



Juliana Canedo

CO-PRODUCING URBAN SPACES

Collaborative Methods
Towards an Insurgent Urbanism

Juliana Canedo
Co-producing Urban Spaces

Urban Studies

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Imagine ourselves as architects, all armed with a wide range of capacities and powers, embedded in a physical and social world full of manifest constraints and limitations. Imagine also that we are striving to change that world. As crafty architects bent on insurgency we have to think strategically and tactically about what to change and where, about how to change what and with what tools. But we also have somehow to continue to live in this world. This is the fundamental dilemma that faces everyone interested in progressive change.

(Harvey 2000, 233)

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Preface

This book emerges from concerns that have accompanied me since I was a young student of architecture and urbanism in Brazil in the beginning of the 2000's. My hometown, Rio de Janeiro, is known both for its natural beauties as well as for its huge social-spatial inequalities. Like most of the big cities in Latin America, Rio's urban landscape is marked by rich neighborhoods surrounded by poor areas, most of them self-built by their own residents. Self-built spaces of poverty, usually referred to as informal settlements – or favelas -, despite being predominant in the urban fabric are often disregarded in planning and architecture training. The disconnection between the reality that I saw and the one that I was taught in the university was always striking to me and it led to a series of approximations with the context of these self-built spaces.

The first deep encounter that I had was during my Bachelor thesis, where I decided to develop a design proposal for one favela that would arise from the issues reported to me by its inhabitants. After several visits and an immersive and completely inductive interaction with a group of residents, it was clear to me that their main concern was the location of the public health clinic that was placed, according to their words, in the only leisure space of the community.

To provide a context on how this piece of information was crucial to the further reflections that led me to the point that I am today, it is important to explain a bit about the context of this favela. The favela is named Vila Canoas, and it is a very small one located in a rich neighborhood in the South Zone of Rio de Janeiro. Just across the street there are “million dollars” mansions located in gated communities. This small and overcrowded favela is located along a river and a short walk through its narrow streets shows us a diversity of technical issues that surely affect negatively the quality of life of the residents: little (or no) sunlight exposure and adequate ventilation in the houses, structural risks, homes at risk of flooding due to being located over the river, mobility issues

caused by non-standard stairs, narrow streets, and ramps that do not follow any technical standards. In 2002 Vila Canoas received an upgrading project in the context of the Bairrinho/Favela-Bairro program¹, where among other spatial transformations a public health clinic was built on what was technically described as an empty plot, but that was perceived by the local inhabitants as their only leisure space. Besides the implementation of the health care facility, the project also built two small squares with adequate urban furniture, in a good location and following all technical requirements to be considered a successful project.

Despite that, in all of my visits to Vila Canoas I never saw one person using those squares. On the contrary, the area where their leisure space used to be and where now the health clinic was located was always full of life, with people using the remaining open spaces besides the building in diverse ways. There was an informal market established there, people would hang out on the stairs that gave access to the clinic building, children would play besides it, and I even saw someone fixing their oven in this space. When I asked the residents I spoke to what was the main problem they faced in Vila Canoas, they all pointed out to the construction of the health clinic: “it destroyed our only leisure space”. The narrative of the residents was not well received by the state architect that worked in the place. According to this person the residents were wrong about their demands and the major problem of the favela was the houses above the river.

Without disregarding the obvious technical issues that the favela faced and that are definitely in need to be addressed, this experience provoked me to see the distance between those who are thinking and designing the spaces and those who are using and in many cases building those spaces. For me it became clear that the training that we received as well as the tools and methods we had were not sufficient or adequate to act on those contexts.

Later on, as I followed my path both as practitioner and as an academic, I would be confronted with those issues in other contexts that made me realize that this phenomena – although more visible in self-built environments – was also present in very formalized areas of the so-called Global North. Following this first intuitive and somehow naïve experience, I started to dive into the topics of participation, collaborative design, co-production of spaces in the attempt to experiment and develop different formats of interaction between

1 Favela Bairro was a favela upgrading program developed in Rio de Janeiro, Brazil, from the 1990's to the early 2000's

technicians and civil society in its diverse forms that could aim for more inclusive spaces.

Coming back to my first project in a favela, in the end I decided to take on the narrative of the inhabitants and proposed a different design for the area where the health care facility was located to accommodate the diverse uses that were already happening there. I mention this, because now I have the clarity to understand that this was also a political decision. And later on, when I became more engaged with favelas' organizations and afterwards with social movements both in Brazil and in Europe, I would realize that engaging civil society can also – or should also – assume a political role.

With this book I aim to provide insights and also describe experienced methods for collaboration between different actors in the fields of urban and architectural planning and design with local communities and civil society organizations. But the lens through which I intend to explore this cases is the political dimension of the struggle and the potential for transformation that is intrinsic in these practices. Therefore, this book is not a merely compilation of methods for co-producing urban spaces, but rather it can be understood as a call for critical reflection in our fields of studies and in others.

Although it is written from the perspective of an architect and urbanist, the past years of working with communities have showed me that it is crucial that we move out from our disciplines and engage in horizontal exchange within and outside our technical and academic bubbles.

Beyond disciplines directly related to design and planning like architects, urban planners and designers, the approach proposed in the book could be useful for urban sociologists, anthropologists, engineers, among others. The base of the methods proposed are spatial, but they have been developed and experimented in an interdisciplinary setting. Beyond scholars and practitioners, the content of the book could also be useful for institutions and organizations working on the field with local communities.

Acknowledgements

This book is a compilation of more than 10 years of several collective work that would not be possible without the amazing students, colleagues, cooperation partners and communities I have collaborated with. All of the presented methods, tools, reflections, challenges were collectively built and summarizing them into this book is also my way of honoring those people and the uncountable learnings I got from them.

It is impossible to mention all the names of the people who were part of this long process, but I need to mention some important ones that have helped me shape my perspective as an architect, urbanist, scholar and most of all as a citizen and human.

First of all, I would like to thank my friend, colleague and former PhD and Master Supervisor Luciana Andrade, who not only supported and encouraged me in my first steps towards this complex field, but also inspired me to understand myself as a political academic, not separating me as a political being from the scholar and professional.

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Introduction

Traditional planning and design have long functioned as an instrument of intellectual colonisation by imposing Eurocentric standards on how cities are imagined, built and inhabited. This colonial legacy dictates rigid frameworks that stifle creativity and overlook local and Indigenous practices, thereby perpetuating systems of exclusion and inequity. By enforcing standardised definitions of urban problems, planners and designers inadvertently determine which solutions are permissible, leading to a narrow set of actions that often ignore marginalised voices.

Deeply rooted in Eurocentric and colonial perspectives, this process of defining the problem establishes rigid boundaries that prevent cities from addressing the unique and evolving needs of their inhabitants. Consequently, the transformative potential of urban planning and design is diminished, as its current frameworks are designed to reinforce existing power structures rather than disrupt them. In addition, the formalisation of planning as a profession has historically been linked to processes of dispossession and violence, displacing communities under the guise of development (Miraftab 2015; Quijano, n.d.; Yiftachel 2009).

As a result, there is a pressing need to redefine planning and design from the ground up by recognising diverse ways of city-making that are already informally practiced outside of formal planning offices. In this context, many scholars have called for a transformative approach to urbanism that critically engages with decolonial methodologies and aims at shifting hegemonic and imposing ways of thinking, planning and designing cities and spaces. (Miraftab 2015; Roy 2011; Escobar 2018)

Scholars such as Miraftab (2015) and Roy (2011) advocate for a form of urbanism that acknowledges and embraces city-making practices that exist beyond official planning structures. Such an approach would involve recognising informal, community-driven practices as legitimate forms of urban devel-

opment. More than just acknowledging those practices, many urban studies scholars have argued for a critical reflection on the practices of architecture and urbanism as a profession. On the one hand, these critiques highlight the level of alienation in these professionals' current practices (Ferro 1982; Harvey 2012; Lefebvre 1991; Santos 1981), and on the other hand, they highlight the potential that lies in collaborative processes that involve civil society, academics and city-building professionals (Canedo and Andrade 2024; Friedmann 1987; Harvey 2012; Miraftab 2015; Roy 2011).

Moving towards a collaborative and inclusive model requires a willingness to question the dominant narratives that have shaped urban planning for centuries and embrace an open, fluid understanding of urban spaces. Only by doing so can we begin to dismantle the structures that perpetuate inequality and instead cultivate cities that are genuinely reflective of their diverse populations.

The debate surrounding participatory practices in the fields of architecture and urban studies is far from new. This discourse can be traced back to utopian socialists like Charles Fourier and Robert Owen, who envisioned communal models of living that prioritised collective well-being over individual gain. These early theorists laid the groundwork for understanding how inclusive, socially driven planning could reshape the fabric of urban environments. In the mid-20th century, the dialogue around participation evolved further with scholars like Santos (1981) and Turner (1976), who emphasise the importance of bottom-up approaches and recognise the value of informality in city-making processes, especially in the Global South, as well as the need for community engagement by arguing for planning models that emerge from grassroots initiatives rather than top-down impositions.

More recently, the concept of participatory planning has expanded through innovations like 'real labs' or 'living labs', which serve as experimental urban spaces where citizens, researchers and policymakers collaborate to co-create solutions for urban challenges. These real labs foster a more dynamic and responsive approach to planning and design, demonstrating that engaging citizens in the planning and design process is not merely a token gesture but a crucial component for creating resilient, adaptive and sustainable urban environments (Parodi and Steglich 2021).

These attempts at debate are often contradictory to a profession that is based on the utopian ideal that physical transformation promotes social transformation. Historically, the architect has been seen as a creator in the broadest sense, someone capable of integrating imagination, technique and ideology to

transform reality. Harvey (2012), in his analyses of urban space and capitalism, points out that the architect does not operate in an ideological vacuum, but within a system that subordinates creation to capital and political power. The utopian belief that the physical transformation of space would automatically lead to social transformation is, for Harvey, often used as a smokescreen to hide the dynamics of exploitation and inequality that shape these transformations.

The division between 'design' and 'construction' exacerbates this alienation, as pointed out by Ferro (1982). This separation, common in contemporary practices, fragments the architect's responsibility and disconnects him from the physical act of building. On the one hand, this reflects the growing specialisation in the building professions; on the other, it reinforces a hierarchical and political division in which 'thinking' is often seen as superior to 'doing'. This dichotomy perpetuates a structure that marginalises those who perform manual labour and reduces the architect's ability to fully understand the impacts of their decisions on the built environment and the people who inhabit the spaces they create.

This alienation is not only a practical issue, but also a symbolic one. When the architect is distanced from the construction process, they lose the opportunity to dialogue directly with the materials, techniques and workers who bring their ideas to life. In addition, this separation reflects and reinforces class divisions in the construction sector, where architects occupy a privileged place in relation to manual labourers. This hierarchical structure is politically charged, as it reproduces social inequalities and limits the emancipatory potential of architectural practice.

These issues become even more evident in contexts of informality and self-built spaces, where the absence of the state, formal guidelines and architects puts the process of designing and building private and public spaces into the hands of their inhabitants. Therefore, most of the debates and experiences around participation and co-production arise from the observation and critical reflection about self-built spaces – often called informal spaces – especially in the Global South. Placing those spaces at the centre of the discussion and advocating for their legitimacy is, as Roy (2011: 228) argues, 'an important correction to the silences of the urban historiography and theory ... that has repeatedly ignored the urbanism that is the life and livelihood of much of the world's humanity'.

In her work, Mirafab (2015; 2016; 2004) explores how marginalised communities can mobilise their collective power to challenge dominant structures

of authority and create alternative forms of governance. She argues that power is not only concentrated in the hands of elites or state institutions but also exists within communities at the periphery of society. By recognising and amplifying the agency of these marginalised groups, Miraftab highlights how they can resist exclusionary practices and create new spaces for political and social engagement. This form of power at the margins is not about seizing control in the traditional sense but rather about asserting influence, redefining the terms of participation and transforming existing power dynamics. In the context of collaborative design, this concept can be seen in how communities, often excluded from formal decision-making processes, use their knowledge and collective action to shape their environments and assert their rights in ways that challenge the status quo. By mobilising from the margins, these communities can influence broader societal change, creating more inclusive and equitable outcomes.

Despite these rich debates, the question of which methods and approaches can effectively enable and sustain collaboration remains largely unresolved. This challenge is further compounded by the limited integration of participatory practices into the formal training of architects and urban planners, among other related professions (Tewdwr-Jones and Wilson 2022). While the theoretical frameworks for collaborative planning and design have been well articulated in the literature, there is still a significant knowledge gap in translating these ideas into concrete pedagogical strategies and professional practices. As a result, many practitioners continue to rely on top-down, prescriptive methods that overlook the value of community engagement and co-creation in shaping more inclusive urban environments.

This book aims to address this knowledge gap by exploring different methods and tools for collaborative planning and design through the potential to develop counter-hegemonic urbanism. These practices – understood here as insurgent urbanism – involve a collaborative praxis of city design and development that arises from the protagonism of marginalised communities and the accumulative knowledge of different actors (e.g. scholars, institutions, citizens and activists). In this setup, architects, urbanists and other city-building professionals can be seen as co-producers of urban spaces that contribute to transforming society by developing collective experiences among a complex set of actors aiming to create mutual learning environments (Canedo and Andrade 2024; Wieck 2021).

Following a methodological perspective based on inter- and transdisciplinary experiences, this book aims to provide design tools that could be used

in different fields, studies and contexts. These different methods and tools, as well as the background theoretical debates that shaped them, are part of collective actions involving scholars from the fields of architecture, urban studies, landscape architecture, engineers, sociology, biology and law.

Beyond offering a set of tools to be reproduced, the methods described in this book aim to build bridges and dialogues between urban designers and communities to co-produce knowledge about urban spaces. These collaborative tools incorporate different types of knowledge and foster exchanges among the involved groups. They also aim to contribute to dissolving hegemonic hierarchies of power, here represented by planners and designers, as well as academic knowledge. Nevertheless, these methods are not intended to diminish the relevance of these actors. Instead, they aim to highlight the potentiality that lies in the cooperation between scholars and communities that are usually excluded from decision-making processes.

The presented experiences place marginalised communities at the centre of urban design and building practices by inviting them to engage, participate and actively shape their own spaces. Beyond proposing a bottom-up approach or giving voice to these communities, this book assumes that the collective production and imagination of spaces should be done in a horizontal exchange where the different actors are mutually transformed. By using collaborative methods for mapping, designing and building, we aim to create what Miraftab (2016) calls 'invented spaces', understanding that different imaginations of the future must be collectively produced through alternative processes if we want to develop inclusive and diverse societies.

The tools and debates presented are based on my experiences with academic and research partners from 2014 to 2024 in different contexts, from favelas and self-organised occupations in Brazil to refugee shelters in Germany. These activities involved international groups of students and scholars from the fields of architecture, engineering, urban design and sociology in close interaction with local communities, actors and institutions.

It is important to highlight that collaborative design is an inherently living field that is constantly evolving with the emergence of innovative technologies, tools and methods. Tools that were effective ten years ago may no longer meet the needs of today's participants or technological advancements. For example, digital transformation especially after the Covid-19 pandemic has reshaped how collaboration takes place, with new platforms for remote engagement, data sharing and co-creation emerging. As such, the field of collaborative design is one of ongoing transformation – what works today may

not work tomorrow – and flexibility is key. This ever-changing landscape demands adaptability from all involved, as tools and methodologies are continuously refined and adjusted to reflect the evolving needs and contexts of the collaborative process. Embracing this fluidity is crucial for sustaining meaningful collaboration and ensuring that designs remain relevant and impactful in our increasingly complex world.

This book is therefore, not to be understood as a set of guidelines but rather as an open format for debate and discussion. The book does not aim to bring new methods and tools to the field of urban design but mostly seeks to creatively rethink other applications for the ones that we already have. Different tools are required for different contexts and goals, and the flexibility to change paths during the process is crucial. Even when the same tool is used, one experience is never like another. Being open to the unpredictable is therefore an important starting point for true collaboration. Flexibility and unpredictability can often seem contradictory to the disciplines of planning and design, and therefore the book also aims to critically reflect on our professional field, its processes and goals.

The described methods are not exclusively useful for marginalised communities in specific contexts; instead, they are potential tools for dialogue that could be adapted to and applied in any context involving an approximation of communities and local stakeholders. Hence, this book aims to address scholars and practitioners in a variety of Fields who are committed to rethinking the development of cities through horizontal exchanges.

This book is divided into two main parts. Part 1 is dedicated to methods that approach the co-development of problems and potentials. It initially describes how to engage with local communities, including the ethics needed for collaborative work. Then, it provides examples of methods and tools for approximation and collaborative mapping in addition to specific tools for children. Part 2 focuses on the consolidation processes in planning and design. It explores the topic of systematisation and representation of findings from the initial stages and proceeds by offering a set of tools and methods for collaborative design and construction. The last section of this book deals with the critical reflection on the role of architects and urbanists illustrated by some examples on how design can have broader uses.

Before addressing the different methods and tools described in this book, some conceptualisation is required to understand the theoretical background of the proposed collaborative approach to planning and design.

Co-production of urban spaces

Traditional approaches to planning and design can no longer address the complexity and multiplicity of the socio-spatial and environmental dynamics of our times (Daneshpour and Qafari-azar 2020). Issues that previously emerged exclusively in countries in the so-called Global South are becoming even more predominant in countries at the centre of capitalism. In this context,

Collaborative approaches have emerged as ways to cope with such complexities while dealing with power inequities towards more resilient, legitimate, context-specific, and feasible outcomes (Gaete Cruz et al. 2022: 1).

The acknowledgement of the need to engage communities and other local actors in the process of planning and designing cities comes from the understanding that urban spaces are co-produced by their citizens (Harvey 2012; Lefebvre 1991); therefore, we should look for ways to collectively think about and design those spaces. In this sense, the concept of the co-production of spaces emerges as a critical reflection on methods and process, especially in the fields of urban design, planning and architecture, which frequently disregard the agency of inhabitants. More than participation or co-design, co-production understands that communities should oversee the thinking, planning and management of their spaces, which also affect their livelihood:

[C]o-production is about engaging citizens and stakeholders in all the planning and decision-making stages of urban development. It goes beyond simply gathering input and seeks to involve them in the entire process, from problem identification to implementation and management (Alfaro d'Alençon and Moya Ortiz 2024: 3).

Therefore, co-production has both a pedagogical and a political role in aiming for the engagement and empowerment of the involved communities, especially by bringing traditionally unheard voices into the centre of the process of spatial development (Alfaro d'Alençon and Moya Ortiz 2024; Lefebvre 2003). These practices must integrate the diversity of knowledge, values, skills and goals that may be contradictory in many cases. In addition to understanding collaboration as a long-term process, reflecting on new tools, methods and forms of communication for planning and design are key to the successful co-production of spaces.

Acknowledging the political dimension in the co-production of spaces is crucial to avoid false legitimisation, where participatory methods are established but power structures are not challenged:

Participation refers to involving individuals or groups in urban planning or decision-making processes. It can range from passive involvement, such as providing feedback, to active engagement. In addition, participation always depends on, and is managed by, the actor who controls more power and resources (Alfaro d'Alençon and Moya Ortiz 2024: 3).

Empowerment and engagement of communities – especially when focusing on marginalised ones – should aim for disruptions and critical transformation of practices. Confronting different types of knowledge in a horizontal way can offer opportunities to challenge hegemonic hierarchies and structures.

In this book, we assume that spaces are co-produced and that we should further develop methods and tools as well as critically reflect on our roles in producing more inclusive and sustainable urban spaces. By focusing on our experiences with marginalised groups, we aim to highlight the importance of community engagement and the need for design processes that centre diverse voices and perspectives. This approach challenges traditional top-down planning methods and encourages a more collaborative and equitable way of shaping urban environments. Ultimately, our goal is to foster practices that not only address the needs of underserved communities but also contribute to a more just and responsive urban future:

Collaborative design for an insurgent urbanism

With this book, I argue that the movement towards more collaborative formats of planning and design has an important political role in our society. This movement is not just about building more inclusive spaces and processes; it also questions and subverts the hegemonic logics and forms of socio-spatial production that are based on one model of living that disregards the multiple lives of people, practices, cultures and relations. In this sense, I advocate for the use of collaborative design as a path towards what I understand as insurgent urbanism.

