



Design in the Multidisciplinary Era: Collaborative Approaches to Cultural and Territorial Reactivation

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DESIGN IN THE MULTIDISCIPLINARY ERA: COLLABORATIVE APPROACHES TO CULTURAL AND TERRITORIAL REACTIVATION.

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ABSTRACT | The new methodological approaches that have developed over the past decades have led to an ever-increasing rapprochement with communities as they can reactivate processes of re-appropriation of territorial identity. The use of similar terms referring to inclusive practices, often used as synonyms, such as co-design, co-creation, participatory design, and open design, immediately highlights some points to ponder.

This paper aims to shed light on how design can build relationships by analyzing these contemporary methodologies, and through the comparison of three Italian cases of community involvement in the cultural and territorial reactivation processes. The best practices are selected based on the impact generated on the territory and communities, the size of the intervention - small, medium, and large - and the “competitive advantage” (Cangiano, 2019) that they created on the social substructure - an approach that ensures social resilience and is not built around profit. The comparison involved Torino City Lab, a Living Lab in northern Italy, and two cases from the south, namely Farm Cultural Park in Favara, Sicily, and Noi Ortadini in Matera, Basilicata.

The purpose of the analysis is to synthesize territorial examples and models supporting regenerative visions in socio-cultural terms, comparing the various collaborative approaches in support of site-specific expressions of design.

KEYWORDS | MULTIDISCIPLINARITY, DESIGN METHODOLOGIES, CO-DESIGN, TERRITORIAL REACTIVATION, SOCIO-CULTURAL REGENERATION

1. Introduction

In recent decades, there has been a progressive rapprochement between design and community thanks to collaborative methodologies. An ever-increasing sense of responsibility, whether ethical, cultural or political, has led designers to imagine broader and multifaceted methodological visions, capable of giving rise to practices of re-appropriation of territorial identity. As a result, notions such as co-design, open-design, participatory design, and co-creation practices were born.

In Lévy (2002) and De Kerckhove's (1998) theories on collective and connective intelligence, multidisciplinary approaches combine different areas of expertise to tackle complex problems. According to Lévy, Collective Intelligence would be the product of memory and collective imagination, capable of bringing out the skills; Connective Intelligence, according to De Kerckhove, is located in connections and networks and characterizes the way we reflect and process knowledge. Connective intelligence represents the most dynamic and practical part. In this scenario, where more and more actors interact and contribute by exchanging experiences, interests and needs, the concept of community emerges: inclusive, able to experiment with open forms of action and widespread creativity (Manzini, 2018). Paraphrasing Ferreri's concept of 'consciousness of place' (2018), we can delineate community as a manifestation of widespread awareness, imbued with values, visions, and representations, which reacts more or less openly to the development conditions set by society. Using collaborative methodologies makes it possible to reinforce the sense of belonging and responsibility towards one's territory, facilitating the assumption of initiatives by citizens and their active participation. Focusing on communities means analyzing the capacity of local actors to operate as a territorial collective actor (Dematteis et al., 2003). Collaboration practices can reactivate places and foster a shared identity of belonging beyond geographic boundaries. As Ferreri (2018) noted, Italy's small towns and villages are repositories of cultural heritage essential to national identity.

In response to the lack of systematic understanding of collaborative methodologies and the ambiguity of methods for assessing quality, effectiveness and value (Wang et al., 2022), this study proposes a comparative approach to analyzing contemporary practices and addresses the following research questions:

RQ1: How can design build relationships through collaborative methodologies to reactivate territory and community?

RQ2: How do methodologies of participatory design, co-design, open design and co-creation differ?

RQ3: What is the impact of these methodologies on cultural and territorial reactivation?

RQ4: Can we identify methodologies that are inherently more effective?

The study shows that different collaborative methodologies produce different results in terms of community involvement and territorial reactivation. The comparison across three scales of intervention - small, medium, and large - allows the identification of key factors common to the different cases. Moreover, they use different degrees of participation and different actors: large scale - involvement of institutions and authorities (top-down approach); medium scale - bottom-up process starting from citizenship and territories; small scale - prevalent involvement of associations and specific groups. All methodologies emerge as effective tools for territorial reactivation and building more openness and resilient communities. Design, thanks to its disruptive capacity to trigger development and design transformation (Ferretti et al., 2022) plays a crucial role in this process, facilitating dialogue and the creation of trusting relationships.

The structure of this document is as follows. Section 2 gives an overview of the different approaches mentioned. Section 3 and 4 analyses methodologies used within these collaborative networks. Section 5 presents and examines three different Italian case studies and Section 6 presents some final considerations about the comparison and concludes the study.

2. Different approaches

In order to adequately understand the topics discussed, this article proposes a summary and definition of the following terms, highlighting their facets and the difficulties in reaching a universal definition; however, it does not aim to define a state of the art. To achieve this, the

most reputable definitions from literature reviews and studies by experts in the field were collected and summarized.

