

BACK TO THE FUTURE

Looking back at the past heritage to find future forms of urban coexistence



In the last century, human beings have built their living environments establishing a strong dichotomy between human and non-human, rural and urban, productive areas and living environments. With the “aim is to explore the regenerative capacities of living milieus amidst new architectural, urban and landscape ecologies that attempt to overcome the opposition between nature and culture and anthropocentrism” (European IT), the proposal Back to the Future investigates the possibility of a new urban paradigm based on the symbiosis between humans and non-humans, between production and nature, to achieve the resiliency that a territory needs to face the challenges of climate change and the continuous economic-productive and health crises that we have faced in the last two decades.

One of the most important objectives of the proposal is to reach a new coexistence between humans and nature, exploring forms of human habitation that do not stifle other forms of life or other lifestyles, therefore understanding that it is necessary to take a step back and make room for a freer and more independent development, while at the same time creating meeting points (Latour, 2018). In this sense, it becomes key to acknowledge what human beings can do to restore the damages that they have created in the past, in order to establish a new balance, a new cooperation and harmony with non-humans. This holistic approach can contribute to rebalance the metabolism of the site and the near territory, restoring the water cycles, the damaged soil, the biodiversity, the wildlife and the human life, preparing the “foundations” for a new regenerative urban landscape that, thanks to its resilience, will evolve autonomously over the next few years.

The context of the site, The Netherlands, and The Brabant Region in particular, have historically developed a close relationship between the urban and natural context, turning it into a true cultural heritage, even before the intensive industrial and agricultural landscape began to characterise the Dutch lowlands. Dutch heritage is in fact rooted in a symbiosis between human and non-human, between water and countryside, between technological and agricultural production. Vincent Van Gogh himself painted several scenes of life in the North Brabant region where this coexistence between human and non-human, rural and urban settlements, could be seen.

The heritage that is taken into account to develop the proposal for the T Zoet area is therefore not only the immediately pre-existing one, i.e. the industrial legacy of the CS M Factory, but also the earlier rural one, present in Van Gogh's paintings and many other painters, as well as the pristine identity of the region's numerous riverfronts, with a high variety of natural landscapes such as marshlands, wetlands and sandy ridges.

Taking a step back helps to understand the territory, its evolutions, and above all, it allows us to elaborate a more sustainable and collective future vision, a new urban paradigm open to interspecies coexistence, without renouncing contemporary urban characteristics. Through time, it is possible to understand space. This strategy follows the principles of the “Nature restoration law” issued by the EU in 2022, and moves away from the architectural call to turn this area into another place where the status quo is privileged revolving around just human needs as the environmental context doesn't exist.

Back to the Future is understood as a pilot project developed as a complete ecosystem that researches the boundary between what is human and non-human: the design process deepens natural and productive environment that end up merging to create an active, inclusive, productive, vital and interspecies urban environment. A set of strategies that work together to attract new tech companies on the one hand, and to attract greater biodiversity on the other.

1 – NATURAL ENVIRONMENT

A non-human regenerative landscape



V. Van Gogh "Marsh with water lilies", 1881

This painting, executed in North Brabant in 1881 shows a typical Dutch waterscape with a human settlement on the background, where nature and the anthropic interventions seems to coexist peacefully without interfering with each other.

