Aalborg Universitet

Improving the Quality of Life and Sustainability for Middle-Class Mass Housing

Perspectives from a Stakeholder Workshop

Ercan, Müge Akkar; Bech-Danielsen, Claus; Estaji, hassan ; Goycoolea, Roberto; Haumont, Bernard; Ioannou, Byron I.; Nicolau, Lora; Nuñes, Paz Nunez; Subic, Sanjin

IMPROVING THE QUALITY OF LIFE AND SUSTAINABILITY FOR MIDDLE-CLASS MASS HOUSING

Perspectives from a Stakeholder Workshop

Müge Akkar Ercan, Claus Bech-Danielsen, Hassan Estaji, Roberto Goycoolea, Bernard Haumont, Byron Ioannou, Lora Nicolau, Paz Nuñez, Sanjin Subic

ABSTRACT: This article presents and discusses the results of the *Stakeholder Workshop (Co) Designing for Quality of Life: Exploring Challenges and Opportunities*, which was held at Middle East Technical University (METU) in Ankara in October 2022 in the framework of the COST Action CA18137 European Middle Class Mass Housing (MCMH-EU). The workshop aimed to discover the possibilities of participatory design as a tool to address the necessary updating of the housing complexes of the Modern Movement (MoMo). The workshop, which was conducted on a cooperative housing estate, namely Ümitköy Sitesi, Ankara, Türkiye (1970), was carried out in five groups with members of different nationalities, ages, and experiences. This article argues that the public and private strategies which were followed to rehabilitate these complexes by focusing on the technical problems (construction pathologies, energy inefficiency, accessibility, parking, among others) tend to neglect, even ignore, the diverse social aspects involved. As a group of participants of this workshop, the authors of this article consider the involvement of all parties (experts, residents, housing management cooperative, and municipality) in the improvement processes of such middle-class mass housing sites as the key instrument to make these neighborhoods more inclusive and sustainable. This article evaluates the Stakeholder Workshop's co-design performance as an instrument to improve the Quality of life (QoL) and sustainability of the neighborhood. The critical analysis of the workshop results leads to several significant conclusions: Social aspirations do not always coincide with political and technical ones; technical rehabilitations are not sufficient for the total improvement of QoL and sustainability of communities; (Co-)Design may have to be approached from different perspectives and, consequently, have different results; citizens have a great potential to participate and contribute to the improvement of QoL with innovative ideas and actions of different scales. However, the socioeconomic diversity of the inhabitants and restrictive legislation are the difficulties to be considered.

KEYWORDS: Participatory design, stakeholder workshop, quality of life, MoMo transformation, social or technical improvement

INTRODUCTION: From the 1950s onwards, Modern Movement (MoMo) housing complexes were developed under particular social, economic, and technological circumstances. Along with rapid and varied spatial, socioeconomic, and environmental transformations, many mass housing sites in different localities create problems for their residents and cannot fulfill their everyday needs. Sometimes top-down planning policies and urban plans cannot address these problems, may neglect the community-level problems, and make citizens' everyday life in their neighborhoods less resilient and sustainable. The city, however, has a variety of territorial layers in terms of planning, designing, building, managing, monitoring, and controlling. These territorial layers, the quality of urban functions and services, and the everyday life of citizens are highly intertwined with their neighborhoods. Rather than waiting for urban public

services from the local and central government levels, citizens have great potential to participate and shape their environment as part of territorial behavior. Such environmental transactions can start from very simple and small-scale actions with the involvement of local citizens at the community level. This article aims to describe a bottom-up endeavor on an example of the mass-housing site Ümitköy Sitesi (Ankara, Türkiye) designed and built in the 1970s based on the MoMo principles. *The Stakeholder Workshop (Co)Designing for Quality of Life in MCMH* was held in Ankara in October 2022 on this cooperative housing estate, suffering from several problems similar to its counterparts. The workshop gathered an international group of experts, residents, and management board members of the housing estate, the *Mukhtar* (elected representative of *Ümit* neighborhood), and the municipality to improve the local community's Quality of life (QoL) and sustainability. This article investigates the opportunities and challenges of the middle-class mass housing site, the workshop process, and its outcomes. Finally, it critically analyzes the potentials, weaknesses, opportunities, and constraints of such a bottom-up, participatory planning and design approach.

A PARTICIPATORY PLANNING AND DESIGN METHOD: STAKEHOLDER WORKSHOP

Citizens' engagement and public involvement are essential in urban design and spatial planning to ensure the application of the principles of democracy and open society. At the same time, it brings more technical knowledge to the decision process and informs about the context and the economic and social background of the people that will be called to live within a new reality (Madanipour, 2006). Although housing estates have not typically been dealt with in a participatory process, it is, nowadays, becoming more usual to evaluate their performance according to the needs and aspirations of their users and decode the localized socio-cultural contexts that can allow a more inclusive development through stakeholder integration (Sharmin & Khalid, 2021). In general, the participation processes of urban design or urban transformation aim to increase not only the exchange value of a neighborhood, a housing complex, or a place under neutral objectivity but precisely the perceived value from the stakeholders', residents', or users' viewpoints. Public participation in such urban design and transformation processes can be fostered through various alternative ways like polls, questionnaires, online democracy apps, public hearings, or consultations. Among them, stakeholder workshops (SWs) appear to be one of the most efficient tools.

Since the 1990s, urban design SWs have been recognized as a new communication type between the participants in the physical planning process (Ažman-Momirski & Dimitrovska-Andrews, 1997). They help realize hands-on projects, providing a physical presence of participants and their interactions. They are dense and timely restricted to prevent disruptions from other irrelevant activities. At the same time, they evolve in an informality that facilitates open debate and free expression of views and opinions. In many cases, the discussions occur in front of maps, plans, or real sites where everything becomes visible, specific, and practically meaningful. Compared to any other participation alternative, SWs increase the easiness for citizens to react to plans and propose their ideas for future actions (UKEssays, 2018). In this sense, SWs focus on co-creation instead of reviewing given solutions.