2.1 Participatory Design

This term, introduced from Scandinavia around the 1970s (Cross, 1972), describes an approach that actively involves end users in the design process. It focuses on using tools to facilitate communication between stakeholders with different backgrounds. Simple tools that invite non-experts to participate actively in the process.

Participatory design is characterized by its commitment to a democratic approach, aiming to simplify and make the design process accessible by enabling end users to understand and tailor it to their needs. Thus, this practice fosters empowerment and mutual learning by using tools and methods that promote transparency and understandability in the design process.

The strength of the collaboration between the roles of the designer and the end user in this participation is well expressed in the words of Simonsen and Robertson (2012): “The participants typically undertake the two principal roles of users and designers where the designers strive to learn the realities of the users’ situation while the users strive to articulate their desired aims and learn appropriate technological means to obtain them”.

In recent years, participatory design has evolved to include different variations, which change the definition based on the hierarchy and intensity of the interaction between the designer and other participants.

2.2 Co-design

The authors Sanders and Stappers (2008), explain how the designer and “people not trained in design” collaborate, just as suggested by the prefix “co” indicating cooperation or collaboration. Moreover, in their definition of this term, they admit that the user who participates in design is not only involved in some steps but also collaborates in the design itself, depending on his experience, skills, and sensibility to play an equal role to that of the designer.

In the co-design process, all actors are involved and play a fundamental role by contributing their everyday experiences, participating as “diffuse designers” (Manzini, 2015). In fact co-design is starting to be defined as “collaboration between stakeholders in designing solutions to a prespecified problem” (Vargas et al, 2022).

Contrary to Sanders and Stappers' definition, Simon (1988) explains that in co-design, design professionals work alongside individuals without specific training, emphasizing the designer's role as a process facilitator. In this sense, the designer interrogates users by exploiting and enhancing the input received in the final design but without making them participants in the design itself.

In this view, the designer has the opportunity to leverage his design skills based on problems identified not by the individual but by the experience of a multitude, allowing him to expand and embrace a broader spectrum of problems to be solved.

A recent study by Avila-Garzon and Bacca-Acosta (2024) notes how this term is associated with fields such as machine learning, optimization, hardware/software co-design, and health issues.

2.3 Open Design

The concept of open design appeared in the scientific literature around the 2000s (Vallance, Kiani and Nayfeh, 2001). The most common interpretation refers to a project that follows the open-source model by sharing all information under a Creative Commons license (Balka, Raasch and Herstatt, 2010; Ciuccarelli, 2008; Van Abel et al, 2011). Through these agreements, all design information can be used, modified, and produced by anyone (Menichinelli, 2014).

Therefore, open design is based on the concepts of openness and transparency in the design process. It must be accessible and reusable by anyone and for any purpose (Van Abel et al, 2011), and promotes the sharing of knowledge, tools and results within broad communities.

This approach allows anyone to contribute to the design, regardless of specific expertise, facilitating large-scale collaboration because its focus is not on the final product but on “its recipe” that is, the sources and method of creation. Open-design can thus be clearly defined as “the state of a design project where both the process and the sources of its output are accessible and (re)usable, by anyone and for any purpose” (Boisseau et al, 2017).

From state of the art by Boisseau, Omhover, and Carole Bouchard (2017), it is also evident that the main areas of use of this term are: the do-it-yourself, which involves end-users capable of creating and modifying designs on their own, using publicly available resources and guides; the meta-design, which includes projects where end-users are integrated and actively contribute in the design process; the industrial ecosystem, which concerns the exchange of knowledge and resources between companies in the context of technological development aiming to shorten development cycles and leverage open innovation.

2.4 Co-creation

This term is often used in a generic and all-encompassing way of collaborative approaches (De Koning et al., 2016; Sanders & Stappers, 2008), and as such has many variations related to different fields of study that have adopted it.

In the business field, introduced by Prahalad and Ramaswamy (2004), the term is associated with the word "value" because it refers to the creation of new value that is generated by the collaboration between user and consumer through interaction with the service, allowing value to be not "delivered" but "co-created."

In the design field, this term identifies design processes where various figures actively participate, from stakeholders to end users, as well as representatives of other disciplines. With this meaning, Ind and Coates (2013) suggest co-creation is understood as creating collaboratively but without outlining specific methodologies or practices.

Looking at more recent theories of more-than-human, the meaning of this term expands to emphasize the coexistence and co-creation of all life forms to address complex ecological challenges, creating bonds and building symbiotic relationships not only among humans (Haraway, 2016). Therefore, in recent years the term has begun to shift to "design-with" (Wakkary, 2021), an approach which recognizes humans as not the only actors in the design process. Instead, they must collaborate and coexist with non-human elements, thus rethinking design as a shared and co-constructed activity by all actors involved, requiring collaboration and interdisciplinarity.

