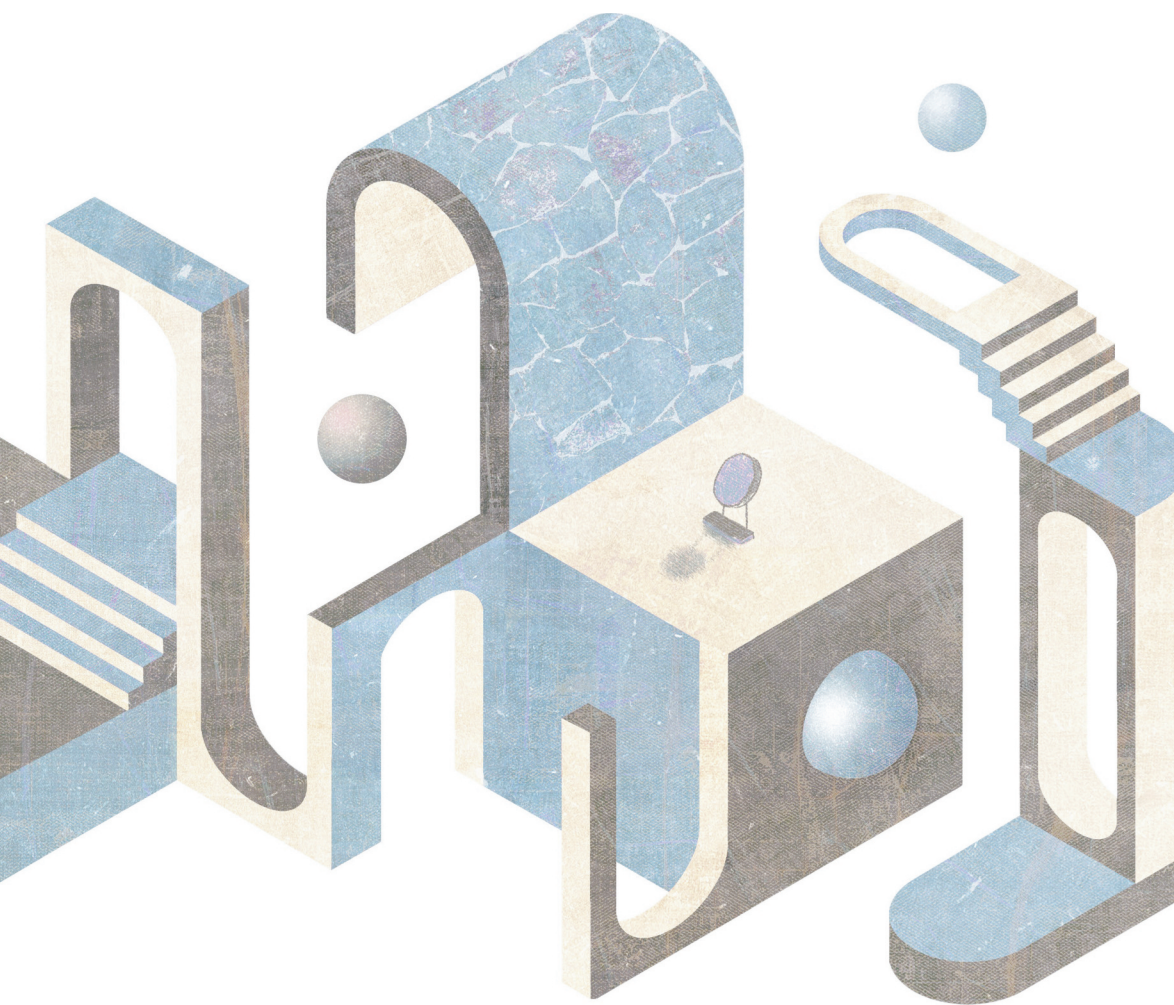


ENGAGING SPACES

How to increase social awareness
and human wellbeing through experience design

edited by Barbara Camocini, Annalisa Dominoni



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and human wellbeing through experience design



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DESIGN INTERNATIONAL

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Contents

Foreword,

by Barbara Camocini, Annalisa Dominoni

pag. 7

Part I – Social design for engaging spaces

1. How to Live Together? Co-living for Future Dwelling,

*by Francesco Antonio Scullica, Mauro Afro Borella,
James Christopher Postell, Gisella Veronese*

» 15

2. Co-designing Public Spaces,

by Davide Fassi, Laura Galluzzo

» 55

Part II – Experience design for engaging spaces

3. Reusing the built space: atmosphere and human experience,

by Anna Anzani, Emilio Lonardo, Massimo Schinco

» 77

4. Front door spaces. A time-based approach to the ground floor design,

by Anna Barbara, Silvia Maria Gramegna

» 107

5. Experiential ways of mapping: revisiting the Desktop Walkthrough,

*by Valentina Auricchio, Annalinda De Rosa, Maria
Göransdotter*

» 131

Authors

» 159

Foreword

Barbara Camocini, Annalisa Dominoni
Department of Design, Politecnico di Milano

The book presents different perspectives of analysis and new models of experience, reconfirming the importance assigned to the wellbeing and human-centered approach, in the contemporary spatial design disciplinary debate. The pandemic and the return to a “post-pandemic new normal” have led us to further reflect on the spatial transformation and hybridization and their shared use in both the private and public spheres, exploring the importance of participatory and engaging strategies in the different phases of the design process with the aim to increase social awareness. The volume is divided into two parts described below.

