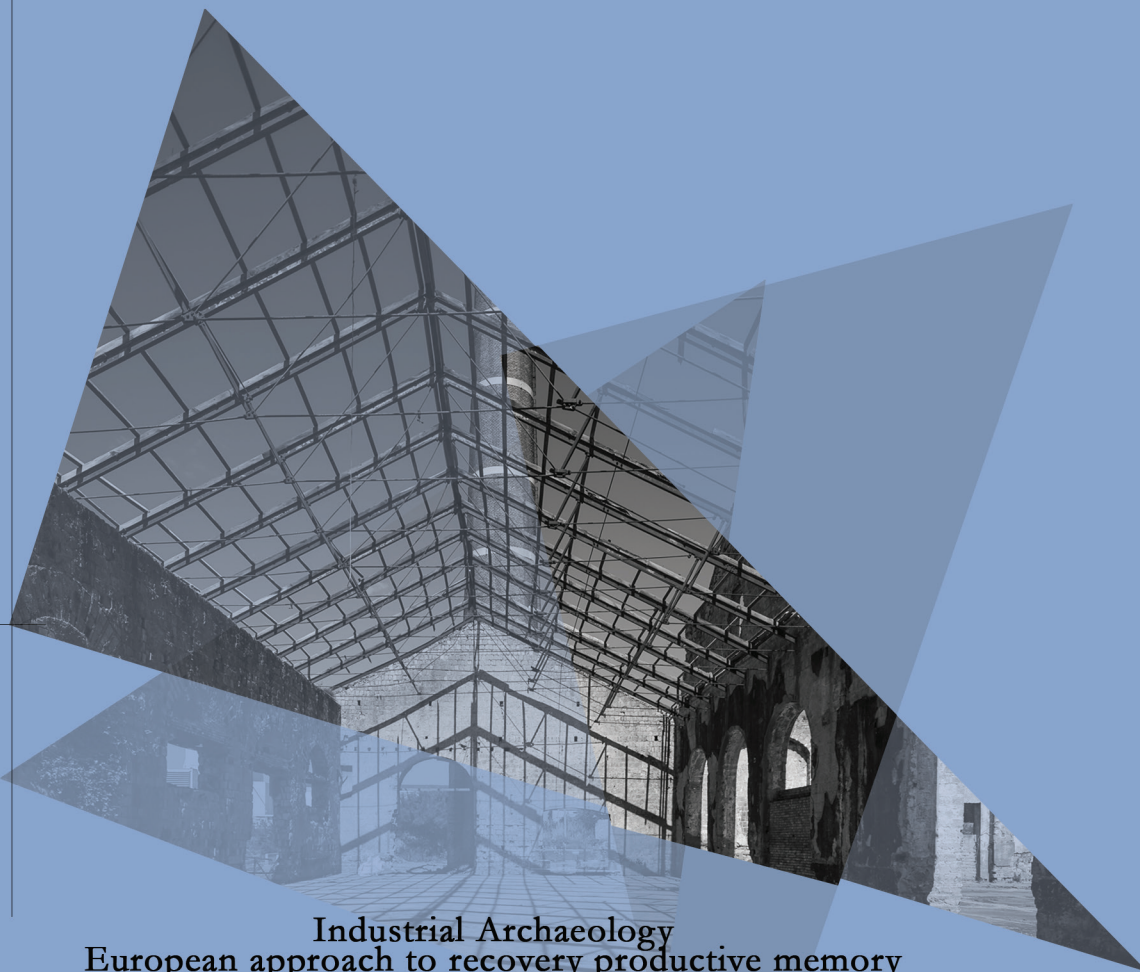


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Industrial Archaeology
European approach to recovery productive memory

Mara Capone, Noelia Galván Desvaux

Luis Agustin-Hernandez, Lucas Fernández-Trapa

01 . Industrial Archaeology. European approach to recovery productive memory

a cura di | edited by Mara Capone, Noelia Galván Desvaux, Luis Agustin-Hernandez, Lucas Fernández-Trapa

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Mara Capone, Noelia Galván Desvaux
Luis Agustin-Hernandez, Lucas Fernández-Trapa

Industrial Archaeology **European approach to recovery productive memory**

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Industrial Archaeology. European approach to recovery productive memory

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Living the spaces of post-production: design scenarios for Bagnoli

Giovanni Multari, Margherita Maurea, Paola Ascione, Vincenzo Gioffrè

“The existing” as potentially structuring material for the architectural design

More than other places, industrial abandoned areas appear suspended, where time, although passed by, manifests itself through present permanencies, in a condition between past and present, between the loss of values and the immense potential they offer to the contemporary city. In this context, the relationship between architecture and time emerges as a crucial interpretative key to address the issue of productive memory recovery.

The project for the regeneration of these areas is required to balance the permanence of identity elements with the necessity of adaptation and variation. It is essential to start from the identification of the intrinsic identity of these spaces, considering their historical, cultural, and social characteristics. The transformation process must be guided by the specific needs and requirements of the local community, in constant dialogue with the surrounding context, through gradual steps and actions that allow for continuous evaluation of the outcome.

In the broader context of transformation processes in the peripheral areas of contemporary cities, there emerges the need for an inclusive approach that sees architectural project not only as a means to transform physical spaces, but also as a catalyst to activate sociocultural processes that can sustain transformations over time.

The thesis studio is configured as a valuable moment to organize and



structure design research dedicated to the regeneration of abandoned sites, with the aim of redefining how public space is used. The methodology adopted explores the possibility of interpreting “the existing” as potentially structuring material for the architectural project to re-signify these areas, introducing strategies that can be replicated in similar contexts.

A tangible example of these challenges is the former Bagnoli steel plant, located on the western suburbs of Naples (Fig. 1).

Founded in 1910, the plant experienced significant growth until World War II, becoming a key industrial hub in southern Italy but simultaneously causing severe environmental damage.

The blast furnace, towers, and industrial spills, directed into the coastal sea, made it one of the most polluted places in the South of Italy.

With the closure of the plants in 1992, a long and unprofitable discussion began on the future of Bagnoli and the re-covery of the area to the point that it “[...] had become so identified with the factory that, when it disappeared, it automatically became a nothing, a non-place, an absence. Above all, an absence of the future” (Rea, 2002, p. 184). Decades of confrontations are closed – finally – with the international competition “UrbaNAture” curated by Invitalia, the agency of the Ministry of Economy and Finance. A competition to transform the 250 hectares of the former industrial area of Naples into one of the largest and most fascinating urban parks on an international scale.

However, despite exciting prospects, uncertainty and carelessness persist in the area, as previous plans have failed to draw sufficient resources and interest to initiate a meaningful reactivation.

There is a long waiting period expected for the new large urban park project to be implemented. Therefore, in the most immediate terms, a series of questions emerge: what actions can be taken towards final implementation? How can we take effective action on such a critical and unique site? Most importantly, can the actions we take now be integrated or related to the final project?

In response to these challenges, the need emerged for a phased and

Fig. 1. Two Faces of Bagnoli: On the traces of its industrial past, the large structures emerge among the lush vegetation that is slowly reclaiming the area. A visual contrast that reflects the ongoing transition, where the industrial legacy merges with the rebirth of the landscape (photographs: A. Cherillo and C. Prezioso).

inclusive approach that actively involves the local community and enhances the existing industrial heritage.

The thesis studio was a key moment in this process, providing a space for theoretical investigation and design experimentation, which involved site visits, seminars with experts, making study models and graphic re-elaborations. The different stages of the process involved the knowledge of different disciplines that informed the architectural project by leading the discussion with different stakeholders, including residents, third sector organizations, academic institutions, associations; the definition of the urban and architectural strategies; the relationship with the existing industrial heritage, the approaches related to landscape project, up to the essential actions to manage, maintain and sustain the regenerated spaces. The Ex-Italsider area represents a testimony to the material and intangible culture that has helped determining the landscape. It is a complex system in which nature, economy, culture, and the built environment meet and relate to each other. The regeneration of this heritage and its related values (both tangible and intangible) necessarily presupposes a holistic approach that starts with a deep understanding of it. Knowledge, as a fundamental act, constituted the starting point for building the intentions of a design strategy, which reads “the existing” as a project issue. In this sense, the reconstruction of the levels of perception and consistency of the territory – including settlement, infra-structure, environmental, regulatory, and social aspects – emerged as the result of a careful reading practice aimed at tracing the demand for transformation. The multiplicity of views made possible the construction of diversified but coherent design scenarios, which constitute – as a whole – a macro-strategy of transformation that, by drawing on two absolutely crucial aspects for the regeneration of Bagnoli, the landscape and the industrial heritage, reflects on the idea of “an intermediate time” between the area’s current condition of suspension (Fig. 2) and the realization of the future urban park. In this perspective, the output of the research is the intermediate time plan named “Living the spaces of post-production” (Fig. 3), which proposes an incremental series of design actions aimed at