The debate around insurgent practices in the fields of architecture and urban studies is often related to the acknowledgement of counter-hegemonic

spatial configurations that have been produced through inequality and exclusion. Led by authors such as Miraftab (2015, 2016) and Roy (2005), these debates validate informal socio-spatial practices that are mostly present in the Global South as legitimate forms of urbanisation, aiming to overcome the discourses of stigmatisation that characterise places like favelas as merely spaces of poverty and precarity. Without romanticising these contexts, Miraftab (2015, 2016) and Roy (2005) seek to highlight that in the absence of the state and technicians, urban inhabitants have built alternative formats of living that are often based on solidarity and community.

Without disregarding the complexity of those contexts and the power dynamics that influence the configuration of spaces, Miraftab (2015) advocates for radical planning, which emphasises that beyond creating *invited spaces* for participation, we must create imaginative spaces, that is, *invented spaces*. This concept comes from the understanding that people can creatively transform and think about their own spaces and that their knowledge should be incorporated into planning and design.

Connecting the ideas of insurgency, radical planning and social learning from Friedmann (1987), my colleague Luciana Andrade and I (Canedo and Andrade 2024) proposed three key learning aspects for collaborative activities between city-building professionals and communities that could lead to potential forms of insurgent urbanism: (1) experiments using different knowledges and technologies, (2) approximation of design and building through a learning-by-doing process and (3) the development of mutual learning environments.

The first aspect of experimenting with knowledges and technologies criticises the hegemonic hierarchies of knowledge that validate certain types and formats of knowledge while disregarding others, such as traditional or popular knowledge, Indigenous knowledge and the empirical socio-spatial knowledge present in all societies (Andrade and Canedo 2019; Friedmann 1987; Illich 1973). Critiques of expert knowledge and the politics of knowledge have highlighted Western and colonialist approaches to urban theories and advocated for the inclusion of diverse and non-hegemonic epistemologies (Adams 2015; Delgado and Ruiz 2014; Merrifield 2015; Roy 2011; Schwarz and Streule 2020).

By allowing space and room for experimentation with different knowledges and technologies, we can produce imaginative futures (Miraftab 2015) that do not reproduce imposing and hegemonic logics. Through the interaction between academic, technical, empirical, popular, local knowledge and technologies, we can develop alternative innovative spaces and practices (Canedo and Andrade 2024).

In the second aspect to be highlighted, the approximation of design and building is crucial in the development of a learning-by-doing process by enabling horizontal exchange knowledge and ways of doing by all involved actors. Insurgent urbanism, as we understand it, considers planning and design as forms of knowledge production that emerge from experience and are tested and validated in practice. This dialectical process, which starts and ends with action (Friedmann 1987), presupposes critical reflections and transformations in the tactics and further actions of all actors involved. In this sense, the idea of learning by doing (Dewey 1986; Ferro 1982) is fundamental and assumes that the concrete act of experimental hands-on work not only produces different types of knowledge but also creates the foundations for other forms of dialogue that will overcome hegemonic discourses and representations, such as technical drawings (Canedo and Andrade 2024).

The third aspect essential for the path towards insurgent urbanism is the development of mutual learning environments, which reposition collaborative actions by emphasising the mutual relevance and outcomes for all involved actors. These mutual learning environments are an attempt to balance or critically address the existing power structures and interests when working with different groups of actors. This approach involves real-life exchanges and dialogues between all involved and presumes that 'effective learning comes from the experience of changing reality' (Friedmann 1987: 217).

It is important to mention that the final outcomes of a collaborative process are not always tangible or physical products. While many design actions result in objects, systems or structures that can be physically built or implemented, the outcome can also be something less concrete, such as an event, a conversation, a shift in perspective or a new network of relationships. This understanding challenges the hegemonic view of design as being solely focused on the creation of material things. Instead, collaborative design recognises that the impact of the process can go beyond the built form and manifest in intangible ways that are equally valuable.

Additionally, collaborative design can lead to outcomes that are more focused on process than on products. For example, the experience of co-designing, building relationships or developing a shared vision can be an outcome in itself. The creation of new social bonds, the empowerment of marginalised voices or the development of a collective understanding around a particular issue can be as significant, if not more so, than the initially envisioned physical product. In many cases, the collaborative process allows participants to rethink

the nature of the problem, solution or design, resulting in insights or actions that transcend the material world.

Ultimately, the idea that the final outcome does not always need to be material aligns with the core values of collaborative design, which emphasise participation, process and inclusivity. Design becomes a way to bring people together, enabling them to co-create and engage in meaningful exchanges that can lead to various outcomes such as objects, events, ideas or actions. These outcomes contribute to the long-term impact of the collaborative process, often generating ripple effects that can shape the future in unexpected and profound ways.

In this sense, action-based processes are crucial for the development of insurgent urbanism. Without disregarding the particularities and specificities of the local context, these processes can create possibilities to overcome hegemonic discourses and practices. Beyond promoting equal and inclusive planning and design strategies, insurgent urbanism, as we understand it, aims at reflecting on and experimenting with other forms of relating to the built environment.

In this book, we therefore aim to explore the radical potential of collaborative design to produce alternative and counter-hegemonic formats of living, inviting practitioners, researchers and civil society organisations, among others, to collectively develop insurgent methods. Central to this exploration of collaborative design is the recognition of gender and radical care as transformative forces that can destabilise capitalist structures. By prioritising practices rooted in care, empathy and the acknowledgement of historically marginalised voices, collaborative designs can challenge the dominant, profit-driven paradigms that underpin urban development. These approaches not only open pathways for more inclusive and equitable cities but also serve as acts of resistance against the commodification of urban spaces. By embracing these principles, we encourage a shift towards a planning ethos that nurtures social and ecological well-being, ultimately fostering a deeper commitment to collective flourishing.

Figure 1: Summer School with refugees in Märkisches Viertel, Berlin, 2022. Source: Juliana Canedo



Figure 2: Exhibition Studio Insurgent Design in Marzahn, Berlin, 2024. Source: Juliana Canedo



*Figure 3: Collaborative mapping with children in Favela Indiana, Rio de Janeiro, 2014.
Source: Juliana Canedo*



Part 1 – Approximation: Co-developing problems and potentials

This part is dedicated to methods of approximation that approach the co-development of problems and potentials with communities. It addresses issues of ethics in collaborative work with marginalised groups, collaborative mapping and specific tools used to engage children.

Ethical notes

Ethical issues related to collaborating with different communities must be carefully understood and critically approached by anyone involved in collaborative work. Specificities, such as social and legal vulnerability and unbalanced power structures within this context, make the development of ethical commitments extremely important. Here, we focus on the ethics of working with vulnerable communities and children; however, these reflections must be taken into consideration for any type of interactive and collaborative work.

Ethics of collaborating with vulnerable communities

Most of the work of this book was developed while working with vulnerable and marginalised communities in different contexts, such as favela, refugee and poor communities. Discussing ethical issues with these communities can form the basis for a broader discussion on ethical commitment for all types of collaborative work involving non-academics or non-experts. In the following sections, we consider four crucial aspects, but the ethical discussion of the co-production of urban spaces does not end there. In particular, further reflections and systematisation of ethical issues must be developed.

Power asymmetries

Collaborating with vulnerable communities must be understood in the context of asymmetrical power relations. The idea of voluntary consent and willingness to participate must also be understood in the context of power imbalances (Clark-Kazak 2021; Gaete Cruz et al. 2022).

Acknowledging that architects, urbanists and academics are privileged – even when they try to avoid it – is a basis for overcoming this position of priv-

ilege. It is important to provide the participant group with as much open and clear information as possible regarding the goals of the activities, envisioned outcomes, potential uses and intended methods. If possible, this information should be provided in different languages and be as visual as possible to ensure that all actors understand what is at stake. In this context, translators and local mediators can play crucial roles.

This issue also relates to the principle of free and informed participation. To ensure that participants are fully informed and willingly collaborating, we should consider the power imbalances from stakeholders, community leaders or academics that can create pressure for people to participate. To avoid these power imbalances, one strategy is to allow people to opt out of the activity at any moment (Kelly 2019).

In terms of informed participation, we should be aware that design practices are not universally known. As Kelly (2019: 339) observes,

for the participation to be informed, it means making sure people are fully aware of what they are agreeing to and what the potential implications of the project could be, as well as how likely outcomes are to be implemented.

Therefore, the issues of how to represent, communicate and discuss ideas are crucial to ensuring that all collaborators fully understand the process. Dedicating sufficient time for questions and clarifications is also important.

Parasitic relationships

In a debate about research focusing on forcibly displaced populations, Clark-Kazak (2021) highlights the risk of the ‘parasitic relationship’ between the researcher and research subjects. This parasitic relationship, where researchers enter the field and extract a large amount of information from the local context to use in their research without providing long-term effective outcomes for those seen as ‘research objects’, is well known and criticised by different authors and practitioners (Sukarieh and Tannock 2013; Clark-Kazak 2021; Bilotta 2020).

This risk is present not only when collaborating with vulnerable communities, such as forced displaced populations, but also in any type of work with civil society. Of course, when dealing with already marginalised groups, the effects of a parasitic relationship have an even bigger impact on how each group perceives and interacts with external actors in the field. It is very common to

encounter populations that are not willing to engage or participate with researchers because they have already been over-researched and have not seen any concrete outcomes from the research findings in their lives.

Therefore, one of the main points of consideration when planning collaborative activities is the concrete short- and long-term outcomes for all involved actors. What kinds of learning and real uses are relevant for the vulnerable community or other involved stakeholders? Answering these questions should also be part of the collaborative process. We will talk more about this concept when discussing examples of methodological tools, but it is important to consider it as an ethical principle.

When dealing with participatory or collaborative processes of planning and design, on the one hand, producing meaningful outcomes can be easy; on the other hand, participants may be misled into thinking that a certain project will be implemented. In some cases, the project may be an academic exercise, or there may be a lack of or change in funding. Therefore, managing expectations is a crucial ethical point in any collaboration with communities. Full and transparent communications – possibly in different languages, depending on the research group – is also a key point of ethical consideration.

The production of knowledge or the learning processes involved in these interactions should also avoid hegemonic and hierarchical knowledge structures and be open to incorporating and promoting the equal exchange of knowledge among all actors or ‘embracing other ways of knowing’ (Taha 2022 cited in Clark-Kazak 2021: 128).

Privacy and data protection

The issue of privacy and data protection is also extremely relevant in the context of vulnerable communities. For example, due to the legal precarity and potential risks connected to certain political issues that may affect individuals participating in collaborative projects, the need to protect their privacy and anonymise personally identifiable data must be taken seriously:

Confidentiality and privacy are particularly important, where the immigration status, liberty, or safety of participants and their friends, families, and associates can be jeopardized by findings generated from programmatic, research, and media outputs (Metzler et al. 2023: 28).

In this sense, personally identifiable data should only be collected when relevant to the project. It is important to critically examine whether having individuals' names, ages, genders or nationalities is necessary for the success of the collaborative activity. For pictures, videos and recordings, the participants' consent should be explicitly obtained in writing. When pictures are taken, avoiding showing individuals' faces is recommended. Visual documentation can occur without revealing individuals' identities. For example, software can be used to blur faces in pictures, faces can be obscured by drawing over them and pictures that show only peoples' hands or their backs can be taken.

Psychological effects and expectations

The final relevant point to mention is the psychological effect that research might have on individuals. The extent to which participants perceive the proposed collaborative dynamic tools should involve various sensitive aspects of research, such as triggering memories of traumatic situations. This concern is particularly important when, for example, dealing with refugees and relevant aspects of their lives before fleeing their countries of origin.

Although the possibility of physical harm may not be a significant factor in most PD (Participatory Design) projects, in many cases there may be a risk of emotional, psychological, or social harm to participants, usually due to the nature of participation as a social activity (Kelly 2019: 339).

The issue of psychological harm should also be considered after the project concludes. That is, some of the research impacts that might be noticed or present during research interactions can continue to affect the participants after the researchers depart.

Sensitivity and awareness to the research context, as well as full respect for the participants' imposed boundaries, must be part of the research process at all times. The use of open questions and methods, the creation of safe environments, the use of nonverbal tools and the understanding of collaboration as an ongoing process rather than as a one-time event are important to ensure that the possible psychological impacts on the targeted communities are minimised or overcome before the conclusion of the research project.

Ethics of working with minors

Working with children and teenagers through action-based collaboration can make huge contributions to our field when we include children and young minors as active actors in city planning and design. However, at the same time, working with this group comes with specific ethical challenges, especially when considering marginalised children or those with disabilities (Spiel et al. 2018, 2020; Valentine 1999). In this section, we will outline two key ethical considerations when collaborating with minors.

Consent

Informed consent means that individuals who are participating in activities fully understand the implications of their participation, the use of their data, the materials collected and produced and the research goals of the activity. This is a primary ethical issue in any research or interaction with society. In the case of minors whose guardians are legally responsible for them, however, this issue is particularly complex and nuanced (Valentine 1999).

The debate on whether children and young people are able to consent or assent to participating in research or other activities is based on the logic of understanding and responsibility from an adult perspective. Valentine (1999: 143) highlights

[t]he notion that children cannot or should not consent, but only assent until the age of 18, is derived at least in part from Piaget's (1952) conception of children as passing through a series of age related stages of development. It assumes a qualitative difference between the competence of children and adults to consent, rather than placing the emphasis on what knowledge they have and how they use this knowledge.

Both consent and assent should be subject to the best interests of the involved child or teenager and should not generate any potential harm. However, this may be subjective, especially in our field of study, and efforts to avoid any negative impacts on the participating minors should be related to the context in which these participants belong, as well as their individualities. Valentine (1999: 145) also calls attention to the fact that

[w]hile parents can block researchers' access to children, they can also hamper attempts to gain 'informed consent' by the opposite process of coercing their children to participate.

Working with what Valentine (1999) calls structures of compliance, such as schools, might create a safeguard for working with children, especially in the following ethical aspects. However, it can also present institutional pressures and barriers that may affect the outcomes of research or collaborative activity.

One way of avoiding coercion and the 'false' consent suggested by Valentine (1999) is to offer children the opportunity to take part in the activity rather than asking them to decide not to take part. This small difference in approach may be especially beneficial for children who are not used to saying no or are confident in their refusal. In any case, adults conducting collaborative activities with children should always pay attention to their behaviour and offer them the option of stopping the activity at any point in time.

Another potential strategy, which we will explore later when discussing specific methods for working with children, is to offer multiple simultaneous activities. This sense of choice allows the children to engage in what they feel more comfortable with, whether it is a more action-based activity, a more introspective one, a dynamic group project or an individual exercise.

Power imbalances

The uneven relationships between adults and children can manifest in multiple ways. When children are considered in relation to authority figures, such as their parents or teachers, or in sometimes uncomfortable interactions with unfamiliar adults, these power imbalances can affect their engagement and must be considered carefully. Marginalised children, such as those from migrant or refugee backgrounds, as well as children with disabilities, require specific ethical considerations (Spiel et al. 2018).

Children may be intimidated by tools designed for adults; therefore, it is crucial to reflect on specific methods for interacting with children. For example, games or arts-based activities may be tools that challenge hegemonic power structures and can offer children the opportunity to express themselves in various ways (Valentine 1999).

The power dynamics within a group of children also play a key role; in groups in which the children are already familiar with each other, their internal hierarchies are clearly impacted by individuals who usually take leadership.

Therefore, thinking about ways of engaging children who are not in a position of power is important to ensure certain equity in their participation.

Inviting children to formulate relevant questions and issues can help researchers to avoid assuming that the problems reported or faced by adults are perceived in the same way by minors.

The location of children and adults involved in these power dynamics are also important. Planning activities in environments and with adults that the children are used to and feel comfortable with can change the way they engage and participate with the researchers.

These power imbalances are also present in the researchers' interpretations of their findings (Valentine 1999). A thorough debate on how to use collected data is crucial to avoid the false participation and adultification of children. The possibility of discussing the outcomes, findings and further uses with the involved children offers a great opportunity to overcome this problem and has the potential to challenge our understanding of the proposed research from different perspectives.

Planning collaborative activities

Establishing a culture of participation in collaborative design is not only key to long-term success but also a significant challenge. It requires creating an environment where every voice is heard, valued and encouraged to contribute. This can be particularly difficult in contexts where hierarchical or exclusionary structures exist or when participants are unfamiliar with the process. Building trust, fostering openness and ensuring that all stakeholders have the tools and confidence to participate fully are essential. This culture of participation is not static – it is an ongoing negotiation of power, trust and respect, and it can shift over time as new ideas and challenges emerge. This transformation can be hindered by entrenched norms, biases and resistance to change, which makes the challenge of establishing a participatory culture a continual process.

Collaborative design is a dynamic and evolving process that hinges on the roles and relationships of those involved. Key figures in this process include the initiators, participants, enablers, caretakers, promoters, consultants and multipliers of a project, each bringing their unique contributions to the table. The *initiator* is the person who sparks the idea and sets the direction, while the *participants* are those who actively engage in the design process, bringing their diverse perspectives and expertise. The *enabler* provides the necessary resources, support and frameworks to facilitate collaboration, often ensuring that the process remains inclusive and accessible. The *caretaker* plays a crucial role in maintaining the well-being of the group, fostering trust and addressing emotional or interpersonal needs. The *promotor* champions the project, helping to raise awareness and engage a wider audience, while the *consultant* offers specialised advice or expertise to guide the design process with external insights. Finally, the *multiplier* extends the impact of the project by sharing the obtained knowledge and spreading the outcomes to the broader community.

These roles are not fixed and might not be suitable for every different context. Sometimes one person can play different roles or some of these aspects

might not be relevant depending on the specific case you are working with. But thinking about these organizational dimensions prior to the events is helpful in preventing frustrations and mitigating challenges.

Having a flexible and open approach towards any form of collaborative activity is extremely important for the success of the activity. However, this doesn't mean that these activities shouldn't be planned carefully. Preparing a detailed plan that considers the local context, the group you are interacting with and the goals is the first step before entering the field.

To develop a good plan, the first aspect to consider is *how to approach* the community with which you want to engage. Trust building and understanding the local context are crucial to collaborative action. In my experience, one effective way to build trust is to connect with already existing local structures that are connected to the grass roots of the community. These structures will differ depending on the context. These grass roots could be other academics who have cooperated over the long term with the target communities, residents' associations, non-governmental organisations or other initiatives that have been operating in the area. In addition, they could contribute to strategic community leadership.

These local actors can support research in many ways. First, they can provide you with valuable local knowledge that cannot be obtained through desk research, among other means of traditional research. For example, these actors may reveal their knowledge about the potential conflicts and challenges, existing structures and other hidden aspects of the local community that will be relevant for planning the collaborative activity. They can also mediate and foster trust with the local community. By connecting with actors who are already trusted by the community, our presence as researchers can be legitimised and better perceived by locals. Of course, depending on the role these actors have in their community, there is a risk that our association with them could result in negative feelings towards us. Therefore, mapping the actors and initiatives that might be interesting points of connection should be done carefully.

Cooperating with local organisations can ensure the long-term effects of planned actions. However, it is also important to consider the local actors' expectations and interests, as well as how the expected outcomes would be useful for them and their roles.

The second aspect to consider when planning collaborative activities is *who* the actors are in the community with which you would engage in the research process. Are they previously organised? Are there existing hierarchies? Are there challenges in terms of linguistic, cultural or religious barriers? What

might be the sensitive issues that you will face? Are you working with a fixed group throughout the process, or will there be some variation among the participants? Various factors, such as age, gender and group size, will also influence the selection of methods and tools for the proposed research project.

It is important to be open to the participation of different actors, but sensitive issues related to the inhabitants' contexts should always be considered. Being aware of the potential conflicts among different local groups and how to address these conflicts is especially important. In addition, understanding the local leadership, such as who the formal and informal leaders are, helps in gaining their support and in developing ways to hear from groups that are usually not actively engaged in the local decision-making processes.

Depending on the context, it might be interesting to invite facilitators to mediate the research activities. This is especially important when there are linguistic and/or cultural disparities between local and external actors. Facilitators should be able to navigate both contexts, such as being bilingual and understanding cultural differences, and should avoid positioning themselves as mere translators on the one hand or as local representatives on the other. Facilitators should mediate the research process as much as necessary but also allow room for spontaneous interactions between the participants and designers/researchers. Spontaneity may be favoured if nonverbal approaches are part of the process:

Approaches to facilitating discussion—whether research or practice-focused—have explored the role of nonverbal communication in overcoming barriers to self-expression and communication. These approaches have been necessary to encourage creative, authentic, and legitimate discussions [McCusker, 2019], and reduced some of the barriers associated with more traditional debating approaches—for example, the most powerful or talkative person dominating meetings [Clavering & McLaughlin, 2007]. One way this can be overcome is through rethinking how exploratory events can encourage equitable engagement from a broad range of people (Tewdwr-Jones and Wilson 2022: 230).

