

The contribution of strategic design in the co-creation of collaborative solutions for more sustainable cities

A contribuição do design estratégico na
cocriação de soluções colaborativas para
cidades mais sustentáveis



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ABSTRACT

Population growth, the preference for urban life, and climate change point to a chaotic scenario if there are no rapid responses in terms of environmental responsibility, sustainable economy, social justice, and preservation of cultural vitality, through public policies that respond to this scenario. Sustainable Cities emerge as one of the possible solutions to organize and direct society, avoiding imminent collapse. However, the understanding of the processes involved in collaboration for such urban interventions is still scarce. Therefore, this article proposes a theoretical-methodological path that employs design strategies to promote citizen participation in the creation of sustainable urban interventions. This aims to ensure inclusion and attention to the needs and expectations of the population. Strategic Design serves as the theoretical and methodological basis, integrating the tactics of tracking, projection, and annotated portfolio, which can be formalized in an enabling digital platform.

KEYWORDS

Sustainable Cities; Strategic Design; Design Tactics; Annotated Portfolio; Digital Platform.

RESUMO

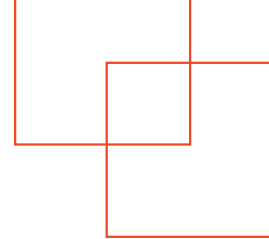
O crescimento populacional, a preferência pela vida urbana e as alterações climáticas apontam para um cenário caótico caso não haja respostas rápidas em termos de responsabilidade ambiental, economia sustentável, justiça social e preservação da vitalidade cultural, por meio de políticas públicas que respondam a este cenário. As Cidades Sustentáveis surgem como uma das soluções possíveis para organizar e direcionar a sociedade, evitando o colapso iminente. No entanto, a compreensão dos processos envolvidos na colaboração para tais intervenções urbanas ainda é escassa. Por isso, este artigo propõe um percurso teórico-metodológico que emprega estratégias de design para fomentar a participação dos cidadãos na criação de intervenções urbanas sustentáveis. Isto visa assegurar a inclusão e atenção às necessidades e expectativas da população. O Design



Estratégico serve como base teórica e metodológica, integrando as táticas de rastreamento, projeção e portfólio anotado, que poderão se formalizar em uma plataforma digital habilitante.

PALAVRAS-CHAVE

Cidades Sustentáveis; Design Estratégico; Táticas de Design; Portfólio Anotado; Plataforma Digital.



1. INTRODUCTION

Accelerated urbanization, coupled with climate change, has exacerbated issues such as pollution, social inequality, and insecurity. According to the World Urbanization Prospects report by the UNITED NATIONS (2018), the urban population has surged from 746 million in the 1950s to 3.9 billion today, representing 54% of the global population. It is projected that this number will reach 6 billion by 2050, equivalent to approximately 66% of the world's population.

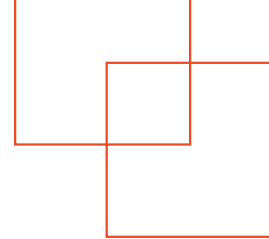
While migration to urban areas can provide access to education, employment, leisure, and healthcare, the rapid and disorganized growth of these areas can exacerbate inequality, as public policies often struggle to keep up with the growing demand. In this context, projects embracing the concept of sustainable cities emerge as a viable alternative to balance the effects of urbanization (LEITE, 2012).

The concept of sustainable cities was introduced during the Eco-Rio 92 conference, the 1992 United Nations Conference on Environment and Development, and reaffirmed during the Habitat II conference in 1996. It is grounded in three pillars: environmental responsibility, sustainable economy, and social and cultural vitality.

In recent years, researchers' interest in the topic of sustainable cities has grown, driven by an increased awareness of the need to develop cities that are ecologically responsible, socially equitable, and economically viable. These studies indicate that local governments must engage multiple stakeholders in the urban development process, transparently setting sustainability goals (DENG, et al., 2021).