SWs can be organized to resolve local problems such as affordable housing, mobility, accessibility, and green spaces (Pimonsathean, 2017) or to address local needs, such as developing new facilities, schools, and retail (Yale Urban Design Workshop, 2021). Likewise, SWs can be effectively used to address the issues that derive from emerging global challenges and can be transferred to local actions, such as the Urban Heat Island effect, the problems, and challenges related to health and QoL, migration, segregation in low-income and ethnic communities (Urban Land Institute, 2020). Some of these inputs come from conventions or policies at the European or global levels, such as the *EU Green Deal*, which offers a set of policy initiatives approved by the European Commission in 2020 to make the EU climate neutral in 2050, and the United Nations' *Sustainable Development Goals.*

Beyond the contents of SWs, their methodologies are equally important. Some approaches attempt to boost stakeholders' awareness of global concerns through the 'city-gaming' methodology (Naycı et al., 2022) and to facilitate a constructive debate by resolving power differences between various groups. In this sense, it is essential to ensure the liability of the SW initiating body, the quality of the participatory process, and the reliability of the SW results (Eshkol & Eshkol, 2017). Literature includes a range of smart participatory methods and tools aiming to capture the feelings and habits of people through their shared digital reactions (Salvia et al., 2021) and on purpose-made online platforms (Lissandrello et al., 2019). In any case, the scope of these participation methods and tools may support but not replace physical gatherings.

SWs are certainly not free of shortcomings. They demand committed participants during every workshop day, which is not always easy for non-professionals. Involving oneself in SWs can be even more demanding, especially when organizers seek active, thoughtful, and well-informed participants free from pre-constructed interests and visions. Besides, especially in local or residential

areas, participants are expected to elaborate on the three critical N's of a project, i.e., *n*eighborhood, neighboring, and neighbor (Shirazi et al., 2022), while the place may coexist with different conflicting conditions and interactions among residents and users. In these cases, SWs must invent ways to keep participants active but calm. Site visits or walking tours, for example, can be beneficial to promote the place-based community by integrating the three N's in a single experience (Wong, 2022).

STAKEHOLDER WORKSHOP METHODOLOGY

The SW, hosted by Middle East Technical University (METU) in Ankara, was organized collaboratively with University College London. It brought 28 experts from eleven countries—Cyprus, Denmark, France, Iran, Italy, Jordan, Pakistan, Serbia, Spain, Türkiye, and the USA. The expert group included architects, urban planners and designers, civil engineers, interior architects, landscape designers, and specialists on housing policies, with different professional experiences, skills, and knowledge of the qualification of middle-class mass housing sites. Around ten residents living in the middle-class mass housing site participated in the workshop. The expert group comprised 18 women and eight men, with different expertise levels ranging from master's and Ph.D. candidates to more senior academics. The resident participants included three women and seven men between 40 and 50 years old. Three residents represented the management board members of the housing cooperative.

As one of the oldest middle-class mass housing sites in *Ümitköy* with a lot of problems and potential, the project site, namely Ümitköy Sitesi, was selected in July 2022 together with METU and the *Mukhtar*. The management board members' willingness and enthusiasm to cooperate was another reason for selecting this site as the focus of the SW. During August and early September, action research was conducted to gather data about Ümitköy Sitesi. Through the interviews with the manager and vice-manager and the site visits, a group of researchers from METU collected the maps and plans of Ümitköy Sitesi, explored its history, the socio-demographic profile of the residents, and the spatial, social, environmental, legal, and ownership potentials and problems. They prepared a presentation to introduce the site to the expert group. This preliminary research revealed several potential issues to be addressed in the SW, such as needs for energy and water consumption efficiency, solar energy use, waste recycling, community gardening and co-producing, and QoL strategies for apartment blocks according to the residents' needs. Before the workshop, the coordinating group prepared the workspaces, the field trip to Ümitköy Sitesi, and the necessary documents and materials to work with.

They set up five working groups (WGs), including international and local experts, and informed them before their arrival. Also, they explained to the participating residents the program and the steps to be followed in three days.

The workshop was carried out in five groups with members of different nationalities, ages, and experiences and was conducted under three parts: i) introducing the project site with its problems and potentials and describing the co-design process methodology; ii) application of the procedure in a proposal to develop improvement strategies of the cooperative housing estate in collaboration with residents, housing management associations and municipality; and iii) sharing the outcomes of the workshop and evaluation.

On September 30, after welcoming speeches, an introductory lecture on Ümitköy Sitesi was delivered to the expert group. Question-and-answer sessions followed this part. Each WG conducted a who-is-who session to get to know each other. In the afternoon, the WGs visited the project site and initiated a productive dialogue in the community center with the cooperative management members about the problems and potentials of the housing estate. After the site visit, the WGs continued their discussions at the university, and each group decided on the specific theme(s) to address the QoL and sustainability issues of the site. On October 1, each WG worked with Ümitköy Sitesi residents at METU and discussed their design-based solutions to some problems of the site with design sketches and some examples from real-world projects. In the morning of October 2, the WGs finalized their presentations on the focused theme and vision. In the afternoon, each WG presented their projects to the SW participants, including their design-based policy solutions in English and Turkish.

A MIDDLE-CLASS MASS HOUSING SITE IN ANKARA: ÜMITKÖY SITESI

Ümitköy Sitesi is located in *Ümitköy*, one of the most popular and prestigious middle-class mass housing suburbs on the west corridor of Ankara. It is around 14 km from the city center Kızılay and 16.6 km from the historic city center Ulus. The site is in the most accessible and central part of *Ümitköy*. It is within a 15-20 minutes walking distance or 5-10 minutes driving distance to the metro, bus, and minibus stops, and many shopping, education, health, entertainment, religious services, and small parks. Yet, the walkability of this area is poor and requires some amendments to improve accessibility for pedestrians.

