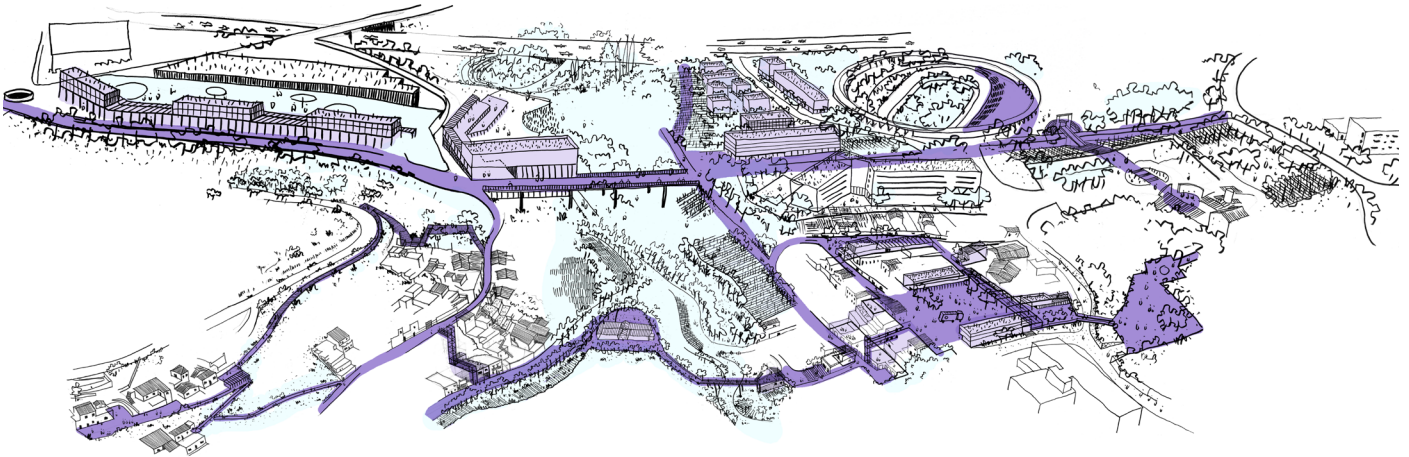


New Eco-systemic Boundary Between Nature and City through Closed-Cycle Logics



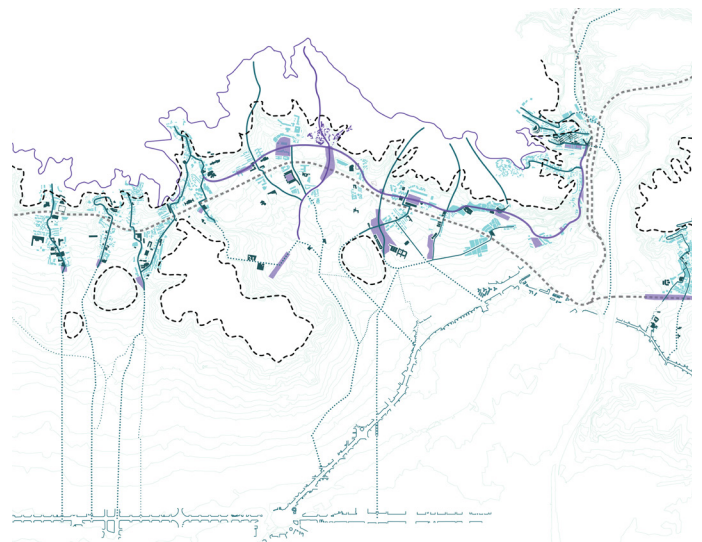
A local saying, “De les pedres en fem pans” -literally, “We turn stones into bread”, speaks to making the most from what seems overlooked. An urban transformation based on freeing forgotten torrents to flow downwards, “De Pedres, Pans!” proposes a new eco-systemic boundary between Horta and Collserola, with La Font del Gos as its keystone.