A third aspect to consider is *where* the activities will take place. Ideally, the activities should occur in, or at least near, the local community where the future design will be implemented. However, this will depend on several factors. For example, do the participants already live there? Is it a new development? Is the necessary structure present for conducting collaborative activities? Weather

issues may also play a key role here; extreme heat or cold, weather events (e.g. storms) and other aspects of the local climate should be considered carefully. In all cases, having a backup plan for the location is highly recommended. You must also reflect on whether the methods to be used should be adapted or replaced in the case of emergent climate events.

Developing collaborations at other locations is also possible, but you must consider which tools are most suitable for imagining or representing the space. It will be important to bring as many elements as possible to support the participants in understanding the proposed space that they will be discussing during the collaboration.

Regardless of where collaborative activity takes place, it is important to previously map what is available and needed in terms of the structure, materials, number of participants and time dedicated to the activity.

Planning *how* to conduct collaborative practices is also a key element of the process. For example, what tools will be used, what are the limitations of these tools and methods, and what could be used if the original plan is unsuccessful? How much time is required for these activities? What are the needed materials and how will they be obtained? Throughout this book, many appropriate methods and tools will be explored and can be understood as starting points for the further development of approaches to fit the specific context and goals of a given project.

The final point is the *strategies to engage* the target groups and how they should be addressed. Finding a common goal or identifying the specific interests of a community in advance offers great potential for increasing their interest in engaging in collaborative research or design. When it is possible to present a concrete outcome that could be relevant to the target community, the odds that they will be willing to collaborate increase. If this outcome is known in advance – for example, through local actors – it should be clearly stated in the advertisement of the event, workshop or activity. It is important to announce realistic goals and to avoid creating false expectations.

Therefore, transparency throughout the entire process is essential in terms of ethics and ensuring the relevant outcomes of the collaborative process. It is important to share the goals, methods, uses of the results and how they could benefit the participants from the beginning of a project. Defining and reassessing expectations from all involved now and then can help ensure the mutual relevance of and engagement from all stakeholders.

Strategies to engage different groups of people will also be diverse. Children, for example, are a quite easy group to attract and engage. In most cases

they will be interested in participating in any creative activity proposed. Their parents also are often happy to bring their kids to spend some time doing something fun. Proposing activities for children can also be an interesting way to attract parents and offer parallel activities for adults. Teenagers are often a hard group to target. Specific activities developed for this group become even more necessary, as we will discuss later on in this book. In some contexts, gender also plays a role and the way of engaging groups of women for example might require different strategies than to engage men.

Social activities that extend research and design efforts are relevant tools for building trust, in addition to obtaining in-depth knowledge. We will explore this further in Part 2, but it is important to consider including social events as part of the collaborative process.

How to communicate is also relevant. In horizontal exchanges, communication should be used to create space for dialogue, which requires constant self-reflection on positionalities, power structures and the impact of your presence in the field. Communication happens not only when informing participants about your research goals or explaining the methods and expected outcomes but also during the activities, in the moments in between and during social events. Sometimes, the conversations that come with the collaborative process are more important than their specific results.

One strategy I find particularly useful is to keep a diary, where you can write down impressions, notes and other information that may not seem important in the moment but may become relevant afterwards. Notes can be taken throughout the process or at the end of each day or activity.

As mentioned at the beginning of this section, all of these plans should be allowed to change during the process. In other words, we should plan for the unexpected and understand that the planned activities will almost never happen exactly as expected; we must accept uncertainty as part of the process. Constant reflection, openness to feedback and allowing room for the unpredictable are extremely necessary when collaborating with people in the field. As will be illustrated through the many examples in this book, these unpredictable events can be opportunities to improve the collaborative process and research outcomes.

[C]o-design is forcefully a flexible process. Flexibility is needed in planning such processes, undertaking them, and evaluating them. However, such flexibility in co-design processes has drawbacks: Co-design is less linear, more time-consuming, and more expensive than conventional processes. It

involves more people, activities, and innovative methods, and consequently, its management is difficult but essential. Despite the above, great democratic, inclusive, and just benefits can be achieved when co-design processes embrace their challenges and pitfalls. In doing so, more context-specific projects can be achieved, more legitimate and empowering spaces can be created, and ultimately, more feasible projects can be implemented (Gaete Cruz et al. 2022: 13).

As Gaete Cruz et al. (2022) argues, real collaboration requires rethinking our time, tools and planning methods, in addition to the way we use our skills to achieve research outcomes. It also requires critical reflection on the productivity associated with our field and searching for other ways of engaging with and transforming spaces.

Dynamics of getting to know each other

Collaborative practices require engagement from all participants; therefore, the initial activities where the various groups get to know each other are crucial for establishing trust, common grounds, goals and expectations. This section is dedicated to exploring dynamic tools that can be included in different contexts at the beginning of the collaborative process. Some of the presented tools are inspired and adapted from the book *Participatory Workshops*. (Chambers 2002)

Pick a photo

This tool is intended to create an open and informal moment for participants to get to know each other. The facilitator's preparation for this activity includes selecting and printing several different pictures, which should be as diverse as possible, such as incorporating different landscapes, social practices, foods, cultural elements, abstract images and different objects.

The activity starts with everybody sitting in a circle, either on the floor or around a table, depending on the group or the space available. The pictures are placed in the centre of the group and the participants are asked to select one each. There should be no further explanation of what the participants should be thinking about when choosing a picture.

After everyone chooses a picture, the facilitator explains the activity: each person should briefly introduce themselves (in under a minute) by sharing their name or what they would like to be called, where they are from and a fact about themselves using their chosen picture. These points of names and countries of origin can be adapted to different contexts and answered briefly; therefore, it is better to avoid any questions related to professions or skills.

The third point related to the picture creates an opportunity for people to give whatever information they feel comfortable sharing. On the one hand, this

question avoids asking for personal information that the participants may be too shy to disclose. On the other hand, this question offers the opportunity for people to connect with each other by revealing aspects of their lives other than the practical information given earlier.

Figure 5: Workshop with refugees in Märkisches Viertel Berlin, 2022. Source: Juliana Canedo



For example, some people might choose a picture of a camera and share that their favourite hobby is photography, or they might pick a picture of fruits and say that they miss the taste of the food in their home country. These are two examples that were presented to me on the many occasions that I used this tool to break the ice among research groups. By asking participants to offer a piece of information they are comfortable sharing, but personal enough that it wouldn't usually be shared during initial introductions, we create a collective feeling and, in many cases, a sense that this is a safe space for sharing vulnerable information. This tool contributes to the trust-building process and fosters personal connections by revealing aspects about the participants beyond expertise or professional capacities.

Bring an object

The second dynamic tool is somewhat similar to the first; it differs in that the participants are asked to bring an object to the first meeting that will tell some-

thing about themselves. This activity only works if the group you will engage with is contacted before the first meeting. It cannot be planned when you are visiting a community without any prior arrangement or organisation. Some participants may forget to bring their personal objects; in this case, you can use objects from their surroundings and ask them to discuss them in their presentation. For example, these environmental objects could be natural features, such as trees or water.

Like the previous activity, the participants are asked to give their name, where they are from or similar brief facts and to show their chosen object and explain why they brought it to the meeting. The goal is to connect people through their emotional attachments to their objects instead of getting to know each other only by their 'labels', such as 'I am an architect', 'I am a carpenter' or 'I am 42 years old'.

During my experiences in using this tool, I witnessed the participants bringing heirloom objects that belonged to their family for generations, rocks from their hometown, a spoon with which they cook food for their children, an old picture of a relative and their favourite books, which were almost always followed by emotional explanations. As in the previous activity, this dynamic tool is not intended to force people to overshare but rather the opposite – they can freely decide what they would like to bring and discuss with the group. Depending on the context, asking participants to bring their favourite foods also works as a great icebreaker and can draw out interesting narratives from their lives.

Name and throw

This warm-up introductory tool works well with young groups or groups of children. It can also be a fun way to encourage introductions in adult groups. This game can be played with a lightweight ball, but I find it particularly nice to use a roll of coloured yarn.

The participants should stand or sit in a circle. The game starts with one person holding the yarn roll; this person asks the name of another participant and simply share something about themselves with the chosen participant. Then, they throw the yarn roll to the other participant without letting go of the end of yarn. Then, the next person holding the yarn roll should say something about themselves and then select and throw the yarn roll to another participant, again holding onto the string of yarn. This process will create a network

of yarn that will end when the last person throws the yarn roll to the person who started the game.

The goal of this activity is not only to break the ice through introductions but also to visually create a connection between the participants. The questions asked can vary depending on the group and the context, but they shouldn't be complex or require people to give long answers. The idea is to have a quick, interactive round of introductions.

Meet and greet

This method is particularly effective in settings with larger groups with more than 15 participants where time constraints prevent the possibility of individual introductions. The core idea is to encourage the participants to move around the space and engage in brief, spontaneous, one-on-one interactions, which fosters a sense of connection from the outset. Each participant can introduce themselves in a quick, informal manner by typically focusing on basic information like their name, role and interests. The key to this dynamic tool is the randomness of the encounters, which helps break down initial barriers and create opportunities for diverse interactions among different people.

In addition to their introductions, the participants are encouraged to ask a few short, open-ended questions, which can be as simple as 'What brought you here today?' or 'What is one interesting fact about you?' These questions should be non-invasive, allowing individuals to share only what they feel comfortable sharing, which encourages openness without pressuring anyone to divulge their personal information. As the participants meet and greet each other, this method works to create a more relaxed and inclusive atmosphere, making it easier for individuals to approach one another throughout the rest of the event.

The beauty of the 'meet and greet' method lies in its ability to quickly build rapport in a larger group, setting the stage for further collaboration. It can also help the participants find common ground, uncover shared interests and reduce any social or professional anxieties they might have in the context of a large group. As the participants circulate and engage with each other, the overall environment becomes more dynamic and interactive, facilitating a sense of community from the very beginning.

Collaborative interviews

Collaborative interviews can be an important tool for gathering in-depth information from participating groups. Interview-type conversations can occur in ways that differ from quantitative interviews for data collection or other open formats. This section aims to explore some methods that can be especially useful for investigating and collecting socio-spatial data from local actors and communities by asking about their perspectives.

Walking interviews

The concept of conducting an interview while walking is a method that has been used in different formats by researchers, especially in the field of anthropology and geography (Warren 2017; Anderson 2004; Evans and Jones 2011). Walking is a spatial practice (Certeau 1984); therefore, engaging in conversations or interviews while walking in urban spaces can be a powerful tool in the fields of planning and design. This format of collaborative interview is in dialogue with another tool that we will explore in the following sections, called 'journey', which involves collective walks around the space to be analysed or designed. Here, we are focusing on individual interactions, where one can get a deeper knowledge about the daily practices of certain individuals, about their perceptions of space, about the decisions they make and what influences those decisions.

As Reznikoff (2024: 50) – a master's student who used this method to engage with women in Medellin, Colombia – describes:

[W]alking interviews have been identified as an intimate methodological way of accessing participant's or community's (embodied) experiences, at-

titudes, knowledges, beliefs, habitual practices, and emotions in relation to their environment and to each other.

The format for walking interviews can vary; ideally, the route should be decided by the interviewee rather than the interviewer because the main goal of this method is to understand the individual's spatial practices and choice of route.

Talking about spaces while walking is a completely different experience from answering spatial questions in a static environment. During walking interviews, the interviewer can follow the interviewee for part of the day and experience their mobility challenges or ask about certain decisions. For example, they may ask, "Why did you decide to take this street instead of another? The answers are sometimes not completely rational and might highlight issues of feeling unsafe, informal networks and quality of public spaces, among others.

During her walking interviews with Venezuelan women living in Moravia, a barrio (i.e. neighbourhood) in Medellin, Colombia, Reznikoff (2024: 50) observed that 'walking with women seems especially meaningful, as the presence of gender-specific discriminations built into space were long not considered sufficiently'.

Reznikoff walked with and interviewed four women from different sectors of Moravia. Through their conversations, she understood the gender imbalances experienced by these women, especially as their daily lives comprised basic activities related to providing care for their family members, such as their children or elderly relatives. Therefore, their mobility decisions and the decisions on where and on what to work were highly related to their role as the main caretakers of their families.

In another experience, a group of students working with refugees in Berlin asked a small group of Kurdish teenagers who had just arrived in the city to show them their neighbourhood. While walking with them, the students noticed that the girls oriented themselves in the area through the distinct types of fruit trees that existed along the walking route. This showed the students a completely different spatial narrative and perspective that they had not been aware of previously.

Figure 6: Course Transforming built spaces in Favela Indiana, Rio de Janeiro, 2014.

Source: Abriçó



Walking interviews can assume different formats and lengths. They can comprise a short walk around the area to be analysed, where the interviewer asks the interviewees to show them around or show the biggest issues or favourite places. The process can even take a half or full day of dynamically following the subject in their daily life. In both cases, this action requires some sort of advance trust-building preparation to ensure that the interviewees feel comfortable walking and sharing with you; therefore, some form of previous contact should be established.

Biographical narrative interviews

Biographical narrative interviews are used in the social sciences. The concept was developed by Schütze (1983) and further discussed and updated by scholars such as Denzin (1989) and Szczepanik and Siebert (2016). This type of interview consists of asking a few open questions and letting the interviewee talk for as long as they want about their personal stories and create a narrative according to their understanding or perceptions of the topic at hand.

Biographical narrative interviews are an alternative to question-based interviews that intend to place the narrator – or interviewees – at the centre of their stories. The interview is guided by the interviewee, and the interviewer interferes as little as possible. You must allow the subject to talk about their life, origins and whatever they want to narrate regarding their life.

The biographical interview implies the definition of the key participant as narrator rather than as interviewee. Each of the participants, researcher and narrator, plays a specific role – the narrator is at the centre of attention, and the researcher is primarily a listener, whose role in guiding the direction and nature of the issues picked up is a limited one (Szczepanik and Siebert 2016: 286).

The researcher acts as a listener and observer who has a limited role in guiding the direction and nature of the interviewee's narrative. By allowing the narrators to tell their stories with minimum interference, we were confronted with unforeseen aspects that could be hidden in question-based interviews:

The fundamental feature of the narrative interview is that the material obtained is not a sum of answers to questions, but a spontaneous and unin-

errupted account in which the participant attempts to relate reflexively to their own life experience (Szczepanik and Siebert 2016: 286).

This approach allowed us to unveil common patterns that shape participants' socio-spatial practices while simultaneously giving us the opportunity to create an intimate setting, which made people feel comfortable with sharing more detailed aspects of their personal lives.

This tool is particularly interesting when collaborating with vulnerable groups because it allows interviewees to freely share private aspects of their lives to the extent that they feel comfortable. In our experience working with refugees living in Berlin, walking interviews allowed me to unveil different layers of the living experiences of these interview subjects, which could then be expanded to broader contexts although the interviews were based on individual narratives.

In many cases, the spatial dimension of these stories is permeated by imaginaries, colours, smells and relationships. It can be difficult to convert this information into useful data, but this is a powerful tool for diving into the daily experiences, issues and perspectives of the target communities.

It is important to highlight that this interview format does not work with everyone, as some people are more open to talking about their lives, while others prefer to answer specific questions. Therefore, it can be useful to keep specific questions in reserve if the interviewees are not interested in sharing much about themselves. In addition, where the conversation takes place is key to the success of walking interviews.

Collaborative mapping tools

Historically, mapping can be understood as a colonial or imposing tool that, on the one hand, simplifies reality and, on the other, illustrates one perspective – usually a hegemonic one. Nevertheless, mapping is a relevant tool for urbanists in understanding and representing spaces:

In every cartographic practice or language, there is a discourse and a story to be told about a particular place. This discourse can be ethical, political or economic. It encourages forms of domination and hegemony in asymmetrical power relations in the production of the space we inhabit and to which we belong. Another more inclusive and critical way of thinking about cartographic languages and practices is the construction of new narratives. In these, the author of the cartography himself helps to create visibilities for those who have no voice or power to decide how they should behave or construct their own places of belonging. This makes their experiences more meaningful and identifiable within urban spaces (Vargas et al. 2019: 261).¹

Maps have been falsely connected to a precise representation of reality, that is, as a connection between truth and knowledge. However, as Halder and Kollektiv Orantango (2019: 12) highlight, ‘truth and knowledge are deeply linked with power and hegemony’. The critical debate on cartography dates back to the 1980s and acknowledges how maps have been used as tools for colonialism and nationalism by naturalising social practices in spaces, as well as ownerships, territories, rights and social norms (Halder and Kollektiv Orantango 2019).

The concept of counter-cartography emerged as a result of this debate, first in artistic communities and later among geographers and planners. Embedded in the post-colonial debate, counter-cartographies understand

1 Free translation from author from Portuguese to English.

mapping as a contested political practice and aim to map practices from below by shifting and challenging hegemonic perceptions and interpretations of spaces (Halder and Kollektiv Oranotango 2019).

Considering this debate, we believe that collaborative mapping tools can be understood in the context of counter-cartography. Therefore, this section is dedicated to exploring counter-hegemonic mapping tools that aim to produce a collective understanding and representation of the analysed space.

Figure 7: Seminar Integration through collaboration, Berlin, 2023. Source: Juliana Canedo



Journey

The journey – or *travessia* in Portuguese – is a tool that has been used in different contexts, especially when working with favelas and other marginalised spaces (Burguière et al. 2016). This tool was developed by the non-governmental organisation Bento Rubião when it established participatory housing projects for self-organised poor communities in Rio de Janeiro, Brazil. These

projects usually involved empty plots in which new housing projects would be built. In this context, the use of the journey tool had an exploratory aspect, as the first group activity aimed to recognise the territory through a collective walk around the area.

The journey tool can also be used in areas where target families already live. In this case, its characteristics are more related to exploring the local community's spatial knowledge and practices.

The main goal is to explore and acknowledge the problems and potentialities of specific areas, aiming to develop solutions for the space based on the practices and needs of current or future residents. These walks can be done in small groups that will explore the area either through different routes or following specific topics, such as public spaces, infrastructure and green areas. The findings should be registered through notes, pictures and maps. After these walks, the group should come together and discuss their findings, as well as how to best represent them.

When applying this dynamic in a favela in Rio de Janeiro in 2014, a group of architecture and urbanism students from the Federal University of Rio de Janeiro who were part of the Abricó² developed the idea of printing icons showing the most common negative issues that they were told about by the local residents, such as noise, trash and traffic. They also included positive values in the icons, such as green spaces, leisure areas and silence. Led by a small group of inhabitants, they walked through the favela and asked the inhabitants to fix the icons on the walls next to the places where they found the related negative issues or potential values. The students then transferred this information into a map and later used the map as a starting point to discuss solutions and potential value for the improvement of the favela with the participating inhabitants.

This experience shows that people are more descriptive and inclined to give precise information about the way they use and see their neighbourhoods when walking through them. Sometimes, asking the same questions over a map may confuse participants, who may then be unwilling to share information.

2 Abrico is the Model Office of Architecture and Urbanism. It is run by students and works in a self-managed and horizontal way. Its activities are carried out through participatory processes, with the aim of meeting the demands of populations that usually don't have access to formal architecture. <https://emaubrico.wixsite.com/abricoufrj>

*Figure 8: Course Transforming built spaces in Favela Indiana, Rio de Janeiro, 2014.
Source: Abri o*



However, this method is limited because it requires residents to be willing to walk with the researcher group, which is not always possible. In addition, the information gathered is limited to the small group of people who took part in the walk and cannot be considered a full analysis of the neighbourhood. In either case, it can be a powerful tool for understanding a space from the perspective of its residents.

Emotional maps

Relating emotions to spaces has been the focus of researchers in various fields of study, such as sociology, psychology and geography. Emotional mapping has been used to support participative formats of planning that focus on collecting subjective data about the emotional responses of individuals in cities (Camara et al. 2021). Understanding the different emotions that spaces evoke in people can be a helpful tool in understanding power imbalances, gender issues and the different forms of engaging with space depending on your social group.

This method can vary with the use of digital tools, such as certain apps, and analogue processes of mapping emotions. The method usually comprises a representation of space, using maps, models, pictures and icons to represent emotions. Participants are then asked to associate emotions with specific areas.