Ümitköy Sitesi was built by a housing cooperative in the 1970s; the first residents moved into their houses in 1976 and 1977. Covering a 4.72-hectare land, it consists of 35 apartment blocks with five floors, and each apartment block includes ten apartments with a total of 350 housing

01 Ümitköy Sitesi, its spatial layout showing community service spaces and its legally delineated boundaries, and its surroundings. © Google aerial map, 2022.

Boundaries of Ümitköy Sitesi
Cul-de-sac
Park with exercise tools
Playground
Cooperative administrative management building
Commercial centre
Central heating centre

02 Five-storey apartment blocks with their private gardens bounded by fences with bushes clearly providing a separation between public and semi-public spaces of Ümitköy Sitesi (left) and the entrances of an apartment building providing a social gathering place for neighbors (right). © Müge Akkar Ercan, 2022.
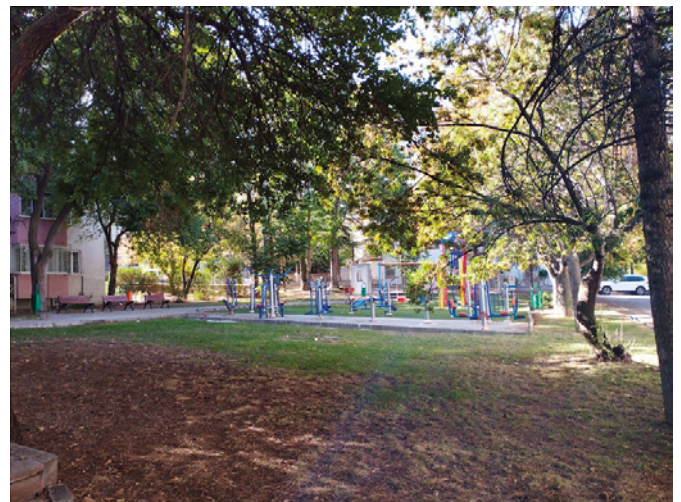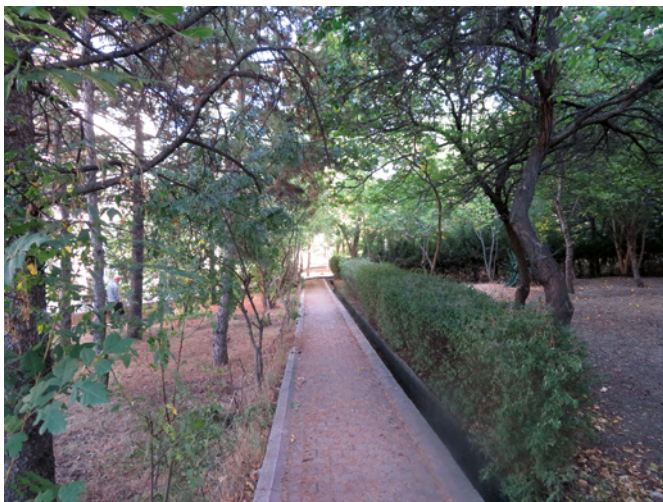
03 Inner pedestrian walkways with drainage canals and common green spaces in Ümitköy Sitesi © Müge Akkar Ercan, 2022.

units [FIGURE 01]. The buildings cover only 18% of the housing estate. In comparison, 82% of the site comprises common spaces, including a pedestrian walkway network, large common green spaces, including playgrounds, parks, car-parking areas, a building for a central heating system, and another small building for cooperative management [FIGURE 02, FIGURE 03].

Buildings are structurally strong but look old and worn out. Some buildings' façades show cracks. Each apartment has one living room, three bedrooms, a kitchen, a bathroom, a separate toilet room, and two balconies facing the back and front of the building. Around 1,000 people live in Ümitköy Sitesi. The tenancy rate is high. 30-40% of the residents are the first owners of these apartments. Being in their 70s and 80s, they live alone. A high number of senior residents raises an urgent need to adapt the buildings and apartments according to their needs, such as an elevator for each apartment block.

Common green spaces show a variety of mature trees, including pine, oak, apple, apricot, plum trees, and vineyards. They also host cats, dogs, hedgehogs, foxes, sparrows, pigeons, magpies and crows, green parrots, and

occasionally canaries. Each apartment block has its private garden providing social spaces for its residents. Although residents grow some vegetables and fruits, the soil quality is not high and fertile. The residents expressed their need for sports fields, such as basketball and volleyball courts.

Inner streets laid out on a cul-de-sac system provide sufficient car-parking spaces. While the municipality controls the design, development, and management of these inner streets and considers these public spaces part of an open street pattern, Ümitköy Sitesi suffers from privacy, security, and safety problems. Residents want clear demarcated boundaries of their estate as the inner streets, shared spaces, and car parks are used by outsiders. Some even damage street furniture and landscape, leave their waste and make noise at night.

The renewed central heating center with an underground heating tunnel network is an essential feature of collective life. The electricity, water, natural gas, and internet network also use the same tunnel network. Drainage canals provide the potential for rainwater collection and watering gardens. But thermal insulation, heating, and humidity cause mold on the interior walls, especially in north-facing apartments. Since the apartments have no hot water service, each apartment needs a hot water boiler. Some residents want to switch their apartment block's heating to an individual boiler system to heat their apartments according to their needs and affordances. However, cooperative management considers this tendency a threat that can jeopardize the collective community spirit. After sudden and heavy rains, some ground-floor apartments are flooded when the rainwater drainage system gets blocked.

The community of Ümitköy Sitesi is not ethnically or religiously diverse, but there exists a variety regarding income levels, ages, household size, tenancy or occupancy, and ownership types. Some residents struggle to afford the high renovation costs of their apartments. Thus, finding medium-term funding alternatives for such community members is essential to improve the QoL and sustainability of the neighborhood. The residents also have difficulty reaching a shared decision on whether the housing site should be completely knocked down and one big contractor should build much denser but newer apartment blocks or whether the existing buildings should be renovated through the residents' efforts with the help of small and medium-scale contractors. The differences in residents' opinions on such issues have divided the community into sub-groups with opposing views. Neighboring relations have also weakened due to these continuous opinion differences among the community members. Nonetheless, the municipal council makes urban renewal decisions, and there is no such renewal decision for this neighborhood. All community members must agree on renewing the 35

building blocks and apply for the municipality to start a legal transformation process.