Moreover, the study by Avila-Garzon and Bacca-Acosta (2024) reveals how this term is associated with areas such as product/service/brand co-creation, social media, customers, innovation, value co-creation, knowledge generation, artificial intelligence, living labs, and virtual reality.

2.5 The different roles of the designer

Participatory design, co-design, open design, and co-creation are approaches that actively involve users in the design process. They present more or less significant differences, especially the role of the designer and the way collaboration is structured.

Participatory design focuses on a democratic process in which the designer facilitates the understanding and expressing user needs, ensuring an output that can be considered predictable and controllable.

Co-design extends this collaboration by involving users as co-designers along the process. In this case, the designer acts as project manager, coordinating the interaction between practitioners and users for an equally predictable and controllable outcome.

Open design adopts an open-source model, sharing information under Creative Commons licenses. This approach promotes transparency and large-scale collaboration, making the designer one of many actors in a horizontal process that produces a predictable but not completely controllable result.

Finally, co-creation places all stakeholders, including users and designers, on an equal footing. In this case, the designer integrates as an equal among the other participants, contributing to a predictable but co-created outcome.

3. Methodologies

Getting into the specifics of the methods, participatory design, co-design, open design, and co-creation develop in similar phases but differ in structure and key participants. As for the definitions discussed in the previous section, literature presents many interpretations also in the methodological field. Given the consistent heterogeneity of design projects, a

corresponding variety of methods has been observed depending on the application fields (Jones, 2018), and, often, varying according to the subjective interpretation of the researcher. Since the analysis in this contribution aims to understand the structures of the processes for interpreting three collaborative project cases, it was decided to provide an example of the methodologies selected from extensive literature reviews and based on their relevance to the contextualization of our case studies.

The case of co-creation has not been addressed from a methodological perspective; its definition, in most of the analyzed cases, encompasses many other approaches. Furthermore, according to Avila-Garzon & Bacca-Acosta (2024), many contributions do not clearly define the methodology, and those that do present no specific consensus, even if there are some touchpoints and common frameworks. Messiha et al. (2023) state that “scholars have not consistently and efficiently contributed to the construction of co-creation theory,” attributing this to inconsistencies and confusion in the way these terms are used, and possibly a potential fragmentation of knowledge due to the multidisciplinary approach.

Moreover, according to the study by Peter Jones (2018), co-creation methodologies are not formally documented or developed and frequently are branded or proprietary craft practices, making them difficult to validate or compare. These aspects, according to the scholar, contribute to a multifaceted scenario in which we find minimal peer critique of methods.

3.1 Participatory Design

The procedure of participatory design involves the collaboration of end-users with the designer in all phases of the design process. In the Scandinavian approach, active user participation is required, whereas in the U.S. there is a tendency to adopt less intrusive methods such as observation and artifact analysis (Spinuzzi, 2005). According to an in-depth literature analysis by Clay Spinuzzi, there are typically three phases: Initial exploration of work, Discovery processes, and Prototyping.

The first phase involves familiarization between users and designers and the introduction of work tools. The second phase consists of the initial dialogue about the product or system to be designed, leading to the definition of specific objectives. The third phase involves the creation of the prototype. All phases can be repeated multiple times until the process is fully concluded.

3.2 Co-design

In the co-design process, besides designers and users, various other professionals from different fields are also involved, allowing for potentially more functional results from multiple perspectives. Within this approach, numerous methodologies exist, often with significant differences. Following, we will report the version from Mulvale et al. (2016) developed in the field of health system, which shows a particular adaptability when abstracted from the specific area for which it is conceived.

The system consists of four phases: diagnostic, intervention, implementation and evaluation. Designers, various professionals and users are always all involved in every phase.

The first phase, *Diagnostic*, is aimed at elicit experiencing data; the authors propose some methods as individual interviews, use of visual representation media, focus groups and ethnographic observation. The second, *Intervention*, is the proper design phase, in which to highlight the problems to solve through the design, or the issues in the system they are evaluating or testing. Following, *Implementation* develops the considerations done so far in smaller co-design groups, and finally, *Evaluation* is aimed to make improvements to the hypothesized solutions.

3.3 Open Design

As represented by Silvia Gasparotto in her literature review (2019), the methodological structure can be exemplified in a three-phase scheme, not dissimilar to that of Participatory Design. The three phases are: Conceptualization, Refinement, and Production.

In the first phase, a person or group, which does not necessarily include a designer, structures the “source project,” to which other people, not necessarily part of this initial group, will contribute in the subsequent phases. The peculiarity of the method is its horizontal peer-to-peer structure, which does not allow any degree of control over subsequent versions of the project.

