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Experimenting with the New European Bauhaus Values and Principles in Urban Transformation



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Alessandro Deserti · Emma Puerari
Editors


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Editors

Alessandro Deserti 
Department of Design
Politecnico di Milano
Milan, Italy

Emma Puerari 
Department of Design
Politecnico di Milano
Milan, Italy



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Preface

Cities are facing the issue of sustainable urban development: “Experimenting with the New European Bauhaus Values and Principles in Urban Transformation” provides a comprehensive exploration of eight diverse European sites, offering a unique perspective of urban change and development. This open-access book draws directly from the experiences of local organizations, activities, action researchers, municipalities, developers, and artists all working to embody and experiment with the New European Bauhaus foundations. Over ten engaging chapters, the book waves a comprehensive narrative around the Desire (Designing the Irresistible Circular Society) project, displaying lessons learned, and providing a window into innovative strategies for developing sustainable, inclusive, and beautiful urban futures. By unveiling these stories, the book highlights the importance of participatory processes, multi-level engagement and transdisciplinary approaches in shaping vibrant cities. The journey begins with an in-depth exploration of the Desire project, providing a nuanced understanding of the broader context of its experiments and research activities. This foundation leads to an examination of diverse approaches to achieving sustainable, inclusive, and aesthetically enriching urban transformations. Showcasing findings from an EU lighthouse project, this book not only highlights the transformation of eight urban sites across Europe but also offers valuable insights that can shape future policy, research, and the New European Bauhaus initiative. This edited book is therefore a fundamental reading for those interested in fostering a circular, irresistible society.

The work carried out by the Editors and Authors of this volume has been conducted within the framework of the project “Desire—Designing the Irresistible Circular Society,” which has received funding from the European Union’s Horizon Europe research and innovation program under Grant Agreement No. 101079912. Website: <https://www.irresistiblecircularsociety.eu>.

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desire an irresistible
circular society

Milan, Italy

Alessandro Deserti
Emma Puerari

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Biodiversity Hub: An Emerging and Co-created Strategy for Cascina Falchera in Turin



Beatrice Villari , Domenica Moscato, Laura Fornaro, and Francesco Tortorella

Abstract The chapter delineates the process and outcomes of the two-year *Desire—Designing an Irresistible Society* project. Commencing by addressing the main challenges identified in the initial stages of the journey, characterized as “Reconciling with Nature”, the chapter elucidates the activities undertaken at Cascina Falchera in Turin (Italy) and the resultant achievements. Indeed, field actions were initiated, grounded in the concepts of Citizen Science and Nature-Based Solutions, aiming to catalyze a transformation the traditional didactic farm model, rooted in 1990s experiments, into a conceptual framework of an experimental urban hub, offering activities and services centered around the enhancement of urban biodiversity. In line with the DESIRE principles—articulated as “Biodiversity: We embrace a planetary perspective;” “Belonging: We nurture a sense of belonging;” and “Aesthetics: We expand the concept of aesthetics”—, workshops and co-design activities with local communities, as well as artistic endeavors were conducted. The overall process is portrayed as action-research which, through cycles of planning, execution, and evaluation, supported and fostered a continuous learning process within the Cascina Falchera community, while facilitating reciprocal knowledge exchange with external stakeholders.

Keywords Social innovation · Community engagement · Peri-urban area · Action-research · Service design

B. Villari (✉)

Department of Design, Politecnico di Milano, via Durando 10, 20158 Milan, Italy
e-mail: beatrice.villari@polimi.it

D. Moscato

Projects Management Office, Consorzio Kairos, Turin, Italy
e-mail: domenica.moscato@coopliberitutti.it

L. Fornaro

European Projects and Liaison Office, Consorzio Kairos, Turin, Italy
e-mail: laura.fornaro@coopliberitutti.it

F. Tortorella

Comune di Torino, Corso Ferrucci 122, 101141 Turin, Italy
e-mail: francesco.tortorella@comune.torino.it

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1 Falchera Neighborhood and Cascina Falchera

1.1 Cascina Falchera and Its Transformation Journey

The Falchera district (approximately 8,000 inhabitants) comprises two settlements: “Falchera Vecchia”, established in the 1950s, and “Falchera Nuova”, constructed in the 1970s. Originally, in the late 19th century, the Falchera area was predominantly rural.