NEW PERSPECTIVES FOR IMPROVING SUSTAINABILITY AND QOL OF ÜMITKÖY SITESI

The five expert groups developed several alternative design solutions to improve the QoL and sustainability of the Ümitköy Sitesi community through community engagement.

WORKING GROUP 1 (WG1) – BOLD MOVE

WG1 was interested in community engagement within the estate at great risk of deterioration if a renewal strategy is not put in place soon. Although earlier tenancies, with a lower percentage, still maintain a sense of belonging, recent tenants feel less attached to the area. To bring back a healthy communal life, WG1 aims to address *how a strategy can regenerate a community whose members want to stay here, live together, and sustain the estate as a collective place*. The group used the site visit to take notes and photographs from the site, ask questions and make voice recordings of the residents (with their approval). The evaluation revealed that the Ümitköy Sitesi's value is a secondary feature for the residents because of the buildings' and outdoor spaces' poor structural conditions. WG1 considers several structural improvements necessary for upgrading the estate and suggests a strategic plan called *the Bold Move*. It was considered that only a decisive strategic refurbishment plan could attain the long-term future of the estate as a high-value neighborhood which could, in turn, support community engagement and enhance the sense of attachment to the site. Accordingly, WG1 proposes the following three critical interventions for the community: improve communal services, upgrade the buildings (structural conditions, climatic performance, vertical accessibility), and upgrade the environmental character of the open space. There was a suggestion that the latter could be achieved through the restructuring of the open space (now all publicly accessible) into private (attached to ground floor apartments), semi-private, and public spaces; thus, increasing the security and sense of belonging and also distributing the responsibility for maintenance. The group also supports the idea of a 'bold move' with a proposal for possible revenue generation from the site itself through an intensification of parts after restructuring, either by adding to existing blocks or building new housing to pay for the extensive building and outdoor space refurbishments [FIGURE 04].

WORKING GROUP 2 (WG2) – STRATEGIES FOR BETTER-SHARED GROUNDS

WG2 notes the lack of communication and social activities between old and new residents, apartment owners,

04 'Bold move' scheme proposed by WG 1, showing the design ideas of improving the open space network, environmental quality, common spaces, backyards of buildings and building the new row houses to develop a self-finance method for the refurbishment of Ümitköy Sitesi. © Authors and workshop participants, 2022.

and tenants to preserve a collaborative culture and shared spaces for young and older people. They also noticed underused green spaces in the housing site. Focusing on the public and common spaces of Ümitköy Sitesi, WG2 suggests a series of strategies that will improve the quality of underused green spaces, integrate shared outdoor and indoor spaces, and tackle the feeling of insecurity [FIGURE 05].

WORKING GROUP 3 (WG3) – RETHINKING THE IMAGE

WG3 recognized that reduced QoL on the site is clearly visible in its deteriorating image, facades, and public spaces. The proposed solutions were closely developed with residents to address the most urgent needs and quickly change the symbolic representations and daily uses of places. The suggested approach is progressive so that first improvements, modest and inexpensive but immediately appreciated, lead residents to support more extensive

05 'Strategies for better-shared grounds' scheme proposed by WG 2, presenting the design ideas of improving the quality of underused green spaces and tackling the safety and security problems in Ümitköy Sitesi by integrating different types of shared outdoor spaces and adding new facilities to ease the daily life of residents. © Authors and workshop participants, 2022.
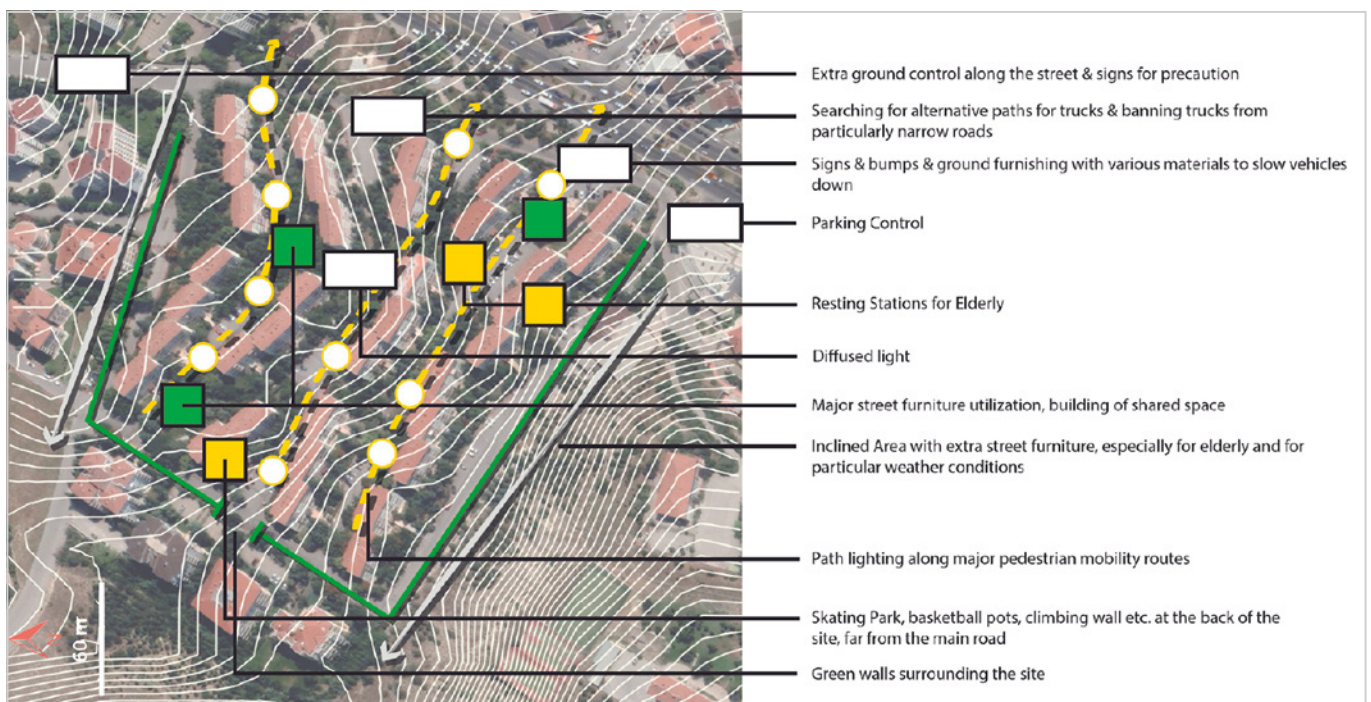
transformations. The discontinuous pathways of the site do not fit modern-day use, which led to a plan addressing quality, connectivity, and modes of transport adequate for residents of all ages. A plan was devised to renew vegetation with species that do not prevent the growth of other vegetative covers and to increase soil quality by collective organic waste composting and help community cohesion. As stakeholders were mainly concerned with energy efficiency, WG3 developed solutions within this context. Investments in façade renewal are urgently needed not only for energy savings but as a significant factor in improving the image of this middle-class mass housing. Solar energy was of particular interest to the stakeholders, and the buildings' orientation is recognized as a unique advantage. WG3 also suggests solar energy use to solve the hot water problem of each housing unit and provide sustainability for ÜS. Using data provided by the World Bank (2020), WG3 foresees that using photovoltaic panels can be self-sustainable, reaching net zero during one year cycle [FIGURE 06].