Indeed, after the launch of the source file released as open source, the subsequent phases involve the interaction of other users for the reworking of the content, which reaches its prototyping through the phase of “open manufacturing,” whether manual or digital.

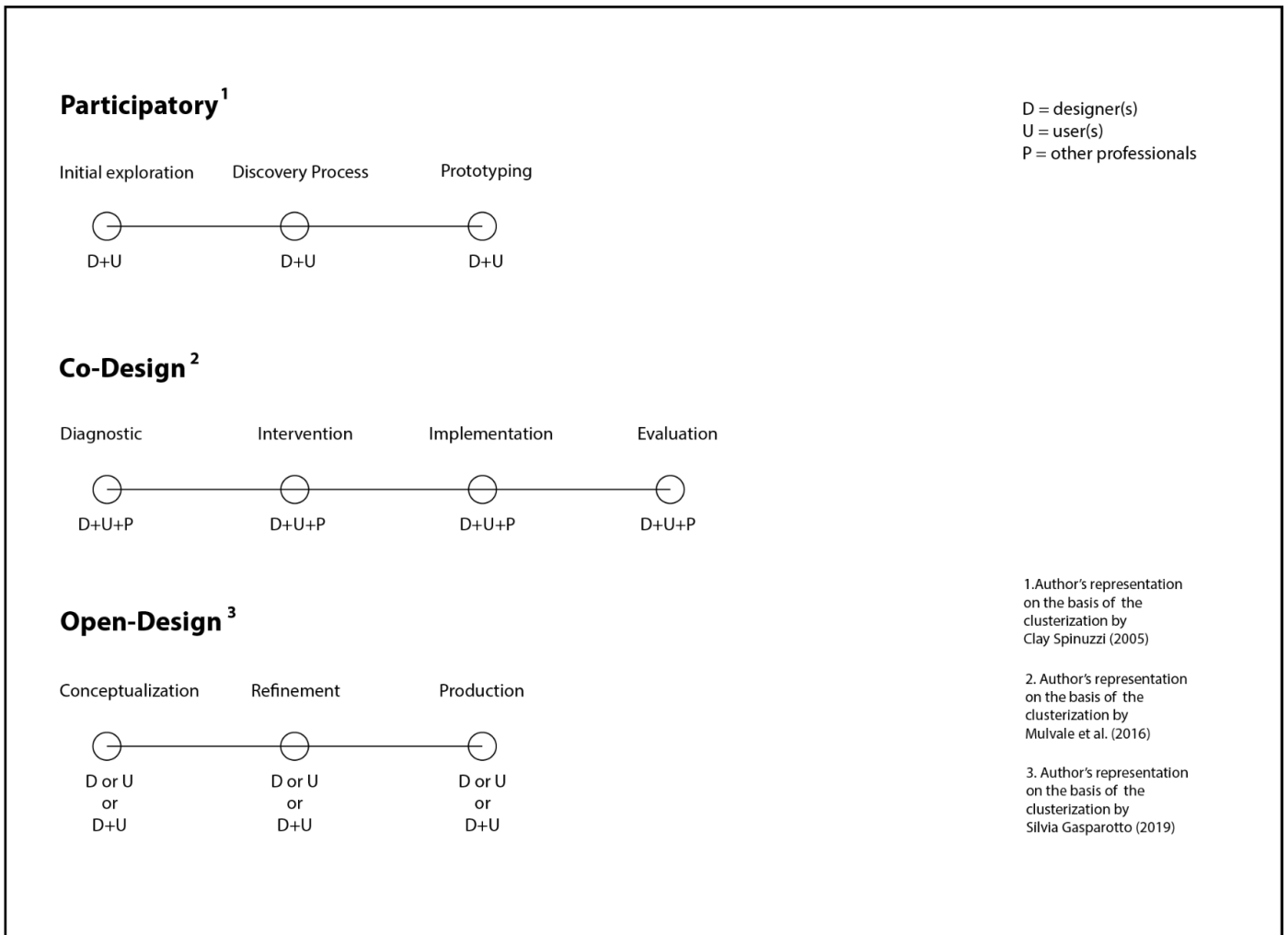


Figure 1. Participatory, Co-Design and Open Design methodology representation.

4. Case studies' methodologies

4.1 Torino City Lab - Living Lab

The first of the three chosen case studies is a Living Lab (LL) situated in Turin. According to the definition of ENoLL (European Network of Living Labs), LLs “are real-life test and experimentation environments that foster co-creation and open innovation among the main actors of the Quadruple Helix Model, namely: Citizens, Government, Industry, and Academia” (*What is ENoLL?*, s.d.).

Trying to insert LLs to one of the collaborative categories explained above, we immediately encounter some difficulties. Based on our analysis, they could correspond to the co-design definition, which involves designers, users and other professionals; also Scott, Quist and Bakker (2009), among others, attribute LLs to co-design, whereas Dell’Era & Landoni (2014) locates them between user-centered design and participatory design.