As a transitional ecosystem part of a redefinition between city and nature in the Barcelona Metropolitan Area, a wide and complex boundary is made through closed-cycle logics: re-purposing obsolete grey infrastructures to promote active mobility, re-thinking pre-existing typologies to increase the diversity of activities and services, re-using greywaters linked to new productive “horts” and daylighted torrents, and re-signifying car parks and empty lots, so as to generate a new civic structure that weaves city and nature.

1. Between nature and city

Barcelona’s torrents, hidden underneath avenues that trace their paths, nevertheless hold the promise of a new relation between city and nature through the repurposing of avenues: ecosystemic promenades that transform the city’s ecological mesh. From the whole city, it is in Horta where the most streams descend on to the city. From Sant Genís to La Font del Gos, flows converge at La Clota, enclosed by the Carmel and Turó de la Peira hills, which forms the Horta torrent, running underneath Passeig de Maragall.

It is also in the Horta district where grey infrastructure is most egregious, as the Ronda de Dalt’s surfaces from its semi-underground section, behaving as a typical highway between the neighbourhoods of Canyelles and Montbau. An obsolete clover-leaf exchange, remnant of a never-executed tunnel, separates neighbours and nature on both sides: the community of La Font del Gos, located at the centre of major ecosystemic and urban flows, is relegated to the background through roads and large public buildings that enclose its two valleys, also internally divided due to its slopes. A modest self-built neighbourhood, its conflicted relationship with local plans have fragmented its fabric and left it out of basic city services such as public transport, commerce and public facilities.



Continuities through torrents

Contact between the city of Barcelona and the Collserola massif is historically determined by the multiple streams that followed down from its valleys, joining into several torrents which flow into the sea, has been incrementally anthropized through the build-up and cover-up of these vital flows. It is in the Horta district where the flows are highest, but also where the Ronda highway surfaces.

2. Intersecting Horta and Collserola

Between the Collserola Hills and Horta's neighbourhoods, two "axes" vertebrate a new structure that bypasses car-heavy infrastructures, and improves connections both in La Font del Gos and towards Collserola and the rest of Barcelona.

The first is a "natural axis": the torrent De Cal Notari, accompanied by the GR-6 which continues towards Montserrat. Towards Barcelona, this trace links Horta and La Font del Gos through a now de-paved highway exit which prioritizes active mobility and water flows. Towards Collserola, the torrent connects with a key segment of the "Passeig de les Aigües" walkway, which starts at the self-built district of Sant Genís and ends at Torre Baró, linking up with a multitude of paths and trails that climb from other communities, following water-streams.

A second "urban" axis intersects the first, a Promenade starting in Sant Genís and ending in Torre Baró, and connects all of the neighbourhoods beyond the Ronda de Dalt forming a singular urban area with increased accessibility to public transport, public facilities and services, simplifying a complex access situation that increased travel time through unsafe roads, which led to an excessive use of private vehicles and car parks, encumbering natural spaces.



Natural and Urban axes

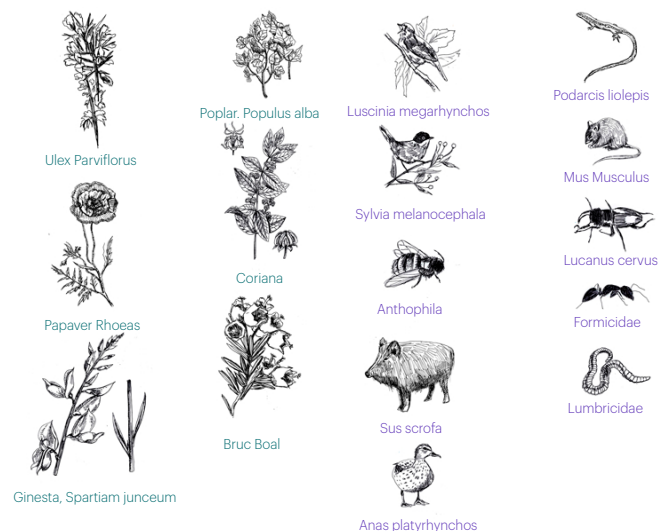
The connection makes use of existing traces: each of the neighbourhood's key streets and public spaces are extended on both sides so as to reach one-another, albeit without disrupting transversal ecological continuities, which are de-paved and prolonged toward the city.

