Increasing biological and spatial diversity. Dialectics of design and scientific experimentation

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Abstract

This contribution addresses an experimental scientific project aimed at increasing biodiversity through afforestation, developed by a multidisciplinary group in various parts of Italy within the National Biodiversity Future Centre, Spoke 5 Urban Biodiversity. The focus is on projects carried out in the Città Metropolitana of Milan and in Pistoia, involving the discipline of landscape architecture, in a multidisciplinary environment. The project has a particular nature being scientific while also incorporating spatial and design-oriented disciplines. It engaged with a variety of plots to be repeated, adapted, and monitored in diverse contexts, addressing both the ideal conditions of a scientific project and actual spatial ones. The process and interventions are discussed from a landscape architecture perspective showing the role that can be played by the discipline and reflecting on the value of diversity, both biological and spatial.

L'articolo riguarda un progetto sperimentale dedicato all'aumento della biodiversità attraverso interventi di afforestazione, sviluppato da un gruppo multidisciplinare in diverse parti d'Italia nell'ambito del National Biodiversity Future Centre, Spoke 5 Urban Biodiversity. In particolare, l'articolo si focalizza sui progetti sviluppati nella Città Metropolitana di Milano e nella città di Pistoia, che hanno visto il coinvolgimento della disciplina dell'architettura del paesaggio. La sperimentazione ha avuto sia un carattere scientifico sia progettuale, confrontandosi con le condizioni ideali di un progetto scientifico e con quelle reali dei contesti. L'articolo discute gli interventi e il processo dal punto di vista dell'architettura del paesaggio, mostrando il ruolo che può giocare la disciplina e riflettendo sul valore della diversità, sia biologica che spaziale.

Keywords

Diversity, biodiversity, landscape architecture, context, afforestation.
Diversità, biodiversità, architettura del paesaggio, contesto, afforestazione.

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On Biodiversity

The diversity of life forms has undergone drastic simplifications throughout the history of Homo sapiens' civilization. Anthropologists identify two significant periods during which this occurred, corresponding to the two greatest transformations in human social organization: the agricultural revolution and the industrial revolution (Harari, 2014). Today, we are experiencing what many scientists in ecology refer to as the sixth mass extinction, occurring in the current geological epoch, the Holocene, which has drastically accelerated since the second half of the last century[1] (Ceballos et al., 2015; Kobert, 2014).

Geographical isolation and increased biodiversity often go hand in hand, as seen over geological timescales with the coming together and breaking apart of continents, which led to alternating patterns of genetic simplification and differentiation (McArthur and Wilson, 1967; Clement, 2005). Globalization, by creating a socio-economic 'Pangea,' seems to be breaking the isolation of niches, fostering species simplification. Frequent reports of the arrival of invasive species, dangerous parasites, and insects from Asia to Europe are symptoms of this phenomenon.

What appears to be the consequence of this condition is the 'Homogenocene,' a term proposed by Mann (2011) to interpret the current age as one of diffused homogeneity. Homogeneity poses a significant threat to ecosystem resilience, and attempting to resist to its diffusion is problematic: it involves, among others, creating or protecting niches that evade the strong forces of intensive global economic activity that induce the simplification of ecosystems and life forms (Folke et al., 2021).

Starting from the 1980s, considerations of ecology began to play an increasingly significant role in landscape architecture, including issues such as environmental sustainability alongside use and aesthetics (Lister, 2007). This has increasingly required the involvement of specialized skills in the multidisciplinary environment typical of landscape architecture, where the roles of the ecologist and the designer can mutually inform each other to shape the project. Yet, James Corner, at the end of the 1990s, underlined that "the appropriation of ecology within landscape architecture" had "yet to precipitate inventive and animistic forms of creativity" (Corner 2014, p. 44).

Today, while the importance of both roles is usually recognized in recreational projects, when it comes to endeavours specifically aimed at increasing biodiversity, the role of landscape designers often tends to be less valued. However, focusing exclusively on ecological performance and overlooking design possibilities often reduces the poten-