Additionally, they introduce concepts such as self-organizing cities, which adapt and constantly transform (DA SILVA NEIVA, et al., 2020), and eco cities, designed with more efficient and low-impact ecological solutions (SMITA, 2019). From an environmental perspective, research discusses how environmental education can contribute to the sustainable development of cities and reduce environmental impacts (EMANUELE, 2022). It also emphasizes sustainable urban planning as a strategy to combat climate change in cities (OSTÁREK, 2021), among other aspects.

However, the understanding of processes involving collaboration in urban interventions, with the aim of making them more inclusive and



sustainable while meeting the needs and expectations of residents, has received little attention. In their systematic review article, Hamdan, Andersen, and De Boer (2021) suggest future research on the aspects involved in collaboration processes among stakeholders and how these can be enhanced to ensure that sustainable neighborhood projects meet the needs and expectations of all residents.

Ruijter (2023) reinforces this gap, emphasizing that collaboration among stakeholders is a crucial component of intelligent governance and introduces tools that can be used to facilitate collaboration among stakeholders. However, it does not analyze the processes in which these tools can be applied, nor the tactics people develop to navigate or negotiate strategies toward their own goals and desires.

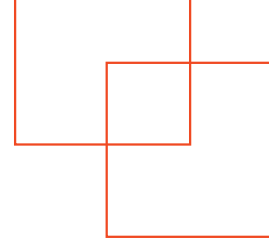
Understanding the complexity of collaboration among stakeholders is essential for the success of any initiative focused on sustainable city development. The inclusion of these diverse actors from the outset of planning significantly increases the chances of ensuring that the project meets their needs and expectations.

However, collaboration among different groups can be challenging, necessitating the identification and addressing of potential obstacles. By gaining a better understanding of these collaborative processes among stakeholders, we can facilitate the exchange of valuable ideas and assessments, which can enhance project design.

Furthermore, collaboration among stakeholders helps prevent conflicts and disputes, ultimately favoring the execution of high-quality projects. This occurs because stakeholders tend to support a project when they feel engaged from the beginning, establishing bonds of trust and cooperation—factors that often lead to endeavors with a more significant positive impact.

Given the presented issue, the question arises: How can we ensure a participatory and inclusive process for citizens in the conception of sustainable urban interventions, while addressing their needs and priorities? This study aims to propose a theoretical-methodological path that utilizes design tactics to promote citizen participation in the conception of sustainable urban interventions, ensuring attention to citizens' needs and expectations.

To achieve this, the article draws upon the theoretical-methodological approach of Strategic Design, which seeks to make



thought processes more visible and comprehensible. It does so through three key capabilities: See: Delving deeply into phenomena, understanding their intricacies; Predict: Anticipating critical futures based on observed patterns; Make Visible: Creating scenarios for future exploration (ZURLO, 2010).

These capabilities inspire the methodological journey proposed, which involves the tracking (Ver) and projection (Prever) tactics introduced by DiSalvo (2009), revealed through the Annotated Portfolio technique (Fazer Ver) developed by Gaver and Bowers (2012).

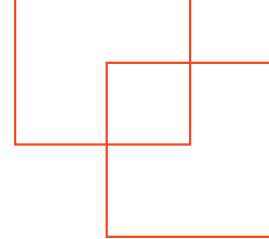
Next, this article presents the interconnections between sustainable cities and collaboration among stakeholders. Additionally, it delves into the role of Strategic Design as a driving force within the proposed theoretical and methodological framework. The study encompasses various techniques, including tracking, projection, and the Annotated Portfolio method. Furthermore, the article discusses the challenges, opportunities, and limitations associated with this approach. Finally, concluding remarks summarize the overall proposal and offer recommendations for future research.