Schuurman et al. (2015) point out an interesting gap in methodology in the literature: “[the literature] positions Living Labs too much as an “everything is possible” concept that resembles an empty box, in the sense that you can put whatever methodology or research approach inside.”

Nevertheless, some authors, such as Vicini et al. (2012), Esashika et al. (2023), tried to exemplify specific methodological processes that could be applied to different Living Labs. That proposed by Vicini et al. is particularly clear and develops in four phases: *Co-Creation* - which includes analysis of the scenario, ideation and co-design, - *Exploration* - consisting in the set up of the

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testing platforms, the execution of the tests and the exploration of the results, - *Experimentation* - therefore, more tests and data collections, - and finally *Evaluation* - which consists in data analysis and conclusions. Analyzing this method, it is possible to find a general coherence and some specific touch-points with the method by Mulvale et al. explained before in the co-design section.

In the specific case of Torino City Lab, it is interesting to highlight the process of creation of the networks: after the first contacts of the Utilizers with the LL net, the Utilizers prepare a testing proposal and send the application via the official website (*Torino City Lab Website*, s.d.). This open process allows anyone to propose its collaboration, and highlights a bottom-up approach to the creation of the final network, in a pre-set top-down methodology.

4.2 Farm Cultural Park - Urban Regeneration

Farm Cultural Park is situated in the south of Italy, in Sicily, in the-municipality of Favara. This urban regeneration project started from a couple living in Favara and willing to trigger a recovery process of the historic center (Faraci, 2017).

Since the literature on this case study deepens mostly the architectural interventions, but does not focus on collaborative approaches to the project, we interviewed one of the two founders, Florinda Saieva, who gave us the following information.

At first the project did not involve the community, as the opening was scheduled for two years later, therefore there would have been more time to co-design. Though, after the collapse of two buildings in the historical center of Favara, the Municipality had decided to demolish the neighborhood and the project had to be pushed to immediate execution in order to avoid the procedure and save the area from obliteration.

Community involvement occurred later; the method adopted was to create distinct projects with different objectives. These were conducted through the involvement of entities, such as schools, and communities using surveys, focus groups, and workshops. The work ultimately culminates in the actual co-design of the space in question. This methodology was repeated with different targets and for designing different specific areas. Also interviews were used to collect other design stimuli from other targets; the local community is encouraged to provide feedback and suggestions on future exhibitions, events and projects. Public institutions were also involved in the processes of discussion of the projects; specifically neighboring municipalities and mostly local Universities (F. Saieva, personal communication, July 24, 2024). Even though this project does not start from designers per se, the emerging methodology is aligned with shared co-design methodologies and evaluation methods reported by scholars (Want et al., 2022). It is relevant to notice that the approach adopted in this case is significantly more flexible and less structured than the Living Lab.

4.3 Noi Ortadini - Social Regeneration

Noi Ortadini (translatable as "Us Gardeners") (Jones & Pappas, 2023), is the smallest among the compared cases; it consists of a project started from a single person and developed because of the creation of a community of friends with similar passions and values.

Also in this case, we collected the following information by speaking directly with members of the organization (S. Simeone, personal communication, July 15, 2024). The project took place in Matera, a south-Italian city, where a group of friends, professionals in different fields and not coming from design, created a regenerative project around a vegetable garden they cultivated together.

The collaborative aspect in this case is relative to the participants of this open small community of citizens, which collaborate to the growth of the garden and the development of a series of social activities involving local citizens, and authorities; we could define the process as co-design within the association. In this case, no strict methodology can be found; in fact, the aleatory nature of the gathering is the key to its development.

As stated in some witnesses collected by Kuthz et al. (2023), the success of a participatory project often passes through an informal methodology untied from surveys and pre-structured settings, but from active collaboration based on listening to the needs of the place intended as territory and inhabitants.