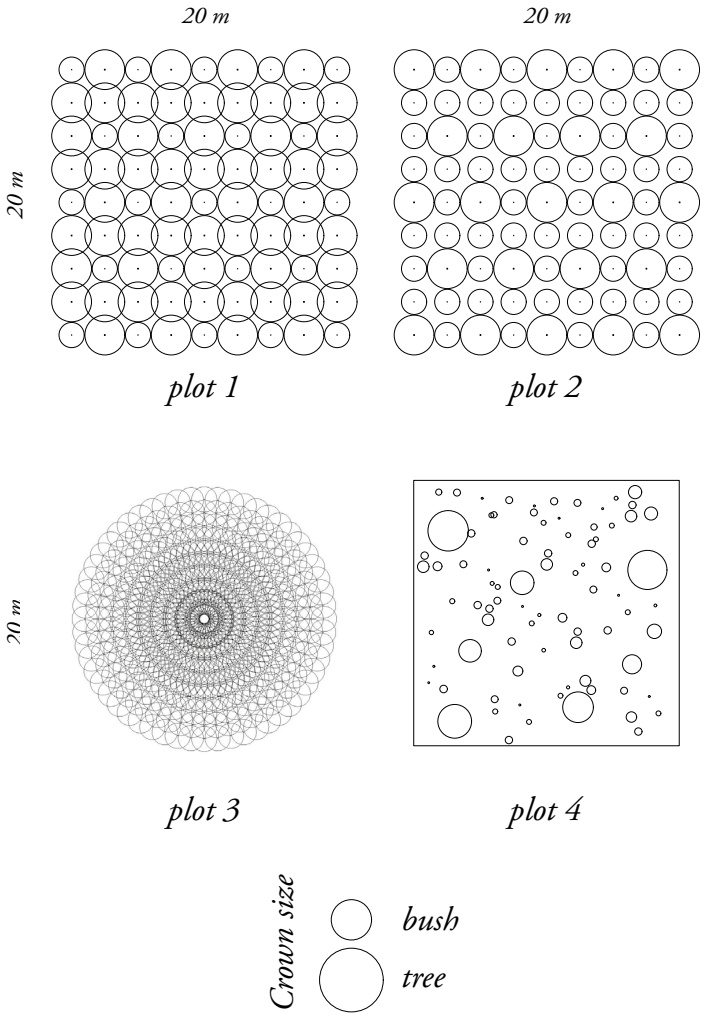


Fig. 1 – Plot typologies with species and plant densities defined by botanists and forestry experts of the research group (see note n. 2). Suggestions about the grid and the circular plots were also given by the landscape architecture team (drawing: Thomas Cabai, 2023, based on the research group work)

tial to embrace various forms of diversity beyond the ecological. This can lead to homogeneity and missed opportunities to foster diversity through a context-sensitive approach that incorporates the unique and specific conditions of different areas - whether ecological, social, cultural, or aesthetic - potentially reinforcing each other. Such collaboration would be crucial especially when dealing with urban environments.

An opportunity to engage with a diversity of disciplines is a scientific experimentation on afforestation developed within the National Biodiversity Future Center (NBFC), involving a research team in landscape architecture, including the authors of this paper, in a multidisciplinary environment. The project balanced scientific and spatial considerations, generating fruitful reflections on the possible role of landscape architecture in collective efforts to improve biodiversity on the planet and sparking discussions on various forms of diversity.

The Scientific Project: Afforestation, 'Restoration Ecology,' and Biodiversity

Within Spoke 5 'Urban Biodiversity' of the NBFC, funded by the European Union – Next Generation EU (an Italian research center involving several universities, public and private entities), Task 6.3 'Restoration Ecology' focused on developing an experimental project testing different 'afforestation' methods, with several repeated interventions featuring some variations across different parts of Italy: in the Città Metropolitana of Milan, in Pistoia, Rome, and Campobasso. The practice of 'afforestation' differs from the more popular term 'reforestation'; in the latter, a forest is recreated after recent destruction, while in the case of afforestation, the forest is established where none has existed for at least 50 years[2] (UNFCCC, 2008).

The project was developed by a multidisciplinary team[3] of botanists, biologists, ecologists, forestry experts, zoologists, landscape architects, and planners from different Italian universities and entities (see Resemini et al., 2025). The authors of this paper were part of the landscape architecture team[4] involved in and collaborating on the interventions located in the Città Metropolitana of Milan (Municipalities of Abbiategrasso, Corbetta, Albairate) and Pistoia[5], which have already been implemented.

The scientific experimentation envisioned by the botanists and forestry experts of Task 6.3 required identifying areas of approximately 1 - 1.5 hectares, flat, and with no contamination. The selected sites in the Città Metropolitana of Milan and in Pistoia consisted mainly of former agricultural land, marginal areas close to productive areas, or sites close to infrastructure. Each site needed to host several 'plots' (Figs. 1 - 3): three plots with 70% trees and 30% shrubs (the typical proportions usually envisioned in afforestation), three plots with 30% trees and 70% shrubs (more resistant to droughts), three 'serial maquis' (*macchie seriali*: dense circular nuclei of trees surrounded by shrubs, referred to as Plot 4 in Fig. 1), three 'control' plots open to spontaneous vegetation, and an area for tree seed planting. Additionally, the sites in the Città Metropolitana of Milan also host experimentations by Task 6.1 'Urban Bio-Phyto-remediation,' particularly several plots testing phytoremediation plants (with and without amendments to compare plant growth, despite the sites not being contaminated), and by Task 6.4 'Enhancement of Functional Biodiversity and Mitigation of Stressors,' which involves flower and herbaceous strips for pollinators envisioned by zoologists, along with nests for bees, wasps, and rodents. This scheme was reduced in Pistoia and Albairate. The areas will be monitored for five years by research group experts to draw conclusions regarding surviv-

