

“PROXIMITY” AS A DESIGN STRATEGY FOR SUSTAINABLE, COLLABORATIVE AND INCLUSIVE URBAN PUBLIC SPACES

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ABSTRACT

Public spaces at neighbourhood scale represent the main scenario of citizens' life, nodes that define an archipelago of places with a key role in promoting and fostering the enhancement and maintenance of the built environment through mutual collaboration. This network of open and built spaces traces the reference infrastructure of urban planning and redevelopment models, based on proximity as device for physical and social relationship, central in the post-pandemic city debate. “The city of proximity” is the first focus addressed by the *Atelier* of Urban Innovation Lab in Bologna: an exhibition and laboratory space for comparison and co-design of public space, housed inside the City Hall of the Italian metropolitan city of Bologna and co-curated by the Department of Architecture, University of Bologna and the city agency Foundation for the Urban Innovation. The *Atelier* explores urban dynamics and contemporary challenges using analogue and digital tools investigating the potential of the ecosystem defining the realm of the everyday dynamics – for instance, squares, courtyards, markets, libraries, urban gardens, playgrounds, sport equipment, etc. In addition to the physical transformations linked to the concept of proximity, the design process, the actors involved and the results obtained are considered relevant. This paper, framing the topic on transition city issues, addresses the potential, transversal and recurrent features of neighborhood spaces with the aim of acknowledging replicable strategies and design practices for collaborative cities based on new form of citizen democracy that encourage the reactivation of places, community creation, resilience to climate change and sustainable mobility, as experimented by the lab-like environment of Urban Innovation Lab Bologna.

Keywords: city of proximity, urban planning, community creation, urban public space, sustainable mobility, design strategies, co-design platforms, social innovation practices, urban transformation processes, the *Atelier* of Urban Innovation Lab Bologna.

1 INTRODUCTION

Global crisis and periodizing events [1] represent agents of change influencing and transforming the urban structure and the way of living everyday life in our cities, capable of triggering new development policies and strategies that involve material and intangible aspects [2] linked to the social, cultural, ecological, economic and spatial dimensions.

The COVID-19 pandemic, since spring 2020, has been just the latest test to assess the level of resilience and responsiveness of our cities to the changes imposed by global challenges. As an immediate consequence, the forced physical distance between people, adopted as the first solution to slow down the contagion, has led to perceptible shifts in the form of use every day spaces, both in the private sphere of the house – transformed in the context in which to combine privacy, free-time and work – both in the public and semi-public domains, where to meet the essential “necessary everyday tasks” [3], for instance, shopping at the supermarket, eating at the restaurant, taking a bus or just meeting a friend. Focusing on the latter point, the pandemic crisis showed how public spaces functioned, served and changed the needs of communities during the lockdown – when only the essential functions of life were allowed – and the reopening stages. Well-designed and equipped outdoor destinations – central but especially local – have become more popular and experienced, thanks to their ability to offer safer places for meeting and recreation, favouring new activities



and forms of urban life [4]. Thus, public spaces have been the main field of observation, application and testing of the necessary measures to ensure the performance of the main human activities, defining that common denominator with respect to which sharing strategies as much as possible replicable, flexible and scalable to different contexts.

Cities, with the aim of dealing with the “new normality” situation imposed by the pandemic, in a widespread way, came up with various and recurring interventions – in many cases inspired by good practices already experienced, or being tested beyond the COVID-19 crisis (e.g., Barcelona [5], Paris [6], Milan [7]) – based, for instance, on corrective actions to current urban regulations, use of digital platforms or implementation of temporary and flexible pilot solutions reflecting the so-called “tactical urbanism” approach [8], [9]. Examples of these kind of operational actions include: the enhancement of pedestrian space or the introduction of new networks of emergency cycle paths (e.g., Rome [10], Paris [11], Bogotá [12]), often converted to permanent; the transformation of open and built spaces to allow different uses, leading to the reactivation of some urban assets (e.g., portions of streets turned into dehors for cafes and restaurants, underused sports facilities or cultural complexes adapted to host vaccine centres [13], etc.); the increase and enhancement of primary local services beyond the central areas; the integrated use of digital participatory platforms (e.g., Barcelona, “Decidm” [14], Amsterdam, “AmsterdamSmartCity” [15], Bogotá, “Yo Participo” [16]) that improve citizens’ engagement and awareness on issues of common interest, with innovative ICT city management tools (i.e., Urban Digital Twins) providing effective data-based informed decision-making support – used during the pandemic in different domains, from monitoring service status of main first aids to communicate changes in urban traffic or crowding level in public spaces (e.g., Open Streets New York city [17], Florence on Snap4city [18]).