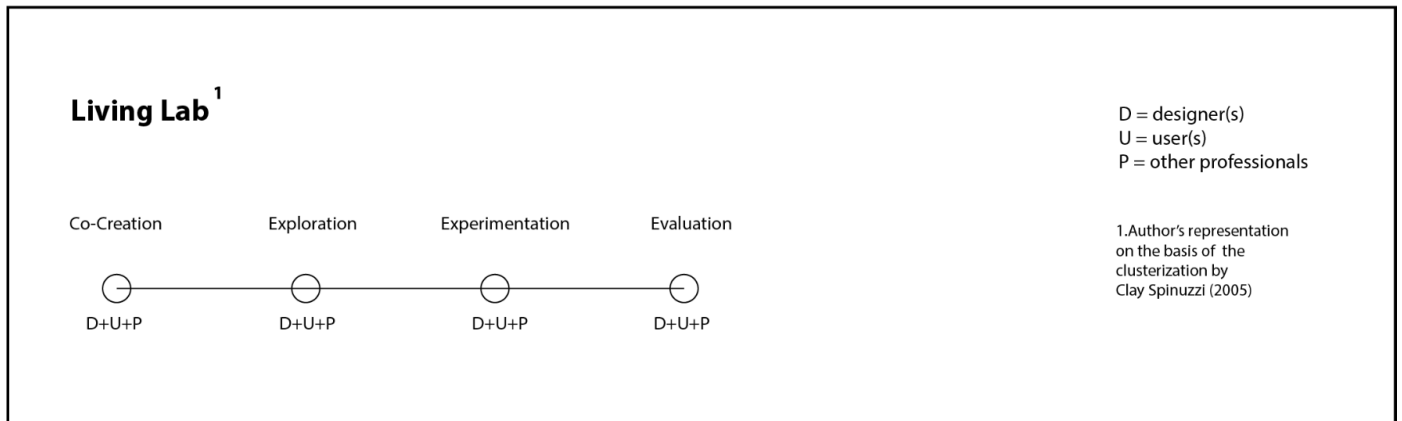


Figure 2. Living Lab methodology representation

5. Case studies

5.1 Torino City Lab

The section was developed based on the study by Cillo V., Del Giudice M. et al. (2020) and the consultation of the websites of Torino City Lab, Casa delle Tecnologie Emergenti, Comune di Torino, and Torino Social Impact.

Torino City Lab is an initiative promoted by the City of Turin with the goal of transforming the city into an open-air laboratory for experimenting with innovative urban solutions. Launched in 2018, the project offers companies, start-ups, universities, and research centers the opportunity to test new technologies and pilot projects in real-world contexts, facilitating public-private collaboration to develop solutions that improve citizens' quality of life and address concrete challenges and needs of the area.

In 2016, Turin inaugurated the first Living Lab in the Campidoglio district, with 29 experiments on environment, mobility, and tourism. In 2018, the focus shifted to a circular and collaborative economy. In 2021, The City promoted the application for the establishment of the Casa delle Tecnologie Emergenti (CTE NEXT) in close collaboration with the universities of Turin and other strategic partners. In 2022, the City was included among the 100 European cities committed to reducing emissions by 2030, becoming a "Mission City" and a hub of climate innovation and experimentation. In 2023, the City established the Living Lab ToMove, which builds upon and expands the goals and facilities of Torino City Lab and CTE NEXT, also pursuing energy and environmental sustainability objectives across the board.

Main actions:

- Collaborations and partnership networks to foster innovation through events and workshops;
- Field experimentation and testing of new urban technologies;
- Support for tech start-ups (incubation and acceleration);
- Smart mobility projects and IoT (Internet of Things) infrastructures;
- Initiatives for sustainable energy production and consumption;
- Digital education projects in schools and accessibility to digital technologies and development of innovative services for the community;
- Professional training programs and workshops for students, entrepreneurs, and professionals;
- Community participation through their involvement in the experiments of new technologies and the implementation of participation and public consultation platforms;

- Promotion of sustainable lifestyles, such as the use of renewable energies, sustainable mobility, and intelligent resource management, as well as urban redevelopment projects to improve public spaces.

Economic impacts:

- Increase in investments by tech companies and start-ups looking to test and develop their products;
- Growth in employment both in companies and related services (consulting, maintenance, technical services);
- Growth of the entrepreneurial ecosystem through support for local start-ups and Small and Medium Enterprises;
- Increased collaboration between universities, research centers, and companies, fostering the development of advanced skills in technology and innovation;
- Greater efficiency and productivity in traditional sectors through the adoption of new technologies.

Socio-cultural impacts:

- Reduction of the digital divide (greater access to technology for all segments of the population);
- Greater support for artistic and cultural initiatives that use technology for new forms of expression and audience engagement;
- Increased collaboration with local cultural institutions and with non-profit organizations and volunteer associations to develop projects with a strong social impact.

5.2 Farm Cultural Park

This section aims to describe the process of sustainable design, social innovation, and inclusion, triggered by the Farm Cultural Park in the historical center of Favara. It was developed based on the reading of several articles and contributions, including Faraci G. (2017), Tesoriere Z. (2023), Occhipinti F. (2017), and Mariani M. (2020), from the Farm Cultural Park website and related projects, listening to interviews available on the web, some direct experiences within its spaces, and, finally, a personal interview with one of the founders.

Farm Cultural Park is an independent cultural center located in Favara, a small town in the province of Agrigento (Sicily), which, since 2022, also has a location in Mazzarino (CL). It was founded in 2010 by the private initiative of notary Andrea Bartoli and lawyer Florinda Saieva, a couple of art collectors with a great passion for contemporary culture who dreamed of raising new generations - including their two daughters - in a socially and culturally stimulating environment.