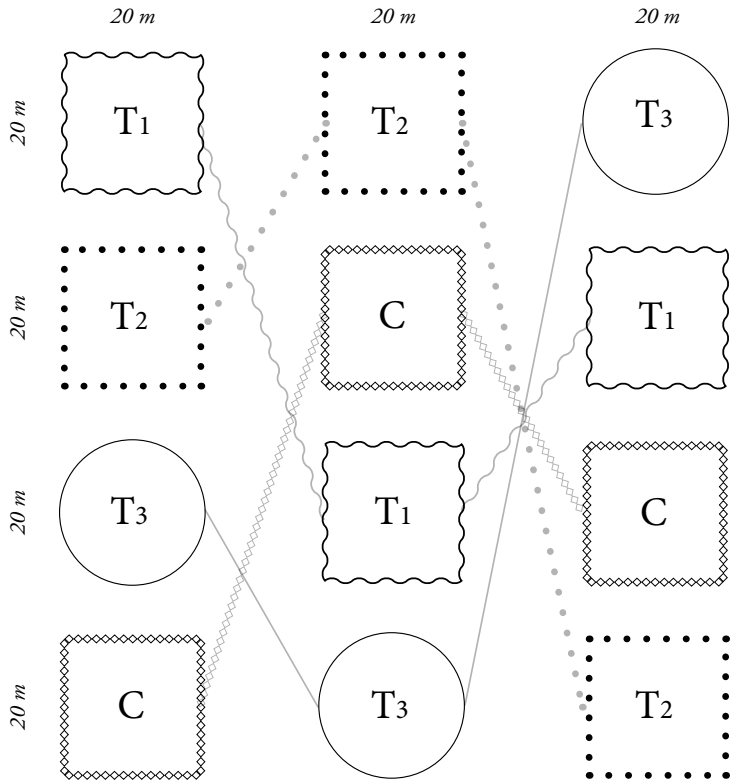


Fig. 2 – Ideal repetition of the planted plots (T1, T2, T3) and the control plot (C) in the scientific project. Each plot needed to be repeated three times and randomized in space to respond to statistical needs. The scheme was to be implemented in several sites in Italy (drawing: Thomas Cabai, 2023, based on the research group work).

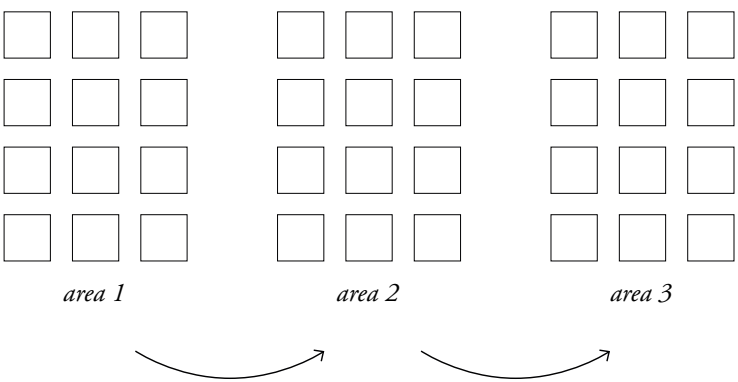


Fig. 3 – Each scheme was repeated in different areas of Italy, with a different climate. In the Città Metropolitana of Milan the scheme was replicated three times, in three different sites. This additional repetition and randomization is aimed at further increasing the data for statistical analysis (drawing: Thomas Cabai, 2023)

al and growth rates, species mix, and density for afforestation in urban areas with attention to biodiversity increase and climate change.

The mix of species and biodiversity is at the core of the scientific project. Regarding the selection of species, the project looks both to the past by adopting the theoretical framework of 'restoration ecology' and to the present and future by considering climate change. Our contribution exploits the diversity envisioned by the scientific project and enhances it by envisioning various compositions of the plots within the sites, diverse relationships with the contexts, and integrating human presence into the picture. We challenged the type of image usually pursued in 'restoration ecology' and afforestation - natural-looking –. We also debated the terminology, suggesting alternatives such as 'regeneration.' However, 'restoration ecology' was ultimately preferred and used by the scientific-oriented components of the research group. It is worth noting that the recent approval of the 'Nature Restoration Law' at the European level has further strengthened the term restoration.