The proposed structure completes a circular circuit, vertebrated water-streams that cross the area perpendicularly, improving the urban coesion of the communities.

3. Eco-systemic logics

Beside a now daylighted Torrent de Cal Notari, the "GR" path descending through the valley finds productive "hort" gardens are expanded along de-paved paths, overgrown terraces, and empty parking lots. In humid areas, beeches and riverine meadows are part of a long concave section that regulates the variable water flows of the Torrent through phytodepuration ponds (synched with nearby buildings that re-use greywater) and basins to laminate and reduce the water's speed. In this way, flooding is recognised flooding as an intrinsic characteristic of the torrent's dynamic climate, to be considered for an appropriate ecosystemic design.

Flowing downwards, the torrent goes past the former Ronda's exit 4, now is replaced by a green mobility corridor, re-purposing the asphalt and earth of the grey infrastructure: with a lamination basin at its centre, its section partly changes to incorporate bicycles and new pedestrian paths that continue alongside them upwards toward the Velodrome, and downwards toward Horta, linking these communities and increasing their accessibility to metro stops. The torrent is able to cross underneath unfettered, flowing towards a new green lineal Park at la Clota. Despite the de-paving, remaing roads ensure vehicle mobility by keeping access through Can Marcet Avenue and a nearby bridge crossing: TMB's buses can quickly reach service. Green continuities from beyond this point into the city via Passeig Maragall and nearby promenades would further enrich the area's connectivity, part of a wider transformation of the torrents as part of Barcelona's Blue and Green Infrastructure.



Ecological strategy

Due to its close proximity to the Collserola massif, and because of the abundance of Ginesta, a highly flammable shrub, the danger of fire is ever-present in the vicinity of the La Font del Gos neighbourhood. "De Pedres, Pans!" faces this challenge as an opportunity to increase the ecological values of the Torrent de Cal Notari: the project proposes a small controlled burn and selected removal of ginesta, substituted with local flora adapted to a dynamic environment of flooding and drought, with shrubs that resist drier habitats like thyme. Landscapes closer to inhabited areas introduce managed pastures, joining pre-existing nearby local pastoral fields, thus promoting an active management of forested areas with productive activities.

4. Together with La Font del Gos

Living, Dwelling, Belonging

The landscape of La Font del Gos is understood through its rhythm, parcellation, the buildings themselves and the colour of their façades, but also its social character, which gives meaning to this built environment.

We propose a series of criteria to determine how best to regenerate these buildings through an understanding of their lived-in experiences, substituting and filling pieces and plots with respect, involving the neighbourhood inhabitants since the first step.

“De pedres, pans!” advocates for an “urbanism of the ordinary”, where collective memory and community relationships go hand in hand.

Regeneration strategy

The project proposes an inclusive densification of the area without losing its identity, by taking advantage of an excess of car parks (no longer needed following its improved accessibility) with clustered housing typologies that resonate with the pre-existing grain. On both sides of the proposed bridge, “palazzina” blocks and linear dwellings integrated within the mosaic of “hort” gardens and greywater re-use network, which are the backbone of the neighbourhood’s green strategy throughout the whole site.

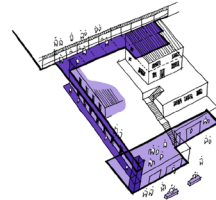
These new units would also introduce new private commercial services and activities. Basic services such as supermarkets, town hall offices, but also shared programs between large adjacent facilities, such as community gardens linked to the Educative Centre Can Llupià, and student residences introduce the mixture of publics within the community. Within La Font del Gos itself, selective additions regenerate aged units, or fill-in in empty plots (in both cases considering planning directives), albeit protecting valuable green spaces.

Furthermore, in areas closest to the water flows, certain units are procedurally removed to ensure that the risk of flooding is properly addressed, inhabitants are quickly rehoused in their vicinity.

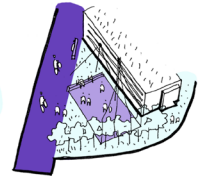
The new additions, apart from their uses, also allow for pedestrian movement between two height levels through public lifts and stairs, connecting different areas quickly.