During the 18th and 19th centuries, the suburban areas of Turin witnessed significant expansion of farmsteads. In 1710, the Falchero brothers acquired a piece of land collectively and marked the establishment of Cascina Falchera. However, following the Second World War, it underwent a significant transformation with prominent architectural and urban planning interventions, designed by architect Giovanni Astengo. Initially conceived as a working-class neighborhood, Falchera was primarily intended to accommodate individuals migrating from southern Italy to work in the north’s large industries. In its early days, the Falchera neighborhood possessed an almost idyllic charm, surrounded by nature and designed to be self-sufficient, with essential and easily accessible services.

Nevertheless, over the years, the Falchera area has experienced challenges common to many peripheral districts of major Italian cities, including a gradual decline in commercial activities, depopulation due to limited generational turnover, and a lack of connections to the urban center. These factors contributed to Falchera’s progressive isolation, fostering phenomena of marginalization, degradation, and impoverishment. Over time, the Cascina solidified its centrality in the local area, evolving into a key hub not only for local agricultural endeavors but also for educational initiatives.

In the nineties, it became an educational center open to schools in the city, as well as a recreational summer center for families in Turin. In particular, in 1996, Cascina Falchera was entrusted to ITER—*Istituzione Torinese per una Educazione Responsabile* (Turin Institution for Responsible Education), a City of Turin municipal entity. ITER transformed the farmstead into an educational landmark, seamlessly integrating it into the city’s educational framework. This educational aspect continues to define Cascina’s mission today, as evidenced by projects undertaken by the Kairòs Consortium. Kairòs aims to further elevate Cascina’s role as a Common Good serving the community while fostering research on ecology, social innovation, rural environments, and agri-food supply chains.

Another initiative worth mentioning is the “Special Project for the Peripheries” of the City of Turin, which establishes Participatory Local Development Agencies in some city neighborhoods. Initiated in 1998, among the objectives of the Development Committee of Falchera, initially, the initiative was aimed at gathering residents’ concerns, their reports, ideas, proposals, and criticisms, and bringing them to the attention of the Municipality. This enabled the latter to have a clearer and more realistic overview of the existing issues in the area, thus enabling policymakers to act more in line with the residents’ daily experiences.

In 2020, after years of inactivity, Cascina Falchera was entrusted to Consorzio Kairos with the aim of transforming the site into a green-oriented hub dedicated not only to the local community of Falchera district but also to the city of Turin and its surrounding areas. Cascina Falchera comprises several buildings, including an active guesthouse that hosted asylum-seeking families, multiple classrooms for educational activities, a conference hall, and offices. Additionally, the facility serves as a shelter for various animals for the educational farm and features a synergistic vegetable garden. Furthermore, there is an ongoing process to establish a food court inside the farm.

The Italian Ministry of Cultural Heritage and Activities has granted Cascina Falchera recognition of cultural interest. While this recognition adds value, it also presents a bureaucratic limitations that hamper flexibility in supporting transforming actions. Consequently, a new governance concept is being developed to regulate public–private partnerships to support a long-term strategy. As part of Desire, Cascina Falchera aims to refine its vision by facilitating a transformation into an urban living lab—a multidisciplinary space for production and lifelong learning. It is envisioned as an urban area where socialization intersects with eco-cultural needs.

1.2 A System of Policies to Foster Urban Regeneration

Over the past thirty years, Turin has undergone a complex physical and socioeconomic transformation that has reshaped the entire urban system. This initiated a process of innovation and change that continues to this day. The reorganization of city accessibility and infrastructure, the creation of new services and public spaces, and the environmental restoration of rivers and parks are among the significant issues that have prompted Turin to develop innovative solutions, new economies, and opportunities.