The Landscape Architecture Contribution: 'Regeneration,' Diversity as a Value, Legibility

Our team's contribution in landscape architecture played a role from several perspectives and at various scales. It consisted of proposing different possible strategies, concepts, and compositions for the sites to better connect the interventions to their nearby contexts (Fig. 4), envision their future roles after the experimentation, and foster public use when close to urban areas, enhancing their legibility for passersby. The project provided an opportunity to combine the scientific goals of the experimentation with spatial and design-oriented sensibilities. The concepts were then developed and implemented by ERSAF (Ente Regionale per i Servizi all'Agricoltura e alle Foreste of the Lombardy Region) for the areas in the Città Metropolitana of Milan and by the research group of the Università degli Studi di Firenze (DAGRI) in collaboration with Green Economy and Agriculture (GEA) for the area in Pistoia. Most of the areas in the Città Metropolitana of Milan were selected thanks to the support of Forestami[6]: a project

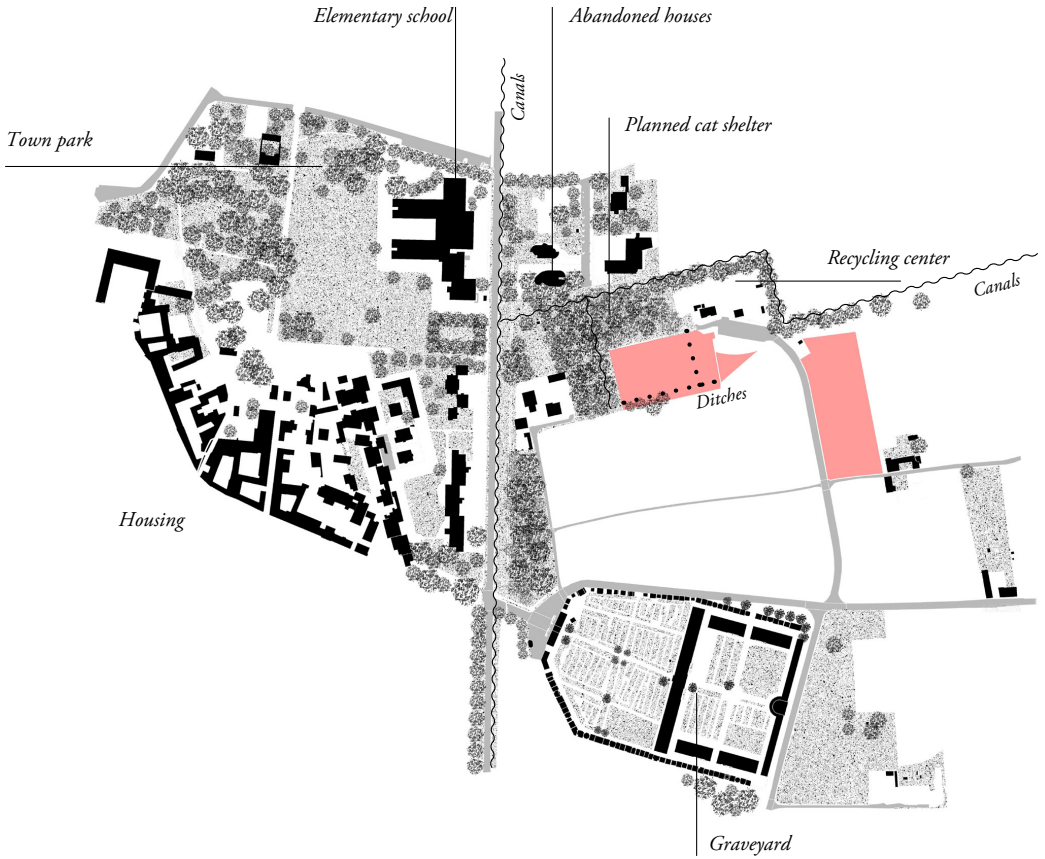


Fig. 4 – Study of contextual relationship by the landscape architecture team, to ground the scientific experimentation in the context. Example for the site in Corbetta (drawing: Thomas Cabai, 2023, based on the landscape architecture teamwork)

aimed at planting 3 million trees in the Città Metropolitana of Milan, having already agreements with several municipalities in the area.