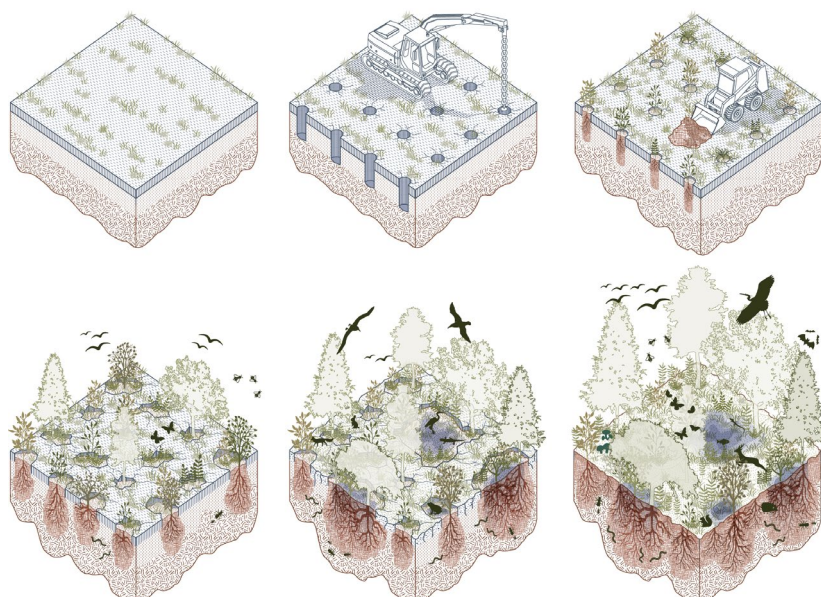
In the context of the project site and the whole Breda urban Area, the Mark River has the potential to become again a rich reservoir of biodiversity, an ecological connection with the countryside, which, through its water fluctuations, is capable of activating a new (or perhaps better said ancient) landscape. In order to allow the river to overflow, the concrete quay from the industrial period that characterises 'T Zoet has to be modified to allow the creation of floodable areas to manage eventual heavy rainfalls.

The general strategy is to demolish as little as possible, fostering a natural erosion over time, thus respecting the European guideline of 'think tabula non-rasa'. The part of the quay adjacent to the waterfront is the only one that is actually being demolished by human intervention to create a softer side that 'accommodates' water level changes instead of fighting them. The residue of this demolition will then be reused for the paving of the urban areas of the project.

The rest of the quay is instead subjected to systematic drilling, which encourages the insinuation and growth of local animal and plant species and at the same time significantly reduces demolition, cutting the economic and environmental intervention costs on an industrial site.

The variation of river water levels is also exploited to bring in new fertile sediments that enhance biodiversity. The drilling and the constant growth of flora itself weakens the hard surface of the quay, which in time will eventually completely erode and turn into the typical wet-meadow of the Mark River. In this way, the nature is free to develop independently, without human control, and find its own balance with the nearby productive and residential activities. The transformation of part of the industrial quay into a natural area beyond human control brings the whole site into ecosystemic connection with the various natural areas in the vicinity of Breda.

In this sense, the landscape represents a regenerating system, whose conceptual dimension goes beyond and transcends the techniques and design of ecological, vegetal and soil systems to aspire to organise or better structure the city and the territory, acting both physically than in intangible social and economic processes in the conformation and transformation of places.



Riverfront De-Sealing Strategies

2 – PRODUCTIVE ENVIRONMENT

An inclusive and ecologic human settlement



V. Van Gogh "Reminiscence of Brabant", 1890

During a difficult period, Van Gogh painted scenes of his native region. A region where the urban environment was integrated with the context, where the productive was starting to be industrial but also was still "cottages with mossy roofs and beech hedges on an autumn evening with a stormy sky, the sun setting red in reddish clouds.

With the will to find a better coexistence between humans and a regenerated and independent natural environment with a proper and independent behaviour, while also wanting to respect the Dutch cultural heritage, the human sphere of the project area takes the shape of a "productive village". This is a place with the size, quality of life and human and non-human scale of the Dutch peri-urban contexts mixed together with the area's industrial past and functionality to gain from their strengths and qualities to foster a better contemporary urban life.

While part of the river quay is eroded through natural processes, the other part of the foundations of the CSM factory is maintained as stable ground to establish new human settlements and its new architecture. Given the area's manufacturing past, the proposal lays the foundations to create a neighbourhood capable of attracting new businesses to the area, in accordance with Breda's development plans.

The "project site" is transformed into an interconnected hub of practices dedicated to research and development of new production practices in the technological and agricultural sectors, while the "urban site" hosts housing (with live+work solutions), offices and social and cultural attractions. The productive village is structured starting from the consciousness of having to relate to a natural context in a more effective way; therefore, the heights, distances and geometries of the buildings are designed to accommodate the new more-than-human environment (Abram, 1996) and enter into symbiosis with it.