The 1st part explores private and public space case studies introducing new hybrid co-living dimensions through the social engagement in “living communities” and reports participatory design approaches in the transformation processes of shared common spaces, such as schools, intended as incubators of social practices. Co-living spaces are constantly redefined by the relationships of their inhabitants. The co-existence of private and public spaces in this “domestic landscape” calls attention to the existing conceptions of “home” leading to new conceptions of “home” and “hybrid” typologies. Co-living interiors acquire new meanings and values in response to the social redefinition of family and friendships, as well as the inclusion of work activities in these domestic spaces. Social practices related to public spaces have increased in recent years, defining a process of urban regeneration. It is led by communities of users, starting from their needs, and related mainly to a combination of spaces and services. In particular, the focus is on the role of primary

and secondary schools in certain key areas of Milan, Turin and Padua to activate and facilitate new solutions through design.

Going in depth into the contents of each chapter, the authors of the first contribution “How to Live Together? Co-living for Future Dwelling” identify a growing need to build community within the domestic landscape of collective housing and focus on co-living and the components of space, furniture, and activities specifically charged with an understanding and intention to add value to the growing repertoire of designed communal and private spaces. Co-living and co-housing are ontologically opposed concepts. The two concepts are materialized into very distinct and differentiated inhabitation experiences with different configurations, products, and services, all leading to very differentiated community conceptualizations and designed configurations. Today we are witnessing an evolving redefinition or hybridization of concepts that influence the use and understanding of shared spaces and services. This evolving morphology is redefining the concepts of community, privacy, and publicness. The function of co-living is in a form of a regulatory structure where the inhabitants are not co-owners, but co-residents who absorb activities and services generally relegated to impersonal, third-party management, while sharing common spaces and maintaining relatively little private space. We define this as a hybrid living experience that gives more responsibility to the residents yet requires them to accept more public sharing and less private ownership. Designers recognize the benefits of co-living for an open, nomadic, and inclusive population, but promotion to a broader audience, such as those raising a family or the elderly, is needed to further educate and promote co-living as a viable housing option for people of all ages.

The second issue “Co-designing Public Spaces” concerns grassroots initiatives related to public spaces that have increased in recent years, defining a process of urban regeneration. It is led by communities of users, starting from their needs, and related mainly to a combination of spaces and services. The transformation of the city is sometimes temporary, related to occasional events or to figure out specific solutions (i.e. urban furnishing, tactical urbanism), to prototype and test scenarios and collect data and feedback to transform them into permanent design outputs. Designers usually take on the role of activators and facilitators, guiding the group of stakeholders in the process of defining what the solutions might be. The recent pandemic has radi-

cally changed many social habits and affected the economic situation, generating new needs related to proximity living (availability of goods and services at a medium-short range) and a widespread crisis in the employment market. Many of the responses being made to what people are now facing refer to the places where they live, work, and spend their leisure time and quality. Several examples show that today the neighborhood dimension in cities is the most promising and active concerning resilience solutions in social innovation. The perceived quality of neighborhood public spaces and services is significantly and positively associated with a sense of community and even the spatial layout and the functional mix could reinforce this connection. There is an undoubted advantage in involving local communities in the transformation processes of the spaces that animate their everyday life. Involvement leads to a greater sense of belonging to the result because it is considered as one's own and therefore is to be cared for, preserved, maintained, and somehow defended.

The 2nd part of the book describes more in-depth the experience of human beings in relation to physical and emotional aspects of space, focusing on the quality of the built environment that deeply affects people's wellbeing, social interaction, and cohesion, and investigating ephemeral practices and projects to experience design through a conscious sensorial approach. Built spaces do not create simple objects of visual seduction, they get into relation through the senses, convey meanings and memories. In collectively shaping the places where we live, it is essential to approach the built space from a holistic, humanistic, culture-centered point of view, responding not only to functional, technical and economic needs, but also to social and psychological needs.

The third chapter "Reusing the built space: atmosphere and human experience" explores how to reuse the built space increasing atmosphere and designing the human experience. We know that the quality of the built environment deeply affects people wellbeing, social interaction and cohesion, creativity and place attachment. Reversely, people's quality of life strongly affects their ecological relationship with places and the environment, influences the way they share emotions, experiences, needs and objectives. The sense of alienation we often experience in contemporary spaces, sometimes perceived as non-places, may be related to the weakness of their atmospheric quality, to a

lower impact on our memory and peripheral vision compared with historical and natural settings, which instead stimulate a stronger emotional involvement. In collectively shaping the places where we live, it is essential to approach the built space from a holistic, humanistic, culture-centered point of view, responding not only to functional, technical and economic needs, but also to social and psychological needs. Reuse design of urban abandoned spaces can allow people to benefit from memory, engaging atmospheres, and synesthetic experiences to prevent stress and restore attention, promoting urban regeneration and improving individual and community wellbeing. As designers, we have the tools to really look at ways to build a new sort of cultural ethos which is focused not so much on the object of architectural design (which of course has to be well built and nicely detailed and exquisitely conceived) but more focused on the human experience of what this built environment is.