The possibility to engage with a diversity of plots was a richness for the project, usually not occurring in afforestation initiatives. Our contribution exploited this diversity, suggesting different arrangements of the plots for each site based on their spatial features. One of our aims was to render the experimentation legible as an artificial and unique intervention rather than proposing the image of a spontaneous wood formation (as usually pursued in afforestation and restoration ecology). In Corbetta, the circular plots are situated in an area with a recreational potential that can evolve into a future park (Figs. 5, 6). In this area, a strip for herbaceous species, flowers, and nests to attract pollinators was also placed. The agreed proposal – a trade-off between scientific and spatial concerns – was to exploit the strip for educational purposes, including humans rather than considering them as disturbing agents for animal biodiversity. A larger number of flower strips, intended to be studied in terms of the number of species attracted, was instead placed in Abbiategrasso, an industrial site where human presence is characterized more by observation than interaction, thus combining human and non-human relations differently. Here, squared plots of afforested areas were used to border the ex-

Fig. 5 – Composition of the plots in the Site of Corbetta (the implemented project has some differences) (drawing: landscape research team, Thomas Cabai, Chiara Geroldi, Matteo Poli; satellite image: Google Earth).

Fig. 6 – Circular plots implemented in Corbetta (photograph: Thomas Cabai, 2023)

isting wooded area, increasing the legibility of the circular plots and the strips close to the road. The different compositions attempt to create differentiated environments for both humans and non-humans, such as areas able to host people gathering, woods, areas for pollinators and small rodents, and well-curated control plots to attract attention of the visitors/users also on the process of appropriation by the spontaneous vegetation. These were treated with equal importance and visibility as the planted ones. Maintenance purposes of the control plots required fencing, which was implemented by ERSAF using a simple system of wooden poles with a cord to avoid repulsive fencing and so encouraging the approaching of the visitors. The diversity of forms and plots allowed for a variety of combinations. Enhancement of diversity was considered at different scales. In the compositions, diversity played a role according to the various contexts, such as places with recreational potential – the site in Corbetta – or places to be seen – such as the site in Abbiategrasso, where the plots are displayed along the road, and the one in Pistoia, where they are visible from the highway.

We dedicated attention to strategies to increase the legibility of the interventions and the afforestation as artificial constructs thus attempting to convey the scientific project to observers. At the scale of the singular plots, sharp and regular geometries of plantation have been finally chosen during the process: a squared grid for afforested plots and a radial pattern for circular plots. Both the legibility of the interventions and the proposed public uses of sites near inhabited areas contribute to extending the project's impact to the social sphere. We contributed to defining the image of the interventions, avoiding a 'pastoral' image of nature, natural-looking landscapes, or the implementation of technical projects overlooking spatial qualities. Several authors in landscape architecture emphasize the importance of approaches that enhance legibility of landscape interventions as artificial constructs rather than masking them with *pastoral* images of nature or implementing natural-looking landscapes, particularly in urban contexts. For instance, Anne Whiston Spirn (1996) and Elisabeth Meyer (2008) highlight how projects with a 'natural' appearance tend to become invisible over time, not valued as cultural constructs, and therefore subject to less care. We think this is especially relevant when dealing with 'urban' biodiversity.

Legibility emerges as an important concept in landscape architecture. Julia Czerniak (2007, p. 215) refers to the "capacity of a project to be understood in its intentions (evolution and goals), identity (its distinguishing character and organization), and image (both its appearance, whether pastoral or post-industrial [...])." Karen M'Closkey (2013, p. 20, 224) further reflects on the term, noticing that for George Hargreaves legibility refers to how a particular landscape is different from another, which is similar to the Czerniak's idea of 'distinguishing character and

organization.' M'Closkey also notes that legibility is an important basis for stimulating awareness (ibid., p. 142). One of the authors of this paper has also reflected on the importance of legibility in the context of "designed landscapes of discarded fill" (Geroldi forthcoming). Legibility can stimulate visitor interest, draw attention to the interventions, which also have didactic value, and encourage use.

In this context, we refer to the legibility of the intervention as an artificial construct and, possibly, as a scientific project to visitors and passersby. We also proposed avoiding the term 'restoration ecology,' favoring 'regeneration' instead, to move away from the idea of reconstructing a past state[7] in an ever-evolving environment. As mentioned, this term was not accepted by other group members, but both approaches are embedded in the implemented interventions.

Regarding the selection of species, the mix was chosen by botanists and forestry experts, with variations across different parts of Italy according to their respective climates. We had no role in this selection, which was based on the plants present in the different territories, climate, looking back to past ecosystems in terms of 'restoration ecology,' particularly the lowland forest (*foresta planiziale*) of the Po River Valley and also considering future climate change scenarios and contemporary issues such as the diffusion of pests due to globalization. In terms of layouts, we suggested new compositions of forms that foster connections with the context and relationships between humans and non-humans.