WORKING GROUP 4 (WG4) – BRIDGE

WG4's first impression of Ümitköy Sitesi was its low population and density, with almost 60% of residents above 60 years old. This condition also affects the viability of any upgrading effort. One of the ways to (re)activate the neighborhood is to increase its population and age diversity with an external and an internal 'Bridge' strategy. Externally, the Ümitköy neighborhood can act as a bridge on the urban scale by increasing its openness and connecting with the surroundings, increasing accessibility, especially for pedestrians. A green transport network for bicycles, scooters, and pedestrians is proposed to connect nearby commercial places such as Galeria shopping mall, mass housing sites such as Mutluköy Sitesi, different building blocks, open spaces, and unintegrated less-used spaces. The connectivity and accessibility of this green 'bridge' network for bicycle and scooter users and pedestrians can be designed carefully by respecting the privacy, safety and security needs and sensitivity of the Ümitköy Sitesi community. Internally, on the building scale, WG4 suggests flexible apartments that can change the spatial configuration of the buildings according to the new needs of the young generations and create the same extra income for the current owners. The idea of viable apartment renewals will make the neighborhood more attractive to new residents. Therefore, the 'Bridge' idea is used as a connector between old and new generations and lifestyles in the Ümitköy Sitesi case [FIGURE 07, FIGURE 08].

WORKING GROUP 5 (WG5) – GARDENING SCHOOL

WG5 focuses on four main QoL problems of Ümitköy Sitesi often seen in middle-class mass housing: buildings
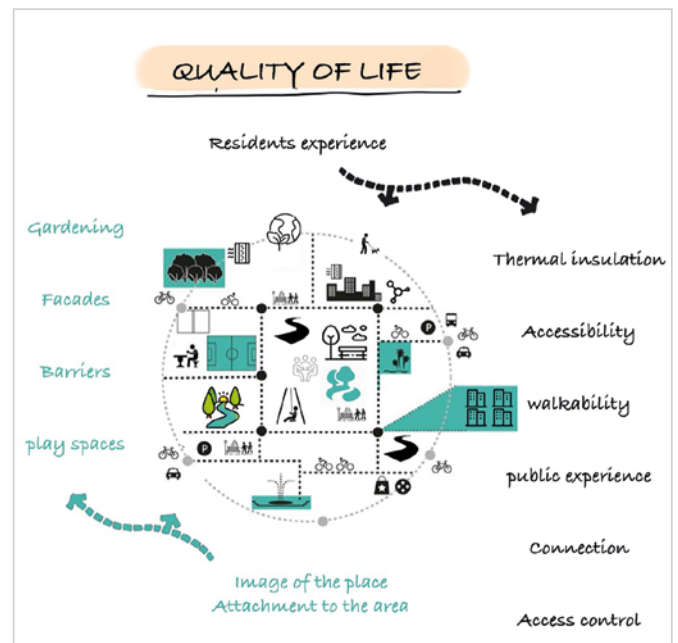

06 'Rethinking the image of Ümitköy Sitesi' conceptual graphic proposed by WG 3, presenting the main intervention areas and the aspects which will be improved in the common spaces and the buildings in Ümitköy Sitesi to change the image of the estate.
© Authors and workshop participants, 2022.