Another common aspect to be highlighted is how public space design strategies promoting stakeholders collaboration (citizens, public sector, private companies, cultural institutions, local communities and associations), through participatory forms of co-decision and co-design, has been a key factor both for their implementation and for their medium- and long-term sustainability. The actions implemented, often of an urgent and temporary nature, as well as making possible the coexistence with the virus and the upturn of economic activities during the periods of the greatest spread of the infection, have imposed the unintentional experimentation of new rhythms and daily lifestyles. A change that has generated, as an indirect consequence, the feeding of the debate on innovative visions, instruments and policies of urban planning according to a new concept of “proximity” within cities, oriented towards more sustainable development and forms of urban life that can support the transition toward a model responsive to other crises, for instance, climate change.

2 RESOURCES FOR SUSTAINABLE, COLLABORATIVE AND INCLUSIVE CITIES

The framework practices, policies, tools and approaches for re-adapting, re-designing and managing our cities, implemented beyond or in response to the COVID emergency, concern and are mainly applied to neighbourhood public spaces. It is precisely this network of open and built “everyday” sites, spread in the different territorial areas of the urban context, which more than others has demonstrated its role as a valuable resource for the promotion of inclusive, healthy and safe environment for large categories of citizens, in order to retrieve the social dimension undermined by forced social distancing during the pandemic. The neighbourhood spaces, main scenario of citizens’ lives, represent that system of nodes tracing the reference infrastructure of new urban planning and redevelopment strategies based on “proximity” as a device for promoting the maintenance of the urban environment through



mutual collaboration and enhance physical and social relationship, very central in the post-pandemic debate [1], [19], [20]. This concept – as defined by Ezio Manzini – in its functional, qualitative and relational dimensions, not only describes the property referred to a system of entities “physically close in space”, but above all a network of interactions capable of generating sociability and new forms of community [19]. Qualities and characteristics envisioned in the so-called “city of 15 minutes” or “Ville du ¼ h”: a model of city theorized by the Franco-Colombian urban planner Carlos Moreno that promotes hyper-proximity (15-minutes distance on foot, by bike or by bus) as an inclusive, collaborative, eco-friendly and sustainable approach to urban planning, capable of positively affecting the rhythm of daily life, restoring a direct relationship between citizens and the territory, and reinforcing the sense of belonging to a community [20]. The transition toward a polycentric city of neighbourhoods, which integrates residence, primary services, sport, culture, work, leisure and social opportunities, provides for the implementation of actions such as the reuse of spaces with different functions throughout the day and/or the week (e.g., opening schoolyards at weekends), green and public space equipment, interventions on the mobility system, strengthening the cycle, pedestrian and public transport network.

The “proximity” spaces can be considered as the intermediate threshold between public and private realm where citizens’ needs, desires and sense of appropriation better take shape and manifest themselves. In this perspective, they represent operative material and strategic resources for design and governance practices: a common and widespread ground for rethinking, sharing, experimenting and prototyping innovative and tailored solutions for more liveable urban conditions, directly involving citizens in policy decisions [21]. The whole ecosystem of spaces defining the theatre of all “necessary, optional and social everyday activities” [3] includes public and private equipment, for instance, courtyards, local and street markets, libraries, shared vegetable gardens, playgrounds, sports equipment, cultural centre, associative circles, schools and surrounding areas, local shops, streets, squares, bike paths, sidewalks, etc. The quality (and availability) of these spaces – mainly characterized by small–medium scale, capillary distribution on the territory, familiarity for target communities, significant collaborative dimension, users from different age groups – is directly proportional to the life conditions of those who enjoy them.

The enhancement of this common resource could bring benefits in multiple domains while addressing different challenges part of the social, cultural, health, ecological, economic and educational agenda of cities: improve the quality of existing public spaces; provide a system of spaces and services well linked to the central ones; foster forms of collective responsibility in terms of management and care of spaces; reduce the sense of isolation and segregation of some peripheral areas by increasing their attractiveness for all citizens; create a network of communities which support each other; encourage local investment and economic activities; raise awareness of global climate issues by promoting shared forms of sustainable mobility; mitigate overheating phenomena related to urban heat islands and favour biodiversity by increasing the availability of green areas.

3 PROXIMITY-LED APPROACHES AND TOOLS FOR PUBLIC SPACE DESIGN: THE CASE STUDY OF BOLOGNA

According to this kind of neighbourhood-centric approach, the city of Bologna (Italy) can be considered a model of collaborative city [22], thanks to a consolidated network of local public spaces, active communities and a set of effective participatory tools. The metropolitan city has been working for many years in the direction of a strong involvement of citizens in the processes of care, improvement and regeneration of local public spaces in terms of quality, social inclusion, accessibility, and climate resilience [23].