Turin has received substantial support from the European Regional Development Fund (ERDF) in implementing urban regeneration programs. More recently, the city has been exploring innovative approaches to urban development facilitated by the URBACT and Urban Innovative Actions programs. In alignment with the EU Urban Agenda and the New Leipzig Charter [1], Turin is currently undergoing a dynamic phase of evolution. This phase aims to integrate at the local level the principles and objectives established at the EU level, including:

- The EU Green Deal: Turin is committed to the EU mission of achieving 100 Climate Neutral and Smart Cities by 2030.
- The New European Bauhaus: In 2023, the city adopted the Manifesto of the New European Bauhaus of the City of Turin.

The City of Turin was among the first local authorities in Europe to initiate a participatory process in 2022 aimed at incorporating the values of the New European Bauhaus—beauty, sustainability, and inclusion—into its political strategy. This initiative began as a policy lab, promoted in partnership with the NEBTO Committee

(Turin Committee for the New European Bauhaus, a group of citizens, activists, and professionals from various fields). The process included several public workshops to explore how the NEB principles could be applied to concrete projects for sustainable urban development in Turin. The first output of this process is the NEB Manifesto of the City of Turin [2], adopted by the City Government with Deliberation No. 120 on March 14, 2023.

The City of Turin has initiated a process to integrate the New European Bauhaus principles into the policy instruments guiding the actions of the local public administration. The current challenge is to translate these principles into operational programs that impact urban development and concrete local policies, such as the management of environmental resources, mobility, technological innovation, inclusion policies, and education and job creation for young people. In particular, the City of Turin intends to start this path of renovation and integration of the NEB principles with the National Program “Metro Plus Città Medie Sud 2021–2027” the national program dedicated to Italian cities funded by ERDF and European Social Fund+ (ESF+). The Program designates 14 Italian Metropolitan Cities as Intermediate Bodies, with the City of Turin being one of them, managing a budget of over €140 million. While ensuring continuity in addressing specific thematic issues previously covered by the National Program for Metropolitan Cities 2014–2020, such as digitalization, mobility, energy efficiency, and social inclusion—the new Program broadens its scope to encompass new challenging such as urban regeneration, environmental sustainability, social innovation, environmental and circular economy initiatives, and natural heritage.

The territorial project associated with the National Program “Metro Plus Città Medie Sud 2021–2027” for urban regeneration will focus on the city’s northern area, specifically where Cascina Falchera is located. This area has been selected due to its significant challenges, including poverty, school dropout rates, youth unemployment, and environmental degradation. It is one of the city’s poorest areas, with many residents reliant on municipal assistance.

The project will encompass urban redevelopment and regeneration initiatives, policies targeting the youth population, and enhancements to the socio-cultural infrastructure and identity of the two neighborhoods involved. In addition to physical interventions, the project will include a comprehensive set of intangible actions, designed to maximize the impact and benefits for the community through a systemic approach. The underlying logic aligns closely with the Strategic Municipal Plan, aiming to create a local, participatory, and sustainable urban development program. This strategic program seeks to trigger an overall improvement in the area through interventions that redevelop public spaces, enhance environmental quality and sustainability, boost resilience, mitigate and adapt to climate change, promote sustainable mobility, and improve the quality of life for residents (focusing on relationships, safety, and health). This approach is fully consistent with the principles established by the New European Bauhaus Manifesto emphasizing inclusiveness, circularity, and the reconciliation of urban areas with nature, integrating art, architecture, and design to explore innovative ways to transform urban spaces.

1.3 Activating Young Adults, Enhancing Water Resources, and Transforming the Farmhouse Identity

In line with the policies described above, Cascina Falchera stands as an emblematic site in the city of Turin, having played a significant role in social and educational realms over the years. The ownership of Cascina Falchera lies with the Municipality of Turin, while the Consortium Kairos oversees its operations through a long-term permit model. This model entails the implementation of an entrepreneurial strategy and an economic framework capable of sustaining the site's development in a self-sustainable manner. This model necessitates integrating the site's strong social orientation with elements of economic sustainability.

