

THE INHABITED GARDEN

BARCELONA (ES)

In retrofitting the modernist housing estates of the El Besòs i El Maresme neighborhoods, this project aims to redeem the intent and spirit of the modern movement whose dreams have been overshadowed by the narrative of degradation. The dreams of recent past are as relevant today as they were in the 1950's when the construction of the housing estates responded to profound social and urban changes with the hope that high-density living would liberate open space on the ground for gardens in the spirit of a true public space.

The garden has always been an inextricable archetype of human settlement, representing a domestication that brought stability to life's endeavors. From the time of nomadic and semi-nomadic hunter-gatherers, to global migrations of the modern era, gardening has been a tool to adapt new landscapes, to integrate, and to truly make a place one's home. Symbolically, the garden has also long represented order, easing inhabitation against a wild and hostile landscape "beyond the wall." Rather than the undefined openness and monotonous character that has come to define modernism's failures, this project repositions urban space as a network of **productive gardens** – and **the city itself as an inhabited garden**. The voids of urban planning become opportunities for micro interventions and new uses of the intermediate space between buildings, with greater **public-private gradation** and **multi-dimensional use** of space that reflects the **immigrant spirit** of the neighborhood. **Inclusive** design is expanded to include **biodiversity** and transforming the city into a haven for nature and other species. In face of increasing commodification of public space, **the garden** provides an opportunity to reimagine **collective life**, while empowering the neighborhood to **cultivate self-sufficiency** and a more **dynamic sense of place**.

The Garden Blocks

The El Besòs i El Maresme neighborhood sits at the edge of the 22@ former industrial area and requires a new structure to define the urban fabric and open spaces, extend transformation from the innovation district, and bridge physical and perceptual boundaries to draw people to the area. This project takes on the block as a key element and tool to better define the space of the public garden. **Drawing from the Barcelona Superblock system** for green hubs and squares, as well as the Sudoeste del Besòs estate's original aim of linking with the **Cerdà Plan** of 1859, **public life** as well as **ecological transformation** is first organized along newly **pedestrian-oriented corridors** that extend from Barcelona's center. Though later "super islands" sometimes featured an interior common or public space, this project aims to **extend the grid** and **reclaim the street-square characteristic of Cerdà's blocks** to better establish **connectivity** between El Besòs i El Maresme and the city. The **transformed blocks** are designed to respond to the most critical environmental challenges of our time, **promoting soft mobilities** and **increasing green space** and gardens to address biodiversity loss and climate change. **Interior pedestrian streets** and **intersections** become opportunities to consolidate pocket gardens for recreational and educational activities that foster social interaction and exchange. In this way, every block becomes a garden block, functioning at the neighborhood scale almost like a compact garden-city.

Re-naturalizing the waterfront zone

El Besòs i El Maresme are situated on formerly **agricultural land irrigated by channels** connected to the River Besòs, and was eventually formed as a peripheral area outside of the traditional city. While this area faces challenges in integrating socially and urbanistically, its low-lying site is also prone to flooding and other environmental problems. This project transforms challenging and **underused land** for new **agricultural programs**, and also **daylights** the former **Horta stream** along Rambla de Prim, recalling the neighborhood's landscape heritage as the Bosquet de Sant Martí with its fields of crops, vineyards, and fruit trees fed by the Horta stream. This solution takes advantage of existing **fertile soil** conditions, improving the land's social and ecological functions as a **productive landscape** that benefits the **local economy** while infiltrating water to **mitigate flooding** in built-up areas. To make Barcelona a "living city," nature is also integrated through habitat, bringing **other species** as a **living feature** to the city. This project establishes a new **ecological corridor, re-wilding** parts of the Parc de Diagonal mar, Parc del Besòs and connecting them with new introverted green spaces within the inner blocks to create a **continuous corridor** that better serves the **region's biodiversity**.

The new **ecological corridor**, like the new **green corridor** along Rambla de Prim, are designed to replace traditional urban features like large paved plazas, parking areas, and commercial strips with new urban features that have more ecological and **inclusive social value**. By reducing pavement, these areas no longer act as a barrier to the movement of species and facilitate the **infiltration of rainwater** to better support plants and habitat. In addition, these spaces are recovered for residents to enjoy with **reduced pollution**, noise, and interference from private vehicles. It creates open-ended opportunities for **contact between human and nonhuman residents**, enriching appreciation for nature and care for the environment.

A more inclusive public space

At the neighborhood scale, defining and improving public space is critical to making El Besòs i El Maresme **safer, more inclusive, and more livable for all**. In line with the neighborhood's history as a settlement for new immigrants, the project promotes **social coherence** through opportunities for passive interaction as well as **new economic activities** that empower residents for **active daily living, self-sufficiency, and celebration of cultural diversity**. Agricultural and ecological features enhance social connections between people, transforming public space and the neighborhood as a whole. Breaking down undifferentiated open spaces and the structure of the superblock, this project uses **small-scale landscape modules** to **generate diversity of open and semi-enclosed conditions**.