In this perspective, significant administrative tools are, for instance, the “Regulation on Collaboration Between Citizens and Administration” and the “Collaboration Pacts” [24], adopted in 2014, to promote the maintenance of the urban commons; the introduction in 2017 of the “Participatory Budget” [25] and the online platform “Partecipa” (“Join” or “Get involved”) [26] to engage citizens in the proposal of interventions on local areas to be realized under public funding. The Municipality in coordination with the city agency Foundation for Urban Innovation (FIU) works in close collaboration with the districts of the city, promoting the so-called “Neighbourhood Laboratories” programme [27]. The permanent collaborative laboratory is a device to address urban challenges through accessible to all and democratic discussion supported by the “Civic Imagination Office” multidisciplinary team of young architects, urban planners, sociologists and facilitators. Public assemblies, thematic meetings, exhibitions and urban trekking, describe the actions involved in the stable process of research, listening, dialogue and collaboration activated and carried out in each city district, involving local communities with the aim of learning from each other, bringing out priorities, needs and proposals, overcoming conflicts and barriers, envisioning shared solutions. “Proximity-led” policies, as an active, effective, resilient, adaptive and responsive strategy, are carried out to promote places of widespread opportunity and attractiveness in neighbourhoods; improve social inclusion, education and equal opportunities; raising awareness of environmental sustainability issues. Initiatives that complement many other projects, across different fields, ranging from air quality, health, mobility, education, culture, housing and digital technologies [28].

3.1 “Urban Innovation Lab, Bologna another way”: An innovative device to experience the history and the future transformation of the metropolitan city

The Urban Innovation Lab (IUL) [29], inaugurated in December 2021, is one the most recent operational tools implemented by the city of Bologna to promote, support and express its participatory approach to urban governance. The Lab is a permanent, multimedia and interactive installation aimed at presenting an original storytelling of the metropolitan city and its changes between culture, politics, economy, urban transformations and ecological transition. IUL is the result of a multi-disciplinary research coordinated by FIU which involved groups from different Departments of the University of Bologna, the Municipality, cultural institutions and professionals in the field of architecture, urban history, political, social and geographic sciences, sociology, digitization, service design [30]. Contents, data, equipment and technologies, integrated by ad hoc periodical events, talks and workshops, characterize in a specific way the five environments of the Lab, distributed across the Palazzo Comunale (City Hall building), in the heart of the historical centre. The *Gallery* is a dynamic and interactive storytelling of the city from the 1900s to date; the *Boulevard* offers an immersive experience in the contemporary city of flows, infrastructure and connections; the *House* presents thematic information on places (e.g., the city in motion, the city of greenery, etc.) displayed on a large interactive maquette; the *Studio* is a data-room space for in-depth study on the city based on diagrams and maps; the *Atelier* is a workshop area on public space transformations. The Lab is part of the “Quadrilatero della Cultura” (Cultural District) project [31], a large programme of valorisation and regeneration involving different cultural containers and monumental complexes around the Palazzo Comunale area. The Lab is free access, connected and fully integrated with the open public spaces surrounding the Palazzo, daily crossed and experienced by a wide target of users: a paradigmatic condition that confirm the role of urban space as an ideal scenario to foster public participation and exchange on urban issues of common interest.



3.2 The “Atelier” of Urban Innovation Lab: A community space to co-design proximity

Among the five environments of the Urban Innovation Lab, one in particular presents a marked vocation as operative platform to experiment innovative forms of co-creation, community engagement and democratic participation. The “Atelier” is an educational and laboratory area for research, dialogue and discussion, aimed at narrating the main components that describe the transformation processes of public spaces in the contemporary city – with a particular focus on the city of Bologna – to imagine and contribute to its future in a collaborative form.