The regeneration initially involved the area of Sette Cortili, a neighborhood in the historic center of Favara that, due to the collapse of some buildings and the death of two girls, was at risk of being demolished. The couple, returned from Paris, decided to take action to stop the neglect and marginalization of their city, accelerating the project's start and acquiring the area. With the involvement of artists, architects, and designers, both national and international, renowned and emerging, they transformed the disused spaces into places for the community with the intent to preserve the town's culture and identity. In addition to exhibitions and installations, workshops, meetings, conferences, and festivals are organized. The place soon became a cultural reference point both locally and nationally and beyond, proposing itself as a replicable model in different contexts.



Figure 3. Farm Cultural Park's entrance, Sette Cortili, Favara (AG)

Over the years, Farm has expanded its exhibition spaces and participated in important international events, including the Venice Architecture Biennale. It established SOU, the School of Architecture for Children - focusing on educating young generations to create responsible and aware citizens - and Prime Minister, School of Politics for Young Women - to train and inspire them to become leaders and change agents in their communities - now spread throughout Italy.

Another significant moment was the inauguration in 2019 of Countless Cities, the Biennial of the Cities of the World, which aimed to shift the focus from the State to the Cities, emphasizing their growing importance concerning a country's economic, political, cultural, and social life. This event led to the reopening of Palazzo Miccichè, a 19th-century noble palace, set up with the intention of redefining the meaning of a historical-monumental building, aspiring to become something else: "Human Forest" project, a place for meeting and bringing people closer to nature.

Andrea and Florinda, through the work of Farm, demonstrate that culture, art, the meeting of people, and the love for a place can be powerful catalysts for transformation and rebirth.



Figure 4. Human Forest, Palazzo Miccichè, Favara (AG)

Main actions:

- Cultural and artistic redevelopment;
- Promotion of cultural events;
- Education and training through workshops, labs;
- Educational programs for all ages on art, design, sustainability, and gender equality;
- Community involvement.

Economic impacts:

- Increase in employment, not only in quantitative terms but also qualitative, and reduced brain drain;
- Updating and professional qualification of local human resources;
- Growth of new entrepreneurship (start-ups);
- Investment in the historic center/culture combination by SMEs;
- Increase in tourism and opening of new businesses by the local population.

Socio-economic impacts:

- Increased social cohesion, sense of belonging, and collective responsibility;
- Positive and proactive attitude of the community;
- Increased cultural and artistic prestige of Favara;
- Greater attention to the maintenance and care of public spaces, the urban context, and the community's needs;
- Inclusion of vulnerable or marginalized individuals;

- Increased self-esteem and aspirations of the local population;
- Improved image of the territories and reduced antisocial behaviors;
- Perception of a greater sense of security by women.

5.3 Noi Ortadini

The section was developed based on the study of the Noi Ortadini website and related projects, listening to interviews available online, and a personal interview with Sara Simeone. Noi Ortadini APS is an Association for Social Promotion that manages a green space in the “Serra Venerdi” neighborhood of Matera. The idea originated in 2020, during the lockdown, from the private initiative of Andrea Grieco, a biologist and aspiring natural farmer, who started a horticulture project on land near his home in Matera. During the summer, he participated with his colleague Sara Simeone in a synergistic and regenerative agriculture course at the Serra Venerdi garden, and in the following months, new members joined, and activities began to expand.

In December 2020, Noi Ortadini formalized its structure as an APS. With the support of the community and institutions, it participated in strategic meetings to define guidelines for urban gardens and established collaborations with Basilicata Link, a local cultural association, as well as with young artists, architects, and both local and non-local networks. Over the years, it has proposed entrepreneurial initiatives and engaged in educational and cultural activities; it collaborates with national organizations and social cooperatives and amplifies the group's engagement within the community, aiming to regenerate the area and create a gathering space.

In June 2021, it joined the participatory discussions organized by Coalizione Civica Matera, involving various Third Sector Organizations around the theme of common goods, and it was recognized as a catalyst for urban regeneration, social inclusion, and sustainability, emerging as a virtuous example of community participation and sustainable development.



Figure 5. Noi Ortadini in the vegetable garden, Matera (MT)

Main actions:

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- Urban agriculture and environmental sustainability through the creation of urban and shared gardens and the promotion of recycling and composting;
- Promotion of agricultural education through outdoor workshops and seminars on sustainable cultivation techniques;
- Community involvement in the design and management of urban gardens, community events, and farmers' markets;
- Collaborations with entities, associations, and local interest groups;
- Enhancement of the territory through the recovery of abandoned areas (about 4000 sqm) and the promotion of local heritage;
- Awareness programs related to the 2030 Agenda to inform the community on sustainable development issues.

Economic impacts:

- Training and acquisition of skills related to European project design, including participation in calls for proposals;
- Job opportunities for local youth;
- Interest and support from local institutions.