As in most of the previously described activities, it is important for the planner, designer, researcher or other facilitator to understand the reasons why certain emotions are attached to certain spaces. In this sense, the icons and emotions are a tool for establishing other types of spatial dialogue. Hence, the conversations that emerge from this interaction are as important as relating a space to a certain feeling. For example, a location can be related to fear if you are talking to women or to peacefulness when talking to men. The relevant data are not whether the space is objectively safe or unsafe, but rather why do women feel unsafe where men feel safe, and what solutions can address both emotions?

Asking symbolic and open questions, such as those about one's general feelings, often makes participants more open to expressing their wishes and impressions about certain places.

In a 2021 project conducted by students in Märkisches Viertel, a neighbourhood in Berlin, we used a map of the area and pictures of some of the most well-known places, such as the park, the river, a shopping mall and the S-Bahn station. We also added pictures of less-specific areas, such as a social housing complex and some side streets. As a large percentage of residents living in this neighbourhood have a migrant background, the students also added instructions in the three most-spoken languages besides German: Arabic, Farsi and Turkish. The students brought stickers with icons representing different feelings, such as joy, fear, loneliness, acceptance, exclusion and peace. In addition, they carried white stickers and Post-it notes for people to add their experiences of any feelings that were not listed.

The particularly interesting aspect of this dynamic tool was that instead of using a dynamic map in fixed spaces, the students used a cargo bike from BENN³ Märkisches Viertel, one of our cooperative neighbourhood partners,

3 BENN: Berlin Develops New Neighborhood is a program from the Senate for Urban Development, Building and Housing. The aim of the programme is to strengthen social cohesion and promote integration in the neighbourhood. <https://www.berlin.de/sen/stadtentwicklung/quartiersentwicklung/programme/berlin-entwickelt-neue-nachbarschaften-benn/>

and rode around the neighbourhood to ask people in different locations about their feelings. Here, the map became more than a graphic tool as people began talking with the students about their current location. The students selected five different spots and stayed for around half an hour at each location. During this time, they spoke with different residents, from children to older adults.

Another strategy the group developed was to offer snacks and coffee as a way to invite people to engage in the activity. The stickers and snacks were not only a major attraction for children and teenagers but also for their parents and other passersby. The way the students decorated their BENN cargo bike also attracted the attention of many people who took part in the activity.

While using the tool to connect feelings to places with the map or pictures, the students asked questions and took notes. The students used another tool that we called the Wishes Box, which consisted of an open box and the question, 'What do you wish for your neighbourhood?' written in four different languages: German, Arabic, Farsi and Turkish. The participants were invited to write their wishes on colourful cards that they would then anonymously place into the box. These wishes could be written in any language and were later translated.

In general, the combination of these different methods and strategies was very successful, and the students collected a large amount of information about the positive and negative aspects of the area, as well as the participants' wishes, which could later be translated into design proposals for the neighbourhood.

Some challenges of this activity were related to the fact that the dynamic tool was used by passersby and not by a fixed group; therefore, it was not possible to discuss later impressions with the involved participants. It was also difficult to engage these passersby in deeper conversations. However, by approaching individuals on the street, the students could reach people who might not have participated if the activity were fixed at one specific location.

Figure 9: Workshop with refugees in Märkisches Viertel Berlin, 2022. Source: Juliana Canedo



Open-source digital maps

Digital tools can be useful for engaging larger groups in participatory design processes, especially under-represented groups such as youth. The use of interactive digital mapping tools has the potential to amplify under-represented voices and convey local knowledge from a bottom-up perspective.

In 2009, the 'Wikimapa' project was developed in Rio de Janeiro by the non-governmental organisation Rede Jovem – Solidaritas as a pilot project that aimed to develop an open-source collaborative mapping tool for favelas. The idea was not only that the favela was mapped – since favelas are often not fully mapped in official documents – but also that this mapping was done by its residents, bringing counter-hegemonic narratives of their spaces. The project arose from this community mobilisation and was developed in cooperation with the residents, especially the youth, called 'wikireporters'. They mapped material places in the favela, as well as its stories, important people and memories, which revealed the subjectivity of the mapped area. The map was then

posted on a blog where the backstage stories of the favela's people and spaces were narrated (Vargas et al. 2019).

As we can see in this example, the use of collaborative digital tools for mapping can expand the production of spatial representation and understanding, in addition to revealing diverse narratives that might challenge hegemonic narratives that are often over-represented in traditional cartographies. It also opens up the opportunity to share experiences and spatial knowledge by bringing different qualities to the mapped space that go beyond just the location.

In 2024, a group of students working with a youth group of refugees living in Berlin decided to test the development of an interactive digital mapping tool aimed at co-producing shared collaborative filtering of accessible local knowledge among young refugees. Using the app UMAP, the idea was to add local resources and the participants' favourite locations.

Over several weeks, the students walked around the neighbourhood, making mental maps, interviewing the young refugees and marking their favourite places and activities:

The Mental Maps visualized personal spatial perceptions, reflecting individual views and fostering self-reflection on important landmarks, mobility, and favorite spots. The informal approach of the Walk-Along Interviews explored real-time experiences, building trust and gaining insights as participants showed us their favorite spaces, documented routes, and took pictures. These methods helped us understand how participants interact with and perceive their environment.⁴

The students later created a base map, including some initial information related to what the refugees reported as relevant places, as well as spaces that they thought could be important, such as youth centres and sport facilities. The creation of this map aimed to showcase a representation of space that was relevant to the refugees' needs and interests.

4 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Alexandra Nunez, Inci Sağırbaş, Yuri Ferenczy, Oline Kuhlmann, Ahmed Kattaya.

The students launched the tool during a community event and showed the young refugees how to explore, edit and add photos to the map. They presented their fieldwork findings, such as the individual mental maps and the collective map. They also facilitated real-time interactions with the digital map on a monitor and promoted the use and editing of the map, even beyond the conclusion of their project. The students also provided the young refugees with a brochure to encourage them to edit the maps at home or at any time.

Mapping through participatory photography

Photos capture a brief moment and thus provide insights into the photographer's life perspective, unbound by any particular language and can be understood by everyone.⁵

Photography has long been a central tool for architects and urban designers. It has also been intensively used in social research to represent and archive spaces and practices. Historically, however, this tool has been used by researchers or designers who decide what the photos should represent and who also usually interpret the results. Recently, the practice of asking communities to take pictures of their own realities has become increasingly prevalent in different contexts. This method is called participatory photography and aims to bring the perspectives and lived experiences of the community to the centre of the debate about spatial understanding.

The use of photography as a collaborative tool encourages participants to explore their surroundings through the lens and representation of spaces. By offering the opportunity to bring individual perspectives into collective discussions, participatory photography can foster debates about how the city and neighbourhoods are diversely perceived and experienced. The act of taking a photo can also increase the sense of belonging by fostering interaction between the participants and the spaces they occupy (Gerodimos 2018).

In a course that I co-taught at TU Berlin, one group of students working with young refugees living in the neighbourhood of Marzahn in Berlin decided

5 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Omar Saleh Zenbaey, Emanuelle Dubot, Luis Michael Baumann, Elise Schreck, Jakob Honz.

to use photography as a tool to understand the refugees' spatial perspectives. This idea came after an initial approximation event, where the students got to know a group of refugees who shared their interest in photography, as one of them was a professional photographer.

Over the course of two months, the students engaged in different photography-based activities with the refugee group. They visited exhibitions, went to a park to take pictures and participated in a workshop conducted by the professional photographer on how to use a camera. Throughout the process, the students and refugees engaged in many conversations and collective activities, found common interests and shared their experiences:

During the semester, we organized various activities with our group, and our weekly meetings were always centered around photography and capturing moments. ... Together, we learned about photography and, of course, had a lot of fun.

During the final weeks of the activity, the students gave disposable cameras to the refugee participants to capture photographs based on the theme 'my daily life in Berlin'. The idea was to offer space for each individual to express their own narrative through photography. Afterwards, they printed their photos and met to have conversations about where the pictures were taken and what they represented. They took the opportunity to discuss the barriers they faced in their daily lives, the places they like in the city and their aspirations for the future:

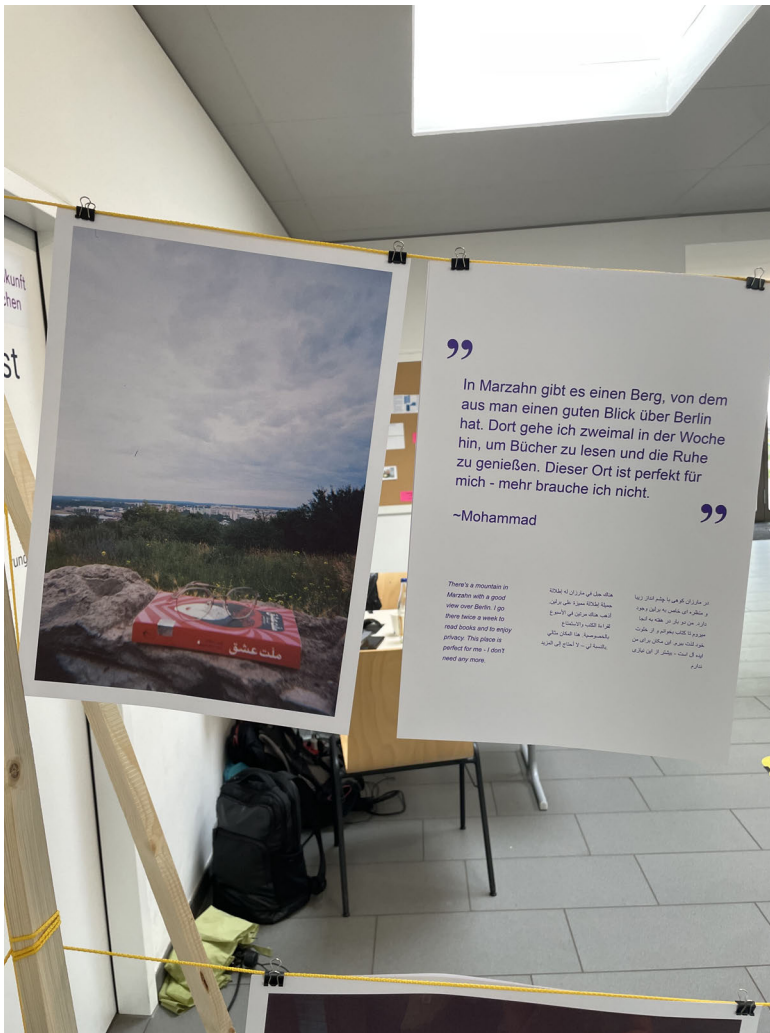
The results of the disposable cameras week gave us unusual insights through the captured moments within the refugees' lives in Berlin. It would be hard to say that the moments pictured were different from the lives we live day to day; in fact, they were unexpectedly similar to our own. Nonetheless, what actually caught our hearts and souls was how similar life can be and how different the resulting interpretations are. Even among the participants, there were differences in opinions about which moments to expose and discuss with others.

From these conversations, the students recorded quotes from the refugees, which they later printed and presented with the pictures in an exhibition we held in a neighbourhood event in the shelter where the refugee group lived. In their words,

[p]hotography is a powerful medium of self-expression and communication, and an exhibition is a clear way to share it. ... We wanted them to be proud of their work and enjoyed seeing the outcome of the entire semester. In a collaborative process, the result was not predefined; we focused on building trust. Therefore, the outcomes, shaped and defined by the process, genuinely express it.

The students translated these outcomes into a map, which was also exhibited. The students' long and fluid process of interaction with the refugee group allowed them to obtain deeper meanings and enter discussions about spatial representations, use and understandings. Using a visual medium such as photography made it possible for these students to go beyond rational discourse.

Figure 11: Studio Insurgent Design, Berlin, 2024. Source: Juliana Canedo



Challenges and limitations

Engaging with minority communities to understand and analyse their realities can be powerful in creating inclusive spaces. Nevertheless, the diverse challenges that arise from these experiences can represent participants' frustrations. In this section, I highlight some of the challenges we faced in such interactions; however, these were not the only challenges. Regardless of how experienced scholars may be in collaborative practices, new challenges will appear, and being flexible enough to deal with them is part of the learning – or unlearning – process.

The first challenge relates to power structures. The presence of a group of scholars or architects may create friction and invisible hierarchies that influence the intended process. Although trying to avoid these frictions should always be at the heart of the matter, acknowledging that there will always be some conflict is crucial. In the words of the student group that used photography as a mapping method,

[w]e also had to find the balance between providing structure to the process and allowing it to progress without becoming too rigid and unintentionally becoming tutors. It was not easy to find this limit between giving momentum to the project and leading at the expense of self-initiative. For example, the youth were more inclined to agree with our propositions rather than proposing their own, such as when defining the theme of the photo series.¹

The second challenge is the limitations imposed by academia, funding bodies and professional fields (e.g. deadlines, structures). The necessary time and po-

1 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Omar Saleh Zenbaey, Emanuelle Dubot, Luis Michael Baumann, Elise Schreck, Jakob Honz.

tential outcomes for collaborative activities are not necessarily suitable and, in most cases, conflict with the time frames, budget structures and required outcomes in those spheres. In many cases, these conflicts might present extra work for researchers dedicated to developing collaborative activities. They often have the burden of doubled work to develop their research in two different languages, and their activities must be conducted in a limited time frame due to the length of the semester, the funding body's deadlines or the contractor's requirements.

The final challenge relates to the coordination of the participants' schedules. Participants' active engagement is necessary for conducting collaborative activities. Coordinating between different schedules, expectations and goals, as well as dealing with last-minute cancellations, might be frustrating and require a level of flexibility that often impacts the envisioned outcomes.

Involving children

Children and young people are integral members of society, yet their voices are often overlooked in decision-making processes related to urban and architectural planning. This neglect is problematic because young people experience and navigate cities in ways that differ significantly from how adults do. The literature on children's participation emphasises the need to recognise their unique perspectives as vital contributions to shaping inclusive cities. (Hart et al. 1997) argues that children are not simply passive recipients of adult decisions but can be actively engaged in shaping their environments when given the opportunity. By involving youth in conversations about urban transformation, we can foster a sense of belonging, agency and responsibility from an early age, encouraging them to become stewards of their communities.

To engage with children effectively, it is crucial to adopt methodologies that resonate with how they perceive and interact with the world. Young people often relate to their environments through sensory experiences, play and exploration. Traditional urban planning languages and processes can seem abstract or irrelevant to them, which is why initiatives like the 'Jugend Stadt Labor' (Youth City Lab) emphasise the use of more accessible and engaging methods. As noted in youth-led movements, such as 'Youth City Manifesto' and 'Young Cities Now', urban development must meaningfully connect with the everyday lives of young people. This involves shifting the vocabulary used in planning and design to align with their experiences, interests and needs. By acknowledging and incorporating their life worlds into urban strategies, we create spaces that genuinely reflect the diversity of urban inhabitants.

One critical challenge in incorporating youth perspectives is finding appropriate ways to articulate their needs and ideas in planning discussions. Children and adolescents often express their thoughts and desires differently than adults, making it essential to use creative approaches to capture their input, such as participatory workshops, visual storytelling and art-based methods.

Projects such as UNICEF's Child Friendly Cities Initiative and the Young Urbanists¹ workshops have demonstrated that when young people are engaged through creative, playful methods, they can provide innovative solutions that might otherwise be overlooked. These participatory strategies not only validate young people's experiences but also enable urban planners to design spaces that are more inclusive, accessible and vibrant.

By making young people's agency visible, we can shift the narrative around who participates in urban transformation. Highlighting young people's contributions can inspire communities and policymakers to rethink how cities are designed and for whom they are built. More importantly, involving children and youth in these processes challenges the notion that urban planning is solely the domain of adults and experts. Instead, it positions young people as co-creators of their environments who are capable of influencing change. This approach not only democratises the planning process but also plants the seeds for future generations that are attuned to the needs of their communities. Ultimately, by recognising and nurturing the potential of young people, we can create cities that are not only more just and inclusive but also more imaginative and responsive to the needs of all inhabitants.

Engaging youth groups involves the ethics discussed in the previous section and requires specific tools and methods. This section is dedicated to exploring these tools, some strategic approaches and the use of produced material. The data gathered from such activities are symbolic in most cases. Incorporating children in the use of dynamic tools is extremely relevant not only to capturing their perspectives in spatial analysis and design but also to shaping their understanding of their role as co-producers of spaces.

1 See <https://youngurbanists.org>

Figure 12: Course Transformation of the built space, Rio de Janeiro, 2014. Source: Juliana Canedo



Approaching children

Unlike adults, children are usually much easier to reach and engage. They are generally curious and open-minded and are therefore likely to interact with creative methods, especially those involving arts and crafts or action-based activities, such as sports and games. Nevertheless, some aspects are crucial to consider when approaching children, not only to create a more engaged experience but also to obtain mutually beneficial outcomes.

The first aspect to consider is the nature of the children with whom you will be interacting and where the activity will take place. You must address the following important questions: Are the children already familiar with each other? Is the work going to be developed in a place where they feel safe? How old are the children? Are they all the same age? Are there any children with disabilities in the group? What is the main language spoken in the group? Depending on the answers to these questions, the methods and tools to be used and the potential involvement of mediators will differ.

The second important aspect to consider is your goal and the envisioned outcomes of your interactions with the group. Are you working with a specific space in mind, such as a playground to be designed, or are you trying to gather general information about the neighbourhood based on the children's spatial knowledge and agency? Defining a main goal and the expected outcomes does not mean that they will be achieved. Therefore, it is important to be flexible and open to the changeable nature of the process. Your interaction with children will often lead you down paths that you cannot predict. This is also due to our frequent lack of acknowledgement of children's spatial agency and knowledge in our training and practices. (Million and Heinrich 2014; Heinrich and Million 2016; Hart et al. 1997)

The third aspect is to carefully plan one or more activities for the children and to keep additional activities in reserve. In some cases, the children may not be interested in the initially planned activities that you envisioned would work well; the secondary activities you planned may ultimately play a central role in obtaining your desired outcomes. As you will see in one of the examples below, secondary activities can become extremely appealing depending on the group of children participating in your work.

The last aspect is to transparently communicate with children about how the collected material will be used and the relevance of their participation in your project. In other words, what will you give the children in return for their participation, and how can this be communicated in a way that they can un-

derstand? Of course, this will depend on various factors, such as their ages, whether there is a facilitator who is already engaged with the group (such as a teacher or community organiser) and the language they speak.

As mentioned in the Ethics section, data protection and privacy are extremely relevant when children are involved. Avoid taking pictures of their faces without their guardians' consent. In addition, do not publish the images on social media or any public forum, even if they are related to scientific publications. Several software tools can be used to blur the faces of people in images to ensure their anonymity, such as drawing on the images, as seen in Figure 11. Children's privacy can be preserved with these methods. You should always critically reflect on whether using tools such as photography or collecting data such as the participants' names and ages is truly necessary for your activity.

Figure 13: Seminar Integration through collaboration, Berlin, 2023. Source: Ani Tashi



In the following sections, I will offer some examples of tools and methods based on my experiences with my students and colleagues. This is not to be understood as a 'how-to' manual but rather as a starting point for the further development of tools that are adequate for the spaces, goals and groups of your project. Also, keep in mind that some of these tools for children can also be adapted for adults. The main tools that will be described in the following are

the use of drawings for mapping problems and wishes, collaborative three-dimensional (3D) models and games.

Drawing

Drawing is the most basic tool in collaborative work with children, as it requires few materials and no specific skills. Most children enjoy drawing, and it can be used as a warm-up activity to build trust or as the main outcome of the collaborative practice.

I would like to highlight some points that I consider relevant when asking children to draw. The most important point is to understand that the process is not about interpreting the children's drawings but rather using their drawings as a starting point for building a dialogue with them. Therefore, it is important that you talk with the children while they are drawing by asking questions, for example, about the meaning of a drawing of a castle or their choice to use yellow to represent a river. In many cases, their answers may not lead to anything concrete, but the process is relevant for building trust and inviting communication through the collaborative activity.

Associating broad questions with children's drawings is especially useful in obtaining targeted information from children. For example, children could be asked to draw their favourite place in the neighbourhood, the people living in their households or what they enjoy most in their daily lives. Keep in mind that the children will not always come up with concrete ideas that can be used in your design proposal, but the conversations arising from these interactions might reveal important issues regarding their perceptions, limitations and wishes of their spaces.