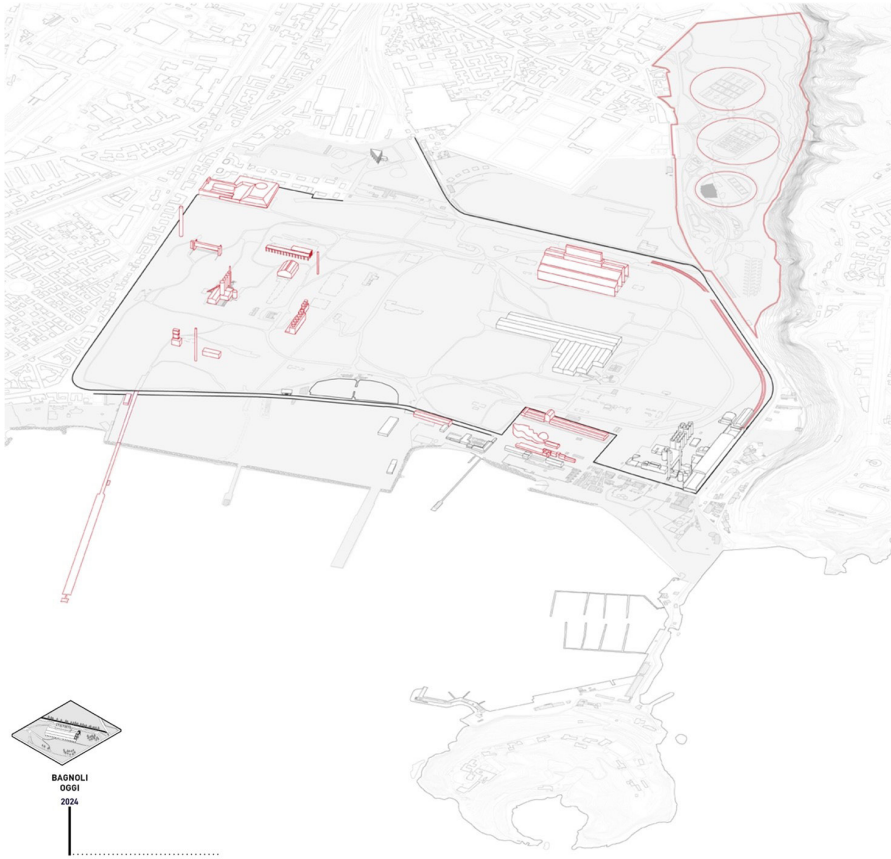


Fig. 2. Axonometric diagram illustrating the current condition of the Bagnoli area, highlighting the boundary delineated by the fence wall separating the former industrial area from the surrounding neighborhood (drawing: A. Cherillo and C. Prezioso).

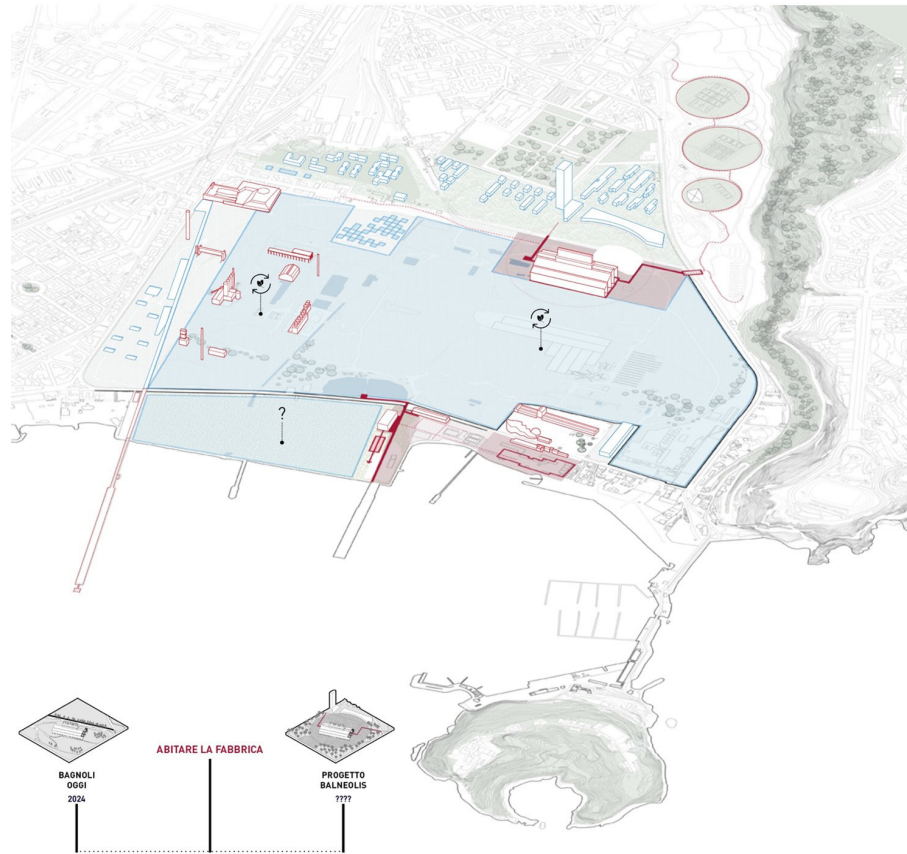
engaging the community and gradually regenerating the area, to relate, in a further step, to what will be the final project (Fig. 4).

This approach aims not only to physically transform the space, but also to promote a shared collective vision and establish an operational model that can be replicated in other similar settings. The goal is to provide the community with new ways to living for previously abandoned or neglected spaces, while the large urban park is being realized.

The urge to start from the “places of post-production” imposes

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Fig. 3. Axonometric diagram illustrating the progress of the proposed interventions of the “Balneolis” project combined with the incremental activation actions of two pilot areas (drawing: A. Cherillo and C. Prezioso).



considering the transformation project as a series of discrete operations, inserted into the context to change its meaning, far from invasive actions. The history of the city is closely linked to the theme of production and the deindustrialization of recent decades, which has led to the decommissioning or reduction in use of entire urban and peri-urban compartments. The city of production is now a project element, no longer as a void, but as “one among those resources of immediate availability capable of activating not only reorganizational-functional processes of

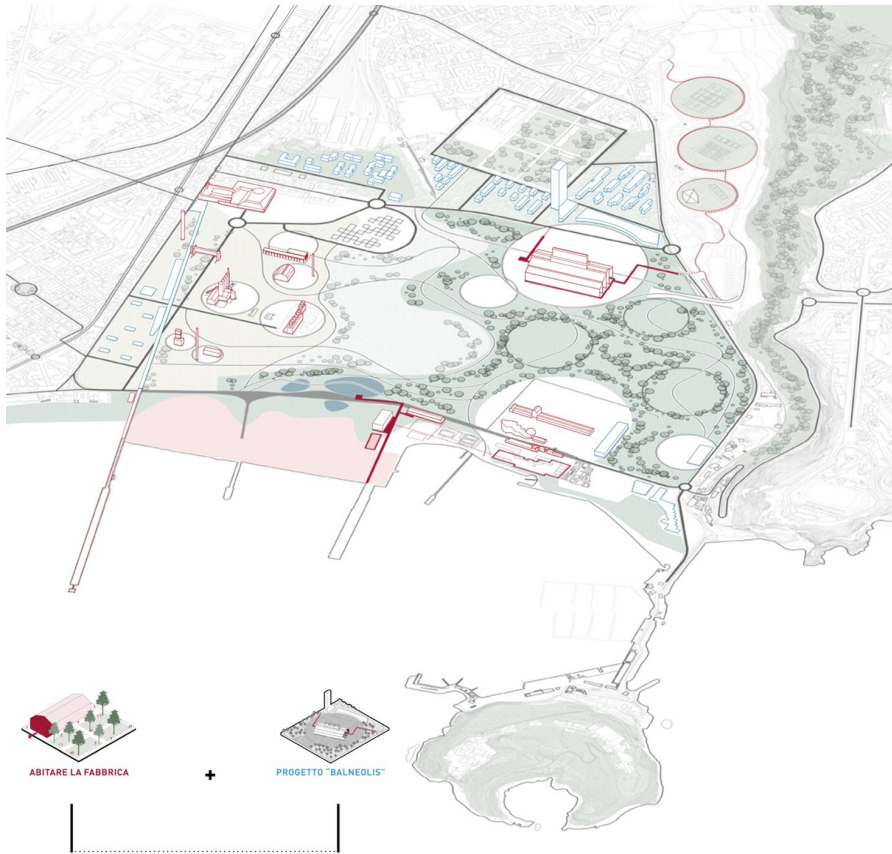
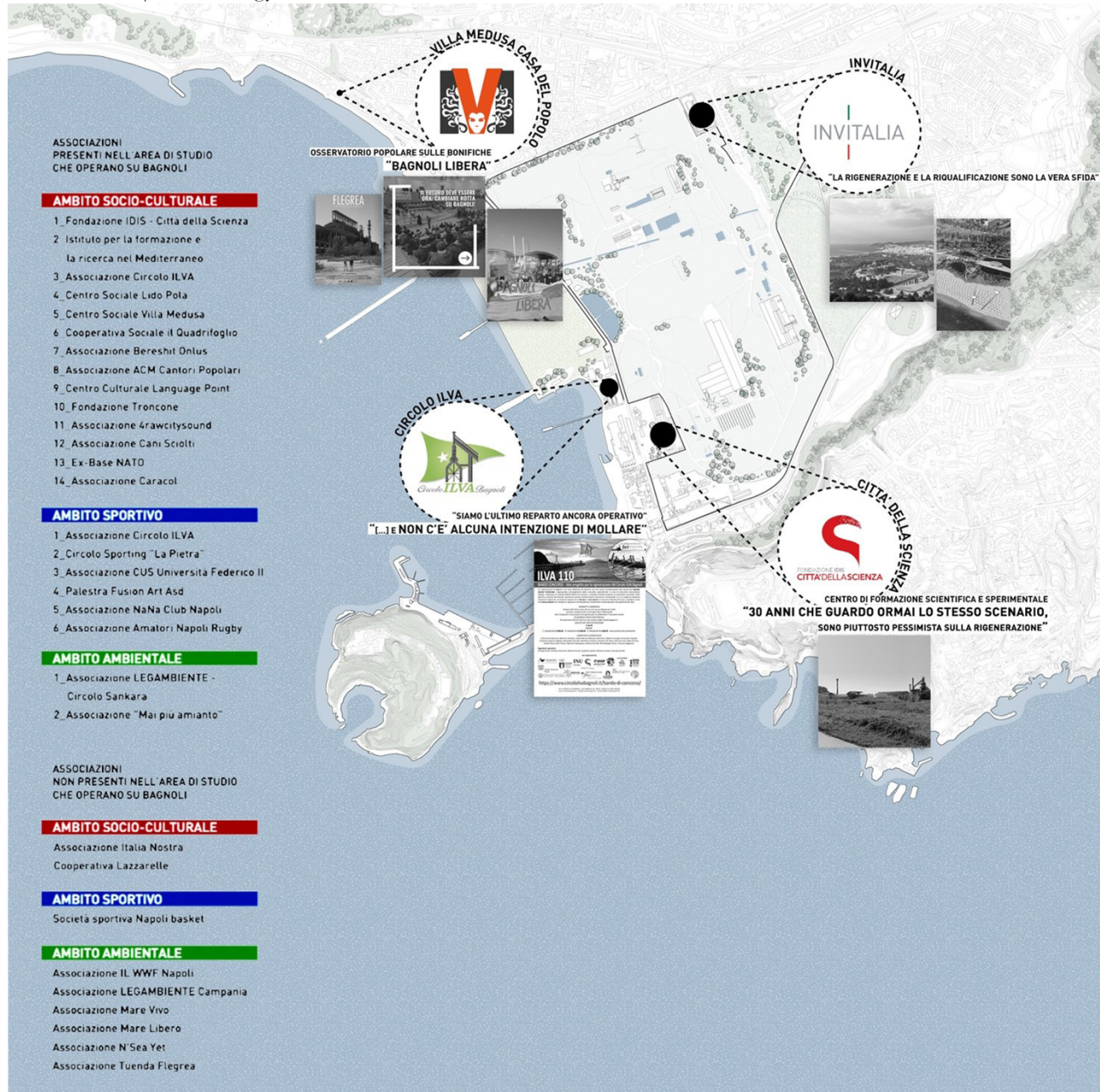