At the same time, proportions, internal distances and uses are studied to ensure that production and cultural activities respond to a human scale, thus allowing the project to promote vitality, sharing and inclusiveness. The buildings are in fact designed to be all in relation to each other and to create the most possible welcoming environment for new businesses, new citizens and new workers as well as new nature. Small and medium-sized start-ups can grow in the Technological Hub and the Agricultural Hub, depending on their sector, where they can find well-equipped and modern facilities and they can develop their business models.

These two hubs are continuously upgraded in processes and machinery through the Research Centre; the latter attracts researchers from universities and training centres and it is responsible for developing new production techniques and technologies that can then be made available in the two hubs. The relationship between each building allows businesses to grow and consolidate, creating an ecology of resilient and sustainable start-ups in the 'T Zoet area, which in turn attracts investors interested in fund and promote this whole process in exchange of an heads-up of new productive possibilities.

The attraction of new businesses and 'T Zoet's strategic location in relation to Breda also makes it possible to develop the entire area with a strong residential character capable of accommodating different contemporary lifestyles. Solutions that meet the needs of home/living, living-working, living alone, young families, consolidated families, students, as indicated in the New European Bauhaus guidelines. The different needs of these lifestyles can be satisfied both at the building scale, i.e. at the intermediate scale through the presence of collective and dedicated uses, and at the neighbourhood scale. In fact, the ground floors of the buildings will all be available to the community, with collective kitchens, kindergartens, shops, bars, restaurants, gyms, etc.

The urban planning layout of the project area is based on the position of the Groete Kerk as a reference point for the area's main streets. These routes connect directly with the innovation axis, which in turn works as a connection to the other future development area of Breda. Finally, the project area is connected to the existing cycle path on the other side of the Mark River via a new cycle and pedestrian walkway, thus decreasing the time needed to reach the nearby high-speed train station. Moreover, thanks to the intermodal hub, it is possible to make the urban site completely pedestrianised, allowing the main services to be reached in less than 15 min.

3 – COEXISTENCE

Symbiosys between human and non human



V. Van Gogh "Rural village at night", 1881

The thatched peasant's houses in Nuenen and the surrounding area reminded Van Gogh of its origins, making him think of the Brabant of its youth. A Brabant where the human environment was in symbiosis with the non-human one, highlighting how this is a heritage and landscape deeply rooted in his country's history, which is just as important as the industrial one.

With the interest to working on the inter-species boundary and their meeting points, the entire project area is predominantly pedestrian-cycling, free from the idea of the street as a barrier. The public space, in fact, is articulated as a sequence of public spaces, with varying amounts of vegetation, thus allowing different social and natural situations to develop. The project's soft-mobility is thus also fauna-friendly, as the entire project is permeable and pedestrian-friendly. Moreover, in the pursuit of equal coexistence, land use is divided 50/50 between humans and non-humans. As one enters the project site, nature infiltrates the new neighbourhood at the same time that the built environment infiltrates the waterfront, triggering a symbiosis between humans and non-humans based on the awareness that we have to learn to coexist.

Back to the future is thus also transformed into a pedagogical landscape where it is possible to experiment and learn hitherto inaccessible forms of urban coexistence, which focus on the necessary balance that human beings must have with the environment in a more general sense. Balance that is increasingly challenged by constant urban evolution and that is increasingly difficult to find in built surroundings, but which Breda has the opportunity to promote through 'T Zoet. A context where it is not only the human being who takes care of nature, but also nature itself that takes care of the human being.

The project presents the search for biodiversity as a key element in defining future sustainable urban developments. Nature is no longer at the background of the city but is transformed into an identity element of the project on a par with the production activities and iconic symbols reminiscent of the old CSM silos. A complex symbiosis that acts on several levels and enriches the entire area, but makes the entire intervention resilient and adaptable to inevitable future changes, both environmental and social.