The fourth contribution “Front door spaces. A time-based approach to the ground floor design” concerns contemporary city development, proposing a regeneration strategy centered on this volume’s ‘Engaging Spaces’ theme. The authors illustrate the ‘city of peaks’ (of traffic, assemblages, ...), which manifested itself in all its urgency during the ongoing pandemic, and, as a paradox, the spread of urban empty spaces. To these observations, the authors add the impact of digital technology on the behavior of the inhabitants, which involves external pressure driving humans and making them move with pre-cognitive logics, with no randomness but causality, no proximity but intimacy. The front door city scenario described in the contribution introduces new city forms and tools, bringing forward new possibilities offered by the ground floors as places devoted to engaging people in their daily lives. The authors examine the potential of exploiting the porosity of built spaces through practices of temporal scheduling and space sharing, considering the city as a sponge with a new regeneration culture. Analyzing a range of proximity-centered strategies aligned with the principles of the city of 15 minutes, the contribution highlights the importance of slowness to sustain the natural times of a community, made of informal relationships, rituals, customs, to help build a physical relationship with places. Finally, the authors define some parameters of success for the front-door design approach identifying their impact on town spatial quality and people’s physical and mental wellbeing.

The fifth issue “Experiential ways of mapping: revisiting the Desktop Walkthrough” intersects the “Engaging Spaces” theme from a perspective that studies how approaches, methods, and tools evolve embedded in the design practice, highlighting the importance of considering and documenting their historical origins and context of use. In particular, the contribution focuses on the Desktop Walkthrough tool, examining how, from being a prototyping tool, it evolved to be an exploring one, and then it showed an additional facet as a participative tool of the co-design practice. The discussion presents two examples of Desktop Walkthrough application in the educational experimentation that integrates spatial and service solutions, where service can help reshape spatial experiences and spaces are part of a service system to be designed for exploring and further developing research on the narrative dimension of the design process. Indeed, Desktop Walkthrough helped explore temporal, relational, and spatial design dimensions with an outstanding representational and visual role. The second case study explores the application of the Desktop Walkthrough tool as the front-end of the design process people’s actions to drive the transformation of public spaces’ new forms of mobility and interaction. In this case, therefore, Desktop Walkthrough assumes the function of participatory and co-design design tool and fosters designers’ and non-designers’ collaboration to generate ideas and insights.

Part I

Social design for engaging spaces

2. Co-designing Public Spaces

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Abstract

Grassroots initiatives related to public spaces have increased in recent years, defining a process of urban regeneration. It is led by communities of users, starting from their needs and related mainly to a combination of spaces and services. The transformation of the city is sometimes temporary, related to occasional events or to figure out specific solutions (i.e. urban furnishing, tactical urbanism), to prototype and test scenarios and collect data and feedback to transform them into permanent design outputs.

Designers usually take on the role of activators and facilitators, guiding the group of stakeholders in the process of defining what the solutions might be.

This chapter analyzes and discusses co-design processes concerning the transformation of public spaces in the context of applied research activities led by the authors. In particular, the focus is on the change of certain key areas in the Nolo district of Milan and of spaces in primary and secondary schools in Milan, Turin and Padua. These are led by the Polimi Desis Lab, a research team based in the Design Department of the Politecnico di Milano.

2.1 Communities, resilience, co-design

The culture of resilience passes through a system of knowledge, opinions, customs and behaviours that characterize knowing how to react to the unexpected to create new situations that are more balanced. When applied to social innovation, the solutions that support it are to be found in people. This occurs not so much in individuals, but in how they group together in forms of cohesion in their communities: associations, informal groups, circles of friends, inhabitants of the same block of flats, people from the same neighbourhood. The UN stated that each individual should have the opportunity to participate in decision-making processes (United Nations, 1992). This way of being together, especially today, several months after such an extraordinary event as a pandemic, finds forms that result in collaborations to counter the unforeseen, respond to the existing, and imagine the future.

The recent pandemic has radically changed many social habits and affected the economic situation, generating new needs related to proximity living (availability of goods and services at a medium-short range) and a widespread crisis in the employment market.

Many of the responses being made to what people are now facing refer to the places where they live, work, and spend their leisure time and quality. Several examples show that today the neighbourhood dimension in cities is the most promising and active concerning resilience solutions in social innovation (Fassi, Manzini, 2021; Manzini, 2021).