Re-using what was there

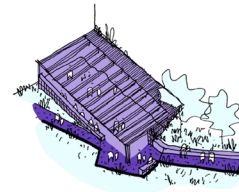
Additions would utilize a circular construction logic: ensuring a negative land-consumption strategy (as more soil is permeabilised than sealed), new builds are reduced, asphalt and concrete resulting from de-paving are employed in both new constructions and public spaces (such as in retaining “gabió” walls, in street furniture, or in new constructions).



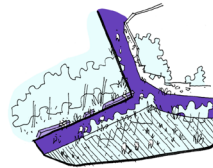
LIFTS WITHIN
INFILLING



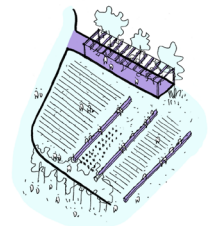
DE-PAVED
SQUARES



URBAN
NODES



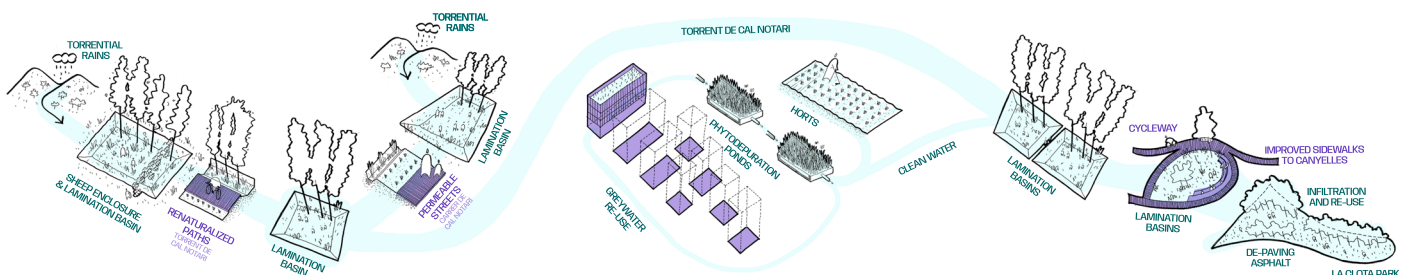
NATURE-URBAN
INTERFACES



PRODUCTIVE
LANDSCAPES

A Constellation of Active Spaces

A series of new squares and streets improves the urban quality of the neighbourhood with small additions to what already exists such as streetlights and benches, but also with new activities: “De Pedres, Pans!” works with the pre-existing typologies, selectively adding publically accessible elevators, and joining up ground-floors together, so as to form continuous, active, façades within the streetscape, with caretaking homes for the elderly unburdened by stairs and market shops all facing the same square.



The Torrent de Cal Notari as a Green Backbone

5. Implementation Phases

The project is structured around three key phases of intervention:

1. Introduction of an urban axis connecting La Font del Gos to key public amenities including the Velodrome, the Horta Labyrinth, the TMB bus depot, and funerary facilities, before reaching the Font de la Baliarda community and ultimately Canyelles.