As the name suggests, the Atelier is inspired by places of experimentation and production – the artisan’s workshop, the artist’s atelier or the designer’s office – but also national and international hubs and centres considered of interest in terms of methodological approach, provision of educational and dissemination activities, as well as for the relationships that these places establish with the city and its communities – for instance, the “Matadero-MediaLab” in Madrid [32], the “UrbanLab Torino” in Turin [33], the “Deutsches Architektur Zentrum” in Berlin [34], the “Centre de Cultura Contemporània de Barcelona” in Barcelona [35]. The concept also guided the two main elements that support the presentation of the contents and define the design of the space layout, based on a large instrument wall and a worktable positioned in the centre of the room (Figs 1 and 2). The Atelier targets a wide range of users and potential stakeholders (professionals, researchers, policymakers, students, children, citizens, tourists, etc.) and periodically explores different and transversal topics significant in describing the contemporary challenge, declined on the city and urban regeneration projects, in line with the approach of the Lab and the activities promoted by FIU. “The city of proximity” is specifically the first field of experimentation addressed by the Atelier. The displayed content, equipment, storytelling tools (digital and analogue) – complemented by collateral initiatives such as guided tours, talks and workshops – are intended to support research, comparison and co-design activities between the city and its communities as a form of relation (Figs 3 and 4).

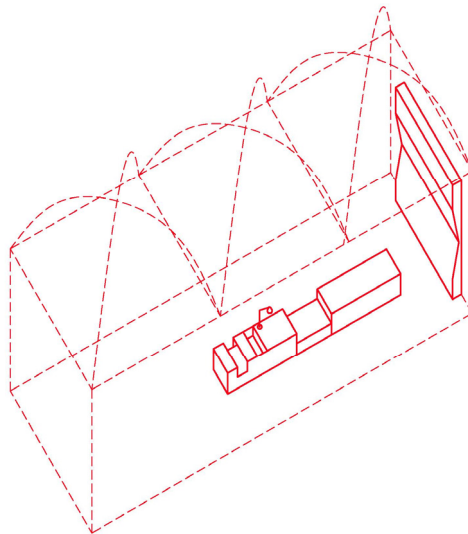


Figure 1: The Atelier – The layout concept. (Source: UNIBO, 2021.)



Figure 2: The Atelier – Pictures of the environment. (Source: UNIBO, 2021.)



Figure 3: The Atelier – The worktable and the panel of instruments. (Source: UNIBO, 2021.)

The wall of tools organizes the information needed to present the thematic focus. A short description and a quotation text introduce and frame the topic – in this first case related to the model of the “15-minutes City” by Carlos Moreno [20]. Some concepts dealing with the culture and the debate of contemporary urban processes and dynamics are presented in a very



Figure 4: The Atelier – The screens for the co-design interaction. (Source: UNIBO, 2022.)

accessible way through an illustrated glossary that includes general issues – such as resilience, urban sprawl, smart city, co-housing, co-design, land consumption, etc. – and more specific aspects – such as green and blue infrastructure, soil desealing, collaboration agreement, tactical urbanism, etc. The most commonly materials used in urban spaces interventions are described in a database, specifying their suitable fields of application, that is, if cycle and pedestrian paths, squares, streets, etc. The different and main aspects involved in urban transformation projects are addressed with the support of a list of keywords, dividing the elements into places, actions, uses, actors involved, processes followed and results obtained. In addition, the topic is investigated through a selection of 60 projects considered relevant for their people–place-based approach, that is to say, characterised by urban reactivation policies focused on the intrinsic relationships between citizens and their city and neighbourhoods, involving local communities and promoting horizontal and inter-institutional cooperation. The atlas of good practices aims to be a useful tool to acknowledge possible strategies, solutions, processes and results achieved in other contexts, clarifying obvious and more or less latent aspects related to: actors involved; potential of spaces, with particular attention to those under-used; uses and reuses, even unconventional and spontaneous; devices and types of intervention, such as new construction or recovery, urban furniture, public lighting, greening, etc.; the ability of the project to influence the users' perception, as well as the transformation, of urban space; effects and results on perceived space, both physical and non-physical, also in terms of management and governance of resources.

The case studies mapped refer to different geographical contexts [36] (local–metropolitan area of Bologna, national, European and international) to simultaneously describe what is

happening in the city and allow for wider spectrum links; reflect the multi-scale nature of the urban landscape and dynamics, from individual buildings or urban spaces to neighbourhoods or entire portions of the urban fabric; cover different urban areas, ranging from the historical city, to the expansion sectors of the consolidated city, to the most peripheral territories; clarify the relations with the involved communities; address additional features of the intervention, such as, type (new construction, recovery, etc.), nature (temporary, permanent, etc.); specific actions (urban furniture, re-paving, lighting, greening, networks, events, artistic installations, etc.); processes (co-design, DIY, co-production, public competitions, participatory budget, spontaneous interventions, workshops, etc.); actors, both public (institutions, municipalities, universities, foundations, etc.) and private (economic operators, age groups, associations, etc.). All the different aspects describing the process of ideation, design and transformation of places, contribute in a critical and systemic way to define an abacus of possibility, visions and tools that at different levels affect the transformation of urban spaces. The identification of this information, in addition to clarifying the specificities of each intervention, highlights the transversal relationships between the case studies, useful for a critical comparison. Each project is presented through a handy sheet in A5 format that can be detached and kept by users, while a QR code gives access to a wider version of the contents and to a list of in-depth resources.

