBER 2015  
**Fifth meeting of the sub-network Housing Research**  
 Centre for Postgraduate Studies, University of Zagreb, Croatia

18 DECEMBER 2015  
**Fifth meeting of the sub-network Community Participation**  
 Faculty of Architecture, Ss. Cyril and Methodius University, Skopje, Macedonia

22-23 JANUARY 2016  
**Fifth meeting of the sub-network Pedagogical Activities**  
 Faculty of Architecture, KU Leuven, Brussels, Belgium

4 MARCH 2016  
**Sixth meeting of the sub-network Community Participation**  
 Sostre Cívic, Barcelona, Spain

22 APRIL 2016  
**Sixth meeting of the sub-network Housing Research**  
 Faculty of Architecture and Urban Planning, Campus of Riga Technical University, Latvia

6-11 JUNE 2016  
**Third international workshop**  
 Faculty of Architecture, University of Belgrade, Serbia

5/10 JUNE 2016  
**Sixth meeting of the sub-network Pedagogical Activities**  
 Faculty of Architecture, University of Belgrade, Serbia

23 SEPTEMBER 2016  
**Third international conference**  
 Renaissance Manchester City Centre Hotel, UK



PRESTON, UK—DECEMBER 2013



BARCELONA, SPAIN—SEPTEMBER 2014



LJUBLJANA, SLOVENIA—JUNE 2014



RIMINI, ITALY—JUNE 2014



LISBON, PORTUGAL—JULY 2014



BUDAPEST, HUNGARY—DECEMBER 2014



ISTANBUL, TURKEY—JANUARY 2015



BRATISLAVA, SLOVAKIA—FEBRUARY 2015



COTTBUS, GERMANY—JUNE 2015



ROTTERDAM, THE NETHERLANDS—JUNE 2015



TIRANA, ALBANIA—JUNE 2015



ZAGREB, CROATIA—NOVEMBER 2015



SKOPJE, MACEDONIA—DECEMBER 2015



BRUSSELS, BELGIUM—JANUARY 2016



BARCELONA, SPAIN—MARCH 2016



RIGA, LATVIA—APRIL 2016



BELGRADE, SERBIA—JUNE 2016



MANCHESTER, UK—SEPTEMBER 2016

[www.oikonet.org/global\\_dwelling](http://www.oikonet.org/global_dwelling)