Presently, it is undergoing substantial transformation, both in terms of infrastructure and cultural and social offerings, as well as in civic engagement and participation. The long-term vision is to create an innovative model of urban space that can inspire the city and serve as a social catalyst, fostering connections and relationships among citizens, authorities, universities, and public and private organizations. On one hand, there is a need for the revitalization and energy efficiency enhancement of the farmstead's spaces. On the other hand, the activities within Cascina Falchera must be redesigned to address the challenges of sustainability, equity, and inclusivity in urban regeneration.

In support of the equitable and sustainable transformation process, several areas of interventions have been identified, namely:

- The revitalization of Falchera lands to enhance landscaping and quality of life, with particular emphasis on those lands involved in the agricultural rural management of soil across various areas of the district.
- The advanced renovation of Cascina Falchera, entailing the restoration of the eighteenth-century farmhouse in a manner that integrates environmental sustainability measures (e.g., integration of solar panels, utilization of geothermal heating systems) with innovative technology applications aimed at fostering community cohesion and reconfiguration of local spaces.
- The conceptualization and implementation of new green spaces and environmentally friendly features (e.g., bio lakes) to bolster local biodiversity and enhance community engagement with water and historical water management systems still extant in the Po Valley region.

Specifically, within the Desire project, a theme of sustainable development has been identified concerning the role of water resources, both within Cascina Falchera and in relation to the surrounding territory. The site is characterized by a historical system of field irrigation (the “bealere”), which is emblematic of the rural landscape of Piedmont. These infrastructures carry historical significance while also contributing to the enhancement of urban biodiversity. Through a participatory and collaborative process involving municipal authorities, citizens, experts, and various organizations, a development strategy for the site has emerged, subsequently conceptualized as the “Biodiversity Hub”. This strategy fully embraces the principles of

the New European Bauhaus, contributing to an urban transformation where the pillars of sustainability, beauty, and participation become integral components of local initiatives.

2 Reconciling with Nature Challenge

In the initial phase of Desire, Cascina Falchera was at the onset of its transformation process, with its new conception and management inaugurated in May 2023. The representatives of the Kairos Cooperative, in collaboration with the Municipality of Turin, were thus laying the groundwork to initiate a process of engagement between territorial stakeholders on one hand and citizens on the other, aiming to strengthen Cascina Falchera's identity as a community center. The challenges identified encompassed various operational and strategic aspects, notably:

- Building a grassroots community of interest around the activities of Cascina Falchera, with an additional challenge of actively engaging the young adult demographic.
- Activating a community of institutional stakeholders to share strategies and proposed actions across various decision-making forums within the municipality.
- Reinforcing Cascina Falchera's identity by changing it from the didactic-educational model characterizing past experiences, achieved through the formulation of a strategy aimed at defining new initiatives and services to be implemented on-site.

The strategic and operational objectives were focused on building new community ties and strengthening existing ones. This was achieved through understanding emerging citizen needs, fostering closer connections with local institutions and organizations, and activating processes of listening and co-design. Aligned with the New European Bauhaus principles, these challenges integrated participatory processes and factors related to aesthetic concerns alongside sustainability considerations from the early stages of development.

Building upon these premises, concrete actions were undertaken on the ground, leading to the formulation of an emerging strategy encapsulated in the "Biodiversity Hub" concept. Cascina Falchera, as a place aimed at reclaiming open spaces for civic engagement and lifelong learning, thus emerges as an ideal context for nurturing a new urban Living Lab in the city of Turin. Indeed, it serves as a natural nexus between city and nature, center and periphery, urban culture, and rural tradition.

3 Site Experiences as Action-Research

The experimentations run in Cascina Falchera revolved around three Desire’s principles, namely “Biodiversity: We embrace a planetary perspective” to demonstrate viable possibilities for sustainable and green transformation for the local resource management system and to enhance the full potential of endogenous resources; “Belonging: We nurture a sense of belonging” to activate pathways of active citizenship and collective responsibility to generate cultural change that promotes the culture of reciprocity, proximity, and co-responsibility, developing welfare practices; and “Aesthetics: We expand the concept of aesthetics” to collaboratively design a mixed plan of functions and services that can orient and guide the transformation of the site and to co-design a new perception of the place.