When local communities are prepared to participate in collaborative actions, it is much easier to design, produce and stimulate solutions for a better life. There is, in fact, a level of proactivity that facilitates their creation: from small events more related to entertainment or cultural dissemination (festivals, thematic weeks) to actions that are more responsive to the particular needs of neighbourhoods that affect public spaces that are often overlooked (urban gardens, improvised play areas) up to real micro-transformations of spaces waiting for a structural change that takes on the character of temporariness to test their validity, effectiveness, proper use and the benefit for people (tactical urbanism, emergency solutions).

If involvement is based around a project, then it takes on the characteristics of infrastructure, i.e. leading to the creation of the physical, social, cultural and economic conditions that allow other projects and

activities to emerge and flourish. Some recent documents from the European Commission (Montalto *et al.*, 2020; OECD, 2018) highlight how this occurred even more during the pandemic, and as a response to it, by strengthening community-building and identifying successful innovative solutions.

Design is increasingly at the heart of this process of activating, supporting and facilitating bottom-up initiatives with its project culture, methods and tools. The involvement and participation of communities increase and assume a central role in rethinking the role of public space in contemporary cities and, above all, in the post-Covid period (Rossi, Perrone, Pillon, 2021). These are not just isolated episodes, but a network facilitated by the governance of the territory, which we find today in excellent cases such as Milan, Barcelona, Paris, just to name a few prominent European cities that now place people at the centre of the city's development.

In light of the changes brought about by the 2020 pandemic, we explore in this chapter what it means today to co-design public spaces through the analysis of two case studies by the Polimi DESIS Lab research group of which the two authors are members. Co-Design's engagement with the public realm is rooted in an activist tradition aspiring to increase democratic participation of diverse societal groups in design activities related to public space, services, systems or policy (Huybrechts *et al.*, 2017).

We refer here to “co-design” by sharing the approach declared in *Massive Codesign* book by Anna Meroni, Daniela Selloni and Martina Rossi (members of the Polimi DESIS Lab too) that is realting to

[...] a complex items: services, strategies and scenarios. These require the participation of multiple and various actors from both the public and private spheres, and expert and non-expert domains that fall within a sort of “third” space.

According to Muller (2008), this “third space” is a fertile environment in which participants can combine diverse knowledge in new insights and action plans. Codesign was originally associated with the initial stages of a creative process, the “front end” activities of exploration and the generation of ideas (Sanders and Stappers 2008), but it is now increasingly valued as an opportunity to create a “third space” or “infrastructure” (Björgvinsson, Ehn and Hillgren, 2012) that facilitate discourse and collaboration among diverse players involved in a creative process ranging from the initial ideas to actual implementation.

The presented case studies consider how to facilitate a move from simple consultations to actual collaboration, in which “those who are consulted” become, in a way, the creators of “contents”, ranging from direct feedback to more articulated contributions (Meroni *et al.*, 2018). The context in which the analysis takes place is the city, where the functional mix of public spaces and personal services guarantees a protected environment that is better suited to countering adverse agents, thanks to the different economies that exist¹. We will see in the two case studies presented how the social distancing imposed by the pandemic has led to the re-inventing of new tools and methods of co-design.

2.2 Case Study 1: Off Campus Nolo

The Politecnico di Milano has been following, reporting, translating and designing solutions in the Nolo neighbourhood for over a decade, allowing its researchers and students to make their skills available to a local area. This presence found a more remarkable physicality in the district’s covered municipal market when, in September 2020, it opened Off Campus Nolo², a neighbourhood living lab, a space for planning within the physical context of the area that helps develop ideas from the grassroots thanks to the polytechnic skills of design, architecture and engineering (Fig. 1).

The Politecnico di Milano has continued its social responsibility programme, which over the years has strengthened its presence in the city of Milan, with the idea of a more responsible university that is attentive to social challenges, open to and nearby territories and communities, through the activation and facilitation of projects with existing local realities (Cognetti, 2013; Fassi *et al.*, 2020; Pasqui, 1998). Nolo hosts an observatory for the regeneration and reactivation of neighbourhoods; laboratories and educational workshops, seminars and open lectures; exhibitions and public events; and an archive of projects developed over the years to become an agent of development for the reality of the market.

1. www.nytimes.com/2020/12/07/well/live/coronavirus-cities-safe.html.

2. www.instagram.com/offcampuspolimi/.



Fig. 1 – Off Campus Nolo, Municipal Market in Viale Monza, Milano (ph. Fabio Cocchi).

The space is also the studio of Radio Nolo³, a web radio run by volunteers from the neighbourhood. This was the first partnership signed to activate and disseminate emerging projects through its broadcasts. A hybrid environment thus becomes a direct observatory on the area's problems and encourages dialogue with citizens and institutions through co-design activities.

In its first months of life, although the limitations of the ongoing pandemic slowed down its progress, Off Campus Nolo carried out an initial project: “Il Vocabolario di Quartiere – the Situated Dictionary”⁴ (Fig. 2).

3. <https://radionolo.it/>.

4. This research project is coordinated by Virginia Tassinari, fellow researcher at the Politecnico di Milano. The research team includes Professor Davide Fassi, and Francesco Vergani and Ambra Borin, PhD candidates at the Department of Design.