2. SUSTAINABLE CITIES AND COLLABORATION

From the focus of this article, and given the relevance of the topic, academic journals have prioritized in their editorial scope research that addresses problems related to the factors that involve cities and their sustainability. When researching sustainable cities and the collaboration among stakeholders in the SCOPUS database, articles with more than 100 citations can be grouped into two thematic groups:

- Articles that seek to characterize the field, identifying its main perspectives, approaches, and shared concepts, and their relevance to sustainability problems and solutions (ALLAM; NEWMAN, 2018; LOORBACH; FRANTZESKAKI; AVELINO, 2017).
- Articles that provide accounts of partnership initiatives, especially involving universities (BEYNAGHI, et al., 2016; DEL MAR ALONSO-ALMEIDA et al., 2015; NEVENS, et al., 2013; SMITH, 2018; TRENCHER, 2014).

In the second group, only one article addresses the collaboration process among the actors in a more significant way. The authors

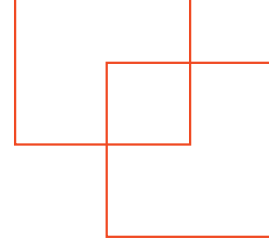


present the Urban Transition Labs (UTLs) as an approach for the co-creation of transformative actions for sustainable cities. They are spaces for experimentation and innovation that bring together diverse actors in a transition management perspective that contemplates a cycle of five distinct phases:

- a) Process design and system analysis: involves understanding the system, analyzing it to obtain an overall view and integrated perspective of the system under study.
- b) Problem structuring and forecasting: develop an attractive and inspiring vision, coherent and long-term, connecting and committing the actors.
- c) Retro formulation, determination of main paths and agenda setting: outline different strategies on how to realize the desired future situation.
- d) Experimentation: transition experiments represent the practical application of radically alternative work methods and/or thinking, aligning with the proposed new system strategies.
- e) Monitoring and evaluation: development of tools to effectively monitor the actions carried out. (NEVENS, et al., 2013).

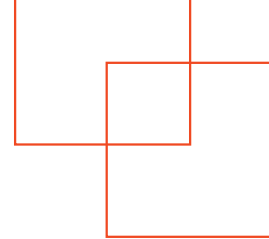
It is understood that Urban Transition Labs (UTLs) are important and potentially innovative initiatives, but they require a structure dedicated to the articulation of actions. UTLs function as an innovation incubator model, centralizing actions in a team. This allows for greater flexibility by involving diverse actors, but it does not guarantee the commitment to articulation or feasibility of the co-created ideas. Furthermore, the centralized nature of UTLs may limit the representation of the expectations and needs of city inhabitants.

Advancing in the perspective of sustainable cities and their actors, Hamdan, Andersen, and De Boer (2021) point out, in a systematic review of 38 studies published between 2012 and 2021, that collaboration with stakeholders is an important theme in the field of sustainable urban planning, but it can be a challenging process. Stakeholders may have different interests and priorities, which can hinder collaboration. In addition, stakeholders may not have the necessary resources, such as time, money, or expertise. The article identifies four main benefits of collaboration with stakeholders in sustainable neighborhood projects (HAMDAN; ANDERSEN; DE BOER,



2021):

- Improvement of project quality: Collaboration allows the incorporation of various perspectives and experiences, which can lead to more robust and effective solutions. This can result in a higher quality project that better meets the needs of the community.
- Greater acceptance of the project: When stakeholders are involved from the beginning, they are more likely to support and accept the project. This can lead to smoother implementation and less resistance from the community.
- Higher likelihood of project success: Projects that have the support of stakeholders are more likely to be successful. This is because these projects are more likely to receive the necessary resources and overcome potential obstacles.
- Greater learning and innovation: Collaboration can lead to new ideas and approaches, promoting innovation. In addition, the collaboration process itself can be a learning opportunity for all involved. Four main challenges of collaboration with stakeholders in sustainable neighborhood projects (HAMDAN; ANDERSEN; DE BOER, 2021) are also pointed out:
 - Differences in interest: Stakeholders may have different or even conflicting interests. For example, one stakeholder may be more focused on profit, while another may be more concerned with environmental impact. These differences can hinder decision-making and project implementation.
 - Lack of trust: Trust is fundamental for effective collaboration. If stakeholders do not trust each other or the project team, they may be reluctant to share information or fully contribute to the project. This can slow progress and limit the effectiveness of collaboration.
 - Lack of resources: Collaborative processes may require significant resources, including time, money, and skills. If these resources are not available, it may be difficult for stakeholders to fully participate in the project. This can limit the quality and scope of the project.
 - Lack of coordination: Effective collaboration requires careful coordination. If coordination is inadequate, it can lead to misunderstandings, duplication of efforts, and missed