The Desire principles guided the implementation of on-field activities characterized by community listening and participation involving diverse competencies and stakeholders, alongside an emergent and bottom-up approach to decision-making because of collaborative endeavor. The experimental journey pursued several objectives:

- Activation and engagement of communities, achieved through multidisciplinary workshops.
- Construction of a shared vision of transformation, developed through a co-design approach.
- Experimentation with specific solutions through the realization of small demonstrators.

Due to the nature of the experiments conducted, the Cascina Falchera’s experiment within Desire can be described as action-research. Indeed, the journey involved a team of researchers from the Department of Design of Politecnico di Milano who actively collaborated with the Cascina Falchera team through phases of planning, action, and evaluation [3]. These processes, interpreted as participatory and collaborative design processes that engaged different stakeholders in transformative and emancipatory journeys [4], contributing to the change in, for, and of the community itself [5]. The adoption of the action-research approach enhanced the core team’s ability to navigate complex systems by integrating observations, analyses, tests, and design visions, as well as critical and reflexive capacities [6]. In the following paragraphs, the experiments conducted are briefly described, initiating learning processes based on action and experience.

3.1 Water Saving Camp: Activating and Engaging Local Communities (The Irresistible Cycle)

The Water Saving Camp [7] initiative is articulated in a series of workshops open to the public, focusing particularly on engaging the young adult community, and

aimed at supporting critical reflections regarding the historical and prospective roles of water and natural resources in the city. Aligned with one of the themes of the Desire project, “Reconciling cities with nature”, the objective was to contemplate the interplay between nature, spaces, and communities not only from a functional perspective but also regarding well-being, local knowledge, and the creation of shared value within these spaces. As previously mentioned, the activities are specifically tailored to young adults (aged 15–29), with the aim of cultivating a reservoir of knowledge and experiences that transform their perception of the places they inhabit daily and the active role that public spaces have in the cities. The long-term goal was to cultivate an initial community of active young citizens who possess an in-depth understanding of their territory, are equipped with the tools to enhance it, and exhibit the necessary sensitivity to narrate and disseminate this process.

Water Saving Camp unfolded through three initiatives: (1) Nature-Based Solution workshop, (2) Urban Exploration initiative, (3) City Branding workshop. During these initiatives, young adult communities and citizen groups engaged in urban exploration activities aimed at fostering active participation in acquiring and sharing knowledge of the local area. Through a Citizen Science approach, valuable information and data from the landscape were collected in collaboration with local communities, institutions, associations, and water channeling experts operating in Cascina Falchera. Furthermore, this activity was conducted in collaboration with an artist and a sound engineer who produced an online-available soundtrack as the Urban Soundscape of Falchera.

Additionally, introducing the concept of Nature-Based Solutions, which entails using natural elements to address typical challenges in built environments, a workshop was organized to de-pave certain areas of the inner courtyard of the Cascina, currently fully paved and impermeable. Through the removal of covering materials, “breathing areas” were created to enable the absorption of rainwater and its reintroduction into deeper layers, thus restoring it to its natural cycle (precipitation-absorption-utilization by vegetation-evapotranspiration-condensation).

Finally, during a phase of engaging with local communities, ideas and suggestions were collected to initiate new initiatives at Cascina Falchera. These projects aim to strengthen the connection with the neighborhood, enhance the relationship with the city, promote knowledge exchange, and advocate for sustainability and inclusion.

This phase of community engagement and activation led to the development of a strategic vision, which evolved into the concept of an urban “Biodiversity Hub”. On an operational level, it involved identifying potential concrete initiatives to be tested on-site. The insights gathered from these participatory processes laid the groundwork for defining a more precise offering for the “Biodiversity Hub” and experimenting with specific initiatives.