Fig. 2 – Vocabolario di Quartiere: words exhibition (ph. Politecnico di Milano).

In line with the principle that citizens should be understood as part of the solution and not part of the problem, and embracing the adaptation strategies that the city of Milan adopted in the second half of 2020, the Vocabulary has activated listening and co-designing guidelines for rethinking the city in the post-pandemic period (Tajani, 2021).

It is an experimental tool, developed by the Polimi DESIS Lab⁵ research group with the support of Radio Nolo, which is available to citizens to initiate conversations which, by enriching themselves with different points of view and articulating the different sensibilities present in the area, can contribute to forming an authentic neighbourhood discourse. Words and actions can feed off each other and together give shape to a shared but, at the same time, multiple vision of everyday life. Conversations on terms such as public space, decay, sense of belonging, enjoyment, etc. have been opened up to different types of ‘voices’: for example, those voices which, for various reasons, are not always heard (the voices of foreigners, the elderly, children, the disabled, but also those of plants, animals, etc.); but also the voices of those

5. Polimi Desis Lab (www.desis.polimi.it/) was established in 2012 and belongs to the Desis association (www.desisnetwork.org/), an international network of design schools dealing with social innovation and sustainability.

already working in the neighbourhood, expert designers from Milan, but also international designers, or the voices of intellectuals, such as writers and artists. The aim is to give shape to a shared neighbourhood discourse, animating a culture of social transformation, in which words become concrete transformative actions for Nolo. The conversations are then narrated in the podcast “In Poche Parole”, broadcast by Radio Nolo.

The process of listening and planning with the territory around the term “Public Space” was developed through various offline activities in the Off Campus spaces (pre-lockdown, September-October 2020) and online ideas (in lockdown, November 2020 – February 2021) with the use of specific software for sharing ideas. Moreover, public space plays a central role in the social dynamics of this neighbourhood and is often the subject of local discussions and experiments. The urban fabric is rich in design potential, which can be found primarily in the numerous underused or run-down public spaces.

Nolo has a solid potential both from the urban and social points of view and already has the distributional and functional characteristics in line with proximity living. The current municipal administration has made it the standard for the governance of the territory in the coming years. Proximity has been increasingly strengthened in recent years, thanks to the synergetic work of local associations, active citizens, creative people and public administration. The neighbourhood’s social fabric presents itself as a community that is already very close-knit and predisposed to participate in collaborative actions. This can be defined as a “project community, i.e. groups of people who are born around an answer to a need in factual, design terms, and carry the idea forward to its realization, going even further, to the phase of use, testing, improvement” (Fassi, 2020; Manzini, 2021). Through the term “Public Space”, an attempt has been made to understand in depth the dynamics of the neighbourhood and its local specificities, from the point of view of the daily experience of those who live it. The application of participatory methods made it possible to establish a dialogue with some of Nolo’s inhabitants, creating relationships of trust and empathy. The research investigated the various meanings “Public Space” assumes within this territory, identifying the practices of use that characterize the spaces, the interdependencies that develop within them, and the layers of friction and conflict that

are inevitably established in such a complex reality. What emerged was intense transformative energy that often translates into processes capable of triggering inclusiveness and social cohesion. The tools used allowed for live interaction through a physical map of the neighbourhood positioned inside Off Campus; two facilitators and activators⁶ of the conversations present during opening hours; and some objects to support the project (postcards on which to leave a text with an idea of transformation of the place or a graphic representation to accompany it). The development of the activities included a heterogeneous public, that includes customers of the market, inhabitants of the neighbourhood interested in the activity, and university students. The month-long offline activities were preparatory to the online activities. Some “design fiction” techniques were tested with a more targeted audience, who were already oriented towards elaborating ideas on specific places of interest that emerged from the first consultation.

The results led to:

- the creation of a map of design opportunities to respond to the need for transformation of some places “on hold”;
- the elaboration of the podcast “In Poche parole” where the results of the activities were discussed;
- the implementation of an initial foundation of one of the ideas that emerged for the transformation of Piazzetta Transiti, a local never ‘designed’ and mistreated by several people (Figs. 3-4).

6. Two postgraduate students (Elisa Scignar and Elisa Maramotti) were involved in an internship at the Polimi Desis research lab. One thesis about the transformation of the public space in the Nolo Neighbourhoods has been presented as an outcome of those activities. (Maria Maramotti, “Farsi Spazio”, MSc Interior and Spatial Design, Politecnico di Milano, Tutor: prof. Davide Fassi. Presented in April 2020).



Fig. 3 – Piazzetta Transiti: suggestions by people (image by Maria Maramotti).