The particular nature of the project – a scientific one with contributions from design-oriented disciplines – makes it an interesting case for reflecting on the relationship between scientific, technical, and sometimes abstract requirements and spatial considerations.

Engaging with Implicit Spatialities in Scientific Experimentation

As seen above, the project has addressed the theme of diversity on multiple levels. From our perspective, understanding the implicit spatialities of the experimentation and measuring them against a given diversity – that of the four territorial contexts discussed – has been one of the most recurring activities in the project[8].

The scientific vocation of the intervention initially prioritized principles of spatial organization defined by scientific needs. These principles, initially manifested in the form of numerical prescriptions – such as distances between plants, between plots, number of plots, number of areas, and size of the areas – were retrospectively analyzed by us to be understood and interpreted as general methodological principles guiding the biologists. Among these, standardization, repetition, and randomization, – all tools of scientific methodology – emerged as the most relevant, each with its own spatial implications. The method-

Fig. 7 – Composition of the plots in the Site of Abbiategrasso (drawing: landscape research team, Thomas Cabai, Chiara Geroldi, Matteo Poli; satellite image: Google Earth, image © 2025 Airbus).

ology of the afforestation experiment was as follows: after establishing the four standard types of plots, these were repeated three times, with the repetitions randomized within the project area. This operation was repeated three times across three sites in the metropolitan city of Milan.

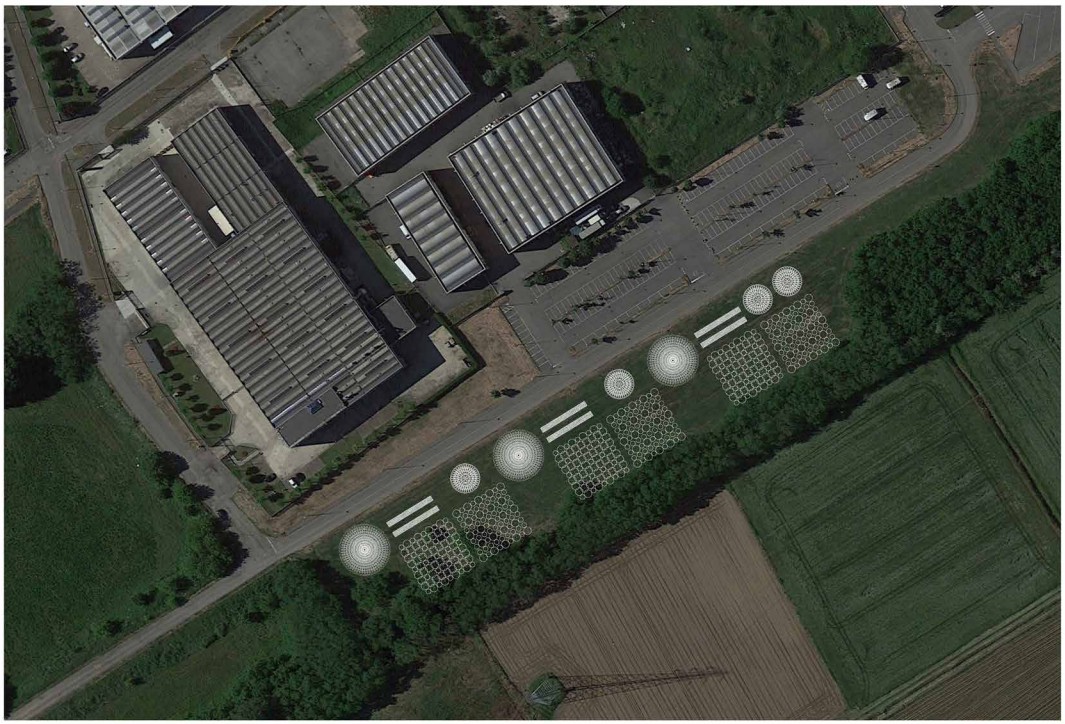
In terms of spatial organization, this meant that the plots – as envisioned by the scientific components of the project – aimed to be standardized and unchangeable types, with constant planting layouts, densities, and numbers of species, initially envisioned on 'paper,' not in a spatial context. The repetition of plots, necessary to improve the validity of statistical data, introduced a system of recurring elements. Finally, randomization was needed by the scientists to neutralize the impact of 'external factors': general physical and chemical conditions as well as site specificities that are instead highly valued in the design discipline.