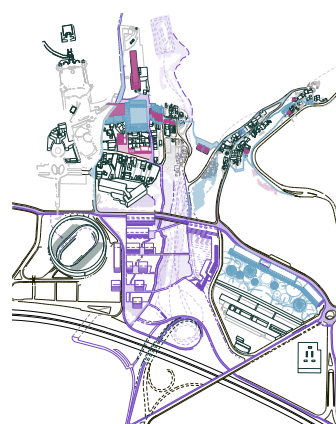
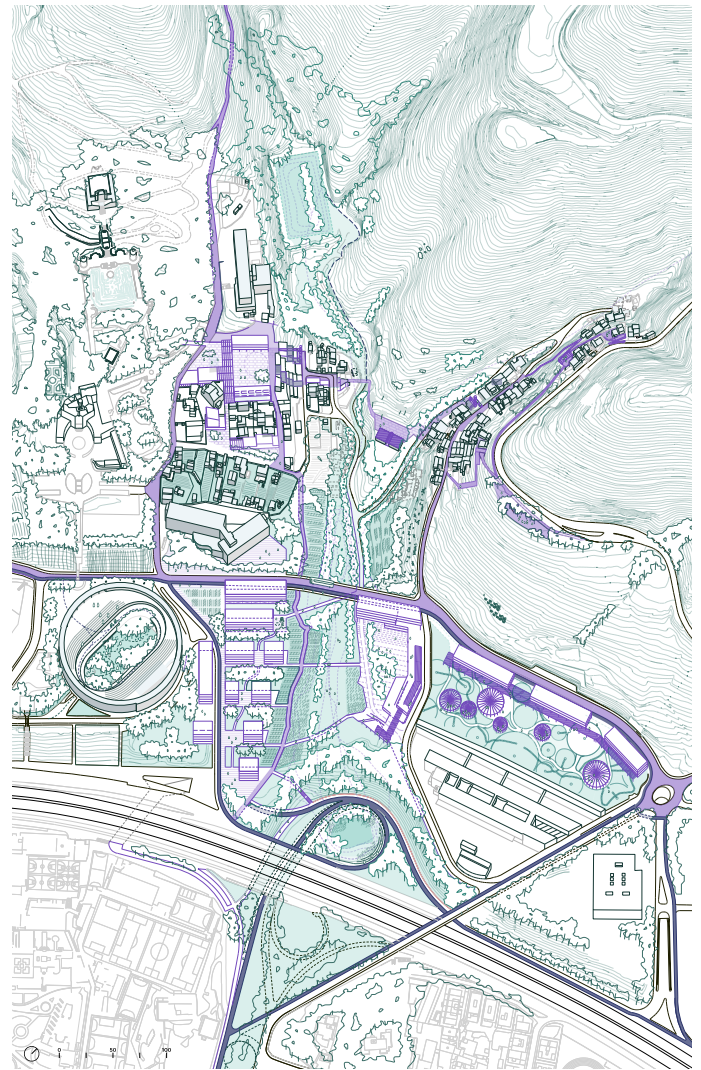
The strategy relies on repurposing existing infrastructure: extending Passeig dels Castanyers from the Mundet Campus towards Síndic Rahola Street via a new bridge. This enhances public transport access, links existing but fragmented cycle paths, and minimizes ecological disruption to the Torrent de Cal Notari below, in which short-term interventions will ensure its safety regarding fire and flooding.

Public-private collaborations will introduce new uses, including housing, food services, and working spaces, which help fund urbanisation, while the outdated road network will be transformed into improved green spaces. These new and upgraded areas will form a continuous link with surrounding neighbourhoods, setting the foundation for future regeneration. A new public transport square, anchored by a short bridge, will finalize this key axis.

2. Between the main axis and the stream, a network of smaller streets and natural paths will reconnect the two valleys of La Font del Gos. This includes interventions that merge civic and natural environments while allowing for measured, tactical densification.

Strategic improvements focus on a series of “nodal squares” that serve the community and ensure emergency vehicle access along with public transport. These are connected by minor modifications to the existing street fabric, transforming cul-de-sacs into a walkable network with added shade, lighting, and signage. These elements will be co-designed through participatory processes, reinforcing ownership and inclusion.

3. A final phase with a series of proposed interventions will consolidate empty plots and will allow the regeneration of existing buildings, whilst re-thinking existing typologies to introduce new uses. As the district has been re-activated, new spaces will accommodate future needs and activities, along with a landscape management strategy that works in tandem with neighbours to protect and expand closed-cycle logics involving water and productive spaces through collective models of ownership and stewardship for shared spaces.



Implementation phases



Green and Permeability

“El Barri” at the centre of it all

La Font del Gos sits at the crossroads between a major stream and the proposed urban axis, remains deeply disconnected, cut off by infrastructure, lacking public transport, and underserved by public spaces and facilities. Fragmented planning, steep topography, and outdated grey infrastructure have reinforced its isolation from both the urban fabric and surrounding natural systems. To address these challenges, a collective, gender-inclusive planning process is proposed to ensure the creation of a safe and equitable environment for all.