3.2 La Roggia: A Collaborative Manifesto to Foster Creativity

During the final phase of the Water Saving Camp, interviews were conducted with young participants to envision the future of Cascina Falchera and propose actions for its aesthetic and participatory regeneration. Various proposals were gathered, such as cultural activities to be held at the Cascina and events for the local community that utilize open spaces and strengthen the connection with the neighborhood. Among the suggestions, the most promising was the idea of establishing an artist residency. This residency would focus on urban regeneration, the enhancement of biodiversity, and the theme of water as a common good. This concept was enthusiastically received by the community to introduce new artistic expressions and contemporary art to Cascina Falchera. Consequently, the initiative “Roggia” was organized, creating a space where young artists, designers, and creatives could collaborate with the local community to experiment with new communication methods and collectively imagine the future of this rural area on the outskirts of Turin. Specifically, a group of twelve young adults developed a Manifesto to be shared with the artist involved in the residency. This Manifesto, inspired by the values of the local territory and community, provides suggestions that could serve as inspiration to explore and interpret the role of the artwork to be created within the Cascina Falchera community.

3.3 Biodiversity Hub: An Emerging Shared Vision of Transformation

Cascina Falchera is undergoing a transformation, necessitating a new identity connected to the current management and governance system. This aims to strengthen both the internal bonds within the Kairos association and to establish a renewed relationship with the local area and diverse users, moving beyond the traditional view of the Cascina as merely an “educational farm”.

Participatory processes and connections with various local stakeholders have led to the recognition of Cascina Falchera as a notable site for experimentation on biodiversity themes, as well as a public space for social aggregation and inclusion. This concept aligns with the existing Living Labs in the city of Turin [8] which have been experimenting with new technologies and circular processes for years, involving both public and private organizations.

This vision of transformation originates from the action-research process initiated with DESIRE. This process needs to be further developed and refined to foster new relationships, define targeted project strategies, and implement solutions that address the diverse needs of different communities [4]. The experimental and collaborative process has led to the construction of a shared vision of the “Biodiversity Hub” at Cascina Falchera as a place for environmental sustainability and social innovation experimentation, and as a provider of different services. Development strategies have been proposed for developing the “Biodiversity Hub” through specific actions and

service offerings. Consequently, co-design workshops have been initiated to define the value proposition, linking the existing offerings with future ones.

3.4 Co-design Value Proposition and Services: Structuring a Service Plan and Service Scenarios

In order to focus and describe how the “Biodiversity Hub” may evolve, a series of initiatives have been launched to collectively define the value proposition and identify a new offering system to be implemented in the short-term, while also defining a future development strategy through service scenarios. Specifically, three co-design workshops were conducted, coordinated by the research team of the Department of Design of the Politecnico di Milano, aimed at (i) mapping the existing offerings and identifying the system of actors and users involved; (ii) defining the value proposition of the “Biodiversity Hub” in relation to the identified user communities; and (iii) identifying a complex and differentiated offering system through a service plan to be implemented in the short-medium term.

In support of the workshops, a series of field interviews were conducted—with the collaboration of local volunteers—which allowed for the delineation of several *Users Personas* (with a particular focus on Young Adults) and *Non-human Personas* (for which the soundtracks produced by artists involved in the Water Saving Camp initiatives were used), along with a mapping of existing relationships with the actors involved with different roles in the Cascina current initiatives. In relation to the specific user communities, the value proposition of the “Biodiversity Hub” was then outlined, describing in more detail how this urban Living Lab could be developed in the future, according to specific objectives, activities, services, and competencies.

Finally, through a participatory process involving local associations, the Municipality, citizens, and the Kairos staff, some transformation scenarios were outlined around the core theme of urban biodiversity. The transformative scenarios were described through five strategic directions that could characterize the “Biodiversity Hub” in the future. The “Biodiversity Hub” was then described as a *training center*, *research and experimentation center*, *territory protection center*, *cultural center*, and *aggregation center*. Within the five strategic visions, some specific services and initiatives were proposed, along with the community users and the system of actors to be involved and engaged.