All this indicated that the ideal spatial condition of the scientific experimentation was to be isolated from the context, abstracted from the diversities present in the area. Moreover, the ecological goal was to find the most performing planting solution for afforestation, applicable throughout the Po River Valley region, and by doing so, increasing the biodiversity of each site. From this point of view, the context as interpreted by botanists and forestry experts could retrospectively be considered the Po Valley itself: the botanists referred to that large-scale specificity, the lowland forest of oak and hornbeam. It was, therefore, an approach that referred to an idea of context at a scale incomparable with that of the project site, hardly perceptible on-site except for botanical relationships and ecological belonging to the region. It also introduced the idea of a now absent but potential context: the lowland forest (*foresta planiziale*), which would be present on the site if not for human pressure.

The local context of the interventions, instead, was one of the targets of our contribution, which aimed to embrace the diversity of each site while dealing with the a-contextually defined botanical plots - an apparent paradox. We recognized that the rigidity of the system also represented an opportunity for recognizing the project on a territorial scale. The abstract, ideal scheme of the experimentation could not ignore the reality of the different geometries, and constraints of the implementation sites, such as irregular geometries, underground utilities, spatial needs for mechanized maintenance, etc. This forced negotiations and mutual exchanges between the theoretical method envisioned by the scientists and the local context, and so among the different disciplines involved in the project. This necessity to negotiate between the abstract and the concrete legitimized the landscape architecture contribution, which engaged with these two dimensions while incorporating spatial considerations and exploiting the diversity of the experimentation and the contexts.

In this way, proposals that embraced the specific diversity of the context, organizing the plots from the perspective of the observer, the passerby, the user, and the neighboring activities, could also enhance the legibility of the experimentation, which included several recurring elements.

The scientific need to randomize the plots, which might be seen as a compositional constraint, proved



instead to be flexible enough to allow for spatial composition. We arranged the plots according to the specific diversities of the contexts in which they were inserted. In Corbetta, for example, the project site was interpreted as divided into two parts: one facing the urban area, and one facing the agricultural area. Thus, the suggestion was to place several circular plots in the area overlooking the urbanized zone (the two larger circular plots being the 'serial maquis', while the smaller ones were for the phytoremediation experimentation). Ample free space was left between the plots, envisioning a potential use as a park, which motivated the use of circular shapes in this area as a baroque invitation to explore the experimentation and the future park. The other part of the site was more densely planted and almost completely filled with plants, being cut off from the urban area by a road and in continuity with the agricultural areas. In this way, it was possible to incorporate the diversities present in the context without distorting the scientific principles of the project.

A second example, different from the first, is Abbiategrasso. This area, compact and longitudinal, faced an industrial zone on one side and an agricultural one on the other, separated by a hedge with an irrigation canal. In this case, as there were no particular potential synergies, the strategy was to interpret the road as a specific mode of observation. Its straight and constant shape suggested a 'gallery' configuration of the plots, maximizing the variety of plots visible in sequence and composing them as a structured succession of all the different elements involved in the experimentation (Fig. 7).

This experience shows that it was possible to dialogue with the specific diversities of each site. The contribution of landscape architecture in a collaborative environment proved fundamental in this aspect, for its ability to identify spatial opportunities, contributing to the contextualization of the intervention and its recognizability.

Engaging with diversity

The overall project worked with diversity in several ways, both biologically and culturally. The increase in biodiversity was coupled with considerations to provide differentiated interventions open to a diversity of human and non-human actors, responding in various ways to context specificities and engaging with diverse disciplines: a richness for the project. A diversity of temporal scales was considered: the evolution of landscapes over time, the time of the once-large scale existing lowland forest, and future adaptations to climate change. Moreover, the project worked at different spatial scales, ranging from the small one of the insect up to the context and territorial scales. Regarding the territorial scale, future research can investigate the role of the three described NBFC interventions in the Città Metropolitana of Milan within the overall system of newly afforested areas carried out by *Forestami*.

Diversity appears to be a valuable lens through which to engage with current projects aiming to increase afforestation and biodiversity in urban areas, helping to include a variety of factors, in addition to merely quantitative ones.

The experience showed the possible role of design within scientific experimentation, a rather unexplored realm. Moreover, several issues can be highlighted for other projects dealing with afforestation and biodiversity lacking such a scientific character. For botanists, forestry experts, and zoologists, the project allows conclusions to be drawn regarding species compositions and numbers. From our perspective, it is also possible to highlight the recreational potential and cultural value these projects can provide in urban areas, their possible role in creating new public spaces, and the value of legibility in this context. Furthermore, drawings proved to be an important tool for fostering dialogue among the different disciplines involved and for representing landscape changes over time. In terms of spatial quality, circular plots and flower strips with nests work particularly well for envisioning engaging public spaces, also offering potential didactic value while increasing biodiversity. The experience showed the value of integrating the discipline of landscape architecture into afforestation and biodiversity projects, which are often interpreted through quantitative lenses rather than through spatial and design-oriented attitudes.