opportunities. This can reduce the effectiveness of the project and lead to less effective results.

The authors propose a research agenda for future studies on relevant aspects in the collaboration processes among stakeholders that can be improved to ensure that sustainable neighborhood projects meet the needs of all their inhabitants. In an attempt to address these issues, this article presents the proposal of a theoretical-methodological path that uses design tactics (DISALVO, 2009) to enable citizen involvement in the conception of sustainable urban interventions, in order to guarantee participation, inclusion, and attention to the needs and expectations of the people living in the place. Such a path is proposed based on the approach of Strategic Design.

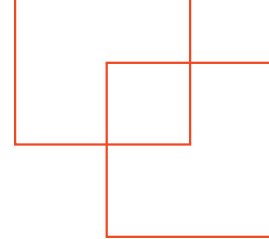
3. STRATEGIC DESIGN FOR A PARTICIPATORY AND CITIZEN PATH

The proposed path is grounded in the approach of Strategic Design, which operates in a collective and collaborative sphere. The strategy project is a transdisciplinary movement that comes from the collective (MAURI, 1996), through a model capable of indicating directions for the future, giving cohesion within such a structure and building and defining identity (ZURLO, 2010).

In addition, by understanding strategy as a process of creating meanings, Strategic Design presents a capacity for mediation between multiple aspects and effects of meaning, subsidizing the decision-making process. This procedural dynamic builds meaning from a constant theoretical, instrumental, and operational opening of this theoretical-methodological approach (ZURLO, 2010).

Thus, Strategic Design seeks to make thinking visible (MAURI, 1996), through the capacities that inspire the processuality of the proposed methodological path, which are:

- The ability to See involves observing phenomena far beyond the visible surface, reinforcing the creative act that to learn the essence of things, prejudices must be set aside. This ability to read contexts and systems allows for a more precise understanding of cultural



reference frames, as structures are filters that give meaning to reality, being constituted by knowledge, social and cultural beliefs (ZURLO, 2010).

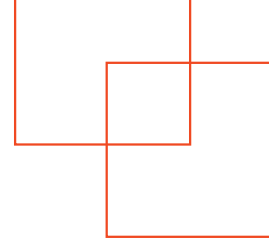
- The ability to Predict is strongly related to the ability to See, as what is observed feeds the creation of possible futures, critically anticipating what is to come. The prospective exercise is a creative dimension, which, starting from limited and partial data, interprets and anticipates what can be done, with a critical approach, that is, consciously revisiting knowledge and information to assess its viability (ZURLO, 2010).
- The ability to Make See, more than others, supports strategic action, as it makes the field of the possible visible and is a powerful tool to accelerate decision-making. Strategic Design not only shows scenarios of possible futures but uses this ability to organize and make context data understandable to support choices (ZURLO, 2010).

This way, design can support strategies for constructing solutions for urban spaces through tactics for building meanings about public interest issues, as proposed by Salvo (2009). Therefore, the theoretical-methodological path proposed in this study is based on the tactics for constructing meanings proposed by DiSalvo (2009), in addition to the Annotated Portfolio technique by Gaver and Bowers (2012), considering the importance of recording in collaborative processes.