The insights gathered from the co-design process led to the identification of some design scenarios and services to be experimented with in the short-medium term. In particular, the scenarios were titled “*Cascina Falchera open workspace*”, “*Cascina Falchera Biodiversity Lab*” “*The Hi-tech Cascina: phygital narratives*”, “*Atelier Cascina Falchera*”, and “*Cascina Falchera Circular Food Lab*” and were described and visualized using evocative pictures. For each of these scenarios, some service ideas were outlined. Of these solutions, one related to the artist residency, an experimental prototype was created, as described in the following paragraph.

3.5 *Experimenting Opportunity: Prototyping Initiatives to Create Legacy*

As mentioned above, the concept of the artist residency has emerged through participatory contributions initiated during the “Water Saving Camp” and further developed through the participatory process “*La Roggia*”. It was subsequently reworked and integrated as part of a broader offering within the “Biodiversity Hub” framework, in line with the principles of the New European Bauhaus. Efforts were focused on constructing a prototype artist residency by engaging local communities while also extending invitations to the international context. Specifically, centered around the theme of water resource enhancement, a call was issued to young national and international artists and designers to envision an artifact capable of visualizing the connection between water, territory, and community.

A young artist was then selected through an international jury to realize a site-specific work that could serve as a landmark and stimulate reflection on the importance of water as a vital element. The residency will commence in June 2024 and conclude with the unveiling of the artwork to the local community.

This amalgamation of art, territory, research, and biodiversity enhancement opens new avenues for experimentation at Cascina, further reinforcing its role as a site for experimentation and multidisciplinary research.

4 Key Learning

The overall results achieved during the Desire project can be attributed to a journey of social innovation and continuous learning that particularly concerned individual skill levels along with organizational strategy and internal processes. Learning, within an action-research process, can be described in terms of value creation [9] in the short and long-term, in relation to relationships, skills, processes, and, in the specific case, in connection with a particular territory. It can be described as community learning that refers to experiential learning of knowledge concerning the skills acquired through interactions with the places and knowledge that belongs to those places.

In Cascina Falchera, the learning process particularly pertained to three main issues: (i) the construction of the Cascina’s identity; (ii) the change in internal organization, and (iii) the relationship with communities.

Building identity and sense of belonging inside and outside the organization. The construction of a new identity and the fostering of a sense of belonging characterized the entire transformative process of Cascina Falchera. The idea of innovating the place towards an open, collaborative, and experimental model centered around biodiversity is the result of a bottom-up process and research that draws from local culture and history, reinterpreting Cascina’s vision and offering. The construction of the new identity (now far from Cascina Falchera only as an “educational farm” targeted to primary schools) resulted from an open and collaborative process that worked as a

collective *sense-making* involving different actors' perspectives. The need to build the place's identity emerges by sharing strategies, visions, working procedures, and tools within the organization, with communities and external actors. The construction of identity also involved community engagement and participation processes to activate interest, motivation, and a sense of belonging. The construction of a shared identity is also a regenerative and transformative process that enables the evolution of a design community over time [5, 10] and represents a crucial part of the local transformation.

Transforming organizational roles and enabling continuous learning paths. One important aspect of the learning process involved organizational dynamics at the operational level and at the broader organizational vision and culture. During the DESIRE initiative, the Kairos association experimented with new methods of action, tools, and practices. Simultaneously, the number of people involved in the association has grown significantly. This necessitated a rethinking of certain internal processes (e.g., training activities or knowledge-sharing processes) and the ability to manage multiple activities concurrently in various roles (e.g., managing projects, handling human resources, maintaining relationships with external suppliers, designing specific initiatives, coordinating ongoing activities with new programming, and so on). From an internal organizational perspective, learning by doing was initiated, which helped overcome obstacles related to bureaucratic aspects, resource availability (people, time, financial resources), and reduced specific skill gaps. This organizational transformation is still in its early stages and will continue to be a focus for future work and experimentation. The aim is to maintain, where possible, a good degree of informality in processes and relationships, while simultaneously implementing structured processes that can alleviate organizational strain and respond more swiftly to changes.