that do not meet current accessibility and energy-efficiency standards, neglected public spaces, and a lack of urban life due to aging and gentrification. The accessibility and energy-efficiency problems related to residents' comfort can be primarily solved with technical solutions. In other words, they can be cured depending on available economic resources. There is no universal answer for the latter problems, and the solution necessarily requires active residents' collaboration. This is where co-design appears as a fundamental tool. When thinking together with the Ümitköy Sitesi residents, WG5 realized the necessity of having a vision for the future, summed up in one critical question: *How do residents imagine their neighborhood in 20 years?* Their answer helped them define the strategies to achieve this vision through realistic phases. The estate's residents aspired to a place with a better QoL, more comfortable housing, and more social activity. The buildings have pathologies, and the complex is a dormitory town. To bring people, activity, and resources, WG5 proposes to develop in the inter-block spaces—large, underutilized, and neglected— an activity that will serve as a trigger to create a place with more sustainable and socially inclusive spaces. In agreement with the residents, WG5 opted for a gardening school that would be co-managed by an NGO (i.e., drug rehabilitation), the cooperative itself, and the local authority. A process that would begin with the community production of compost and the self-building of a classroom can continue with the teaching of gardening and landscaping and the development of nurseries for aromatic and decorative plants, display gardens, and a florist's shop. Eventually, a greenhouse and a flower restaurant would be built. These elements, distributed throughout the complex [FIGURE 09], would make it a dynamic point of
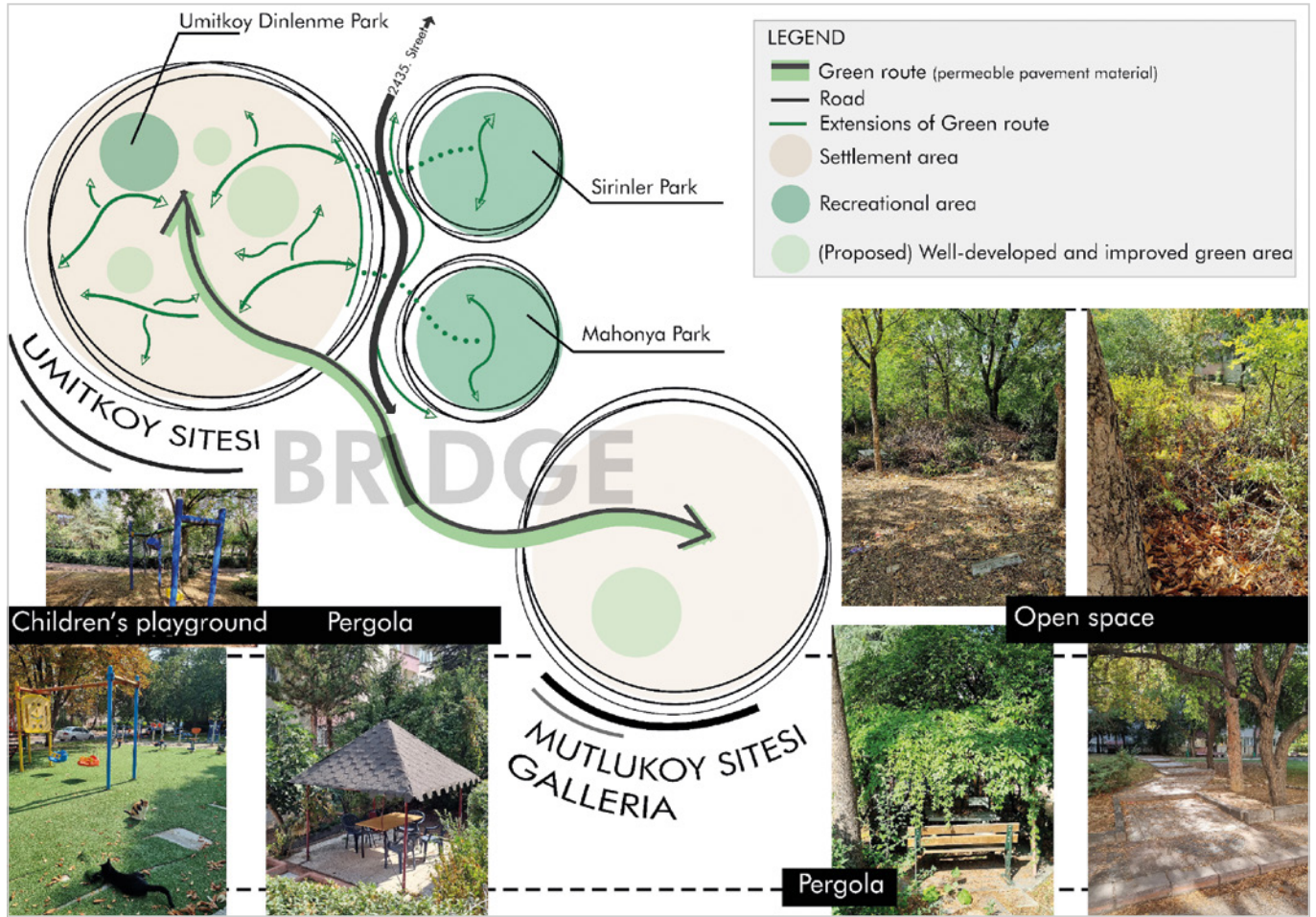
07 'Bridge': Connection with surrounding neighborhoods proposed by WG4, presenting conceptually how to establish an external bridge through a green network for bicycle and scooter users and pedestrians between Ümitköy Sitesi and its surroundings. © Authors and workshop participants, 2022.
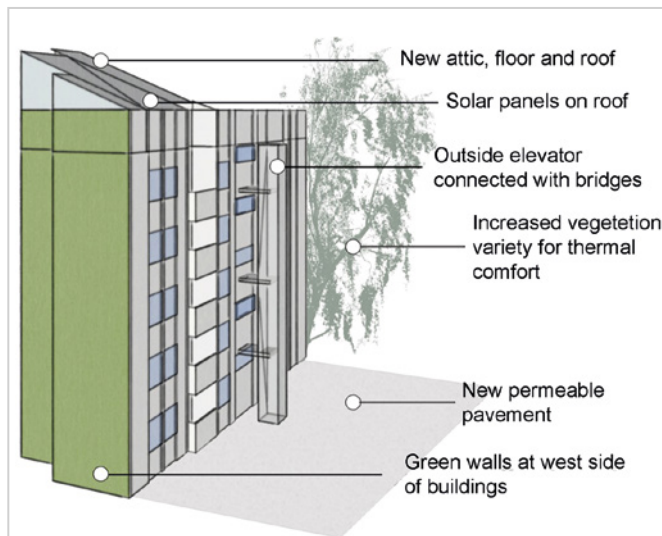
08 Six renewal interventions for buildings referring to the 'flexible apartments idea' as proposed by WG4. © Authors and workshop participants, 2022.