Fig. 4. Axonometric diagram illustrating the integration of the proposed intermediate actions with the final implementation of the “Balneolis” project (drawing: A. Cherillo and C. Prezioso).

the territory, but also the social and economic development of our cities” (Sposito, 2012, p. 12).

In the outlined perspective, the case of the former steel center of Bagnoli - starting from its image of abandonment – the industry offers a possibility of rebirth based on its intrinsic characteristics, on the “waiting stones” present in the place, as stated by Daniele Vitale. This interpretation transcends the mere concept of “ruins”, as there is a latent vitality waiting to be brought to light (Vitale, 1996, p. 41).



Thus, urban regeneration, associated with the reuse of abandoned industrial heritage, becomes a dynamic process that requires not only the preservation of existing values, but also the definition of innovative proposals capable of meeting various functional, social and cultural needs.

The research represents the most concrete testimony of the necessary and indispensable relationship between the university and the city, equal protagonists in a common development, where education becomes - as Mumford argues - “[...] the central nucleus of the new urban and cultural organization” (Mumford, 2007, p. 254). Therefore, the main objective has been the formulation of “possible visions”, starting from an “academic social responsibility”, which seeks synergistic and impactful solutions.

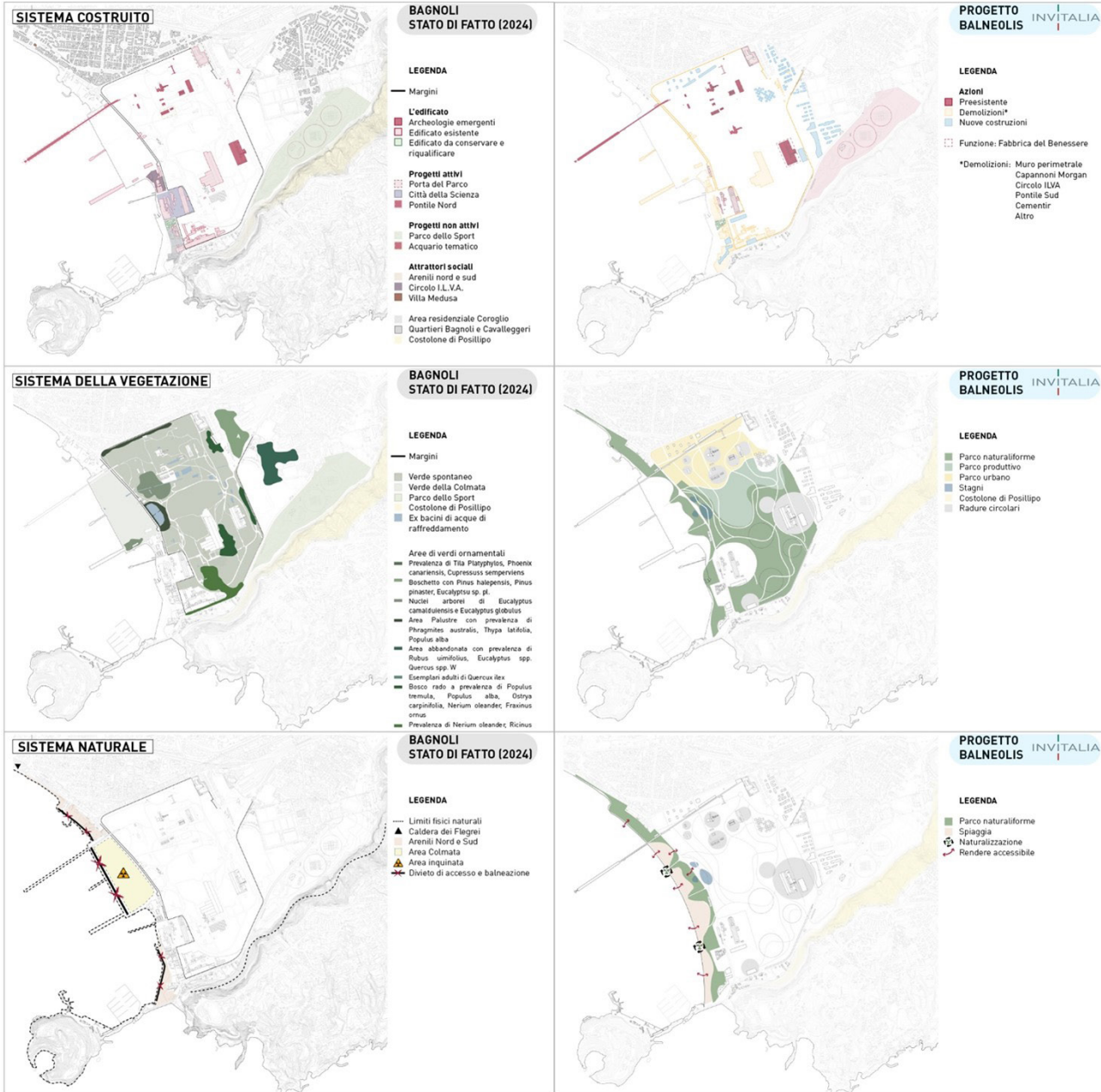
In order to encourage critical thinking, the research conducted by students has attempted to reconstruct the specific character of the place, through focused analyses conducted on thematic levels. The case of Bagnoli represents an emblematic example of how urban regeneration can be driven by the reuse of existing industrial heritage, turning it into an opportunity for the local community. The collaboration between the university and the city proves itself essential in this process, as it allows for the development of innovative solutions and the construction of a shared vision for the future of the area.

An incremental approach to analysis and design processes for industrial sites in disuse

From the transformation of the former industrial site as the “Nuova Italsider” and “Bagnolifutura”, through “Ilva” and “Bagnoli S.p.a.”, up to the “Balneolis e la nuova Stagione Felix” project [1], about 250 hectares - previously occupied by the steel plant - are now set to become an urban park. The goal is to create an ecological network linking the sea and the hillside, with a focus on enhancing the industrial heritage. However, the future of this place remains uncertain, an area suspended between “the no more and the not yet”, with “the regret [...] of helplessly witnessing the continuous delays of the transformation works, while the inexorable

Fig. 5. The first “cognitive” phase guided the understanding of both the physical context through field visits in the extensive western suburb and the social context through dialogues with residents, local entrepreneurs and active associations in the area (drawing: A. Cherillo and C. Prezioso).

