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, Miraftab (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

Figure 4: Summer School with refugees in Märkisches Viertel, Berlin, 2022. Source: Juliana Canedo