Socio-cultural impacts:

- Greater sense of community and solidarity and active participation of people;
- Increased connection of "ortadini" citizens with nature;
- Transformation of an abandoned space into a place accessible and open to the entire community;
- Greater involvement of both local and non-local youth;
- Increase in activities and services that promote intergenerational and intercultural relationships, with particular attention to migrants and people with disabilities.

6. Conclusion

The research questions brought to light different interpretations. As the case studies analyzed show, design can and does build collaborative relationships in the contemporary age. In Celaschi's essay, design acts as a bridge capable of connecting and integrating different areas of knowledge (Germak, 2008), metabolizing and synthesizing certain design practices and creating a "conscious collage" and a continuous reshaping of knowledge. Like an enzyme that sets in motion a process of (re)interpretation capable of generating new matter (Tufarelli, 2022). As can be seen from the collection and synthesis of the most widely accepted definitions, the different methodologies differ in definition but not always in methodology. Trying to categorize the case studies examined, the situation blurs to the point of asking a further question: how important is it to define a preset methodology, rather than to focus on creating a cohesive and adaptable approach? In a small scale and small community context, cohesion appears crucial, obsessing over the division of approaches and attempting to use the perfect methodology may not be the key to project success. The question also prompts reflection on further aspects such as the importance of context, creating a sense of unity and shared goals, the type of project or initiative, and the skills and experience of those involved. Prioritizing valorization, cohesion, community involvement and flexible approaches is key to succeeding in social and territorial regeneration. "Accepting the fact that non-experts also make critical contributions and should work alongside experts is a sign of progressiveness and maturity in the discipline of design" (Muratovski, 2022) and is reflected in the possibility that an approach works even without a clear and defined method, but, more precisely, despite having one. This hypothesis highlights the need for further research.

The comparison of the three cases highlighted the similarities and differences between the different methodologies. All three projects emphasize the active involvement of the local community, with a particular focus on education and training, and engage in territorial enhancement. Specifically, Farm Cultural Park and Noi Ortadini implement participatory projects and community activities. They offer educational and training programs on specific topics such as art, agriculture and sustainability. They are involved in the regeneration of abandoned spaces and the promotion of local heritage. Torino City Lab includes community participation in the experimentation of new technologies and organizes events and workshops to foster innovation and collaboration.

The differences between the different cases concern thematic focus, scale and impact, and types of intervention: Farm Cultural Park focuses mainly on art and culture as tools for urban regeneration, Noi Ortadini focuses on urban agriculture and environmental sustainability, and Torino City Lab is oriented towards technological experimentation and urban innovation. While the first two operate in more localized contexts (Favara and Matera respectively), with a strong community and territorial impact, Torino City Lab operates on a broader urban scale, aiming to make Turin an intelligent and innovative city. Finally, Farm Cultural Park and Noi Ortadini, carry out physical and tangible interventions (transformation of urban spaces, creation of vegetable gardens), and Torino City Lab focuses on technological and digital interventions (testing new technologies, smart city).

In conclusion, Torino City Lab, Farm Cultural Park, and Noi Ortadini represent three distinct models of urban regeneration and social innovation. Each of them has a specific focus and the common goal is the improvement of the quality of life of citizens and the promotion of sustainability and inclusion. Torino City Lab is the one with more industrial objectives and initiatives. For example, in collaboration with the company ABzero, urban trials are underway to develop innovative technological solutions and social acceptance for a drone-based autonomous transport system (Smart Capsule) designed to transport medical equipment in urban areas.

Assuming that the scale of the project influences the need for structuring, following rigid standardized methodologies is seemingly negligible. Flexibility and adaptation to individual needs, through the combination of different strategies, appears to be a strength that can transform and innovate cities and communities. For this reason, we cannot at present identify methodologies that are inherently more effective.

Design thinking emerges as a concept to support the theme in light of the above. In the context of social innovation, design thinking is particularly valuable because it allows for a human-centered approach to problem-solving (Kazuhiko, 2014). All those involved, whether designers or non-experts, employ their design skills during a project. They first identify and understand the problem, then they imagine a better solution. Finally, they translate those ideas into practical actions. Non-experts offer pervasive design skills through life experience and creativity. Design experts contribute by utilization of design tools and the capacity to facilitate co-design activities. Today, it is easy to find clear examples of these two groups working side by side in any design activity. Co-existence is accentuated when dealing with issues of social innovation (Muratovski, 2022).

In conclusion, despite the multiplicity of existing terms and methodologies, it is clear from this paper that these should not be considered static and rigid elements. On the contrary, their primary function is to facilitate the initiation of a process of collaboration and sharing of a common vision. In this sense, they can be understood as guidelines, to be used flexibly and adaptable to specific needs. To grasp the complexity of the phenomenon, it is necessary to continue the comparative analysis of further case studies.

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