In the second group, only one article addresses the collaboration process among the actors in a more significant way. The authors

3.1 Theoretical-Methodological Proposal

This study involves an exploratory qualitative research, which drew inspiration for the proposition of the methodological path from Strategic Design, the experience of two disciplines of the Postgraduate Program in Design: Audiovisual, Intelligent and Sustainable Cities and Inventive Methods. The first sought to reflect on the place of the city in contemporary times from a transdisciplinary approach, offering theoretical and methodological perspectives to give visibility to its material and immaterial heritage. The second discussed new or

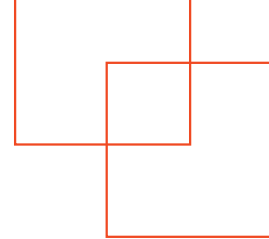


emerging themes in the field of Design, in order to stimulate the reinterpretation of current design practices and to anticipate the development of new ways of feeling, thinking and doing design, in which one of the techniques presented was the Annotated Portfolio, experienced and discussed by Rosa (2022). In addition, the collaboration between social actors has been a research interest of the authors, whether in social innovation initiatives (SILVA, 2020), local ecosystems (SILVA; CHAVES; RODRIGUES, 2021) or design-oriented innovation (BARAUNA, 2021).

Representing an effort to understand the context of research on collaboration among stakeholders in city interventions, with the intention of making them more sustainable, a search was conducted in the Scopus database using the syntax “sustainable cities” AND “stakeholder* collaboration*”, without applying any filter. A total of 339 documents were listed, from which we selected the articles with more than a hundred citations, reducing the set to seven articles. These were duly analyzed, and it was noticed that only one of them addressed collaboration in the context of sustainable cities in a clearer and deeper manner.

Based on these results, it was understood the need to advance in the search for other references, especially review articles. For this, the research was centered on the Dutch journal Sustainable Cities and Society (SCS), focused on theoretical and applied research aimed at designing, understanding, and promoting environmentally sustainable and socially resilient cities. SCS is considered a qualified journal, classified as A1 on the Sucupira Platform - CAPES, with an H index of 103 on the SCIMAGOJR Platform and a CitScore impact factor of 18.4 on the Scopus Platform. A search was conducted for peer-reviewed articles with the syntax “sustainable cities” AND “stakeholder collaboration”. The search generated a list of 16 articles, from which the “review articles” filter was applied, limiting to one article with potential contribution to the research. In this way, in addition to identifying the existing gap in the literature, it was possible to aggregate important information with benefits and challenges identified in stakeholder collaboration processes.

Having Strategic Design as the approach for constructing the path proposed in this study, we start from the perspective of the importance

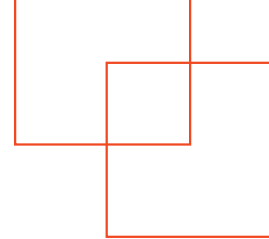


of establishing a path committed to open and collaborative processes. This path is situated in a temporal arc that contemplates the past and the future to transform the actions of the present. The path does not have the prescriptive commitment to construct an optimal solution, but rather to foster broad participation, knowledge sharing, and meaning construction in decentralized design processes, focused on issues involving sustainability in urban spaces.

Thus, the feasibility of constructing the path based on the capabilities described by Zurlo (2010) was understood, making them tangible in two project movements: SEE - tracking (reveal, expose the structures, arguments and underlying assumptions of an issue) and FORESEE - projections (representation of a possible set of future consequences associated with an issue) (DISLAVO, 2009). The ability to MAKE SEEN requires the recording, reflection, and visibility of the collaboration process between the actors and their results, which can be accomplished through the Annotated Portfolio technique (GAVER, BOWERS, 2012).