Third landscape including inner intersections, street corridors, and unused spaces near rail and highways can be **transformed into rain gardens**, tree nurseries, orchards, and even pasture to integrate them as active landscapes within the neighborhood. Pocket "in-between" spaces become productive container gardens, kitchen gardens, and composting sites, or sensory gardens and playgrounds for residents to use and enjoy. Open spaces adjacent to

social services and commercial hubs become prime opportunities for unique educational farms and recreational programs that will attract visitors to the neighborhood.

Phasing Strategy

Gregal garden cluster 2025

The Comedor Solidario Gregal (soup kitchen) is a vital facility that has the potential to seed wider transformation in the neighborhood. A community hub dedicated serving the vulnerable, Gregal's facilities and mission could be developed to consolidate its function as a social space and its participation in the food supply chain from production to distribution to preparation of locally sourced agricultural products within the neighborhood. This would increase the neighborhood's food security as well as provide opportunities for education, employment, and other forms of social security for neighborhood residents. The first phase of our project proposes a multi-functional cluster of community and commercial gardens as an extension of the Gregal facility.

Connecting the neighborhood 2028

The second phase is aimed at building greater connectivity between neighborhood hubs by utilizing underused and infrastructural space within the neighborhood. Taking advantage of inner intersections and streets as experimental, transitory spaces, such interventions grow a network of green axes that will raise awareness, dialogue, and demonstrate the value of inclusive public gardens in the community. This network will focus first on transversal axes, connecting the 22@ hub towards the River Besòs. Rambla de Prim will be partially re-naturalized by daylighting the Horta stream, while with more connections into the neighborhood, Alfons de Magnanim will become the primary civic axis and target of major investments during this phase to facilitate pedestrian and soft mobility, public transportation, and public activities.

A new ecological corridor 2030-2040

The project's new ecological corridor focuses on developing a functional ecosystem for urban wildlife with structural diversity of vegetation for habitat and greater ecological coherence. Shared streets will be improved by reducing pavement for vehicles, while the semi-enclosed intermediate spaces between buildings will be planted with native species offering habitats and feeding grounds throughout the year for birds, bats, insects and other species. Parts of Parc del Diagonal Mar and Parc del Besòs will serve as large areas for re-wilding and improved by establishing more diverse plant communities. Multi-story forest structures require time grow, though certain afforestation techniques, such as the Miyawaki method, are able to establish a dense, mature forest within 15-20 years. Concentrated in the block's introverted interiors, the green corridor will also mitigate heat islands and provide recreational value for the neighborhood.

Green Vision 2050

El Besòs i El Maresme will be connected seamlessly to 22@'s green hub infrastructure and Barcelona's system of green axes and squares to connect neighborhoods while re-imagining the landscape heritage of the River Besòs within the city as a whole. This city becomes an

inhabited garden, providing diverse programs for the neighborhood as well as valuable ecological infrastructure to tackle climate change in the 21st century.

Buildings Toolbox – Typology and Interventions

The housing estates of El Besòs i El Maresme are a distinctive artifact, and serve as a powerful testament to a twentieth century moment dedicated to solving urgent social problems and safe, affordable housing for all. These modernist projects are often criticized for being monotonous, offering no sense of belonging, and further concentrating crime and poverty within the city. However, these challenges cannot be blamed on the buildings themselves, but reflect the lack of investment in the intermediate spaces between buildings and the integration of private life with the context of the neighborhood and city. This project proposes a toolbox of interventions to **extend the domestic space and improve the dialogue between built-up and open spaces**. Simple operations can transform the character of the buildings, **improve their thermal performance**, and bring **diverse uses** for the community to **enhance both public and private life**. While the housing towers were initially designed to maximize density, new interventions would allow critical and underused spaces to be **reinvented for better uses**.

The proposed toolbox includes interventions that improve living conditions by **extending domestic space**. Even from the outside, this allows the neighborhood to show signs of everyday inhabitation, inventiveness and adaptation, and cultural diversity. This offsets the dominance of the towers as the pedestrian experience becomes filled with individual balconies, gardens, furniture, and other evidence of life. The toolbox also includes **climate adaptations** with **improved ventilation** through **cutting height from buildings or excavating their inner courtyards**. **Added double facades and green roofs improve microclimate** and air quality for residents within.

This project aims above all to foster **a sense of community**, which is achieved through both public space and architectural interventions. Interventions add or **reinvent spaces in-between buildings and on rooftops** to offer places for interaction and active recreation for the community. In particular, there is new provision of green space and opportunities to grow food that **promote cultural vitality and self-sufficiency**. **Activating the ground floor as a common space** brings life to the streets and the neighborhood as a whole while an inviting façade and new vertical connections **increases the dialogue between residents**. Finally, the extroverted character of a façade facing the street is offset by a more introverted interior façade that also has quiet spaces for small gatherings, connection to nature, and habitat for **urban biodiversity**.

In the spirit of the modern movement, collective housing estates responded to profound social changes with the hope that high-density living would liberate open space on the ground for gardens as a true public space. In place of the undefined and monotonous character that has come to define modernism's failures, this space can be repositioned as a network of productive gardens. Voids become opportunities for micro interventions and new uses, with greater public-private gradation and multi-dimensional use that reflects the community's dynamic immigrant spirit. In face of increasing commodification of public space, the garden provides an opportunity to expand inclusivity for nature and other species, while cultivating collective self-sufficiency. The city itself becomes an inhabited garden.