In a workshop that we organised with refugees living in a refugee shelter in Marzahn, Berlin, a group of students working with children developed a drawing activity as an approximation tool to establish contact with the children and to ask spatial questions. The decision to use drawing as the first activity was related to the fact that they didn't know in advance how many children would come to the workshop; therefore, it was important to choose a simple activity that could be adapted to different group sizes and children of different ages.

The proposed activity consisted of drawing postcards of their favourite places in the neighbourhood. In the students' words,

[w]e gained main information about the spatial configuration, the rules and the use by children of the GU and its surroundings. Besides first learnings about the places in Marzahn and the habits of the children, we could experience the social dynamics of the children's group. We learned that it was a big group, organized by language and family structures. The group size and big diversity in age and languages was identified as the main methodological challenge whereas spatially, no singular problem was identified, which led to continuing with an open approach.²

This quote shows that the students' findings came from the drawings themselves, their conversations with the children and their active observations and dynamic reflections over the course of this experience. Furthermore, the children could later give these postcards to their friends or families. The products of the activity could also be presented in a small exhibition, as children usually feel proud to have their drawings displayed for their peers and families.

In this case, an exhibition was not possible because the students were working on an open playground. In other experiences, we created exhibitions of drawings by children by connecting their drawings to neighbourhood maps or organising them along similar topics.

The simple activity of drawing can be used in a variety of ways and is one of the most engaging activities for working with children.

2 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Annika Rütter, Salma Elbasty, Hannah Langels, Amalia Ardian, Lilli Reinkensmeier.

Figure 14: Winter School Building Resilient Cities, Cairo, 2024. Source: Juliana Canedo



3D models

3D models are useful for creating a commonsense understanding of children's and adults' spatial understandings and representations. Various materials can be used, such as LEGO, differently sized cardboard boxes, pre-cut wooden blocks and any recycled materials, such as cups, colourful paper, plastic, cotton, fabric, ropes or paints.

Despite having the goal of realistically reproducing spaces on a smaller scale, the goal here is to use 3D representation to discuss anything that cannot be represented in two dimensions. The aim should not be to produce a good-looking and precise model but instead to use as many textures, colours, materials and volumes as possible to discuss the participants' perceptions of the spaces instead of their real representation. For example, places that are important to children are usually represented using large elements and/or in a central position in the model.

The process for developing a 3D model are also especially important. For example, we usually start by building the place we are in, such as a community space within a favela. We then ask the children questions: Where do you live? Where is your school? Is it far? How is your route to the school? Are there trees? What is the road like? How do you feel when going to school? During these conversations, children can be asked to locate and represent the spaces they frequent by adding pre-made elements, building new ones, adding colours or sticking Post-it notes to the 3D model.

It is important to ask the children to represent the main problems they see in the modelled area, as well as the potentialities, the places they like to visit and why they like these spaces. Further questions can be asked: Why did you take one street instead of another to go to school? Why do you prefer this playground? What is interesting about the museum you like? Their answers can provide relevant spatial information that could be used in various research outcomes, such as design proposals, recommendations for public policies and planned activities for children.

This dynamic tool allows us to build the children's neighbourhood from their perspective according to their knowledge and the places they frequent. In addition, we can use the 3D model to imagine different uses or spaces for their neighbourhood. After establishing a common understanding of how the area is represented in the 3D model, we can explore the children's wishes and desires.

Again, the researchers' conversations with the children, as well as the representations the children decide to use, can be valuable for developing an understanding of the children's daily lives in specific spaces or areas, in addition to the key issues to address in these areas. It is important not to censor non-sensical suggestions, such as building a unicorn farm or putting a swimming pool in the living room. We should allow children's creativity to flow, which will build their trust and the connections developed through play.

Sometimes, these dynamic tools can lead to results that oppose what we intend to find. For example, when developing this method with a group of children living in a refugee shelter in Berlin³, the students who organised the activity came to realise that the children had little experience of being outside their shelter. They knew only the building where they lived, which had a playground on the grounds and a view of the street through the fence. In contrast to most children living in Germany, the refugee children's experience of their neighbourhood was extremely limited. Thus, the students decided to explore the children's imagination and memories and to build a model of what the children wanted to see or explore in their neighbourhood.

In this sense, flexibility and openness were shown to be key to developing fruitful collaborations with this group. It is extremely unlikely that researchers will find the field exactly as planned or imagined. Therein lies the beauty and challenge of this research process.

3 Activity developed during the Winter School Integration through collaboration (Juliana Canedo, Hassan Elmouelhi), TU Berlin and Yarmourk University 2022.

Figure 15: Winter School with refugees in Märkisches Viertel, Berlin, 2022. Source: Juliana Canedo



Games

Games are a fun and effective way to engage children in research activities and can be used as secondary or central activities. I will report on one of our previous experiences, which started as a secondary activity and became central to our research. Games can be active, like a treasure hunt or hide and seek, or more introspective and strategic, like board or card games.

It is important to manage expectations, as in all other interactions. In one of our planned activities with children in a peripheral neighbourhood in Berlin, the students proposed a game for which they would bring boxes of different sizes to build a playground with the children. The idea was to use boxes large enough that the children could walk around them; hence, this model was somewhere between the scale of a 3D model and a life-sized model. However, the students did not expect that when the children saw the boxes, they immediately thought there were toys inside and started to open and destroy them.

This kind of frustration – both for the children who did not find any toys and for the students who now could not continue their plan – was impossible to predict. Therefore, some level of disappointment and ‘failure’ is intrinsic to the research process. The resulting question is what should be done when faced with such unexpected outcomes. It is important to find ways to transform the planned activity, rearrange expectations and continue with the interaction. Hence, planning backup activities, as mentioned earlier, is highly useful in overcoming these situations.

In the following sections, I will share examples of games developed by students for different occasions and contexts. However, understanding the use of games as potential collaborative tools is more important than explaining them, because these tools can reveal relevant spatial issues in unconventional ways. As we saw in the brief example mentioned above, the ‘failures’ of such interactions – in the sense that the planned activity didn’t occur as envisioned – are also learning experiences. Without disregarding the ethical issue of not causing harm to the community and avoiding parasitic relationships where everything extracted by the researchers, students and practitioners leaves the community with no ‘gains’, some level of frustration and flexibility are expected in collaborative processes.

Figure 16: Seminar Integration through collaboration, Berlin, 2023. Source: Juliana Canedo



Treasure hunts

Treasure hunts can be played by different age groups in a variety of ways. Organising a treasure hunt for collaborative planning and design is interesting because it is a very spatial and active game that works well with children who need to expend energy and are less likely to engage with researchers through the sedentary activities mentioned earlier, such as drawing and creating 3D models.

First, it is important to consider the age of the group and the location where the game will be played. Safety should never be underestimated and, depending on the context, age of the group or number of facilitators, it is important to consider conducting this game within a 'controlled' space, such as a gated playground or a community room. If it is possible to play in a more open set-up, treasure hunts can also be used to explore a space through children's eyes.

The aim of the game is to find a treasure. Hence, the participants must be informed about specific tasks and be allowed to ask questions. In some variations of the game, children can search for clues, and upon finding the first

clue, they will find instructions for the location of the next clue. In this way, the game proceeds until the children find the treasure.

Depending on the age of the group, the decisions about what kinds of clues or requests will be used and how they will be hidden are key. For example, for treasure hunts with older children, more complex maps, questions and tasks can be used. For younger children, pictures can be used or simple questions can be read aloud. Whether the children all speak the same language is a crucial factor in planning the game.

Decisions about what treasures will be used are also important. The treasure may be small gifts, such as stickers, temporary tattoos, snacks and sweets. It can also be related to the next planned activity, as shown in the following example. When offering sweets, please ensure that the children's guardians consent to this beforehand; whether the children have any allergies or cultural or religious food restrictions should also be known.

A group of students developed an experience in which a treasure hunt was a warm-up activity to get to know the children and ask questions related to their neighbourhood experiences⁴. In this treasure hunt, the children were aged between 4 and 10 years old, which created challenges in terms of their understanding of the dynamic tool. The students' plan was to conduct the treasure hunt before their main activity, which was to create a 3D model. The treasure in this case was a box of colourful blocks and arts-and-crafts materials that would later be used for the 3D model. The students also prepared some small gifts for the children such as temporary tattoos, stickers and small toys.

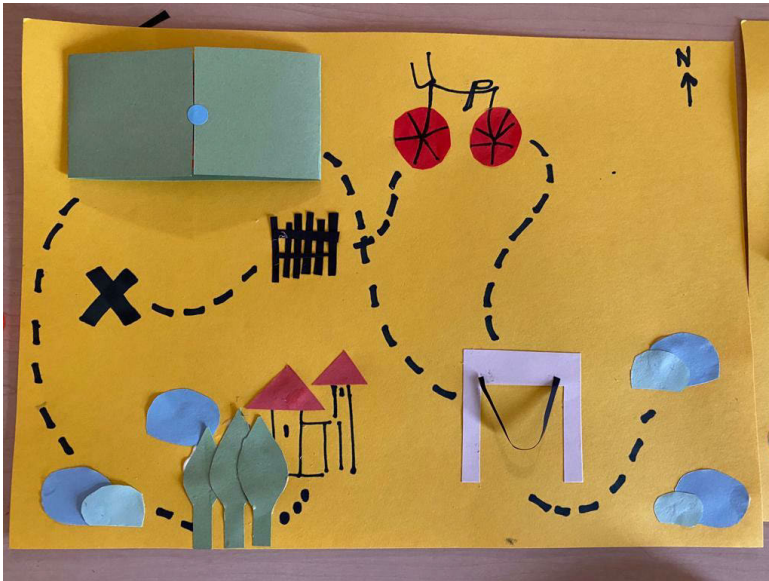
The treasure hunt was developed for a gated playground. While the children lived in the adjacent building, not all of them knew each other. Hence, the first questions the children needed to answer were related to their names, whether they had siblings and their favourite foods. After answering each question, the children received a map to find the next question and after the clue was followed, the full group needed to answer the next question. The following questions were related to space: What do you do on the weekend? Describe your favourite place in the world. What would you change if you were the mayor of the city?

These questions served several purposes: First, they extracted valuable information about the children's daily socio-spatial practices. Second, the questions prepared the children for spatial thinking, which can be helpful if follow-

4 Activity developed during the Winter School Integration through collaboration (Juliana Canedo, Hassan Elmouelhi), TU Berlin and Yarmourk University 2022.

up activities are planned. Third, the questions served as a means of integration and interaction among the children. For example, when they learn what their peers do on weekends, they can find common interests and form personal connections with one another.

Figure 17: Winter School with refugees in Märkisches Viertel, Berlin, 2022. Source: Juliana Canedo



The outcomes of the treasure hunt and 3D model activities, in addition to the conversations between the students facilitating the activities and the participating children, were then translated into bullet points listing the negative, positive and desired aspects of the neighbourhood from the children's perspectives.

Board games

Board games require more complex preparation than the aforementioned games, which depends on the participants involved. They can be creative tools that not only bring knowledge but also produce knowledge.

In one of our experiences, a group of students who were interacting with refugee children decided to develop a process-oriented framework in which the methods and tools they were using emerged from the interests of and interactions with the participating children.⁵ The students prepared several parallel activities and continuously tested what worked and what didn't work. They immediately changed the planned activities to better match the behaviour of the children. Through this interactive process, the students incrementally developed spatial knowledge from the perspectives of these children over the course of a month, which guided their next steps. They described the activities as a process of 'unlocking spatial perceptions' that aimed to be inclusive of all the children who wanted to participate.

After their initial interactions, they introduced the planned secondary activity: a 'kid-friendly' map containing abstract drawings of the places that the children had mentioned during their previous interactions. This was designed as a game in which the children connected the represented places by indicating routes, describing the surroundings, and making additions to the map. The students were surprised by the children's level of spatial knowledge as they corrected the map. For example, the lake was in the wrong location; it was on the left, not the right side of the map. The children also corrected the direction and façade of their school and located distant places in other neighbourhoods.

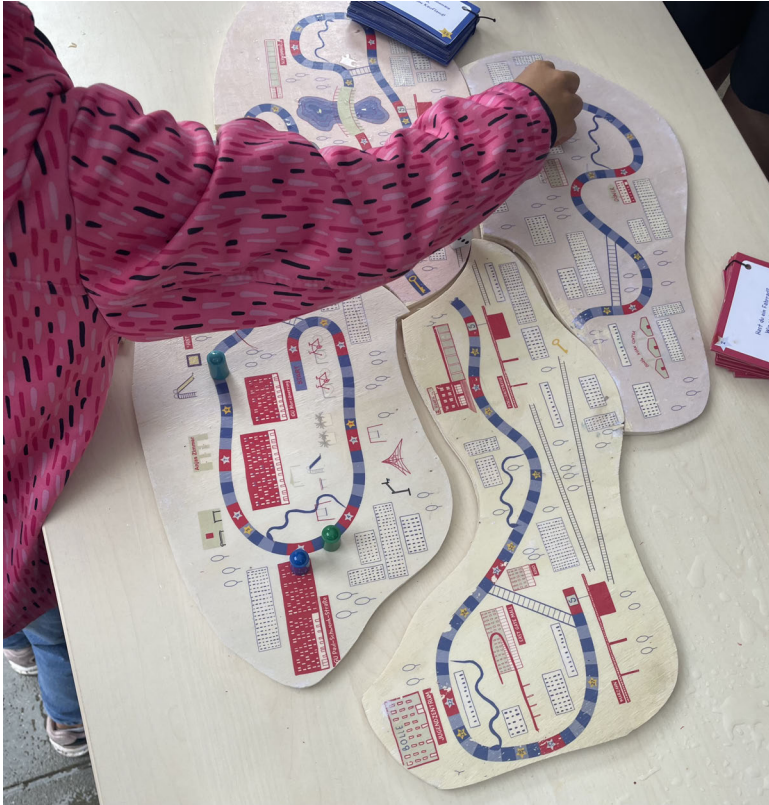
This success of this activity and the children's interest inspired the students to further develop the map into a board game. Situating the representation of the building in which the refugee children lived in the centre of the map worked particularly well. The children immediately recognised their home because their refugee accommodation in Berlin had colourful windows and a façade; it was so well represented by the students that the children immediately wanted to play with the board game. As the students observed, 'the goal was to develop a co-creative game that would show them a representation of their neighbourhood and make them able to change this while playing the game'.

The board game was based on 'Snakes and Ladders' and incorporated the students' spatial findings from their previous interactions with the refugee children. In the game, the students included action cards, such as visiting the lake to feed the ducks, and prompt cards that invited the children to think about and elaborate on additions or changes to their neighbourhood, which

5 Activity developed during the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024.

were represented on the map. Examples of these prompt cards included 'You are bored. Build something in the neighbourhood where you can have fun.' and 'Build a bus stop at a place where you would like to go.'

Figure 18: Studio Insurgent Design, Berlin, 2024. Source: Juliana Canedo



The board game was further developed every time the students played with the children. At the end of the project, the students produced the final version of the game in Styrofoam, which was presented and used during a neighbourhood festival.

The development and use of this board game showed the enormous potential for creatively developing open tools that can encourage conversations

about the spatial aspects of children's lives. The student group perceived much interest and engagement among the children as well as some challenges. For example, in some cases, the children were more focused on winning the game, which made it difficult for the students to establish their idealised spatial transformations. Despite such challenges, the use of board games can stimulate active exchanges of spatial knowledge and surface new spatial narratives from the perspectives of children.

Challenges and limitations when working with children

As described earlier in the section on ethics, working with children presents many challenges and limitations, as can be seen in some of the experiences reported above. Here, I highlight some other challenges of involving children and call for further theoretical and empirical discussions and research systematisations to improve both these processes and the outcomes of collaborating with children.

The first concern relates to the use of the gathered data and the development of meaningful outcomes for children. In most cases, the data gathered from these activities are extremely symbolic; they are not always sufficiently specific or reliable for use in research and design. Collecting data while keeping children engaged is also a challenge that requires a lot of energy from research groups planning activities. A group of students made the following observations:

It wasn't easy to have a straight-forward collaborative design process either since kids receive and share information in more abstract ways than adults might. We also had to pay special attention to keep the process collaborative because of the inherent hierarchy when working with children. We tried to keep a balance between providing the children with examples and options to choose from without restricting their creativity in any way and between being well-prepared while staying flexible and openminded.¹

¹ Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Annika Hopster, Sari Hallak, Valentin Keller, Milon Thomsen, Ida Duge.

The second aspect is managing emerging issues among groups of children when using dynamic tools. This can be particularly difficult because students and practitioners in architecture, planning and design may not have training on how to manage violence among children, such as bullying, among other types of group behaviour and interactions that are beyond the facilitators' skills and expertise. Should researchers always ensure the presence of a social worker during these types of activities? Although including a social worker would be invaluable, it may not be practical in many contexts, especially when exploring spaces in the Global South.

In addition, decisions about how to organise the group, the size of the group, the children's ages and whether the study group should remain the same throughout the process or change over the time can create several challenges and opportunities. In the words of a group of students that worked in a public space with no predefined group,

it was difficult to control the group sizes of children within each workshop, and as a collective agreement within our group since the initial workshop, we have decided to experiment with those big and open groups of children and aimed for an inclusive experience for all. We have worked with many children, of different ages, language capabilities, and ethnicities, leading into many perspectives. This has certainly helped us with learning and unlearning our ideas and assumptions along our framework, where many possibilities were opened by always being prepared with different methodologies we can test in a single workshop, in order to account for the imminent unexpected limitations.²

Despite these challenges and limitations, collaborating with children and planning their spaces is extremely relevant not only to introducing their perspectives into spatial analyses and designs but also to allowing them to perceive their role as co-producers of urban spaces.

2 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Annika R  ther, Salma Elbasty, Hannah Langels, Amalia Ardian, Lilli Reinkensmeier.

Part 2 - Consolidation: Building bridges through spatial transformation

Part 2 focuses on the consolidation processes in planning and design. First, the topic of research systematisation is introduced, followed by a representation of our findings from the initial stages. Finally, tools and methods for building collaborative designs are offered.

Translation and consolidation

This section delves into the critical process of translating, systematising and representing research findings from the initial phases of collaborative activities and potential definitions as a preparatory step for the design phase. One of the essential skills of city-building professionals is their ability to synthesise and present complex spatial data in ways that are accessible and engaging for a diversity of stakeholders. This process involves not only interpreting the spatial, social and cultural elements gathered during the initial stages of planning and design but also reformatting them into comprehensible outputs that will facilitate active collaboration. The capacity to clearly communicate these findings ensures that all participants remain fully engaged in the decision-making process, making it possible to achieve inclusive and holistic urban transformations.

A critical aspect of successful communication is reflecting on the technical language and graphic materials typically used by architects, planners and designers. The challenge lies in making these materials legible and meaningful beyond the confines of these professional circles, as jargon can often be a barrier to participation. Planning and designing cities inherently involve imagining different futures, yet this process is often clouded by entrenched, colonial and Eurocentric frameworks. As Miraftab (2016) emphasises, decolonising the imagination of the future requires questioning the assumptions that underpin the planning process. This means acknowledging the diverse perspectives of those who inhabit the spaces being designed and making space for alternative visions that reflect local knowledge and lived experiences. By rethinking how we communicate spatial findings, professionals can support a broader spectrum of voices in co-creating the urban landscape.

The imagination of the future should not be confined to isolated design moments but should be seen as a continuous, iterative practice that is embedded in the everyday lives of urban communities. This shift in perspective empha-

sises the idea that planning and design are not ends in themselves but are ongoing processes that respond to changing social, economic and environmental conditions. Therefore, the production of urban spaces becomes an open-ended dialogue that evolves through daily interactions, feedback and adaptations. Engaging communities in this fluid process ensures that their insights and aspirations are woven into the fabric of urban transformation, thus democratising the planning process.

To facilitate this continuous engagement, various tools and methods can be employed to make spatial data more accessible and actionable. For instance, 'problems and potential maps' are effective in visualising the challenges and opportunities identified in the initial stages of collaboration, as they help stakeholders to see both the constraints and possibilities of a given urban context. Additionally, using 'visualised narratives' and 'personas' can introduce the lived experiences of diverse community members into the design process. These personas help articulate the needs, desires and daily routines of different user groups, making it easier to translate abstract planning concepts into tangible, relatable terms. By grounding design decisions in these personalised narratives, city-building professionals can create spaces that are better attuned to the complexities of real life, thus fostering more inclusive and responsive urban environments.