To propose a theoretical-methodological path that uses design tactics to encourage citizen participation in sustainable urban interventions, it is crucial to ensure inclusion and attention to the needs and expectations of citizens. Irwin (2015) highlights the role of design in the production of new visions of life, anchored in local knowledge, but globally connected through knowledge sharing. The production of these new visions involves collaborative mental models, open to uncertainties, controversies, and diversity, challenging the current paradigms of unsustainability.

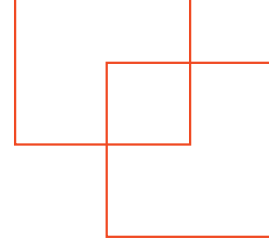
As researchers of participatory design, the authors of this article have made efforts to seek new possibilities to facilitate socio-environmental transformation processes through collaboration. To this end, a recombination of the tactics proposed by DiSalvo (2009), which, according to the author, "can be used in projects outside of what we commonly consider design, by people different from those we commonly consider designers" (DISALVO, 2009, p. 52) was proposed and articulated with the Annotated Portfolio, which, for Kelliher and Byrne (2015), supports continued reflection on the design process and creates an open, intermediate-level record of annotation of activities for participants and other actors.



Tracking is to follow and record the networks of materials, actions, concepts, perceptions, and values that shape and frame a problem over time. It is based on the process of sensitization about contexts, involves activities aimed at the creative expression of stories, discourses, and techniques, fostering knowledge through engagement. Tracking is not defined by the context, but by the method and intention. The use of flâneur practices aimed at critically analyzing urban spaces and the relationship of subjects with these spaces (RIZK; BIRIOUKOV, 2017), as well as workshops that can promote the visibility of complex information in understandable forms that involve the sharing of knowledge among those involved (STUBER, 2012), using techniques such as storytelling, storyboards, among others (SCALETSKY, 2016), to work different looks and modes of expression, are some possibilities of dynamics to be developed. In relation to the temporality of tracking, it takes place from the present to the past. Tracking manifests the ability to SEE (ZURLO, 2010).

Projections are based on facts, being an advanced indication of what could be informed by the knowledge of the past and present, and presented through an assumption of possible future scenarios. The construction of scenarios allows for imagining future possibilities for learning construction. There is no concern with the search for the optimal, a unique solution, or even the identification of the scenario that will take place, but rather the idea of learning from experimentation, building competencies so that, regardless of the future scenario, the various actors involved have the ability to interact, transform, and adapt. "The scenario offers the possibility of simulating actions in the real world or in possible worlds, including futures" (HINDRICHSON; FRANZATO, 2014). In this case, the projections are not developed to suggest or direct choices, but aim to make apparent the possible consequences of a problem, being able to attribute a predictive and not prescriptive characteristic. Thus, the temporality of the projection is from the present to the future. Projections express the ability to FORESEE (ZURLO, 2010).

The objective of these project movements is to assist in accomplishing something in the present, not to provide subsidies for a future event or simply to illuminate the past. It should be noted that the issues are situated, that is, the framing and presentation of an issue are

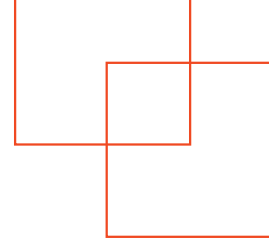


a reflection of the current context. Projections are an image of the future based on what we know today, and the traces make the past relevant to a contemporary context. Thus, projections and tracking require a balance and a flow between the past, the present, and the future to maintain the temporal posture. Considering the intentionality of recording and reflecting on the process, the use of the Annotated Portfolio is proposed. This was presented in an article by Bill Gaver and John Bowers in 2012, in which they proposed it as a technique for communicating research in design (Research through Design - RtD). The captions are associated with the images, establishing a connection between the artifact and the research questions. These annotations allow the indexing of the portfolios and theoretical components can be attached to elucidate issues that were considered in the research. The sense and relevance of the annotations come from their connection with the artifact itself. And this can be re-associated with the issues that generated it.