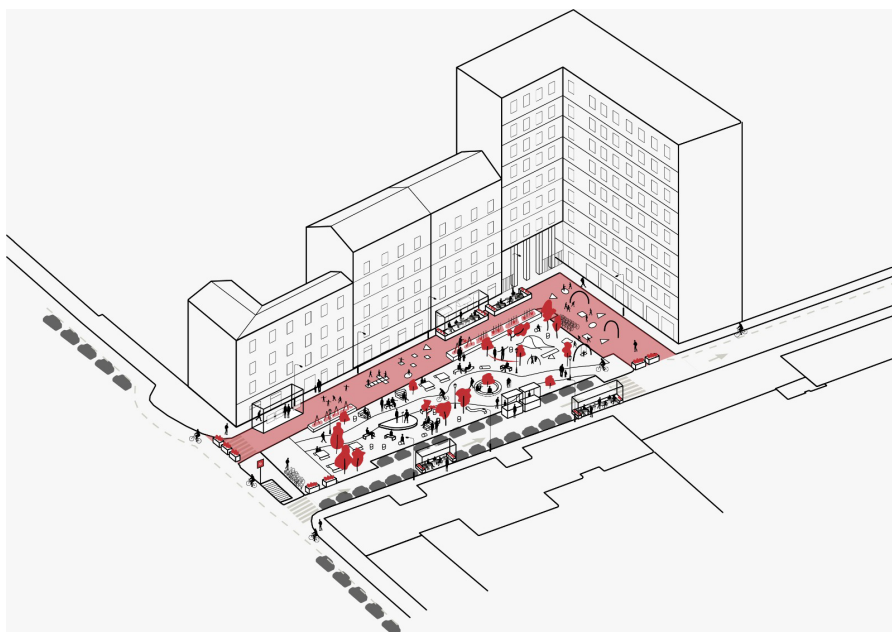


Fig. 4 – Piazzetta Transiti: design proposal (image by Maria Maramotti).

The consultation activities between different local actors are currently underway to experiment with some temporary spatial solutions in the Piazzetta and the stipulation of a “collaboration pact”⁷ with the Municipality of Milan for the care and maintenance of the place.

2.3 Case Study 2: La mia Scuola è diferente! – My School is different!

Starting in 2019, the Polimi Desis Lab team has actively collaborated as a partner in the project “La mia Scuola è diferente!”, a three-year project (2019-22) selected and financed by Con i Bambini as part of the Fund for the Contrast of Educational Child Poverty, one of the winners of the “New Generations” national tender, and coordinated by Diapason Cooperativa Sociale di Milano. The project focuses on strengthening the school as an educating community and promotes, through innovative paths, the essential skills to prevent social exclusion.

Twenty-four partners are working on different activities to achieve this goal. The partners include five schools in Milan, Turin, and Padua. Among the leading partners in Milan is the Polimi DESIS Lab research group in the role of coordinator of the 2.0 School activity. This action aims to regenerate some common spaces inside the buildings of the partner schools of the project through participatory planning paths with the communities that live and learn in the schools every day.

This project was an opportunity to reflect on various topics: on the importance of public space as a generator of sociability inside and outside school buildings; on the relevance of the collaboration and participation of communities in the various co-designing phases; on the usefulness of prototyping and the creation of a simulation of spaces as a test of the design hypotheses that emerged from the co-design paths; on the role of spaces as places of socialization and the value of their shared design in preventing social exclusion,; and on building a solid synergy between school, territory, and city.

The study of school structures and the redesign of common spaces also leads to revising teaching and training activities (Dovey, Fisher,

7. www.comune.milano.it/web/patti-di-collaborazione.

2014). The connection between spaces and learning activities has been confirmed for years, starting with the idea that space is the third educator (Malaguzzi, 2010) for children attending an educational facility. A greater fluidity of the spaces allows more significant movement of students, which interrupts the normal rhythm of work and study and allows and promotes a greater propensity for learning (Brittin *et al.*, 2015).

The space is intended as a container that favours social interaction, exploration and learning, and has an educational “content”, which offers educational messages within it and is full of stimuli in the direction of constructive knowledge.

The space in the school is a constitutive element for the formation of thought and has a solid and effective language. Spatial language is multisensory, involving remote receptors (eyes, ears, nose) and immediate receptors (such as skin, membranes, and muscles) (Rinaldi, 1998).

Furthermore, we can speak of relational space because the environment is a sort of cradle of relationships, interactions, possibilities, and limits. But the environment is not a container that welcomes without interference; it is more of a “mediator” because it is an object/subject that is strongly intertwined in the relational texture that characterizes places and, specifically, educational classes.

“La mia scuola è differente!” project includes a series of activities to be developed over three years, which include, among others, experiences of “school open to the territory” with working groups, and activities in the extracurricular environment involving pupils, teachers and parents, as in the case of the School 2.0 activity coordinated by the researchers of the Politecnico.

During the first year of the project, the School 2.0 activity launched five co-designing processes for the redevelopment of the common spaces of the partner schools; these were live co-design sessions, carried out with teachers, managers, parents, grandparents, students, and school staff.