09 'Gardening School for Ümitköy Sitesi' proposed by WG 5, presenting the new Gardening School vision, with a series of production and practice gardens and other common spaces, bringing co-learning and co-producing environments for the community and turning the neglected shared spaces into sustainable and socially inclusive places. © Authors and workshop participants, 2022.

attraction. The resources would allow for the technical upgrading of the buildings. The generalizable idea is to develop a permanent facility or activity, in this or similar MoMo neighborhoods, that will improve the environment and social cohesion in a sustainable way.

CONCLUSIONS

The *Stakeholder Workshop (Co)Designing for Quality of Life: Exploring Challenges and Opportunities* created an opportunity to bring together the residents of Ümitköy Sitesi with international and interdisciplinary expert groups and the municipality. Although collective decision-making for

such cooperative housing sites is typically considered an obstacle to solving shared problems due to the high number of property owners, this hands-on experience has proved that such SWs can be greatly helpful in revealing common problems, discussing alternative solutions between stakeholders and experts, and reaching optimum solutions to resolve the community problems through co-creative means. SWs also allowed stakeholders to see the challenges of making these optimum solutions real. Such negotiation and co-creation practices are also beneficial for communities to develop a collective spirit toward the common benefit of the community. Local leaders of communities must continue such bottom-up endeavors in cooperation with local authorities, universities, and civil society organizations to achieve successful and sustainable regeneration schemes for middle-class mass housing sites.

It is possible to note several strong sides of this SW: i) Organization of a compact, efficient and productive workshop by preparing background material and initiating conversation with the management board members of the housing cooperative, ii) participation of experts from different cultures and urban design/planning practices across a vast geography (Europe, East, etc.), which brought the local and oversea views and knowledge together for creative solutions to the problems, iii) participation of young and senior professionals which helped the transfer of knowledge and experience between them, iv) use of a well-selected example as the representative of the MoMo transformation to work on and learn from its potentials and challenges, v) revealing different viewpoints of each group which opened several issues for a rich debate and created potential approaches for an evaluation at later stages; vi) residents' participation and their amazing hospitality which impacted on the dynamics of the workshop throughout, vii) adequate number of experts and participants to conduct a pilot SW to formulate a continuous and sustainable participatory design process.

Besides, the deliberate formation of the groups with researchers from different backgrounds, experiences, and ages was also very positive, as it significantly opened up both the perspectives of analysis and the proposals for intervention. The size of the WGs, with five to seven participants, allowed all to express their opinions, understand each other's competencies, and create relationships important for future collaborations. Within each WG, the mix of locals/foreigners, young/older, and experienced/less experienced consultants from the north/south regions opened up the opportunity for a debate on issues from very different viewpoints and generated 'positive energy' during the working sessions. The number of WGs (limited to five) allowed all WGs to make their presentations and stakeholder consultation possible within a single session.

Having sufficient prior documentation and the definition of the theoretical framework made it possible to go deeper into the issues addressed. Using English as a *lingua franca* allows interaction but reduces the nuances of the different cultural environments. The case study resembles other MoMo complexes built throughout the world. However, the research and site visit of the neighborhood, accompanied by experts from different nationalities and the Ümitköy Sitesi residents, showed the differences in the way of living and valuing their estate. Giving voice to the users provides essential data for a complete understanding of the architecture and its social and environmental impacts.

The following four concerns have been identified across all five WGs:

- The physical characteristics of the site cause accessibility and connectivity problems for older people and parents with young children,
- Open spaces and their vegetation are seen as potential but require some renewal ideas for exhausted soil and new facilities for socialization and physical exercise,
- The poor distinction between public, semi-public, and private spaces which leads to the privacy, security and safety problems can be discussed in relation to the existing dialectics between seeing, being seen, and hiding that require more creative design solutions rather than present hedges with bushes around the estate.
- Buildings' thermal insulation including buildings' wall materials, window frames and balconies, street lighting, which raised security and safety problems, and inadequate rainwater drainage infrastructure causing flooding of the ground-floor apartments were other common concerns of WGs to improve the QoL and sustainability of the community.

The (Co)design methodologies presented by the different WGs were similar. In contrast, the design proposals differed regarding the sequence of activities and the extent of attention given to these concerns. The WGs proposals differed through three strategies: a) improving the built environment qualities such as accessibility, connectivity, energy improvement, parking, etc.; b) enhancing the common and individual experiences in public space; c) incorporating facilities and activities to energize the neighborhood. These three strategies, complementing each other, enriched the debate by showing different ways of understanding, configuring, and managing the habitable space.

Besides, the MoMo transformation approaches derived from the WGs were mutually inclusive. They included proposals ranging from soft to hard, from attitudinal to built-environment transformations, and from residents-led soft improvements of shared space to the critical restructuring of ownerships. The workshop opened up the opportunity

for the involvement of the local authority presence. Indeed, the workshop's process and projects gave a clear message about how valuable the place is at present and how much more value can be added. Perhaps the workshop strengthened the management board's commitment to pursuing a transformation in the estate's environment.

Nonetheless, the SW had some weaknesses and constraints. The workshop was short for a reiterative process of back and forth with residents' groups through which WGs could have tailored design ideas more to the estate's realities. More time was needed for debating issues and understanding the existing condition. The SW experience revealed that such events should be programmed as a series of workshops to achieve a concrete outcome, such as a straightforward improvement program for the community. The participation from the residents was relatively small. The future participatory phases should include several resident groups with different ages, gender, and concerns to provide comprehensive improvement strategies. As a cooperative housing estate, including a high percentage of residents in the design process will be crucial for representing different voices from the community and finding egalitarian and just solutions for all through democratic and participatory ways. For evaluating the WGs proposals, it became evident that more multidisciplinary inputs from different fields (engineering, environmental design, construction, legal advice on ownership constitution, etc.) will be crucial to developing future transformation strategies. Finally, the results of the SW should be recorded electronically and disseminated in various ways to keep the bottom-up initiative alive.

ACKNOWLEDGMENTS

REFERENCES

AŽMAN–MOMIRSKI, L., Dimitrovska-Andrews, K. (1997). Urban design workshops: A planning tool. In *Urbani Izziv*, 30/31, pp. 121-125.