According to Löwgren (2013), the Annotated Portfolio approach allows for additional annotations to be made, revealing a speculative nature (original intentions, history, and exploration of the design space) and informative (relationship with the previous project, choices, data, and evaluations). "The designer has access to the original design intentions, the history of how the design space was explored, how the process relates to previous work, how different treatments were evaluated, what data emerged from empirical evaluations, and so on." (LÖWGREN, 2013, p. 2, our translation).

From the perspective of the researchers of the Annotated Portfolio, little attention has been given to the description of the processes of creating future-oriented artifacts. They seek to extend the notion of Annotated Portfolio by creating a hybrid documentation (analog and digital), presenting both the product and the research and creation process. In the research of Gaver, Bowers, Löwgren, Kelliher, and Byrne, special attention is paid to the path taken for the production of artifacts. In this technique, in the design process, attention is given not only to the processuality of its production but also to the production of knowledge. The Annotated Portfolio evidences the ability to MAKE SEEN (ZURLO, 2010).

Still from the perspective of recording and sharing knowledge, the



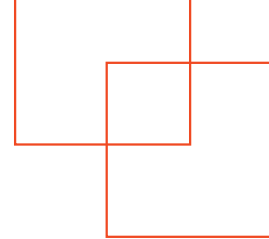
adoption of a digital platform is indicated, in which the Annotated Portfolio can be constituted, to characterize itself as an open and dynamic space for archiving documentation about the construction and development of the participatory and citizen design process, in a collaborative and networked innovation approach (NAMBISAN; SAWHNEY, 2011), which focuses on cultivating creativity, doing, connecting, and experimenting, aiming to deepen and transform shared knowledge.

Digital platforms are an effective strategy to access and leverage the potential of a network of actors involved in a collaborative project process. They help to reach new potentials and to create the conditions for the development of collaborative interactions among independent partners. These interactions, in turn, affect the value that a platform can create for each of them. Thus, the collaboration architectures on these platforms must have an original value creation approach that is based on processes that involve different actors, communities, activities, and resources. For this, it is important to have mechanisms that facilitate the engagement of independent actors in the search for innovation.

From this perspective, the concept of enabling platforms (MANZINI; MENICHINI, 2021) contributes to the previous reflection, by identifying a new generation of platforms that focus on supporting the reorganization and redistribution of infrastructures and activities, aiming to foster collaboration, the common good, and collective ethics. These platforms are designed based on the principles of resilience, justice, inclusion, promotion of local relationships, sense of place, culture, and worldview, with the commitment to foster the measurement of the impact of co-created strategies.

Manzini and Menichini (2021) proposed ten guidelines, considered challenges for designers who design enabling digital platforms:

1. create platforms aligned with local worldviews, promoting the horizontal connection of communities with initiatives that value and globally connect local diversities;
2. promote awareness of the plurality of local worldviews, including those of designers;
3. recognize the resilience of communities, which have diverse knowledge and structures, and map groups of people, places, and



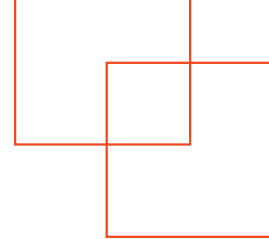
infrastructures that can be relocated in emergency situations;

4. avoid the hyper-specialization of places, infrastructures, and organizations, making them more flexible and not just efficient for what is most convenient at the moment;
5. design resilient platforms, with architecture, infrastructure, and management that keep them always available and ready to correct problems and quickly adapt their resources;
6. develop fair, open, and democratic platforms, ensuring that they are suitable for communities and that these are empowered, not just end users;
7. evaluate whether a project that works on building the infrastructure for new types of communities achieves its goal;
8. design monitoring and evaluation tools and systems that generate information and knowledge, allowing the visualization of results in a way that each specific community can understand the local impact, based on their specific values;
9. carry out the impact assessment at the platform level, on a larger scale of the system, providing an overview of the impact of communities and individual initiatives as well as larger systems; and
10. involve communities in validating the impact assessment and the validity of the adopted models.