The co-design paths followed a standard process (Figs. 5-6):

- a first observation session of the uses of the spaces, the habits and customs of the different populations that inhabit them, and the formalization of a list of possible areas in which to intervene;
- the second activity of a study of case studies and best practices from which to draw inspiration;

- a third session focused on recognizing needs and desires and then arriving at the definition of the space in which to refine the co-design activity;
- a fourth activity of selecting the functions to host in the chosen space;
- a reflection on the positioning of functions in the space and the collective construction of a sort of masterplan of the area and therefore of a shared plan;
- a sixth joint construction activity of a mood board;
- the application of the mood board in the space, the choice of some furnishings and possible finishes, and following the definition of a list of purchases to be made;
- the organization of activities to be carried out together with the whole school community during a prototyping event.



Fig. 5 – La mia Scuola è differente! Co-design session at the primary and middle school “Istituto Comprensivo Sandro Pertini”, Milan (ph. Ambra Borin).



Fig. 6 – La mia Scuola è differente! Co-design session at the nursery “Istituto Comprensivo Statale Niccolò Tommaseo” (ph. Ambra Borin).

The spaces in which to intervene, selected together with the schools, are of different types: a reading room for an elementary school; corridors to be transformed through graphic elements and furnishings that improve the reception in the classrooms; an area dedicated to the lunch break; a psychomotricity classroom; a courtyard for a kindergarten; a lecture hall to be transformed into a showcase space for the institute; a sort of multifunctional space that can host musical and theatrical events, and which in the future can be a hub for extra-curricular activities and neighbourhood activities (Fig. 7).



Fig. 7 – La mia Scuola è differente! Prototyping activity with Pertini School (MI) (ph. Ambra Borin).

At the end of the first year of the co-design activities with schools, when 4 out of 5 paths were underway, and some were almost completed, the process suffered a decisive setback caused by the spread of the Covid-19 virus from the first lockdown.

Faced with great uncertainty and the numerous questions that arose about the present and the future, it was certainly challenging to talk with schools, which were closed to ordinary activities, about participatory processes, shared spaces, living spaces in groups, and even the

possibility of opening schools to the neighbourhood and the organization of prototyping events.

After a few months' standstill, the co-design sessions were remotely reorganized, thanks to shared digital platforms. On the one hand, this has undoubtedly made it easier to reach everyone, even for short discussion meetings, and has sometimes made the process easier. But, on the other hand, it made it more difficult to involve students more regularly, and more interestingly, it meant the various actors involved had to deal with new tools that require more specific knowledge.

The compulsory social distancing made it impossible to carry out collective prototyping activities, space tests, and presentations to the entire school community. This was undoubtedly the most complex aspect in managing the new structure of the process during the pandemic.

Regarding the co-design processes already underway, in which the spatial project had already been defined, it was necessary to review some characteristics in the light of the rules related to social distancing. The most urgent request relates to the use of space in small groups, guaranteeing respect for physical distances between individuals. However, the city discovered an exciting theme of the relationship between schools and the surrounding area between the school and the neighbourhood. The strategic theme is also searching for larger spaces to respond to the most urgent requests just underlined. Schools and their surrounding public places could become the fulcrum of the first interventions of micro-mobility, pedestrianization, which are key interventions to redesign the proximity relationships, the new neighbourhood dimension. (Mattioli, Renzoni, Savoldi, 2020)

2.4 Emerging Issues

In the preceding paragraphs, we have seen how designing public space through a participatory process brings together a complexity of actors, actions and contexts, which is not always easy to govern. In this paragraph, we will try to outline some final considerations, derived partly from direct experience and validated by the literature, which will bring out the strengths and weaknesses of the process, highlighting the opportunities and potential threats.

2.4.1 Comparison

The consultation of the different voices goes through processes that are sometimes tortuous, dichotomous and full of contrasts. Involving many actors and people, communicating the scope of intervention and the path of participation, bringing forward examples and visions, creating conversations, listening to and translating voices – all of these can help mitigate the threat of conflicts between different factions that inevitably arise.

It is about to deal with that “third space” mentioned in the introduction, to manage it and to get advantage of the richness it takes, made of different voices, competences, skills, background.

Nevertheless, the creation of the ‘consensus’ has to accept its limits. Participation deals with the identities and subjectivities of participants, and outcomes depend on it, limiting the design actions in the public realm, not to mention the broadest range of possible people and groups that may or may not be pre-constituted concerning particular issues (Keshavarz, Maze, 2013). Co-designing usually involves people predisposed to participation and confrontation (associations, informal groups, activists), but also has to deal with that part of the local population that is not used to such processes, and is distrustful of those who work for the common good. An ‘urban’ context entails the co-existence of actors with different (agonistic) interests. It is characterized by negotiations among such other interests (Dellenbaugh *et al.*, 2015; Eriksen *et al.*, 2016) that is why it is necessary to explore an alternative based on ‘dissensus’, as theorized within political philosophy where the design role is that of a reflexive and situated translator (Mouffe, 2000; Rancière, 2015)

2.4.2 Sense of belonging

There is an undoubted advantage in involving local communities in the transformation processes of the spaces that animate their everyday life. Involvement leads to a greater sense of belonging to the result because it is considered as one’s own and therefore is to be cared for, preserved, maintained and somehow defended. In this way, the perception of a community of place is also increased, where the

network of neighbours and the assistance between inhabitants have a fertile ground (Carr *et al.*, 1992). Furthermore, the perceived quality of neighbourhood public spaces and services is significantly and positively associated with a sense of community (Francis *et al.*, 2012) and even the spatial layout and the functional mix (including residential and transportation realms) could reinforce this connection (Talen, 2000). Where a principle of dissent, understood as the inclusion of diverse voices in the participation process, has not been adopted, the sense of belonging is lost. This can lead to an ex-post exclusion of the use of the place by uninvolved actors, resulting in less proactivity (actor vs spectator).