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passage of time is now fading the memory of the factory” (Capasso, 2020, p. 131). To address this challenge, a new approach was undertaken in the thesis studio that aims at an alternative reading of the context and a site-oriented design. Rather than focusing on the inefficiency of the plans already proposed for these areas, an attempt was made to identify a model of project development as a form of “mediation”, with the aim of initiating actions that can restore new ways of living for previously abandoned spaces.

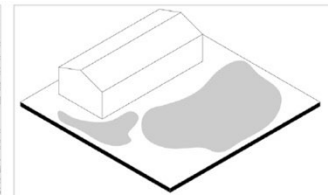
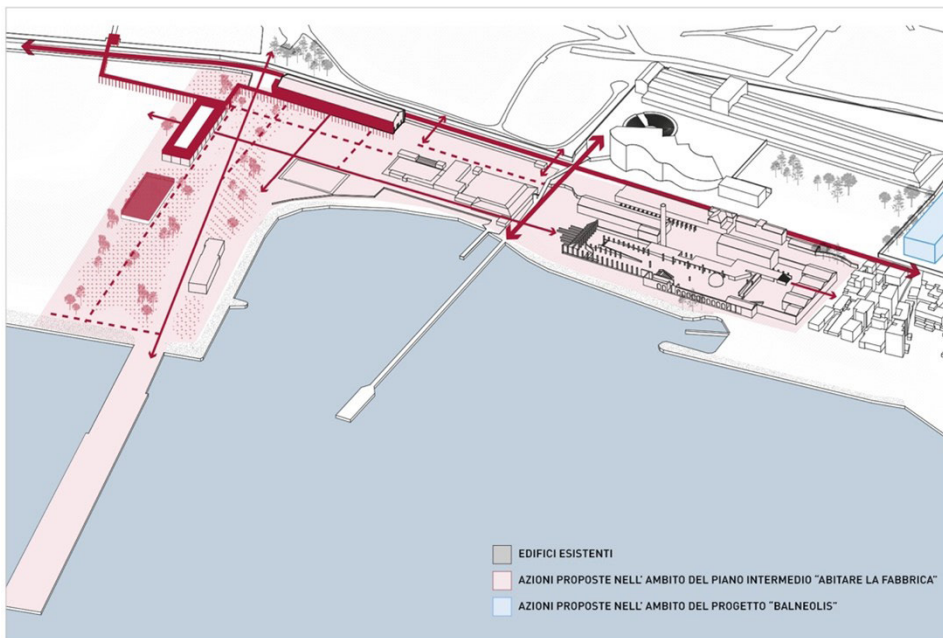
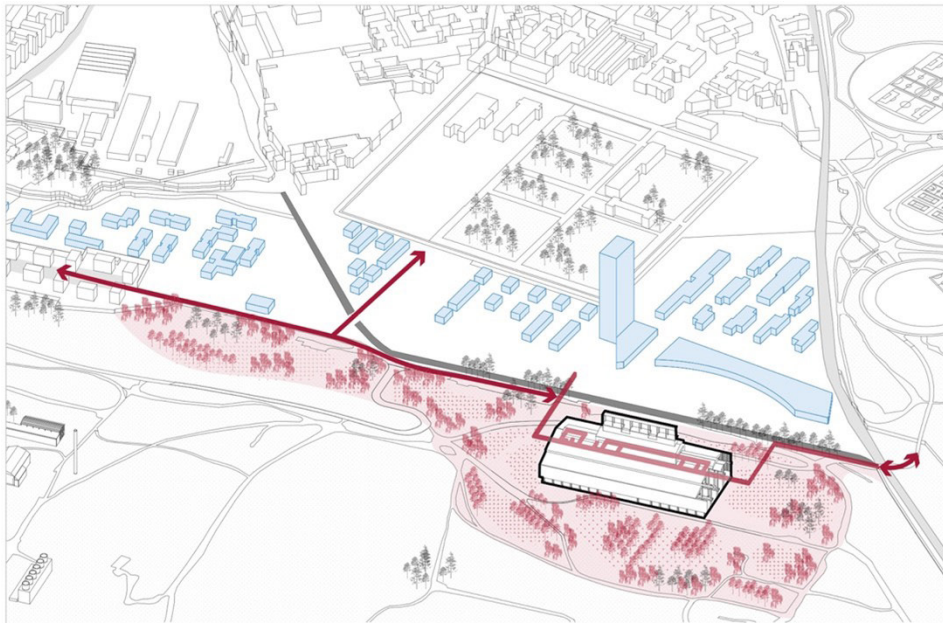
The thesis research is characterized by its interdisciplinary approach, serving as a fundamental workspace for sharing reflections and perspectives from different disciplines. This context allows for the integration of a wide range of knowledge and skills, crucial for structuring a comprehensive and well-articulated project workflow. The aim is to create synergy among contributions from different fields, with the goal of formulating innovative and effective solutions. This gradual approach allows for the progressive tackling of challenges, adapting and optimizing intervention strategies based on the results obtained and the new knowledge acquired along the research journey. Moreover, the research’s diverse phases have spurred reflections that have guided the architectural project. This includes exploring modes of collaboration with stakeholders representing varied interests, such as residents, third-sector organizations, academic institutions, entrepreneurs, and traders. Additionally, it entails examining the structure and nature of the urban project, from urban and architectural strategies to landscape design, while considering the actions required to manage, maintain, and support regenerated spaces.

In this regard, the thesis studio has endeavored to provide a concrete response to the regeneration of the former industrial area of Bagnoli, starting from the environmental remediation and urban regeneration program (P.R.A.R.U.) [2], promoted by Invitalia, and the subsequent international competition “UrbaNAture” [3], which became structuring elements for defining the research question.

The thesis has been structured in three phases where the understanding

Fig. 6. Comparison maps making explicit the current condition of Bagnoli and the directions of the winning project, produced during the discussion phase with Invitalia, the entity responsible for the revitalization program of the industrial area (drawing: A. Cherillo and C. Prezioso).

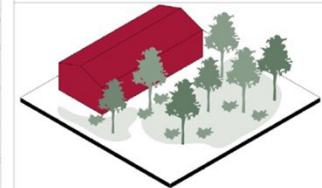
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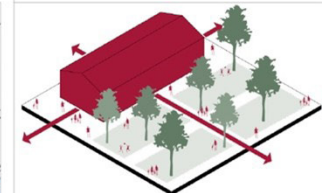
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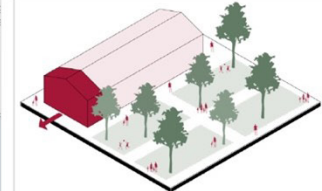
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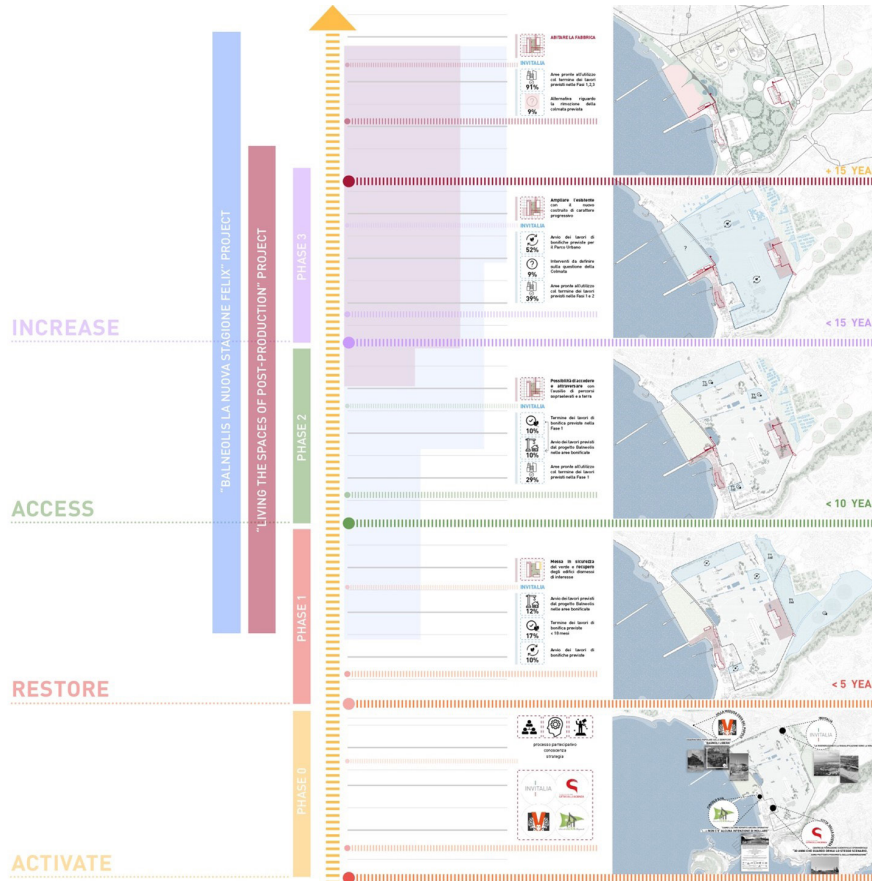


Fig. 8. Diagram of the intermediate temporal plan named “Living the spaces of post-production”, structured in a progressive sequence of project actions - activating, regenerating, accessing, expanding - by combining the strategies of the winning project “Balneolis” (drawing: A. Cherillo and C. Prezioso).

of the territory was deepened to comprehend the physical and socio-cultural conditions of the area; dialogue and engagement with various stakeholders were initiated, and finally, an operational intervention strategy was proposed. The first “cognitive” phase guided the understanding of both the physical context through field visits in the extensive western periphery and the social fabric through dialogues with residents, local entrepreneurs, and active associations in the area [4]. In particular, interactions with the Circolo Ilva, which has long promoted

Fig. 7. The diagrams illustrate the two pilot areas to be activated to trigger the wider regeneration process and the proposed strategic program for incremental actions (drawing: A. Cherillo and C. Prezioso).

social inclusion and promotion actions, were of great source of knowledge (Fig. 5). The subsequent “engagement phase” was characterized by an active dialogue with Invitalia, the entity responsible for the remediation and revitalization program of the former industrial area of Bagnoli. This engagement was useful for understanding the status of the remediation efforts and the implementation of the winning project “Balneolis”, identifying strategic directions and implementable criticalities (Fig. 6). In the third phase, after identifying two potential areas of “urban reactivation” - the steelworks factory and the Circolo Ilva warehouses - an intervention strategy was developed, focused not on a defined project, but rather on a program defining the type of transformations, uses, and activities needed to support future regeneration (Fig. 7).