It is understood that digital platforms are more than just a set of technologies, innovations, or business models, they enable the strengthening of collaborative networks, supported by ICT, with disruptive potential, once when designing platforms techniques such as the Annotated Portfolio are involved, which stimulates stakeholders to develop bonds of trust, share knowledge, and strengthen the sense of belonging to a territory, recording its past, reflecting on the future, and transforming the present from broad participation, and focus not only on needs, but also on citizens' expectations.

4. FINAL CONSIDERATIONS

Considering the objective of this study, to propose a theoretical-methodological path that uses design tactics to promote citizen participation in the conception of sustainable urban interventions, in order to guarantee participation, inclusion, and attention to the needs

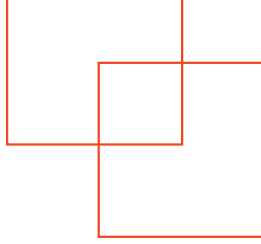


and expectations of citizens, this was explored by presenting the project movements and suggestions of practices for their exploration, as well as the indication of a research technique in design for recording, reflection, and visibility of the path with potential to be realized through a digital platform.

Some differentials of this proposition in relation to others are: decentralization, the temporal perspective, the potential for broad participation and engagement through individual and collective stories, and the construction of new knowledge made explicit by the Annotated Portfolio, based on shared tacit knowledge. In addition, with the implementation of the Annotated Portfolio through a digital platform, the processes of various sets of actors located at different points in the territory can connect, enhancing local responses to demands for cities to become environmentally responsible, socially just, economically viable, and culturally vibrant.

Considering the proposed process, its application is independent of a specific physical structure, teams, or a proposing institution. In contrast to the Urban Transition Labs (UTLs), this process proposal can be appropriated by various groups and encompass different territory configurations. The essence of this process is to ensure participatory and inclusive action of citizens in the design of sustainable urban interventions, in order to meet their needs and priorities. It should be noted that, throughout the process, care needs to be taken to highlight and articulate differences, foster engagement and the construction of bonds of trust among the actors, identify the leaders starting from their recognition by the group itself, and mobilize the necessary resources through cross-sector partnerships, thus overcoming the challenges pointed out by Hamdan, Andersen, and De Boer (2021).

As limitations of the study, it is pointed out the choice for a certain database and “top journal” for the theoretical reference. Possibly, other databases and other journals can contribute with other perceptions. It is also understood that the movements, practices, and techniques combined in this proposal require field experimentation to enable their discussion and effective contribution to deal with the dynamics of collaboration in the context of sustainable cities. Thus, as a suggestion for future research, it is indicated the application of the proposed path, together with different groups and territories, seeking to understand



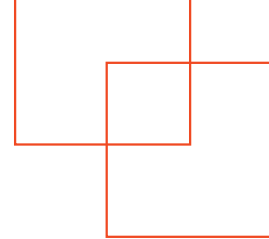
the real scope of participation and inclusion of citizens, meeting their needs and expectations.

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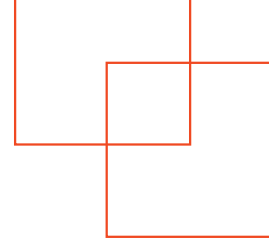
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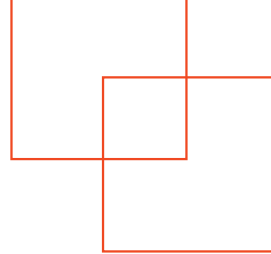
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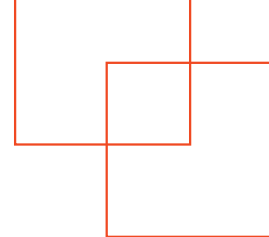
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