ESHKOL, B. & Eshkol, A. (2017). Participatory planning in Israel: from theory to practice. In *Journal of Place Management and Development*, 10(3), pp. 213-239.

LISSANDRELLO, E., Morelli, N., Schillaci, D. & Di Dio, S. (2019). Urban innovation through co-design scenarios: Lessons from Palermo. In: Knoche, H., Popescu, E., Cartelli, A. (Eds.), *The Interplay of Data, Technology, Place and People for Smart Learning*. Springer / Cham. pp. 110-122.

MADANIPOUR, A. (2006). Roles and challenges of urban design. In Journal of Urban Design, 11(2), pp. 173–193.

NAYCI, N., Tan, E., Saf, H.O., Mazmancı, M.A., Arslan, H., Yalvaç, M., & Kurt, M.A. (2022). Mersin City-Lab: Co-creative and participatory design approach for a circular neighbourhood. In *Journal of Design for Resilience in Architecture and Planning*, 3(1), pp. 1–23.

PIMONSATHEAN, J. (2017). Creative Community Development. From urban design studio to international collaborative workshop, In *The Journal of Public Space*, 2(4), pp. 111-130.

SALVIA, G., Boffi, M., Piga, B.E.A., Rainisio, N. & Arcidiacono, A. (2021). Participatory approach for a sharing city: understanding citizens' perceptions in a neighbourhood of Milan. In *Territorio*, 99(4), pp. 164-178.

SHARMIN, T. & Khalid, R. (2021). Post occupancy and participatory design evaluation of a marginalized low-income settlement in Ahmedabad, India. In *Building Research & Information*, 50(5), pp. 574-594.

SHIRAZI, M.R., Kevani, R., Brownill, S. & Butina Watson, G. (2022). Promoting Social Sustainability of Urban Neighbourhoods: The Case of Bethnal Green, London. In *International Journal of Urban and Regional Research*, 46(3), pp. 441-465.

UKESSAYS. (November 2018). *Public Participation Planning*. https://www.ukessays.com/essays/project-management/public-participation-planning.php Accessed December, 2022.

URBAN LAND INSTITUTE (2023). *Urban Design Climate Workshop: Gowanus, Brooklyn*. https://newyork.uli.org/uli-resources/urban-design-climate-workshop-gowanus-brooklyn/ Accessed December, 2022.

WONG, S.C. (2022) Walking Tours and Community Heritage in Singapore. In: Cho, I.S., Kriznik, B., Hou, J. (Eds.), *Emerging Civic Urbanisms in Asia*, Amsterdam University Press / Amsterdam, pp. 41-70.

ESMAP (2020). *Global Photovoltaic Power Potential by Country*. World Bank: Washington, DC. https://documents1.worldbank.org/curated/en/466331592817725242/pdf/Global-Photovoltaic-Power-Potential-by-Country.pdf/ Accessed October 2022.

YALE URBAN DESIGN WORKSHOP (2023). *Dwight Healthy and Just Neighborhood*. https://udw.architecture.yale.edu/projects/dwightAQM Accessed December, 2022.

Müge Akkar Ercan, *Urban Planner (Middle East Technical University-METU), MSc in Urban Policy Planning and Local Governments (METU), Ph.D. in urban design (Newcastle University), Professor in the Department of City and Regional Planning at METU. Her research interest focuses on urban design, public spaces, urban regeneration and conservation, sustainable community development, sustainable urbanism, walkability, social cohesion, and inclusion.*

Claus Bech-Danielsen, *architect Ph.D., Professor, Aalborg University. In his research, Bech-Danielsen studies the relations between architectural space and social space. Bech-Danielsen is currently (2018-2030) head of research in a major research project that follows the physical transformations in Denmark's fifteen most disadvantaged housing areas.*

Hassan Estaji, *Architect, Doctor of Technical Science from University of Applied Arts Vienna (2016), Assistant Professor at the Architecture and Urbanism Department Hakim Sabzevari University. Wrote several articles on Sustainable Architecture, Flexibility, and Adaptability in Architecture and Housing Design.*

Roberto Goycoolea-Prado, *Architect & Urban sociology Diploma (UBB, 1983); Ph.D. Architect (UPM,1992). Since 1999, Architectural Analysis Prof. Alcalá University, Madrid. Research lines: conception, configuration, and use of living space, with projects, teachings, and publications in Europe, America, and Africa.*

Bernard Haumont, *Ph.D., Sociologist, Emeritus Professor, Paris-Val de Seine National School of Architecture, Centre de Recherche sur l'Habitat, Paris. Developed numerous research programs about architects and their clients and directed a research program on architectural and urban design with a European perspective: EuroConception. Author of several books and articles: La* Société des Voisins: Partager un Habitat Collectif *(2005).*

Byron Ioannou *is an Associate Professor, Head of the Department of Architecture, and Lead of the Urban Planning and Development Unit at Frederick University, Cyprus. He studied Architecture, Urban Planning, and Planning Law in Greece and the UK. His research interests focus on the sustainable built environment, inclusive urban development, urban design, and mobility.*

Lora Nicolaou *is a Professor at the Department of Architecture and co-founder of the Urban Planning and Development Unit of Frederick University, Cyprus. He studied Architecture, Urban Planning, and Urban Design in Greece and the UK. Her research interests focus on planning policy, master planning, and integrated and sustainable development strategies for building design.*

Paz Núñez-Martí, *Ph.D. Architect (UPM). Technical specialist in Development Cooperation and Heritage Recovery and Rehabilitation (UPM). School of Architecture, Alcalá University, Madrid (since 2002). Research group: Habitat and Territory development cooperation COOPUAH. Cañada Real slum technical advisor, Madrid City Council.*

Sanjin Subic, *MSc, practicing architect and urban planner in Serbia. Implemented a number of projects aiming to reach Sustainable Development Goals. Main fields of expertise include stakeholder management in projects focusing on increasing community resilience.*