The research outcome is the intermediate temporal plan named “Living the spaces of post-production”, structured in a progressive sequence of project actions - activating, regenerating, accessing, expanding - suggesting which actors to involve, which remediation interventions to implement, and what types of architectural and urban interventions can facilitate this transformation process. The aim is to combine the strategies of the winning project “Balneolis” with incrementally implemented actions, allowing the community to “live” in spaces previously neglected or abandoned while the large urban park is being realized (Fig. 8).

After the initial activation, supported by participatory communication and engagement processes to involve interested actors, interventions are carried out to ensure the safety and recovery of disused buildings, simultaneously with the start of remediation works. At the end of the activation and regeneration phases, access will be possible through elevated and ground paths in areas ready for use. This operational sequence provides a basis for expansion actions through interventions on existing structures, thus offering the possibility of “Living the spaces of post-production”.

The proposal aims to cooperate with the “Balneolis” project. In the new context, the Circolo Ilva contrary to the planned relocation of its spaces, will retain a central position, acting as a hinge between the waterfront



Fig. 9. The vast former Ilva area of Bagnoli from the hill of Posillipo (photographs: A. Cherillo and C. Prezioso).

and the large park, in continuity and installing an uninterrupted dialogue between the two landscapes. Consequently, actions are proposed to facilitate communication between the park and the sea, protecting and enhancing the spaces of the Circolo Ilva as a “space of social inclusion and knowledge”, through the realization of the “Ilva Archive Museum of Bagnoli” and the enhancement of sports and social activities through the activation of agreements with territorial partners.

The proposed project for the former steel factory area represents an innovative approach aimed at reclaiming and enhancing this important historical and industrial site. The approach is structured through a series of incremental phases, with the goal of transforming the area into an accessible and functional space for the community. Central to the project is the development of a modular construction system that can accommodate various urban functions. Using modular and flexible structures such as walkways, arcades, stairs, and alcoves, the project aims to adapt to the changing needs of the community and offer opportunities for use.

One of the initial phases of the project involves creating an elevated

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pathway to allow access to the interior of the former plant. This enables visitors to explore the area safely and admire the industrial monuments that characterize the urban landscape. Subsequently, the module is expanded to envision semi-public spaces that can be equipped for various urban activities and functions. The vertical configuration of the structures allows users to have a full awareness of the natural terrain, traversing different layers of uses and landscape, thus creating a harmonious blend between the industrial history of the site and the contemporary needs of the community.

To sum up, the thesis research has provided a valuable opportunity to reconsider intervention approaches in particularly fragile areas, offering a process that acknowledges the adaptability of transformations to the specific characteristics and timelines of the places. At the core of this process emerged the need to define programs that not only guide the execution of the transformations, but also support their management and long-term development. This incremental project development model not only raises crucial questions but also opens up to a wide range of possible future scenarios. It invites further research to explore the various forms that architecture can take into consideration by addressing the dynamics of transformation in contemporary cities.

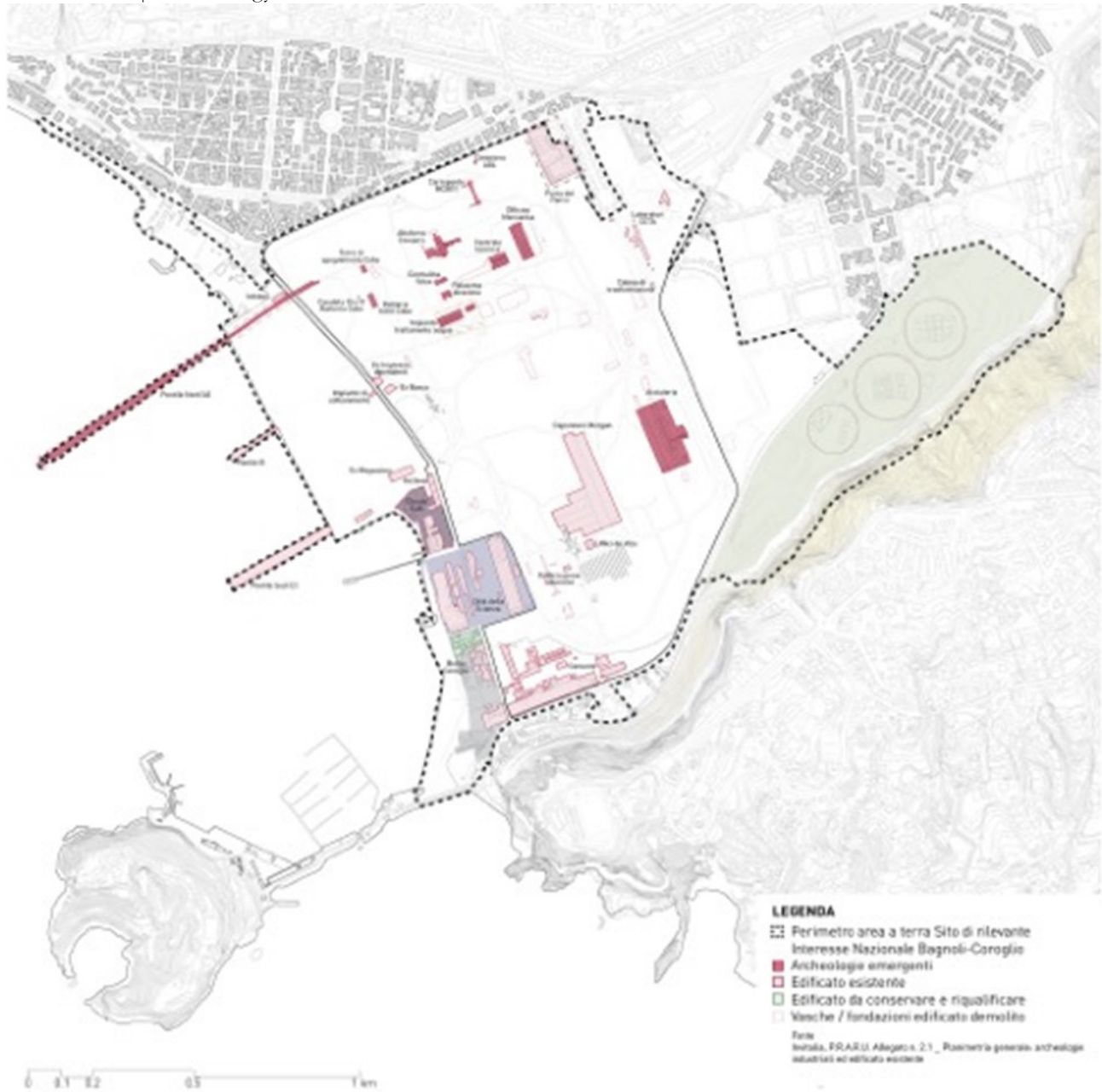
A deep understanding of these dynamics and their integration into design processes is essential to develop effective and sustainable solutions that meet the needs and challenges of modern urban communities.

The Industrial Heritage

Whoever looks today from the hill of Posillipo at the vast former Ilva area of Bagnoli cannot but notice the “remains” of the plant that has been disused for almost thirty years, alternating with vast uncultivated green areas (Fig. 9).

A sort of large archaeological park (belonging to a recent past) closed to the city by a wall, which the gaze cannot grasp except in relation to a landscape context. Within the large enclosure, the smokestacks, blast furnace and especially the steel mill, an imposing monument of modern

Fig. 10. Some “remains” of industrial archaeology within the large enclosure (photographs: A. Cberillo and C. Prezioso).



times, seemingly casually located. But no building has random type, shape, and location in a manufacturing plant (Fig. 10).