2.4.3 Waiting

Time is an essential variable in the construction of the process and the sedimentation of the result. The structure of a community of reference, if not yet existing, and/or its involvement in the co-design process entails longer times of immersion in the context by the designer than a classic design process (Meroni *et al.*, 2018; Sanders, Stappers, 2008). This is because of the creation of empathy between the activator (designer) and the actives (stakeholders). The process of trust between the parties and the credibility of the path is built with time and continuous presence in the context. Moreover, when the transformation of public space goes through the approach of temporariness as a strategy of adaptable solutions for the long term (Fassi, Galluzzo, 2018), this generates in those who were not part of the process an instant reaction of rejection of the change that is often mitigated over time through the use phase. This was found in several examples of tactical urbanism in the Nolo neighbourhood. The use of the spaces and services co-designed and made available to the population initially met with a high level of mistrust, especially on the part of the shopkeepers located along the streets concerned, who complained of reduced income due to the lack of parking spaces in front of their businesses. These fears were dispelled as the weeks went by, to the benefit of adaptation to the intervention and active participation in the life of the sites (e.g. equipping the spaces with tables and chairs, renting board games, etc.).

2.4.4 During and post-pandemic emergency

During the lockdowns and the semi-opening periods, participatory processes have undoubtedly suffered slowdowns and second thoughts: the need to meet in small groups or carry out co-creation activities at a distance have favoured an acceleration in the redesign of the digital co-design tools and activities.

This acceleration towards the digitization of tools and methods inevitably creates the need to respond to and reflect on new trends. While on the one hand, it can bring a more comprehensive public closer to the participatory processes themselves, favouring “that right to the city as the right to participate in the construction of its future” (Rossi *et al.*, 2021); on the other hand, however, the adoption of digital tools can also remove some possible actors of co-design.

During the Covid-19 pandemic, one of the first consequences was the lack of a strong diversification and variety of the components of the communities involved during the co-design process, precisely due to the use of digital tools, shared boards, etc., which, as suggested by the authors could on the one hand greatly facilitate the activities and on the other cause quite a significant digital divide.

Also, the opening and closing ceremonies of the activities (Meroni *et al.*, 2018) have radically changed due to remote co-design activities and in the case of co-designing in small groups. The importance of the classification of “responses” and shared experiences so they can be collected during the activities and easily used later as results in the different stages of the process is certainly answered by the greater diffusion of digital tools.

Even the experience of the co-designing sessions has undergone variations in terms of timing; level of concentration and attention required; fatigue from overexposure to screens; ease and propensity for networking; and socializing with the rest of the group of participants and facilitators.

Finally, with regard to the boundary object in this fast and forced acceleration towards a new level of digitalization and virtualization of co-design activities, the aspect that has undoubtedly suffered the most significant impact is the possibility of manipulating, and being able to assemble and dis-assemble possible prototypes, leaving less room for improvisation, and thus making the participants a little less proactive in the design process.

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The book presents different perspectives of analysis and new models of experience, reconfirming the importance assigned to the wellbeing and human-centered approach in the contemporary spatial design disciplinary debate. The focus on “engaging spaces” is due to the increase of participatory experiences in the design strategies supporting designers who want create tailor made environment to feel people more conscious of the great value of social relations.

The title of the book anticipates the aim to explore the transformation process which we are living, both in private and in public spaces, underlining the central role of design to define new qualities of connections to live together in relation with the space around us. The volume is divided into two parts described below.

The first, “Social design for engaging spaces”, explores private and public space case studies introducing new hybrid dimensions through the social engagement in “living communities” and reports participatory design approaches in the transformation processes of shared common spaces, such as schools, intended as incubators of social practices.

The second, “Experience design for engaging spaces”, describes more in-depth the experience of human beings in relation to physical and emotional aspects of space, focusing on the quality of the built environment that deeply affects people’s wellbeing, social interaction, and cohesion, and investigating ephemeral practices and projects to experience design through a conscious sensorial approach.

The pandemic and the return to a “post-pandemic new normal” have led us to further reflect on the spatial processes of transformation and hybridization and their shared use in both the private and public spheres, exploring the importance of participatory and engaging strategies in the different phases of the design process with the aim to increase social awareness. Being back to the physical perception of spaces has confirmed the importance of evaluating the project’s sensorial aspects with a new awareness. This novel attitude leads to rediscovering the values of measurable space in the constant confrontation with the virtual perspective that triumphed during the pandemic, introducing the “time” factor in the design discipline even with a broader complexity than before.