Activities beyond design

Social events play a fundamental role in fostering collaborative experiences in urban planning and design. These gatherings are not merely supplementary activities but are integral to the overall process of building trust among the participants. Trust is crucial in collaborative environments, as it encourages open dialogue, reduces power imbalances and nurtures a sense of shared ownership over the outcomes (Innes and Booher 2004). By providing informal and welcoming spaces for interaction, social events create opportunities for participants to connect on a personal level by breaking down existing barriers due to differences in backgrounds, expertise or social status. This atmosphere of trust can lay the groundwork for meaningful participation, enabling participants to feel valued and heard throughout the design process.

In addition to trust-building, social events offer a space for dialogue that extends beyond the specific tasks and agendas of formal planning meetings. According to Sandercock (2003), these informal gatherings can facilitate the exchange of knowledge that might not emerge in more structured settings, allowing participants to share insights, experiences and concerns that are essential for understanding the complexities of urban spaces. By fostering informal conversations, social events can reveal hidden dynamics and local knowledge that might otherwise be overlooked. This broader, more holistic understanding can then inform the design phase, helping to create solutions that are aligned with the lived realities of the community.

When planning social events within collaborative design processes, it is essential to consider their timing, format and intended purpose. Events should occur at stages where the participants feel comfortable sharing their insights and when the information gathered can still influence design decisions. For example, holding social events early in the process can help set the tone for collaboration, and follow-up gatherings can be used to reflect on progress, gather feedback and adjust strategies as needed. The format of these events

should also be carefully curated to encourage active participation. Using creative methods such as workshops, storytelling sessions or even community festivals can make these events more engaging and accessible. This approach aligns with (Miraftab 2004) emphasis on insurgent planning practices that challenge conventional methods and create space for marginalised voices to be heard.

Social events can be seen as potential outcomes, not just as part of the design process. Key aspects of collaborative design include its flexibility and openness to diverse outcomes, depending on the needs and goals of the participants. The collaborative design of a community event – such as a workshop, exhibition or public gathering – can be just as powerful and transformative as a physical object. In this case, the event is the outcome where connections are fostered, knowledge is exchanged and participants are enabled to explore ideas collectively. An event can create a space for dialogue, challenge existing norms or spark new collaborations and ideas, thus achieving its intended purpose of transformation, learning and engagement without ever taking a physical form. These types of outcomes can have a lasting impact on the community, even if they are not tangible in the traditional sense.

Social events in collaborative planning are ultimately not only about gathering data but also about cultivating a sense of community and shared purpose. They provide the space to build relationships, reflect on shared experiences and co-create visions for the future. By integrating social events thoughtfully into collaborative design processes, planners can tap into the rich, diverse knowledge that communities hold, leading to more resilient and inclusive urban spaces. Embracing informal and socially oriented methods can significantly enhance the participatory design process, ensuring that it remains flexible, adaptive and genuinely inclusive.

Figure 19: Winter School Building Resilient Cities, Cairo, 2024. Source: Juliana Canedo



Collaborative design tools

City and building design have traditionally been regarded as the exclusive domain of architects and urban planners. These professionals are seen as experts who hold the knowledge and authority to design spaces that shape people's daily lives. However, in practice, many spaces are created without the direct involvement of these so-called experts. Communities often engage in self-built, informal construction, shaping their own environments based on immediate needs, resources and cultural contexts. This reality challenges the conventional view of design as something that can only be dictated by trained professionals and highlights the importance of recognising the expertise and agency of local communities in the design process. Architects and urbanists must acknowledge the legitimacy of self-built spaces and their potential to inform professional practices.

To understand our role as co-producers of spaces, it is essential not only to recognise the value of self-built environments but also to reconsider the tools and methods we use in design. Traditional design tools have often been top-down, hierarchical and disconnected from the realities of the people who live and work in these spaces. Moving away from this model requires rethinking the very nature of design. Instead of viewing design as a product or a prescriptive vision of the future, we must shift our perspective and see it as a tool for dialogue. Design should not merely anticipate what a space will look like but rather serve as a platform for collaborative exchange where multiple voices, ideas and experiences are woven together. This requires a more inclusive approach in which residents and users are empowered to shape their own environments.

This section focuses on presenting tools that enable a horizontal and collective approach to the design process. These tools aim to facilitate the democratic exchange of ideas, allowing participants to co-create a vision for their spaces. Beyond simply understanding the demands and needs of the residents,

the dynamic tools presented here seek to foster a shared imagination of the space – one that emerges through collaborative engagement rather than expert-driven prescriptions. These tools, such as the utopian map, design from elements, urban games and collaborative 3D models, encourage participants to actively contribute to the creation of their environment. Each tool facilitates a different aspect of the collaborative process, encouraging users to map their aspirations, experiment with materials and forms or engage in playful design exercises.

The dynamic tools presented in this section are not only about creating physical spaces but also about shifting the mindsets of both designers and residents. The collaborative process encourages active participation, where everyone's input is valued and contributes to a collective vision. By using these tools, participants can break away from traditional expert-driven design models and move towards a more inclusive, open-ended process that embraces the creativity and agency of all stakeholders. This approach aligns with the idea of designing spaces as a shared experience, where the lines between 'designer' and 'user' are blurred and everyone involved plays an equal role in co-producing the built environment. Ultimately, these methods encourage a new form of design practice where the power of collaboration is recognised – the dialogue in creating more inclusive, sustainable and meaningful urban spaces is particularly important.

Utopian map

As a tool to foster the community's imagining of ideal spaces, the utopian map corresponds to a collective projection of what the community considers important, necessary and desired in a given space. The utopian map aims to go beyond the materiality and physical dimension of the discussed area by incorporating additional aspects that might not be solved by the design but can contribute to the organisation of the community towards a common good. These outcomes can help to form an agenda of community demands that can be used by citizens or organised through social movements.

The main goal of the utopian map is to generate a discussion about what should be done to improve living conditions in the neighbourhood and to propose built solutions. The map also aims to encourage different experiments exploring possible implementations of urban projects and promote discussion about the results of the different spatial arrangements and elements. Follow-

ing these discussions, it will be possible to choose a spatial model that should be developed.

This method is a second step after the current situation of the area is collaboratively mapped through one of the previously described activities or other activities not mentioned in this book. Following the results of those previous activities, the idea is to formulate reflections on what should be done and improved in the neighbourhood in question. If the previous activities involve the production of a map or a model, these can be used in this dynamic tool. If no models or maps are available, a street map of the area can serve as the basis for spatial discussions of the utopian map.

In addressing the key issues that emerged from the earlier mapping activities, the participants were asked to imagine and simulate solutions to these problems. It is important that the proposals be spatialised properly. The facilitator can incorporate various questions (Burguière et al. 2016): What should be on the streets? Where should the school be located? What should the houses look like? What actions are necessary to achieve these utopian ideals?

In 2014, we used this tool during our work with a favela threatened with eviction, developing a utopian master plan based on the residents' wishes and the students' technical suggestions¹. Instead of just aiming to be built as planned, this tool not only supported the favela in the legal process of resisting eviction (see Canedo 2017) but also created an environment of mutual and collective imagination for the potential developments for the area. It became clear from this experience that the favela residents had concrete and creative ideas for improving and further developing their neighbourhoods.

The utopian map activity usually starts with a large blank piece of paper, with which participants are invited to represent the meeting place located in the area where they would like to develop their ideas, such as a space well known by all participants, a school, the residents' association, a church or the main square. From this starting point, using our knowledge of the earlier activities to generate a collaborative understanding of the space, we invite participants to imagine and draw their ideal spaces for the area or interventions to improve existing spaces. We encourage the participants to represent elements beyond material objects, such as feelings, stories or actions.

The concept of the utopian map is designed to free the residents' imagination from preconceived structures and constraints. Therefore, using tradi-

1 In the context of the course *Transformação do espaço construído* (Juliana Canedo, Maria Paula Albernaz, Abriçó), UFRJ 2014.

tional maps or worrying about scale and accuracy should not be part of this activity. The goal is to create a shared, collaborative view of the future of the area; however, this does not mean that consensus is an aim. Conflicting ideals should be embraced, discussed and represented. The utopian map can be an initial method for brainstorming ideas that could lead to more concrete, tangible and viable solutions.

Dream journey

In contrast to the utopian map, which is essentially a collective action, the use of imaginative interviews or dialogues can be a powerful tool in contexts in which the community may be dispersed and has not previously been organised. This was the case with a group of students who were attempting to collaborate with a group of women living in refugee accommodations in Marzahn, Berlin. After several attempts to organise a meeting with them, the students realised that the women didn't feel comfortable in the proposed collective set-ups. Instead, they began exploring one-to-one interactive methods. From these attempts, they developed a method they called the 'dream journey':

To gather more in-depth information, we introduced the 'dream journey' method to envision their wishes and demands in a more utopian spatial context. Conducting this journey with one woman revealed that general questions could elicit deeply personal and emotional responses, often linked to past experiences and shaping their vision for ideal future spaces.²

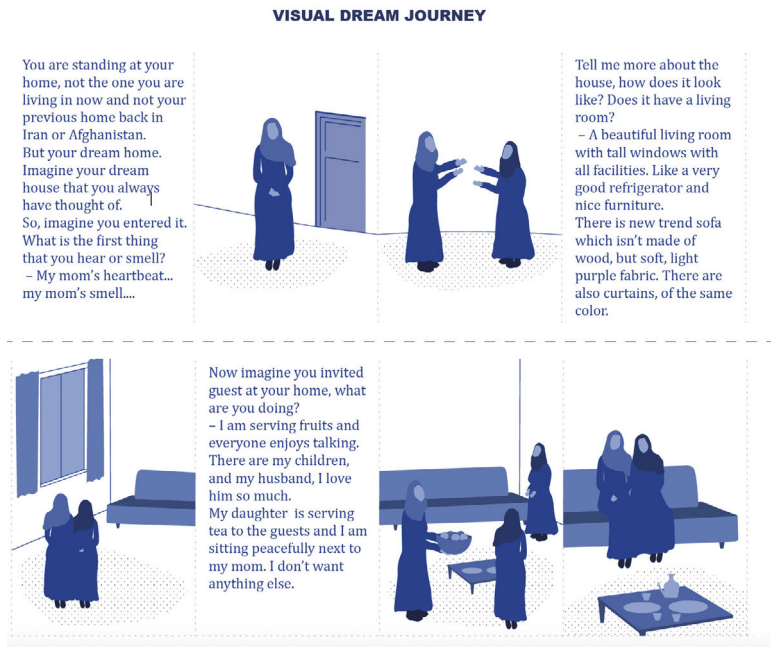
The dream journey method began with asking each woman to close her eyes; the interviewer would then ask questions, such as how do you imagine your ideal private and communal spaces? The idea was to encourage each woman to focus on her vision of a utopian communal space through a guided dream journey that could help them visualise their wishes:

2 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Elena Spatz, Pietro Mellano, Eloise Luzieux, Jun Yamawaki, Maryam Mousavi Charavi.

Close your eyes and try to imagine what I will tell you: You are standing at the door of your house, not your current one, not one from the past, but the one you would like, the one you dream of. Enter. Who is inside? Who lives with you? The first thing you feel is the smell. what does it smell like? Does it have a space to receive guests? What does it look like? Who would you like to host and what would you like to do?

Through these dream journeys, many emotional and symbolic aspects of the women's lives appeared. When some women talked about their utopian imaginary places, they used references to their past lives and shared memories of people, places and objects.

Figure 20: Studio Insurgent Design, Berlin, 2024. Source: Elena Spatz, Pietro Mellano, Eloise Luzieux, Jun Yamawaki, Maryam Mousavi Gharavi



Using the women's spatial descriptions, the students produced illustrated scenarios intended to represent the symbolic and extrasensory aspects of the women's journeys. The students described the results of one woman's dream journey as capturing 'the complexity and poetry of her testimony, reflecting the depth and nuance of her shared experiences'.

These in-depth conversations produced information that could be translated into guidelines and design solutions. The challenging aspect of developing such activities lies in extracting information from individual perceptions and experiences that can be transformed into proposals that could benefit the group and not just address individuals' specific ideas and demands. It is important to understand this dynamic tool as providing a starting point for further discussion with the wider community. In the case of the students' work, the illustrated scenarios aimed to bring these conversations from individuals' visualised imaginations to the wider community.

Co-design

Co-design refers to the joint development of concrete spatial solutions by architects and planners and with relevant communities, among other local actors. The scale of co-design can vary, from projects as small as the interior layout of a house to those as large as the planning of a neighbourhood or city. Of course, the complexity and choice of tools should vary according to the scale of the project.

On one hand, this dynamic tool aims to understand residents' daily habits and customs and how they can be accommodated within the built environment. By engaging in dialogue with the community, we gain insight into their needs and aspirations. On the other, this activity allows the residents to visualise key spatial implications of the proposed development, such as its density, vertical growth, open areas and communal spaces, fostering a collaborative approach to planning and design.

Moreover, in urban co-design processes, participants should feel comfortable expressing their points of view and being flexible to change their minds (Gaete Cruz et al., 2021). In collective decision-making settings, participants should be available to deliberate or negotiate when necessary (Castro, 2021). This may not be the case when actors come from diverse sectors and backgrounds or are unacquainted with design practice (Enserink et al., 2003). But

when some forms of collaboration are achieved in urban design processes, outcomes are more likely to be more appropriate and locally suitable (Ersoy & Yeoman, 2020; Smaniotto Costa et al., 2020 (Gaete Cruz et al. 2022: 2)

In one experience developed by students for a refugee shelter in Berlin, where they engaged with a group of women during their mapping activities, it was highlighted that one of the women's interests was to operate a collective bazaar in the neighbourhood. The students then decided to co-design and plan the bazaar as a tool for neighbourhood networking.

Their first co-design activity, which the students named Ideation, was aimed at brainstorming about the potential activities of and products to be sold at the bazaar. The refugee women divided themselves into smaller groups based on their different nationalities and discussed what they could offer in the bazaar and what activities they would like to hold during the bazaar.

In the second activity, which the students entitled Spatial Imagination, they used pictures of objects, markets and bazaars from different cultures as well as figures representing people and activities to conceptualise the future market. The women could recognise common aspects of the street markets from their home countries in the pictures, even when they came from very different places around the world. This was a particularly important trust-building activity in which the students helped create a shared vision of what a bazaar could look like for this group of refugee women.

After this activity, the group planned a final workshop in which they brought different elements to build 3D models of the bazaar and experimented with different spatial organisations and additional elements that could be incorporated to create spaces shaded from the sun and privacy, among others. The students and refugee women created what they called a neighbourhood pavilion during this workshop:

From the workshops emerged the idea of a simple, physical structure as a tool for future neighborhood market events that could be used and adapted without the need for any curator. ... Prefabricated simple modules in various shapes were used, along with basic modelling tools. The women showed great interest in detailing stalls, abstract examples encouraged them to design beyond referencing traditional structures. Summing up the workshop outcomes and the women's ideas of individually detailed stalls, we propose a

modular, flexible furniture-like structure as a base for further development, individual design and multi-use.³

Figure 21: Studio Insurgent Design, Berlin, 2024. Source: Nadine Abdelghani, Daria Kurbatova, Emilia Lienhard, Alina Molavi, Anushka Anand



As shown in this example, using multiple co-design approaches, materials and scales can lead to diverse outcomes. Using concrete elements to discuss spatial arrangements, uses and shapes can be a powerful tool to incorporate

3 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Nadine Abdelghani, Daria Kurbatova, Emilia Lienhard, Alina Molavi, Anushka Anand.

different formats of spatial use and appropriation, which can be especially relevant when working with silenced and marginalised communities, such as in the presented case of the refugee women, in addition to many other contexts.

Urban games

Games that have been used to mirror society and experiment with different ways of behaving and relating can be traced back to ancient times. For example, in war games, battles and military exercises were tested to predict potential strategies and solutions. By exploring the development of strategies through role-playing, games can be a powerful tool to establish debate, share ideas and visualise them (Tewdwr-Jones and Wilson 2022).

In the field of urban planning and design, urban games have emerged as an innovative strategy to enhance community engagement and foster participation through creative and interactive formats. These games leverage playful approaches to break down barriers between planners, designers and residents, making the planning process more accessible and inclusive (Gugerell and Zuidema 2017). By translating complex planning concepts into engaging activities, urban games encourage the participants to explore, discuss and reimagine their environments in ways that traditional planning meetings often fail to achieve (Brandt et al. 2008; Muehlhaus et al. 2023; Reinart and Poplin 2014; Poplin 2012).

Urban games not only stimulate interest but also serve as tools for gathering valuable input from diverse stakeholders, including those who might otherwise be excluded from conventional planning processes. For instance, games such as *Participatory City* and *Block by Block* use collaborative play to enable citizens to express their needs, priorities and aspirations for their neighbourhoods. This interactive format helps to democratise the design process, giving voice to community members who are often under-represented in the design process, such as youth, older residents or non-native speakers (Gordon and Schirra 2011). Through playful experimentation, the participants can visualise different futures, test out potential solutions and collectively develop a shared vision for their community.

The potential of urban games extends beyond mere engagement, as they can also reveal new insights into the social dynamics and spatial challenges of a given area. By simulating real-life urban scenarios, these games allow participants to identify issues and opportunities that might not be immediately

visible through traditional surveys or workshops. As noted by Salen and Zimmerman (2004), games have the capacity to generate a safe space for experimentation where participants can take risks, think creatively and collaboratively solve problems without the constraints of real-world consequences. This environment fosters a deep level of engagement and encourages participants to freely share their ideas, leading to innovative and context-sensitive design solutions.

The integration of urban games into planning and design processes can ultimately transform how cities are shaped by promoting resilient, inclusive and community-driven urban spaces. By bridging the gap between formal planning processes and the lived experiences of residents, urban games contribute to the co-creation of cities that better reflect the diverse needs of their inhabitants. As the challenges of urbanisation and climate change intensify, these playful methodologies offer a powerful means of involving communities in the co-design of their futures, thus fostering greater ownership, collaboration and long-term sustainability in urban development.

In Part 1, we explored the use of games to engage with children and map socio-spatial practices and perspectives. Here, we would like to explore different uses of urban games to develop ideas, imaginations and visualisations of urban spaces.

I present two experiences that exemplify this process. The first involved a game that was developed by the initiative Platz für Wien⁴ and tested during the 2021 Urbanize! conference. I experienced this game as a participant and not as one of the developers; thus, my report is from the perspective of a user, not a designer. This game was part of the political action '[Ein]Mischen', which was conducted in a public space in a peripheral area of Vienna, close to where the conference would take place. The chosen space was usually car dominated, and the aim of the game was to role-play discussions that critically reflect on mobility, green spaces, social activities, and other concerns.

This particular urban game comprised a field made with a plastic mat using chequered markings like those of a chessboard, which aimed to represent a city or neighbourhood. The game also included several items that represented different spaces and elements in the urban setting. Vases of plants represented

4 Platz für Wien: Die Initiative für eine klimagerechte, verkehrssichere Stadt mit hoher Lebensqualität [Space for Vienna: The initiative for a climate-friendly, traffic-safe city with a high quality of life]. <https://platzfuer.wien/>

parks or green spaces, shoes represented pedestrian lanes, traffic cones represented bicycle lanes and construction helmets represented housing or other private developments.

Each person received different cards with goals to achieve in the game, such as 'build a new bicycle lane from the south to north end of the game field' (5 points) or 'fight for a section of the street' (2 points). The players could also adopt distinct roles, such as being in favour of real estate market developers or being connected to a green party. When each person played their round, they could place one of the available objects on an empty square or decide to fight for a square that already had an object. For example, to build a north–south bicycle lane, a player may have to argue with another about a housing project interrupting their path. When these situations arise, the two players argue why their claim to the land is more relevant to and better for the city, and a third player assumes the role of mediator. Following these debates, the mediator decides who had the better argument, and the winning object is placed on the square. The debates and conversations of the game were interesting because they pushed people to develop strategies and discuss conflicting interests in the urban sphere. The fact that the game involved an environment where people needed to move on the game field also created a sense of reality for the game.

When talking to the game developers, I discovered that the game concept was derived from their experiences in urban political activism. This game was their attempt to approach the topic of spatial planning through a fun activity that doesn't require much technical knowledge.

The second example is the use of online digital games, specifically Minecraft, a video game also known as 'digital LEGO', where the players can build different scenarios and recreate real-life experiences. Minecraft is mostly aimed at young people. However, several projects around the world have made use of such video games because they are effective tools for visualising and intervening in urban spaces. One such project is Block by Block, which was developed by the Block by Block Foundation and applied by UN-Habitat as a strategy to increase vulnerable groups' participation in urban planning processes (United Nations Human Settlements Programme UN-Habitat 2021). In this methodology, community members can participate in workshops where they will plan and model a site using Minecraft and later design, develop, operate and monitor their own neighbourhoods.