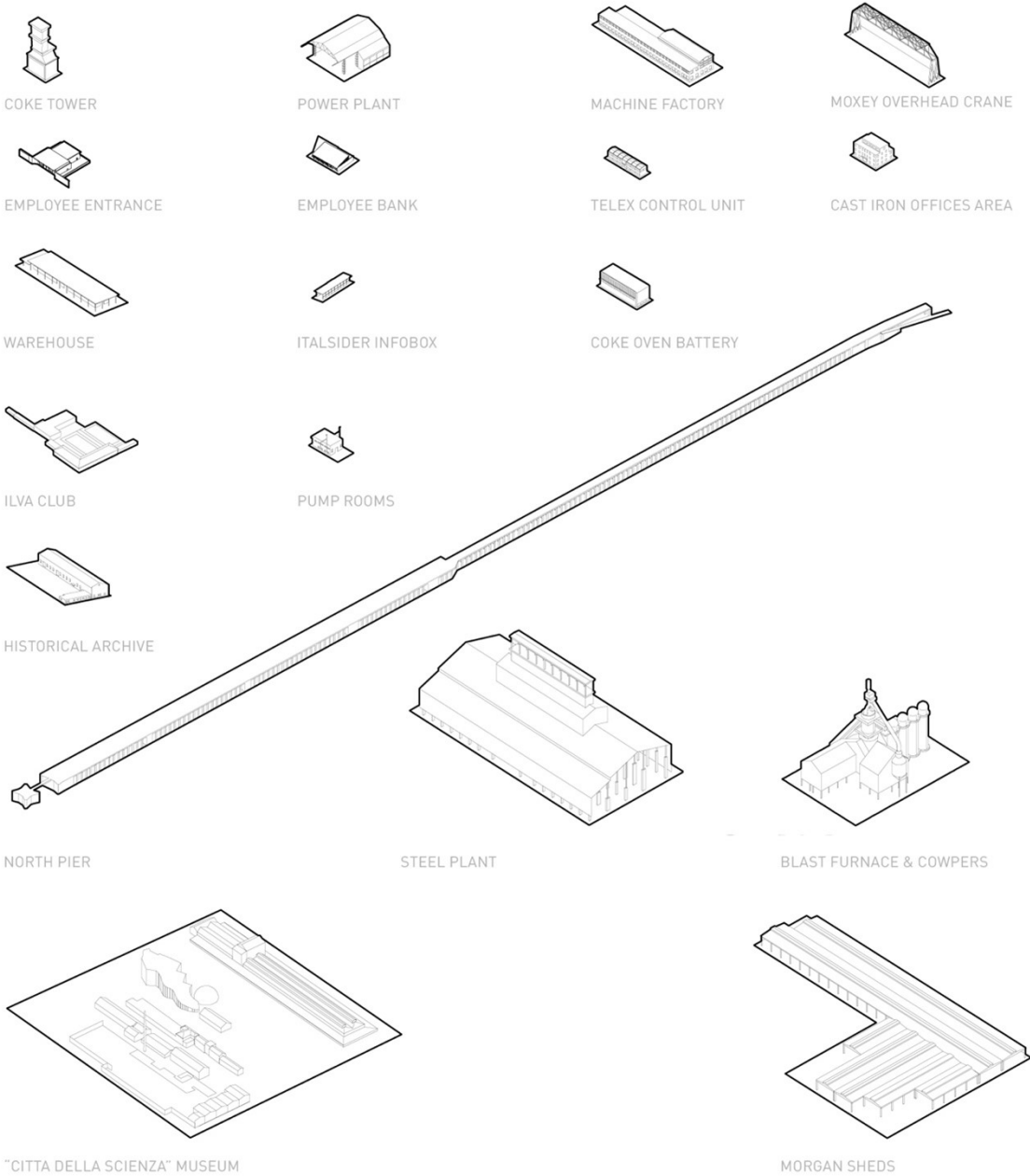
Not far from Ilva, set in the same scenery of the Phlegrean fields stands out the Olivetti factory in Pozzuoli, where Luigi Cosenza, interpreted in a completely innovative key the idea of the factory and its relationship with the environmental context inspired by the idea that the project takes on the rules of the place and then confers new ones. Reproposing such an exercise for the SIN area of Bagnoli, becomes a necessary, albeit somewhat complex, action. It means addressing the issue of regeneration from two questions: what are the “rules” to be incorporated? What are the “rules” to be assumed in the project?

In this specific case, bringing these aspects back to the way of approaching the topic of industrial archaeology, it is a must to remember that such “remains” were part of a system created with the precise purpose of making the factory work. No construction, from the blast furnace to the wharf, from the steel mill to the machine shop, is conceived independently of the other: each artifact played its own role in perfect relation to the others and in function with the development needs of the production process.

These are not stand-alone constructions but a system of architecture and infrastructure, placed according to a logic never divorced from the context, based on the phases and sequences of the industrial cycle. All starting with the imposing presence of the North wharf that connects the complex with the sea, the starting point of the cycle, the place of arrival of raw materials then deposited next to it in the storage area, originally located within the enclosure between the boundary of Via Coroglio and Via Diocleziano, and later moved to the fill along the coast. With the decommissioning, dismantled the road and track infrastructure, the built-up area of the industrial era emerged, “remnants” not without value, coinciding with what the Nizhny Tagil charter defines as industrial heritage: “industrial heritage represents history, architecture and technology in different time and area, which needs to keep in good condition for next generations” (IcCiH, 2003).

Fig. 11. General plan: industrial archaeology and existing buildings. Source: Invitalia, Program for environmental renovation and urban regeneration. Bagnoli - Coroglio site of relevant national interest. Update: March 2018 (drawing: A. Cherillo and C. Prezioso).

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A heritage, this one, recognized as early as March 1999, when sixteen industrial artifacts were selected for relevance and state of preservation among those not yet demolished at the time, and in 2005 incorporated into the PUA with the aim of “restoring the extraordinary environmental conditions that were erased by the construction of the factory and, at the same time, preserving in non-superficial forms the memory of the recent productive past, especially for the significance it had in the formation of a labor culture in our city” (Figg. 11, 12).

The pre-existence must be thoroughly investigated in order to carp about its real possibilities for adaptation to strategies and plans of reconversion. Only if “vivisected and loaded with enough symbolism to bring out its characteristics as a shared good, and therefore susceptible to protection” (Zorgno, 1998) will the factory be able to show itself as a resource for the contemporary project.

While recognizing the value of the industrial site, today we have the right-duty to recover the environmental value of that area as well, restoring a balanced relationship between natural and industrial heritage. Hence the need to use an environmentally sustainable approach to the project. In this perspective, the building as such was not taken into consideration, rather the work aimed to focus on that “ ‘mechanics’ of existential space which takes the form of the building of a harmonious fabric, encompassing both the natural and the artificial and responding to changing housing needs...in search of a new rootedness of things and man and nature, it being well understood, however, that the characteristic of the human species is the ability to modify nature, to make it more and more suitable for its own survival” (Vittoria, 1960).

In this perspective, the project starts from some paradigms of contemporary building dictated on the one hand by the need to rebuild a network of relationships between the built, itself understood as a resource and natural resources, in order to: principles of bioclimatic environmental design (partly already present in the types of industrial pavilions equipped with skylights designed to rationalize light and ventilation to the working environments); systems of energy production from renewable sources,

Fig. 12. Classification of industrial archaeologies. Source P.R.A.R.U. Annex no. 2.2. Urban Regeneration. Title: Industrial archaeology with description of the state of degradation. Update: March 2018 (drawing: A. Cherillo and C. Prezioso).

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Fig. 13. The disused industrial area of Bagnoli as a valuable resource of naturalness and urban biodiversity (photograph: A. Cherillo and C. Prezioso).



in compliance with and beyond the thresholds provided by current regulations and protocols; as well as the principles of an architecture in the making, based on the uncertainty of construction and operating times, thus also providing for temporary, semi-permanent or permanent constructions, to provide for a progressive use of pre-existing volumes. Regarding the latter aspect, the time factor was decisive in the choice of construction principles appropriate to what are the needs of the contemporary project, versatile for a variable and evolving demand, in

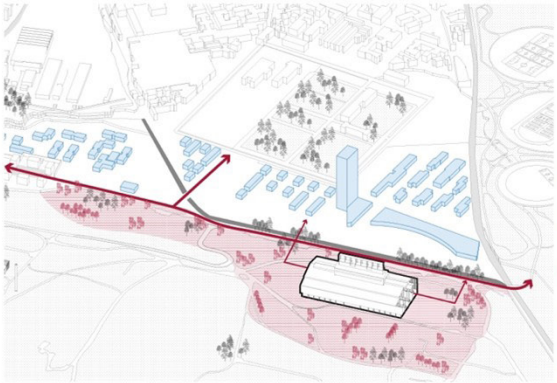
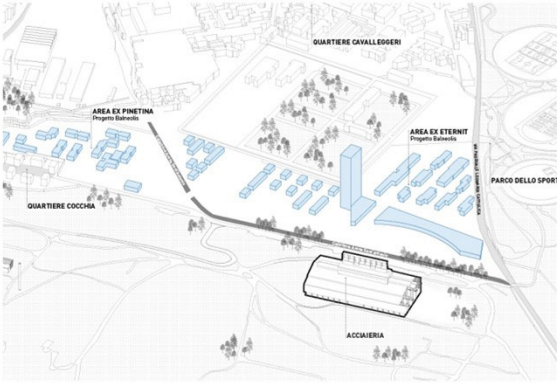
accordance with the strategic objective defined by the Intermediate Time Plan within which the project proposal is placed. Hence the logic of operating from the perspective of landscapes “in transition”, transforming pre-existing architectures into architectures “in the making” through the grafting of innovations, recovering peculiarities and implementing performance in terms of the environment and usability of spaces.