Note

The two authors have jointly conceived the structure of this article. Chiara Geroldi authored sections 2 ("The Scientific Project"); 3 (The Landscape Architecture Contribution"); 5 (Engaging with diversity"). Thomas Cabai authored sections 1 ("On Biodiversity"); 4 ("Engaging with Implicit Spatialities"). Drawings were curated by Thomas Cabai and based on the research group work.

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Notes

[1] The 1950s was also a period considered and proposed as a starting point of the Anthropocene.

[2] The case of afforestation induces a debate on the term restoration ecology, as the target to a previous state is less obvious compared to reforestation.

[3] The research team of task 6.3, "Restoration ecology" (NBFC, Spoke 5 Urban Biodiversity) regarding the activities on the sites located in the Città Metropolitana of Milan (Corbetta, Albairate, Abbiategrasso) and in the city of Pistoia is composed as described below. M. Labra, Università degli Studi di Milano Bicocca (Scientific Director of the NBFC and former Principal Investigator of the Spoke 5); A. Galimberti, Università degli Studi di Milano Bicocca and M. C. Pastore, Department of Architecture and Urban Studies, Politecnico di Milano (Principal Investigators of Spoke 5); R. Gentili, Università degli Studi di Milano Bicocca (Coordinator of the task 6.3, Botany); C. Geroldi, M.U. Poli, T. Cabai, Department of Architecture and Urban Studies, Politecnico di Milano (Landscape Architecture); G. Gaiani, E. Simoni, E. Alghisi, M. Bertini, ERSAF Lombardia (Construction documents, implementation, manteinance of the sites in the Città Metropolitana of Milan); F. Ferrini, E.

Lo Piccolo, A. Maltoni, B. Mariotti DAGRI Università degli Studi di Firenze, F. Salbitano, Università di Sassari (Developing the project in the site in Pistoia in collaboration with GEA); A. Arcidiacono, A. De Toni, S. Ronchi, S. Salata, Department of Architecture and Urban Studies, Politecnico di Milano (Analysis of the recent afforestation interventions in the areas of the project sites); P. Digiovinazzo, Freelance (Collaboration in the species selection); C. Panigada, M. Rossini, L. Vignali (Remote sensing analysis), R. Resemini, S. Citterio, Università di Milano-Bicocca (Botany, species monitoring). Moreover, the sites of the Task 6.3 experimentations in the Città Metropolitana of Milan also involved Task 6.1 "Urban Bio-Phyto-remediation": S. Castiglione, F. Guarino, Università di Salerno, W. Guidi Nissim, Università degli Studi di Milano Bicocca (Phytoremediation); and Task 6.4 "Enhancement of functional biodiversity and mitigation of stressors": P. Biella, R. Ranalli, Department of Biotechnology and Biosciences – ZooPlantLab, Università degli Studi di Milano Bicocca, L. Bani, O. Dondina, V. Orioli, Department of Earth and Environmental Sciences, Università degli Studi di Milano Bicocca, E. Caprio, Department of Life Sciences and Systems Biology, Università di Torino, V. Fiorilli, A. Genre, Department of Earth and Environmental Sciences, Università di Torino (Experimentation with strips for flowers, shrubs and nests for wildlife). Task 6.3 Projects in Rome and tree seed planted plots: M. Del Monte, M. De Sanctis, G. Capotorti, C. Blasi, Francesca Vergari, Università di Roma Sapienza. Task 6.3 Project in Molise: Cesar I. Alvites Diaz, M. Marchetti, M. Ottaviano, F. Parisi, L. Sallustio, G. Santopuoli, R. Tognetti, D. Tonti, E. di Pirro, V. Garfì, B. Lasserre, Università del Molise.

[4] Landscape architecture team: fixed-term Assistant Prof. C. Geroldi, Associate Prof. M.U. Poli, PhD Student T. Cabai, Department of Architecture and Urban Studies, Politecnico di Milano.

[5] Sites locations: Via Mons. Zat, Corbetta; Via Umberto Saba, Abbiategrasso; Località Faustina, Albairate; Via Ciliegiole, Pistoia.

[6] Forestami is promoted by the Città Metropolitana of Milan, Municipality of Milan, Lombardy Region, Parco Nord Milano, Parco Agricolo Sud Milano, ERSAF, and Fondazione di Comunità Milano, and involves planting 3 million trees by 2030. It is the result of research by the Politecnico di Milano with the support of Fondazione Falck and FS Sistemi Urbani.

[7] For the context of mining landscapes and argumentations in favor of terms and approaches such as reclaiming and reinventing rather than recovering a previous state, see Berger 2002.

[8] For additional reflection on the issue see Cabai et al., 2024.

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