In 2021, we attempted to recreate this activity in a refugee shelter in Berlin with a master's student who was developing his thesis on this topic. We in-

vited the children living in the shelter to represent their ideal spaces using Minecraft.

The activity lasted only a couple of hours and was part of a bigger workshop that we planned in parallel; independently, it was not a very successful activity. One reason for this lack of success was that there were no prepared elements in the game that the children could use as references to produce their designs. It was too abstract for them to start planning their neighbourhood from scratch or to explore what they would like to have in their Minecraft build. In a later reflection, we considered that it could be useful to plan some elements beforehand so that participants could interact with them and even change them as desired.

Another concern was the children's great interest in playing the game versus the lack of available equipment (e.g. computers, tablets). As this created frustration, the children eventually lost interest. Therefore, when setting up this activity, it is crucial to plan how, where and when the appropriate groups will use these tools.

We also considered how to better engage the children in planning their own spaces. In our experience, many children didn't understand the task very well and were more interested in just playing the game than in designing their own spaces.

Despite these challenges, the potential of using these gaming tools to develop creative ways of participation and collaboration is enormous. In both cases of on-site and real-life exchanges, such as the game in Vienna and the use of Minecraft, thinking about urban planning, design, policies, strategies and negotiations can become a fun pedagogical method for engaging different communities in decision-making processes.

Build and design

Ferro (1982) argues that dynamic tools, especially drawing, may act as instruments of alienation by those who actually build the cities due to the artificial separation between those who think about and design spaces and those who build them. In this section, the concept of reapproximating design and construction is intended to illustrate how hierarchies can be challenged and how other forms of dialogue can emerge when designers and builders work together.

This section will explore the potential for experimentation and innovation when hands-on work and design are combined. One of the main tools that will be presented is the dual design strategy, which we have been experimenting with in different contexts since 2018. The dual design strategy is based on a combination of a small-scale intervention – that aims to provide concrete outcomes for the community and build an environment of trust and mutual learning – and the development of future scenarios. In addition, we will explore other tools, such as experimental construction sites and technical guides.

Dual design strategy

The dual design strategy is based on a methodology I developed in collaboration with a group of researchers and professors during the annual COLLOC Workshop Series¹, which has been held since 2018 in a self-organized occupation in Rio de Janeiro, Brazil. The COLLOC Workshop Series is a Deutscher akademischer Austauschdienst (DAAD)-funded workshop coordinated by Kathrin Wieck. I am part of the project team, which also includes Natacha Quintero, Toni Karge, Fernanda Petrus, Manuel Meyer, Ana Slade, Jorge Fleury,

1 <https://collocworkshop.com>

Luciana Andrade, Ana Lucia Britto and Luciana Lago. From 2018 to 2024, we have experimented with and developed a dual design strategy based on the simultaneous development of small-scale interventions and systemic scenarios oriented towards localised problem-solutions and reflections on their implications

The systemic scenarios and embedded interventions focus on issues that are decided collectively and that can change according to the needs of the community. ... The small-scale interventions play the role of catalysts, they are test balloons, and they link short-term solutions with long-term perspectives. They manifest and anchor transformational knowledge in space, meaning that knowledge becomes visible, tangible, and accessible for all. They also create the possibility for reflection on that practice, what practice means for research, and how it can be transferred. (Wieck et al. 2023: 129)

These solutions arise from close interaction with the local community and other relevant actors from the beginning to collectively develop the problem(s) to be addressed and to further develop joint findings for the potential solutions at different scales.

In this context, the small-scale intervention must be relevant to the collaborating community, and the systemic scenario approach works to bridge the dialogue among scholars, citizens and other actors. Therefore, the developed interventions prioritise the inhabitants' urgent needs. The systemic scenarios connect these local and urgent needs to broader contexts and issues in terms of their spatio-temporal scales:

... these aspects interlink and complement each other – together they do not only alter the physical features of the settlement and its vision of the future, but they impact the system that holds it all together, the urban metabolism so to say, linking different spatial and temporal scales (Wieck et al. 2023: 129).

An example of a systemic scenario is a collective kitchen and community garden operated by a self-organised occupation in Rio de Janeiro, Brazil. These two areas are central to the community; they are the places where most collective actions take place and how potential income is generated through the production and sale of food (Petrus 2021). In recent years, the COLLOC interventions in this community space included restructuring cooking workflows, installing new lighting systems, creating multifunctional furniture

pieces, building stronger connections between the kitchen and garden and connecting them to ecological sanitation infrastructure.

In another experience I coordinated using the dual design strategy in 2022 at a DAAD funded summer school in Berlin entitled Collaborative Design Methods: transforming communities through spatial intervention, we built a small playground inside a community garden, mostly using existing materials from the site. The systemic scenario connected to this construction involved thinking about green spaces in the neighbourhood and exploring the potential of the community garden as a central place for connecting diverse inhabitants. In particular, we considered collective food production in the neighbourhood as a counter-hegemonic practice towards a sustainable and healthy future.

The goal of the dual design strategy is to promote environments of knowledge exchange where individuals can bring their own expertise, relevant issues are addressed and concrete outcomes are produced.

[The dual design strategy] goes beyond singular participatory processes. Instead, it fosters mutual learning through continuous collaborations between academic and non-academic actors. We all become 'co-researchers' and we develop what we call 'common ground' knowledge, knowledge as a commons, which emerges from experiencing, negotiating, and experimenting together. Learning, planning, and acting together can lead to more socially and spatially just transformation (Wieck et al. 2023: 129).

Figure 22a: COLLOC workshop, Rio de Janeiro, 2022. Source: colloc archive



Figure 22b: COLLOC workshop, Rio de Janeiro, 2022. Source: colloc archive



Figure 23: Winter School Building Resilient Cities, Cairo, 2024. Source: Juliana Canedo



Figure 24: COLLOC Workshop, Rio de Janeiro, 2022. Source: Group open spaces

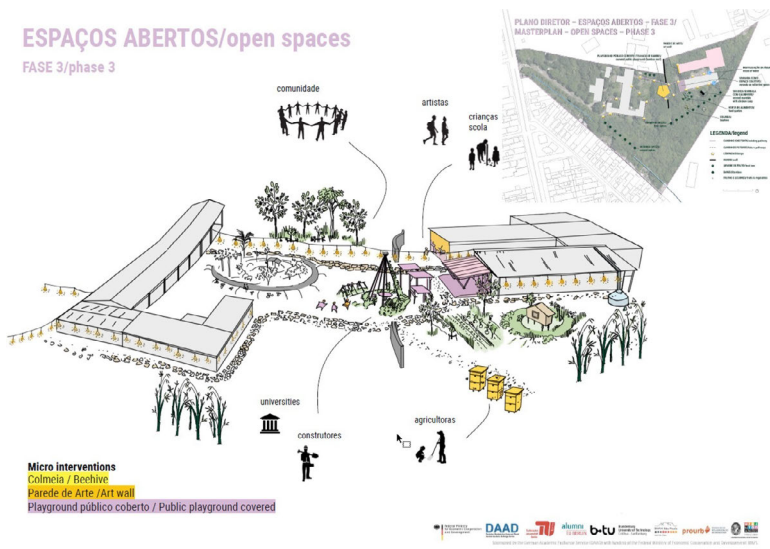


Figure 25: COLLOC Workshop, Rio de Janeiro, 2023. Source: Juliana Canedo



Experimental construction site

The concept of an experimental construction site can be used in diverse ways that are not necessarily connected to collaborative processes that approximate designing and building sites. In Brazil, for example, experimental construction sites are part of architects' and urbanists' regular training. This activity aims to offer tools for students to experiment with and develop innovative construction techniques or materials.

The experimental construction site is an innovative part of training in architecture education, which qualifies learning and provides integration of disciplines through the design and construction of models and prototypes. In addition, it enables a systemic approach based on the student's experience and interaction with the diverse events of a construction site environment. Above all, it is a space for students to experience their transformative potential in the act of designing and building (Gonçalves and Martinez 2021: 1312)².

Despite the value of these activities, in this book, I aim to focus on the idea of using experimental construction sites as a dynamic tool for local communities to exchange building methods based on technical, popular and empirical knowledge that expand upon traditional building methods. In this way, the experimental construction site can serve as a pedagogical tool for students, researchers and local communities.

I present two examples to better illustrate this concept, which are both connected to a self-organised occupation in Brazil called Solano Trindade, where my colleagues and I have been developing the COLLOC Workshop Series since 2018.

The first example is not connected to the COLLOC Workshop Series but was developed through the cooperation between the Federal University of Rio de Janeiro, Brazil, and Solano Trindade. It also involved various actors, such as Catálise, an architects' collective. In 2018, a series of practical workshops were held at the Solano Trindade occupation with the aim of introducing alternative construction technologies, such as 'rammed earth', 'reinforced masonry' and 'reinforced mortar'. These techniques have opened up a myriad of possibilities for the local production of building elements, which could be used in

2 Free translation from the author from Portuguese to English.

the construction of new homes, help reduce costs for families and improve the quality of the built environment. Despite the initial resistance by the Solano Trindade inhabitants to experiment with these alternative building materials and techniques, after completing the workshops, the participants became excited by the potential of these techniques in building houses in cost-effective and ecologically responsible ways (Petrus 2021).

One outcome of this experience was the development of compressed earth blocks to construct the internal walls of new-build houses in the occupation. The idea of using this material was in connection with the ecological sanitation system that was being implemented in the occupation, which involved the extraction of a large amount of soil from the site. The decision was to use the removed soil to produce bricks for the new houses. With the supervision of technical advisers, several lab tests and training workshops were conducted until they identified the exact ratio of local soil and cement for the compressed earth blocks as well as the appropriate process for preparing and drying them. A manual press was purchased, and the production of the ecological bricks was led by residents who produced 400 bricks per day. (Petrus et al. 2022)

Although the development and production of these construction materials were not part of the COLLOC projects, the production and use of the ecological bricks became a central part of the community. The production of these materials was included in all of our subsequent workshops in diverse ways. For example, a group of participants in one of our workshop events organised a brick production site, which incorporated the names the women from the community gave to each step of the process, namely the maternity, nursery and kindergarten.

This involvement of women from the community in the production of the compressed earth blocks was key to understanding the potential of the experimental construction site for the awareness and politicisation of the community. Initially, the production of compressed earth blocks was dominated by men from the community as a clear reflection of the patriarchal structures that are hegemonically and globally present. In the occupation, women were responsible for running the collective kitchen and men were usually in charge of the construction site.

Women from the community became the experts and main actors in this field over time. The women developed their expertise as a result of the care and attention needed for drying the compressed earth blocks, which required specific amounts of water poured over them at regular hourly intervals throughout the production process. We observed that this dynamic challenged the sex-

ist structures of Brazilian society and placed the women in different positions and roles in the community.

Another interesting outcome of this experience was that when the idea of using alternative construction materials was presented to the residents, they were initially very resistant. This resistance is related to the ideals of hegemonic construction techniques and materials that even influence self-built areas, even when residents cannot afford them. The concept of status in construction and architecture was also engrained in these contexts; therefore, proposing techniques that are more closely associated with traditional architecture can be perceived as efforts to reinforce the aesthetics of poor communities. The potential for developing innovative techniques through using local and popular knowledge became clear to the technical and academic experts following their experience of collective testing, exploration of different materials and discussion about the benefits and potential outcomes for the community. This occurred after the community members learned to produce the compressed earth blocks and became fully in charge – and the real experts – of their implementation.

After the first houses built with the compressed earth blocks were ready, the residents were extremely proud of how beautiful their earth walls looked. They realised how the bricks could be used to differentiate their buildings from others.

The second example involved the use of bamboo as a construction material and was developed in one of the COLLOC Workshop Series. The desire to learn how to use bamboo as a construction material first came from the Solano Trindade residents. The Solano Trindade occupation is located in a 50,000 square metre area, with a forest comprising a large portion of this land. The residents saw the potential for planting bamboo on this land to have access to cheap – or free – construction materials.

Figure 26: Production of BTC in Solano Trindade, Rio de Janeiro, 2022. Source: colloc archive



Following this initial concept and a discussion with the Solano Trindade residents, we decided to organise a workshop where our students and the residents would learn different ways of using bamboo as construction material. The students developed different design proposals using bamboo as a structural element. For example, it could be used to build space dividers or as the main material for a roof for a building in the community. At the end of this COLLOC Workshop Series, we organised the Solano Trindade children to plant bamboo seeds.

Both of these experiences show the potential of developing alternative solutions that emerge from local and technical knowledge on site. In vulnerable contexts, such as favelas or other forms of self-built spaces, these experimental construction sites also have the potential to inspire others and influence other building environments.

Figure 27: COLLOC Bamboo Workshop, Rio de Janeiro, 2021. Source: colloc archive



Figure 28: COLLOC Bamboo planting, Rio de Janeiro, 2021. Source: colloc archive



Technical guides

Manuals or technical guides can be used as tools for documenting and enabling the expansion of solutions that have been developed on-site through hands-on work. Here, the idea is to use the visualisation and systematisation skills from our training to create documents that can continue to be used by the community after our departure.

I describe the development of two manuals in the COLLOC Workshop Series in Rio de Janeiro, Brazil. The first manual details the production of a trampoline using tyres, which was initially suggested during a workshop I attended in Jordan organised by my colleague Hassan Elmouelhi. There were a large number of tyres in the area, which we decided to use to build play structures for a public playground. For example, a tyre trampoline made with colourful ropes was a huge success among the local children. After this experience, I presented this idea to students during the 2022 COLLOC Workshop Series, and we built tyre trampolines for a playground for refugees in Berlin. One of the students was highly skilled in handcraft, and she developed a technique for braiding ropes to make the trampolines sturdy and aesthetically pleasing.

Figure 29: COLLOC Workshop, Rio de Janeiro, 2022. Source: Group collective spaces

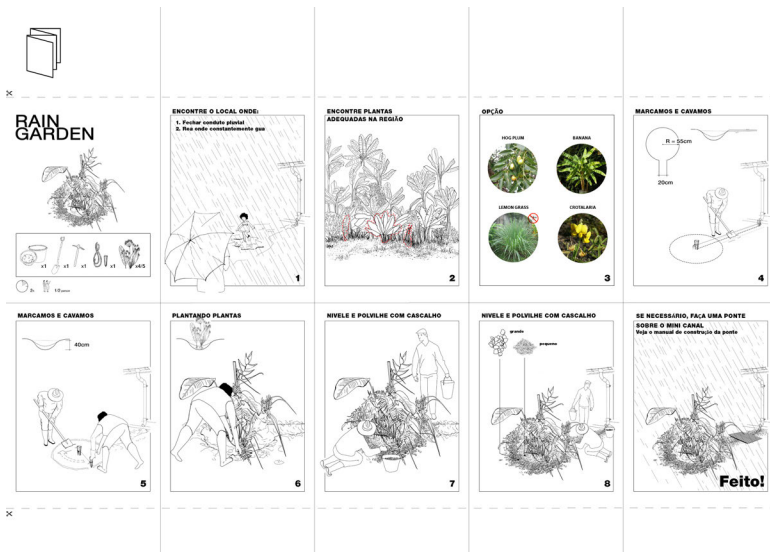


The local children loved the tyre trampoline, and the students involved in the project decided to develop a manual to document the construction process and to enable the residents to build more trampolines. The manual was an interesting method for recording empirically produced knowledge and served as a basis for further development.

Another example of manual development and use came from the same COLLOC Workshop Series. For this scenario, participants were focused on water, which was a great challenge in this context due to the heavy rains that caused flooding and leakage problems in the area. In addition, the public water supply system was precarious and often left the area without potable water. Due to these issues, the student group developed the concept for collecting roof water, employing a filtering system for water reuse and directing excess water to a rainwater garden. This idea combined the inhabitants' local knowledge, as they already understood how to channel rainwater from their roofs through a gutter system, with the technical knowledge of water experts who had previous experience in constructing rainwater gardens. In addition, one participant's knowledge of specific local plants with insect-repellent properties was used for the rainwater garden, resulting in a systemic solution that encompassed several community issues.

The group built a prototype of the rainwater garden and produced a technical guide to document the process and enable the community to develop it further. This guide included various details, such as how to build the rainwater garden and the specific uses of various recommended plants.

Figure 30: COLLOC Workshop, Rio de Janeiro, 2022. Source: Group open spaces



Artefacts

An approach gaining traction within education, business, and government is the use of tangible objects as a tool for structuring, sustaining, and evidencing collaborative events. The qualities of tangible objects lend themselves to becoming items of discussion and critique that can address some of the difficulties of traditional approaches to facilitated discussions and events. The tangible object physically embodies and represents a shared understanding and vision. Objects are better the more abstract they are, otherwise, there is a tendency for people to think about the details, rather than the overall picture (Buur & Mitchell, 2011). (Tewdwr-Jones and Wilson 2022: 230)

Transformative artefacts can be a powerful tool to engage a community to focus on one specific topic; they serve as physical representations of ideas that enable the participants to actively engage in the design process. These objects function as conversation starters, making abstract concepts more accessible and allowing for more inclusive discussions. When community members interact with artefacts, they are invited to co-create, question and refine their ideas, ensuring that diverse perspectives are integrated into final outcomes. This hands-

on approach not only breaks down communication barriers but also empowers participants; their contributions can be made visible, which can be especially valuable in communities where marginalised voices often go unheard.

Moreover, the transformative potential of artefacts lies in their ability to shift focus from traditional, often hierarchical, planning modes to more democratic and collaborative processes. By using abstract, flexible objects that encourage imaginative thinking, communities can move beyond preconceived notions and rigid structures. This allows participants to explore possibilities for density, communal spaces and urban configurations without becoming entangled in specific details. The open-ended nature of these artefacts fosters creativity by enabling participants to envision new forms of urban living aligned with their own needs and aspirations. Thus, artefacts not only facilitate dialogue but also become catalysts for innovative, sustainable and inclusive urban design solutions.

In the experience of a group of students working with refugee children living in Berlin, a *Bollerwagen* (i.e. handcart) was chosen as an artefact was to be transformed by the children to embody their wishes, favourite actions and places and what they missed from their home countries. The idea emerged during the first interaction, when the students learned that the children could not invite their friends over due to the rules of their refugee shelter. The students then proposed that the children could bring their playground to their friends instead of inviting them to visit. This artefact, which the children could manage, was designed to explore the materiality of the object, incorporate their dreams and desires and allow them to explore their neighbourhood.

This workshop comprised three interactive moments that happened on different days, mostly among the same group of refugee children. The students described the different workshop activities as follows:

Workshop 1: Collaging

The objective was to further understand the children's preferences and introduce the *Bollerwagen* (a handcart) as a tool for creative expression. Activities included creative collaging to identify favorite activities. Outdoor experimentation with the *Bollerwagen* to see how children interacted with it in a more dynamic setting. Findings were clearer: Picnics, BBQs, and sports were popular activities. The *Bollerwagen* served as a catalyst for outdoor play and creative expression, despite initial difficulties in maintaining focus indoors.

Workshop 2: Mapping

The objective was to explore how children perceive and interact with their neighborhood using the *Bollerwagen*. Activities were walking tours with children to map their favorite spots in the neighborhood and a series of interactive games involving dice and question cards to guide the children in discovering and documenting their environment. Findings: Children enjoyed nature and wanted to use the *Bollerwagen* for picnics. The *Bollerwagen* became a tool for spatial appropriation, allowing children to claim and personalize their surroundings. Mapping activities revealed insights into the children's views and their attachment to various neighborhood spots.

Workshop 3: Picnic

The objective was mainly to involve parents in the project and establish a sense of ownership and connection with the *Bollerwagen*. Activities included organizing a family picnic to introduce the *Bollerwagen* to parents and children. Facilitating model-building activities where children could directly implement their ideas on the wagon. Collecting materials for creative projects, such as sewing sandbags for games. Findings: the picnic fostered a communal atmosphere and encouraged families to connect with the project. Children expressed interest in various creative pursuits, such as fashion design. The *Bollerwagen* was successfully integrated into the children's activities, reinforcing the concepts of ownership and creative expression.³

During these three workshop activities, the students tested different interventions using the artefact, such as painting it, dismantling it, adding new elements to it and filling it with toys or food for the picnic. All these activities were conducted with the refugee children as a way of building their sense of appropriation of the *Bollerwagen* while discussing the children's spatial perceptions, assumptions, practices and desires.