The second main element defining the Atelier layout is a workbench designed to host and enable different forms of collaborative interaction between multiple users.

The table is composed of variable height blocks accessible to different visitors (adults, children and people in wheelchairs), detachable and movable on wheels to allow a flexible arrangement of the space. Each block features specific equipment to support co-design activities including a top with backlit whiteboard for manual work with children; compartments for books and magazines to browse using the reading lamp; a screen to access a digital archive that collects additional resources (in particular, a booklet organizing the extended version of the case studies Atlas contents; a bibliographical selection; the results of the laboratory activities hosted in the Atelier). On the table, four touch screens enable users to experiment – individually or collaborating on a shared canvas – a project exercise on three neighbourhood spaces of the city of Bologna, interested by on-going processes of reactivation and civic collaboration (Fig. 4). As for step, a general framework of the area (images, historical info, current projects, relevant buildings and spaces, local communities, etc.) is provided, for better get to know the site; therefore, it is possible to intervene on the scene by proposing a series of large-scale transformations (e.g., introducing slow mobility systems, increasing green surfaces, de-sealing pavement surfaces, etc.) and small-scale actions, inserting, placing and colouring different possible assets (e.g., small pavilions, temporary or permanent installations, furnishing, trees, etc.) providing suggestions on different uses and non-traditional interpretations of the public space role. By selecting the different possible sets of “options”, some indications are provided with the aim of clarifying the effects or objectives of the specific transformation action (Fig. 5). The results, completed by a title and a brief description, become part of a common shared repository available to all and accessible from the digital archive of the Atelier.

4 CONCLUSIONS

The recurrent actions, processes and dynamics involving transformation processes and design interventions in neighbourhood spaces – as well as investigated and addressed by the different tools and interaction activities of the Atelier – describe their main transversal features and highlight the potential of the proximity-based model in terms of environmental





Figure 5: The Atelier – Mock-up of the co-design interaction: opening page, presentation of the project area, interventions on the urban context, furnishing of the space. (Source: UNIBO, 2021.)

sustainability, social inclusion, collaboration, new connections and economic growth for the whole city. The implementation of ephemeral and temporary actions able to transform the perception of places and allow a mix of uses; interventions on mobility system introducing new dynamics in urban context by promoting safer pedestrians and cycle paths; the reactivation or recovery of neglected, underused or abandoned small buildings and open areas as shared facilities; the increase of accessible and available green areas with different vocation and equipment; the promotion of networking programs that define different spaces as coherent and recognizable system, partially cover the wide sample of mapped experiences from the Atlas that could define the operative actions of a strategic plan to enhance the level of resilience and quality of life of our cities, intervening on citizens' daily spaces. The transversal and common aspects emerged from the comparison among the case studies and design interactions provide insights, lesson learnt, and an operative abacus of practices useful in guiding the transition toward a model of city of relationships and collaboration. Moreover, the methodological approach to understand and read the urban transformation processes of the Atelier highlight and remark the importance of taking into account and merge all the different components describing the complex system of urban dynamics, in term of actors to be involved (e.g., public institutions, residents, designers, associations, citizens and volunteers); actions to be implemented (e.g., new functions or reuse, de paving or re-paving, refurbishing, greening or introducing missing equipment or services); spaces to be enhanced (e.g., squares and streets, parks or gardens, neighbourhoods centres, former underused or abandoned areas – in the suburbs of the city but not only); uses to be matched (e.g., recreational, multifunctional, working, cultural, social and sports activities); enabling processes (e.g., community engagement, co-design, collaboration agreements, open call/competition, public funding and self-construction); and obtainable results (e.g., urban regeneration, new perception, re-appropriation and re-activation, new sense of community, physical transformation of spaces).

Squares, courtyards, local equipment and site at neighbourhood scale therefore represent potential and favourable arenas to investigate and explore integrated and sustainable design solutions which transforms public spaces into spaces of proximity able, if properly outfitted, to conversely elicit sociability and create communities' praxis for their collective maintenance and care. In this perspective, the participatory approach to urban transformation issues promoted by operative environments such as the Atelier of Urban Innovation Lab reclaim the central role of forms of citizen democracy and social innovation practices based on the collaboration among citizens, institutions and third sector, as a crucial condition for addressing contemporary urban challenges in a more resilient, effective and adaptive way.

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