Enabling continuous dialogues with the local communities. An important aspect of the learning process in Cascina Falchera relates to the relationship with communities, that is, on the one hand, understanding their needs and characteristics, and, on the other hand, activating mechanisms of engagement and participation that generate interest and a sense of belonging. This entails a continuous and constant learning process that ranges from strategic and relational to practical interventions [11], from informal and unstructured actions to more structured and targeted initiatives, such as meetings, workshops, or practical activities. Community involvement concerned at least two aspects. The first was related to the internal dimension of the organization, exploring how communities and citizens can have an active role, for example, in organizational processes, activities to be carried out, or space management and maintenance of the place. The second was related to the external relationship, and therefore the ability to generate interest in the place and make it lively, vibrant, participatory, and open. The gradual process of participation support (with different degrees of involvement) needs to be designed, instructed, and supported over time through precise and varied choices for each situation. Therefore, community building is a sort of project within the project that requires the allocation of appropriate resources (i.e. time, and competencies). Building, nurturing, and maintaining different types of social relationships supported the identity-building process described above, through the construction of social and relational capital [12]. The importance of learning in collaboration with the different communities revolving around Cascina Falchera thus

generated a common sense of place that also helps to promote regenerative practices to support a renewed relationship between humans and nature.

In summary, the process initiated with Desire represents the first step in a broader and long-term transformation of Cascina Falchera and the surrounding neighborhoods. The conducted experiments led the core research team to reflect on the knowledge capital acquired, on ways to strengthen internal relationships and reinforce external ones through a mutual learning process, and on the ability to create value through small steps aimed at supporting a wider transformation. This allowed for greater awareness of existing critical issues, process challenges, as well as people, communities, and organizations strengths. This reflective and iterative approach characterized the entire process, identifying the value generated in the short and long-term. Such value goes beyond the DESIRE results, but it represents a new local capital to be used and regenerated in future initiatives while approaching urban biodiversity through the idea of being together, sustainable, and beautiful.

References

1. European Commission, https://ec.europa.eu/regional_policy/whats-new/newsroom/12-08-2020-new-leipzig-charter-the-transformative-power-of-cities-for-the-common-good_en, last accessed 2024/07/22.
2. Città di Torino, <https://www.torinoeuprojects.it/manifesto-nebto>, last accessed 2024/05/27.
3. Kemmis S, McTaggart R (1990). *The Action Research Planner*. University Press, Geelong, Deakin.
4. Villari B (2023). Action research approach in design research. In: Roger P, A, Yee J (eds.) *The Routledge Companion to Design Research*, pp. 269–284. Routledge, London.
5. Villari B (2021). Community-centered design: a design perspective on innovation in and for places. *The International Journal of Design in Society*, 16(1): 47–58.
6. Minna K, Jacobi J, Korhonen-Kurki K et al (2024). Reflexive use of methods: a framework for navigating different types of knowledge and power in transformative research. *Sustainable Science*. 19(2): 507–521.
7. Cascina Falchera. *Water saving camp: Desire project*. <https://cascinafalchera.it/homepage/futuro-2/desire/water-saving-camp/>. Last accessed: 12 September 2024.
8. Cuomo F, Lambiase N, Castagna A (2021). Living lab on sharing and circular economy: The case of Turin. *Health Informatics Journal*. 27(1):1–12.
9. Blaak M, Irepu S, & Zeelen J (2024). Transforming collaboration between communities and non-governmental organisations: Reflections on learning spaces in Central-Eastern Uganda. *Action Research*, 22(1): 51–68.
10. Fassi D, Manzini E (2022). Project-based communities: lessons learned from collaborative city-making experiences. *CoDesign*, 18(1): 4–15.
11. Villari B (2012). *Design per il territorio. Un approccio community centred [Design for places. A community centred approach]*. FrancoAngeli, Milan (in Italian).
12. Johnston K A, Lane A B (2018). Building relational capital: The contribution of episodic and relational community engagement. *Public Relations Review*, 44(5): 633–644.

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