Within the timeframe required for remediation, in anticipation of time-varying uses, potential levels of transformability of the artifact need to be established, and the where and how of adding new volumes, components, technologies for water reclamation and energy production from renewable sources needs to be identified, with a view to “adaptive reuse” (Robiglio, 2017).

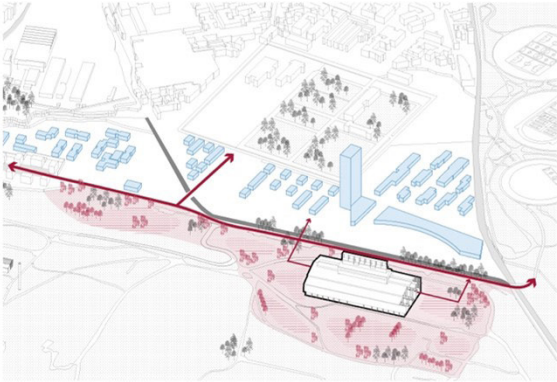
The choice obviously fell on systems and materials that meet the paradigms of reversibility, recyclability and the main environmental criteria aimed at making a project meet the goals of the Green Deal.

The proposal has focused on two among the existing volumes, different in type, structure, materials, location, but which in common have a high strategic value insisting on two edge areas close to two of the main axes that delimit the intervention area: the steel mill next to via Leonardi Cattolica, for which a semi-permanent construction is planned, and the shed of the former archive, destined to assume a permanent function whose side front insists on the sidewalk of via Coroglio, southwest towards the coast. The design hypotheses basically start from two assumptions. In the first case, that of the steel mill, interventions were considered that would allow the activation of functions even during the planned soil remediation activity using natural processes. Based on the logic of building in the built environment, a lightweight system with a structural steel cage and performance closure panels was assumed. The framed structure, an autonomous grid from the existing, allows the interior of the shed to be gained by accessing an intermediate elevation from the outside via a walkway to avoid contact with the soil at least until ecological regeneration processes restore the natural balance of the outdoor and covered areas.

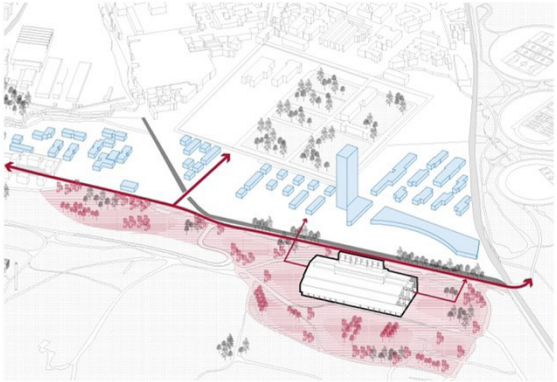
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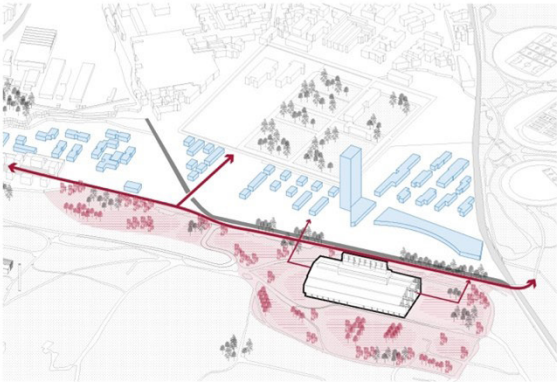
- PHYTOREMEDIATION: Fitoristrazione
- Plante di sacrificio FASE 1
 - Salix Caprea
 - Populus nigra
 - Helianthus annuus
 - Medicago sativa
 - Zea Mays



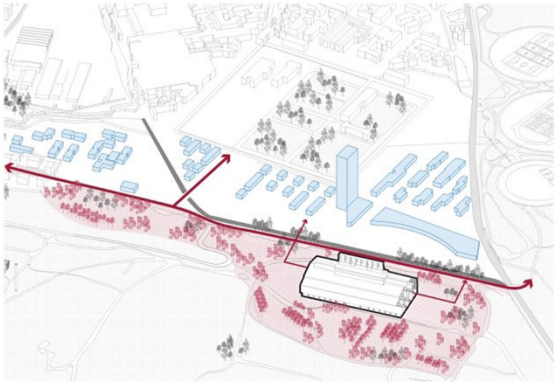
- PHYTOREMEDIATION: Fitoristrazione
- Plante di sacrificio FINE FASE 1
 - Salix Caprea
 - Populus nigra
 - Helianthus annuus
 - Medicago sativa
 - Zea Mays



- PHYTOREMEDIATION: Fitoristrazione
- Plante di sacrificio FASE 2
 - Salix Caprea
 - Populus nigra
 - Helianthus annuus
 - Brassica Napus



- PHYTOREMEDIATION: Fitoristrazione
- Plante di sacrificio FINE FASE 2
 - Salix Caprea
 - Populus nigra
 - Helianthus annuus
 - Brassica Napus



- PHYTOREMEDIATION: Fitoristrazione
- Vegetazione Permanente FASE 2
 - Salix Caprea
 - Populus nigra
 - Erbacee perenni
 - Cranmacee cefalime

In the second case, relating to the former Historical Archive destined also by its construction characteristics to last over time, special attention was given to technological and functional retrofit solutions, attentive to in-door wellbeing and energy saving. The retrofit actions therefore involved the entire shed, the external envelope and the construction of a new body leaning against the pre-existing one that allowed through the volume exposed to S-W to control and optimize environmental resources, filtering lighting and irradiation with a variable configuration façade system. In addition, on the large outdoor space, the semi-open volume intended as exhibition space, alternates ideal light and shade zones in a context facing the sea, characterized by the landscape design of sea dunes, mediates the indoor-outdoor relationship. The creation of shaded areas and the attention to the materials and color of the outdoor flooring, lowers the risk of generating heat islands, keeping the effects of the climate characterized in summer by the sea breeze constant.

When the Italsider (ex Ilva) in Bagnoli was decommissioned and the first demolitions began in Germany the RHUR had already become the Emscher Landschaftspark area, a reference of environmental regeneration and landscape design. Today we are aware of how much damage has been done by abandoning the Ilva artifacts, turned into ruins, whose demolition would produce waste to the detriment not only of the identity of the building but of the habitat in which we live. The motivation that drives us to conserve the existing comes from this dual need, cultural and environmental, but we must not forget that the main purpose of the project is to return to those architectures born for other purposes, and in the past place of polluting productions, the role of mediation between natural resources and human needs for indoor and outdoor comfort, respecting the planet as a “common home”.

The Landscape Project

“Coping with post-industrial sites is a pressing issue throughout Europe and North America. One point of departure for their general rediscovery was the revitalisation by Latz + Partner in the early 1990s of an abandoned

Fig. 14. Planned phytoremediation process in the Acciaieria area, featuring sacrificial and permanent vegetation for environmental reclamation (drawing: A. Cherillo and C. Prezioso).