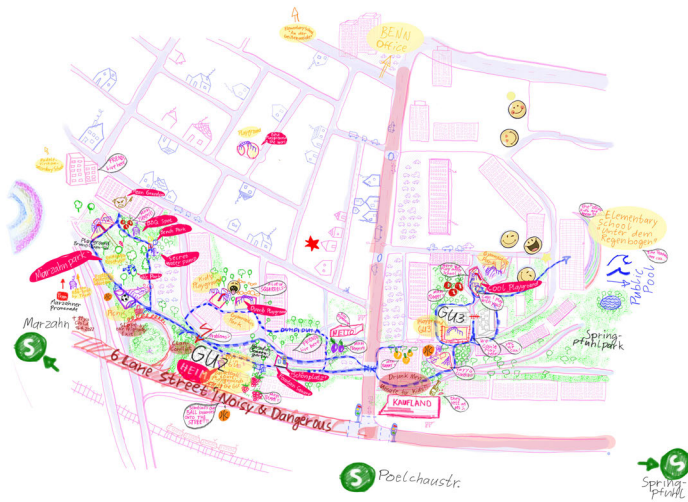
Following their walks in the neighbourhood and the children's drawings and disclosed information, the students created a child-friendly map of the area surrounding the refugee shelter.

3 Extract from the Ebook of the Studio Insurgent Design: unlearning practices through marginalized spaces (Juliana Canedo, Tuanne Monteiro, Qusay Amer, Maureen Abi-Ghanem and Francesca Ceola), TU Berlin 2024. Students: Annika Hopster, Sari Hallak, Valentin Keller, Milon Thomsen, Ida Duge.

Figure 31: Studio Insurgent Design, Berlin, 2024. Source: Annika Hopster, Sari Hallak, Valentin Keller, Milon Thomsen, Ida Duge



Figure 32: Studio Insurgent Design, Berlin, 2024. Source: Annika Hopster, Sari Hallak, Valentin Keller, Milon Thomsen, Ida Duge



All these produced materials and the artefact were then given to the children with the mediation of the social worker responsible for all voluntary activities in the refugee shelter. The students described this process as follows:

At the end of the process and all the workshops, the neighbourhood map and the *Bollerwagen* are available as a product for the children. They identify with the object and recognize ownership, they proudly call the *Bollerwagen* their own. They can now use it to explore the neighbourhood and use it with their friends outside the GU⁴. The families can also borrow it to go on a picnic, for example, or the social worker can use it during her activities with the children. It's also great to see that the children use the *Bollerwagen* to appropriate their surroundings and re-code existing spaces.

In addition, a festival kit was developed together with the children to help them appropriate their surroundings. It consists of simple materials that can be used in different ways – such as a blanket that can be turned into a volleyball net with the help of the *Bollerwagen* and broomsticks, but is also the playing field for “Twister”. All the situations developed together with the children were recorded in a manual, which is now part the *Bollerwagen* such as a picnic table, a stage or different games. Rules were also developed for using the *Bollerwagen* (e.g. “only two children maximum”), so every kid is safer while using it. From now on, the children can borrow the *Bollerwagen* from the security personnel and have fun with it in the neighborhood.

In this example, as well as in the other methods that involved construction elements, the outcomes for the refugee community were clear and tangible. Efforts to target the children's urgent needs or address objects that can potentialise their imagination and materialise solutions or ideas using objects or interventions is an empowering way to give something back to these communities and build their trust.

4 GU, *Gemeinschaft Unterkunft* or collective accommodation in English.

Challenges and limitations

Collaborative mapping and participatory methods, which involve communities sharing information about their daily lives and spatial experiences, have become well-established approaches in various contexts. While it is essential to critically examine just how genuinely collaborative or participatory these processes are, they have been widely adopted, from favela-upgrading initiatives to public projects in Germany. However, a significant gap still exists when shifting from identifying issues to proposing solutions. In the design and implementation phases, the focus is often still on drawing from the expertise of architects and urban planners rather than leveraging the lived experiences of non-professionals who frequently shape and construct their own spaces.

There is a noticeable disconnect. While participatory processes have evolved to better involve residents' perspectives when diagnosing problems, they often fall short of integrating those same voices in developing solutions. Community expertise tends to be undervalued when transitioning from problem identification to the design phase, in which professionals typically dominate the conversation. It is crucial to shift the focus towards co-designing solutions that prioritise the residents' knowledge, creativity and aspirations, which would not only lead to more contextually appropriate outcomes but also foster a greater sense of ownership and sustainability in urban projects.

The challenges of implementing collaborative design methods in urban planning and architecture are deeply intertwined with the limitations of our current professional training and tools. Traditionally, architects, planners and designers have been educated within frameworks that prioritise technical expertise, control over outcomes and adherence to established standards. This training often does not adequately prepare professionals to engage with communities, especially those who exist outside formal planning spheres (Sandercock 2003). As a result, many practitioners struggle to meaningfully incorporate diverse perspectives into their projects, lacking the skills needed

to facilitate open dialogue, listen actively and adapt to the evolving needs of communities.

However, this issue goes beyond a mere lack of training. It is also rooted in a deeply ingrained belief in the transformative power of design. Many professionals operate under the assumption that design alone can dictate and improve ways of living, and they often impose their vision of what urban spaces should be like on local communities. This approach is grounded in a top-down, technocratic perspective that assumes that professionals know what is best for communities, leading to outcomes that may not align with the actual needs and desires of those who inhabit these spaces (Miraftab 2004). This belief in the omnipotence of design not only reinforces power imbalances but also risks perpetuating colonial and paternalistic dynamics in urban development, where professionals dictate solutions without genuinely involving the people who will be affected by them.

The limitations of these traditional methods and over-reliance on professional expertise are particularly problematic in diverse urban contexts, where lived experiences vary widely across cultural, economic and social lines. Conventional planning tools often fail to capture the nuanced realities of marginalised communities, resulting in projects that are disconnected from their local contexts and are sometimes actively harmful. For example, standardised design solutions may overlook informal economies, communal spaces or traditional practices that are crucial to the social fabric of certain neighbourhoods (Watson 2014). The inability to engage effectively with these complexities can lead to the displacement of residents, erasure of local identities and the perpetuation of social inequalities.

Addressing these challenges requires a fundamental shift in how collaborative design is approached. It necessitates a move away from the view of design as a tool for imposing predetermined solutions and towards an understanding of design as a process of co-creation. This shift calls for new methods and practices that prioritise dialogue, flexibility and responsiveness, enabling communities to participate actively in shaping their environments. By embracing participatory approaches, such as co-design workshops, urban games and community-driven mapping exercises, professionals can begin to bridge the gap between expert knowledge and community wisdom (Awan et al. 2011). However, for these methods to be genuinely effective, there must also be a deeper cultural change within the professions – one that acknowledges the limits of design, respects local knowledge and is open to relinquishing control to those who have traditionally been excluded from the planning process.

It is not a question of dialogue between those who master knowledge and those who do not but of conflicts between different forms of knowledge, such as those based on experience and urgency. The challenge lies in how to articulate these different worldviews. We must understand that as technicians, we have some specific knowledge, but residents have much to teach us about their daily practices.

Conclusion: Collaborative design as a political tool

This book aimed to address collaborative tools and methods for urban planning and design from the potential of incorporating silenced and marginalised voices into the centre of city-making and development. Collaborative design is assumed to be a political tool that goes beyond the limitations of participatory processes by actively challenging power structures and enabling more inclusive, transformative forms of agency. Unlike conventional participation, which often limits stakeholders to predefined roles within established frameworks, collaborative design encourages co-authorship, fostering the emergence of shared narratives, knowledge, values and solutions. This approach moves beyond token involvement, positioning design as an active space for dialogue, dissent and transformation. As such, collaborative design reshapes how we view not only the design process but also the very nature of political engagement and governance by democratising both creation and decision making.

This implies a different perspective on the role of city-building professionals and ways of perceiving and acting in reality. Therefore, collaborative design also involves a critical revision of our own tools and methods, both as researchers and as practitioners.

We believe that starting this reflection from the peripheries in the world enable us to highlight the contradictions between the external and static visions of the idealised world and the dynamism and complexity of the concrete real world (Yiftachel 2009). When faced with a dynamic reality, such as that of the favelas, we realise that professionals are unable to effectively grasp nuances of self-built spaces. We find ourselves adapting instruments designed for other realities, times and contexts. At most, we manage to produce a series of approximations.

Further developing tools to approximate, exchange, collaborate and co-produce spaces in cities is a key issue in the pathway to more inclusive,

egalitarian and radically transformed cities. In times of a multitude of crises, such as the climate, wars and recessions, we as professionals must rethink our role and our tools and understand planning and design as processes instead of products.

Other tools, other uses and other times

As architects and urban planners, we have learned that if we want to participate in collective construction as an alternative way of relating to spaces, we must rethink our tools, processes and roles. In this discussion, it is worth emphasising the importance of the debate about the architect's authorship. Historically, architecture has been linked to art and, thus, to the concepts of monuments and creation. In a reality where spaces are often modified by the residents themselves to suit their expanded needs, a conflict is created and it invites us to reflect on the role of the architect and urbanist in cities.

The vision of this creator-architect distances the professional that develops projects from the practice of cities or from their in-depth knowledge of the social reality in which they intend to intervene. Harvey (2000) emphasises the role of the architect not only as a shaper and transformer of physical spaces but also as an agent who gives human, aesthetic and symbolic meanings to space. However, Harvey (2000) also notes that this image of the architect can be rebutted by the metaphor of the architect that exists in all of us, that is, the understanding that each individual produces, reproduces, transforms and gives meaning to spaces.

During our work, we were constantly faced with limits and challenges as practitioners and scholars aiming to work closer to reality. These limits go beyond our lack of practice in collaborative processes or activist architecture; they are closely related to the relationship between the production of space and the reproduction of the naturalised logics of domination in our system.

This reproduction is directly reflected in our tools, times and processes. As (Ferro 1982) argues, our tools, especially our design tools, serve as instruments of alienation, by separating those who conceptualize the city from those who build it:

The designer's drawing comes between the hand that makes and its goal. In fact, this is the first mission of design under capitalism: to separate the hand from its own objective, the doing from the done. The separation of the labor

force from the product of its work, the spring of exploitation, has repercussions, engenders its echo, in the material progress of production. The distancing of the worker from the means of production is prolonged in the distancing of the productive moment, its specific logic, and its result. (Ferro, 2002: s/p)

In marginalised spaces, especially in the so-called Global South, design is often an element of oppression and of dialogue. Planning and design can and are often used as justifications for large-scale evictions. In the name of progress and development, spaces are designed top-down and local people are replaced, as if they were objects. Their lives, networks, spatial knowledge and practices are disregarded.

Escobar (2018) illustrates other forms of interacting with space and nature when talking about how Indigenous communities have extensively built 'life projects' instead of 'development projects'. Indigenous communities advocate for life projects as a form of resistance and to sustain their relational ontologies. Escobar (2018: 65) explores the idea of autonomous design but critically reflects on whether the design as we know it is intrinsically related to capitalism:

Is design tied, inextricably, to capitalism and a liberal conception of politics? Conversely, can design be infused with a more explicit sense of politics, even radical politics?¹

Escobar (2018) advocates for a shift in our understanding of the design as a product or a technology towards one that is interactive, centred on the user, collaboratively produced and based on experiences and the production and reproduction of life. This requires a different system of values, ways of relating to each other, ethical principles, tools and methods. Escobar (2018: 183) describes this as the transition to relational design instead of dualistic design:

These proposals sense a great transformation of design. Design itself becomes a project in transition and joins other theoretical-political projects that seek to enrich our understanding of life and the human ... New practices of co-design, participatory design and design activism (to which I will add autonomous design in the next chapter) become the raw material of a

1 Free translation from Deepl from Spanish to English.

new model of design for social innovation. Whichever mode of design prevails, the implication is that design knowledge needs to be rethought if it is to support collaborative design with non-experts. New design knowledge will be based, above all else, on a positioning that is, simultaneously, critical of the status quo and constructive because it contributes, actively, to broad cultural change.²

Beyond new tools, methods and interpretations of design, we must critically reflect on our notion of time. By entering the field and establishing collaborations with local actors and communities, it becomes clear that the timescales of our work and those of universities and public authorities are not in line with the urgent needs of residents, who in many cases transform their space on a daily basis.

The linear view of time present in the practice of urban planning is not only inconsistent with the dynamic reality of the studied spaces but also serves as an instrument of imposition and domination. The linearity of time implies the idea of evolution and progress. In theory, pre-moderns (Latour 1993), are at an earlier stage of development than the moderns or the developed countries of the Global North. As time passed and the populations evolved, according to the logic of these dominant models, they would one day reach this new level. In other words, the attempt to impose a predefined physical model and the understanding of a temporal structure of evolution is reflected in the work of practitioners in the fields of architecture and urbanism to reinforce existing segregation and impose one certain way of life on city inhabitants.

In a counterpoint to the colonial view of time, Santos (1981) proposes time as a spiral, in which past, present and future can coexist at certain moments. According to Latour (1993), what defines us is the exchange, accumulation and coexistence of different times in each and every existing social practice. More than revealing the past and imagining the future, what matters to us are the elements that each individual or social group selects from these different times:

We do have a future and a past, but the future takes the form of a circle expanding in all directions, and the past is not surpassed but revisited, repeated, surrounded, protected, recombined, reinterpreted and reshuffled. Elements that appear remote if we follow the spiral may turn out to be quite nearby if we compare loops. Conversely, elements that are quite contemporary, if we judge by the line, become quite remote if we traverse a spoke. Such

2 Free translation from Deepl from Spanish to English.

a temporality does not oblige us to use the labels 'archaic' or 'advanced', since every cohort of contemporary elements may bring together elements from all times. In such a framework, our actions are recognized at last as polytemporal. (Latour 1993: 75)

In *Critique of Black Reason*, Mbembe (2017) proposes a reconfiguration of time as a form of resistance to the historical control imposed by colonialism. Time should not be conceived as linear and uniform, as suggested by colonial structures, but as a space where the voices and rhythms of various cultures can intertwine. In the context of collaborative design, this implies a practice that does not submit to the rhythm imposed by Western narratives of progress but recognises the multiplicity of times and lived experiences of marginalised peoples, creating spaces for active resistance against cultural homogenisation.

Escobar (2018) argues that instead of imposing universal development models, design should align with local ecological and social rhythms, acknowledging alternative ways of living that contrast with the logic of exploitation and domination. Collaborative design can be a political practice that fosters the creation of plural spaces where time and space are reconstructed to embrace the diverse temporalities and cosmologies of Indigenous peoples and other marginalised cultures, thus creating a development that respects these local dynamics.

Considering all these factors, it is clear that we must rethink our tools, methods, times and role to co-produce urban spaces in horizontal exchanges. This book aimed at compiling experiences of collaborative design, planning and building that might help us to further reflect on those processes.

Empowered communities

Participation and collaboration have long been seen as crucial steps towards community empowerment, which involves equipping individuals with the tools, resources and opportunities needed to influence decisions that shape their lives. Such empowerment can manifest in various domains, including local governance, urban planning and social justice efforts. However, the concept of empowerment often implies that communities lack inherent power, suggesting that it is the role of external actors to grant them authority or amplify their voices. This perspective can inadvertently overlook the existing strengths and capacities of these communities.

This book emphasises the recognition that communities are already empowered and explores strategies for co-creating tools that encourage their active participation in shaping their environments and futures. By centring communities in the decision-making process, this approach leads to more inclusive and sustainable outcomes. It involves not only determining how actions are developed but also considering what will be created and when, with what resources and for whom.

Moreover, empowerment fosters resilience, as people who are involved in decision-making processes often take greater ownership of the results. This leads to stronger social bonds, higher engagement and a sense of belonging, all of which contribute to the long-term well-being of local communities.

Collaborative design for insurgent urbanism goes beyond simply consulting the community – it involves acknowledging and engaging them as active co-creators. When communities are given the opportunity to meaningfully participate in shaping their environments, several benefits emerge.

The first benefit is related to the interaction and exchange between different types of knowledge. Communities have a deep understanding of their own spaces, cultures and challenges. Collaborative design taps into this local knowledge, allowing professionals and locals to create solutions that are relevant and sensitive to the context.

The second benefit is related to feelings of belonging and appropriation. When people are part of the design process, they are more inclined to feel a strong sense of ownership over the final outcome, which not only enhances community pride but also encourages long-term stewardship of the space. In urban projects, this often results in better maintained and more vibrant public spaces, as local residents are more invested in their care and development.

Communities that are empowered through collaborative design processes are better equipped to respond to changing circumstances. Whether it is adapting to environmental changes, shifting social dynamics or economic pressures, these communities can be resilient because they've been involved in the creation and evolution of their spaces from the beginning.

Towards insurgent design in times of multiple crises

So today we should expect to be living this turbulence for a long time to come, in a double world where two realities coexist in conflict: the old 'unlimited' world that does not recognize the limits of the planet and another that recognizes

these limits and experiments with ways to transform them into opportunities ... A continent is emerging ... it is a transition (long for us but short for world history) in which we must all learn to live, and live well, in the new islands of the world in doing so, anticipate what the quality of life will be like on the emerging continent. Manzini, 2015: 2–3, cited in (Escobar 2018: 172)³

As the world grapples with intersecting crises, ranging from climate change, migration flows and socioeconomic inequalities, the need for the fair production of space is increasingly urgent. The traditional models of urban development and spatial design, often driven by top-down decision making, are ill-equipped to deal with the complexity and diversity of contemporary crises. For instance, climate change disproportionately affects marginalised communities, and migration flows continue to reshape urban landscapes. A more inclusive, equitable and sustainable approach is required – one that views space not just as a commodity but as a shared resource co-created by those who inhabit it.

Directly involving communities in the creation and adaptation of their environments allows for solutions that are more resilient, contextually relevant and adaptive to the needs of those facing the brunt of these crises. For example, in areas vulnerable to climate change, communities with local knowledge can collaborate with architects and planners to create flood-resilient infrastructure or climate-adaptive housing that reflects their lived realities. Similarly, in cities experiencing high levels of migration, co-production with diverse communities ensures that public spaces and housing cater to the needs of all residents, fostering inclusivity rather than exclusion.

The fair production of space demands that everyone – especially those most vulnerable – has a voice in shaping their environment. As crises such as climate change and migration deepen existing inequalities, placing decision-making power in the hands of the community allows for more just and humane solutions. It also challenges long-standing hierarchies in architecture and planning in which the architect is seen as the sole creator and the community as passive recipients.

In this book, we explored collaborative design and building practices through a political lens. By examining these practices within historically marginalised communities, we proposed different methods of engaging, interacting and co-creating spaces with these groups. This approach aims to advance an equitable and sustainable urbanism. By framing these efforts as

3 Free translation from DeepL from Spanish to English.

a form of insurgent urbanism, this book underscores the inherent challenges and struggles involved in any collaborative process.

To address the deeply entrenched challenges of climate change, demographic pressures, global unsustainability and geopolitical instability, we need far more than reactive adaptations or the benefits for the wealthy. This structural crisis necessitates not merely a shift in how we occupy spaces but a profound transformation in the ways we envision and co-create our habitats. In this context, insurgent and collaborative design practices emerge as crucial alternatives to dominant urban strategies that perpetuate inequality. By engaging marginalised communities directly in the design process, these practices reject top-down models and instead foster co-production, allowing for more inclusive, just and sustainable urban environments. This approach challenges the logic of current adaptation strategies, which, as Escobar (2018) warns, are often 'defuturing' and deprive future generations of viable conditions for existence. Through insurgent urbanism, we seek to rethink and reshape our built environments in ways that not only respond to current crises but also actively construct resilient futures grounded in collaboration and equity.

Figure 33: COLLOC Workshop, Rio de Janeiro, 2024. Source: colloc archive



Figure 34: Workshop with Yarmouk University, Jordan, 2022. Source: Juliana Canedo



Figure 35: Winter School Building Resilient Cities, Cairo, 2024. Source: Juliana Canedo



Figure 36: Summer School with refugees in Märkisches Viertel, Berlin, 2022. Source: Juliana Canedo



Figure 37: COLLOC Workshop, Rio de Janeiro, 2022. Source: colloc archive



Figure 38: Winter School Building Resilient Cities, Cairo, 2024. Source: Juliana Canedo



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