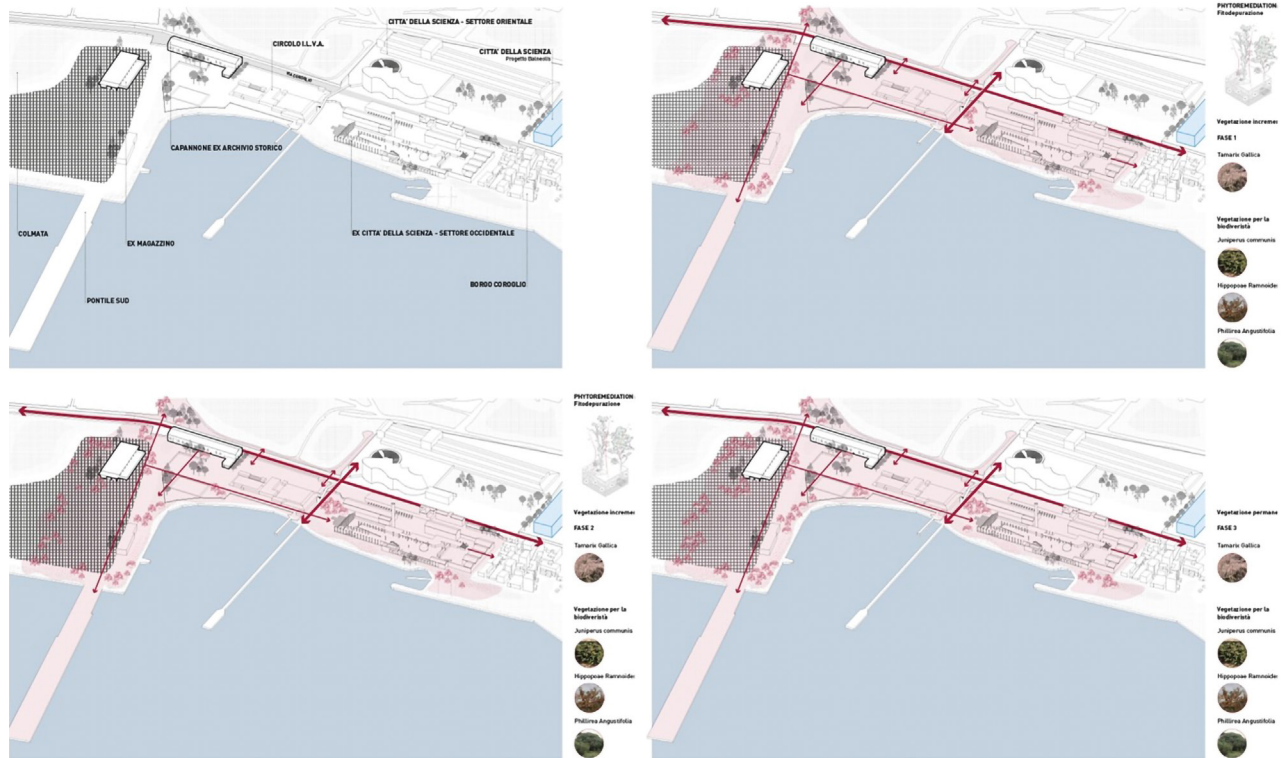


Fig. 15. Proposed Mediterranean dune landscape design for the Circolo Iba area. Tamarisk trees (*Tamaris gallica*) and a variety of dune grasses and shrubs are strategically planted to enhance biodiversity and remediate polluted soils, while providing a picturesque backdrop for sports and recreational activities (drawing: A. Cherillo and C. Prezioso).

steelworks as Landschaftspark Duisburg-Nord; industrial relics were not demolished but seen as integral parts of the overall concept and imbued with new meanings and uses. Many more projects with a similar approach have since been executed, the most seminal such as Chemetoff's Île de Nantes, Parc del Clot in Barcelona, Hargreaves/PROAP's Parque do Tejo e Trancao in Lisbon and Michel Desvigne's Parc aux Angéliques in Bordeaux" (Braae, 2015).

The onset of the new millennium has raised the major issue of disused industrial areas reconversion. These are those territories, the outcome of a post-industrial condition now widespread and consolidated, that underwent radical changes brought about by the rapid industrialization

processes of the nineteenth century, reaching their productive peak in the twentieth century, only to gradually cease their activities, leaving behind a huge number of abandoned areas with disused infrastructure and barren soils. Brownfields are part of that wide range of “latent landscapes” (Gioffrè, 2018) waiting to be discovered, interpreted, and restarted to a new life cycle, landscapes that constitute an untapped wealth of ecological and social resources for the contemporary city.

At the turn of the year 2000, coinciding with the evolution of the concept of landscape and the huge issue of brownfield redevelopment, novel approaches to landscape design with significant new works were born and spread internationally.

In Germany, where an ecological and environmentalist tradition is well established, there are some of the most significant experiences of a design culture that can be considered avant-garde in contemporary times. The histories and qualities of abandoned sites are reimaged in the transformed landscape to reveal the dramatic changes that have been made to these places in a short period of time. As part of the more general process of reclaiming the Rhur Valley, where one of the largest brownfield sites in Europe stood, Peter Latz created the famous Duisburg Park. The German landscape architect does not operate an erasure of the industrial pre-existences; on the contrary, he ennobles them by elevating them to the rank of real “ruins” of a recent modernity and defining overall a “sublime” post-industrial landscape (Latz, 2016).

Pylons, cisterns, and metal platforms dialogue with the vegetation inserted into the design that envelops and integrates them into a single context. The result is an overall design of the park that expresses an unprecedented aesthetic quality, a re-actualization in a contemporary key of the nineteenth-century style of the picturesque. Latz is also among the designers of the Dora Park in Turin, also built in a disused industrial area, where once again the design choice is to maintain some of the pre-existing structures that acquire, in the total resignification of the site, a new iconic value. The path opened by Latz, as supported by Braae in the quotation given at the opening of this text, has led today to the realization

of some particularly significant works. Latz's proposed approach, focused on rewriting brownfields while minimizing the demolition or erasure of pre-existing structures, has also been the central reference of this design research work for Bagnoli. The research project for the Ex-Italsider area, proposed here, defines an evolving landscape that is not structured on assertive and definitive configurations but, rather, on changing and transitional scenarios capable of accommodating further grafts and additions over time. The disused industrial area of Bagnoli, in fact, can be considered an emblematic example of a "third landscape" (Clément, 2014): it is already a valuable resource of naturalness and urban biodiversity not only for Bagnoli, but for the entire city of Naples, thanks to the ongoing process of spontaneous renaturalization.

The project in the Ex-Italsider of Bagnoli can only arise from the assignment of new qualities and new value to an area, emblematic of the complex and contradictory post-industrial condition of contemporaneity, accepting its distortions and contradictions, in order to define a new adaptive, ecological, shared and open landscape for the community of Bagnoli and Naples (Fig. 13). In fact, the time frame for the realization of "Balneolis and the New Felix Season", the first-place project in the in-ternational design competition promoted by Invitalia in 2021, will inevitably be very long.

The project drawn up by RTI Constituent S.B. Arch-Studio Bargone Architetti Associati proposes a monumental intervention with the cancellation of the current spontaneous nature forms and the total rewriting of the site. The project proposes, with an excess of formalism, the figurative reference to the circles of volcanic calderas and to the famous definition of *campana felix* given by the Romans for the fertile Campania countryside. It is therefore necessary to propose "landscapes in transition" that can gradually make parts of the disused industrial area of Bagnoli usable.

The landscape design proposed here is centered on two principles: the first is to carry out soil remediation through natural processes, thus using phyto-remediation and bio-remediation techniques whose effectiveness

is widely demonstrated in similar cases; the second design principle involves the gradual and progressive opening of areas already compatible with public use. Thus, the vegetation envisaged in the landscape design performs a dual function: that of an “ecological machine” for soil reclamation; and the aesthetic and perceptual function of a qualifying element of the entire area to define new spatial configurations that evolve with natural processes. In this design scenario, nature, with its ecological times and processes, returns to be the protagonist of the Bagnoli landscape.

In this hypothesis, the landscape project is generated by the landscape and not vice versa; the project is not a prepackaged abstract geometry that lands on the site colonizing it, but rather a sensitive reinterpretation of the existing that generates new forms and spaces.

The project proposes two thematic insights in two areas: the “Acciaieria”, and the “Circolo Ilva”. For Acciaieria area (Fig. 14), massive use of sacrificial vegetation, especially herbaceous and shrubby vegetation, is planned in the first phase to start the phytoremediation process. In a phase, when the remediation process is already underway, the progressive planting of permanent vegetation consisting of trees (*Salix caprea* and *Populus nigra*) and herbaceous perennials. After reclamation is completed, the Acciaieria landscape will be characterized by geometric poplar forests, widespread systems of willows, and dense meadows of perennials.

For the area surrounding the Circolo Ilva (Fig. 15), being near the sea, the intervention consists of building a Mediterranean dune landscape. The project includes the planting of tamarisk (*Tamarix gallica*), a tree typical of sandy coasts also in the Campania Region, which in addition to its aesthetic value also does an excellent job of cleaning up polluted soils. In addition, a collection of dune grasses and shrubs will be planted to increase biodiversity. The result is thus the defining of a Mediterranean landscape that can well accommodate the sports and recreational activities of the Circolo Ilva. The interventions proposed for both cases, the arboreal landscape of the Acciaieria and the dune landscape of the

Circolo Ilva, will also and above all make it possible to significantly increase the biodiversity of the site by attracting new plant and animal species.

The most avant-garde Landscape Architecture is today understood as a “therapeutic tool” (Jacob, 2009) capable of repairing the damage caused by the industrial development of the last two centuries; it is a specific approach that provides responses to contemporary global crises, from environmental to social and health ones, with a design attitude that repositions Man’s relationship with the Nature of which he is part, according to principles of co-evolution: “Following the relational models also in the field of meaning of the landscape, it is possible to trace a path that brings us closer to the themes of co-evolution in the contemporary world (...) new interpretative references are involved in the change in meaning of three main terms constitutive of modern thought: nature, earth, evolution (Caravaggi, 2022).

Notes

[1] The project “Balneolis e la nuova Stagione Felix” was awarded First Prize at the Bagnoli UrbaNAture Competition (2021). It proposes the transformation of the site, a former industrial area characterized by decades of abuse and pollution, through a metamorphosis that returns to the ideal of “Campania FELIX”. This contemporary interpretation of the genius loci aims to highlight the natural, agricultural, chromatic, aesthetic, and well-being characteristics specific to this part of Campania, which the Romans considered both fertile and “felice”. The abbreviation “Balneolis” is used to refer to the project title within the text.

[2] See: <https://www.invitalia.it/cosa-facciamo/rilanciamo-le-aree-di-crisi-industriale/rilancio-bagnoli/doc01---programmazione-e-pianificazione>.

[3] A project to transform the 250 hectares of Naples’ former industrial area into one of the largest urban parks on an international scale.
See <https://bagnolicontest.invitalia.it/i-progetti>.

[4] The involved associations - Villa Medusa, Lido Pola, Circolo ILVA Bagnoli, Fondazione Idis Città della Scienza - actively participated in the meetings, sharing the experiences and needs of the local community.

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