# How to Design a Second Life

By **Carlos Arroyo Zapatero** (ES) – PhD architect, urbanist, linguist, teacher in Madrid's Universidad Europea. Founder and director of Carlos Arroyo Architects www.carlosarroyo.net





I – Eibar (ES), runner-up – Hyper-Txonta > See more P.174

This article focuses on the *tactical* aspects of the proposals. While *strategy* is the overarching plan to achieve long-term goals, *tactics* are the specific actions taken to execute that plan in practice. There is high value in an architecture that is strategic, but it may come to nothing without the right tactics. We can easily agree on certain strategic ideas, but the real difficulty may be just what to do about it.

We have selected five projects dealing with the strategic idea of adaptive re-use, the idea of a second life to our existing constructions to minimise the carbon footprint of demolition and new construction. In most cases, the strategy is already clear in the brief, it is a given, a part of the question.

In Eibar (ES) the question is very explicitly about designing a second life for existing industrial buildings, while in Rennes (FR), it is a hospital that needs to change its function. In Brussels (BE) the brief was more open, but is still about a reformulation of an existing park and cultural hub, which over the years had taken on major infrastructural public works. In Grensen (NO) the aim is to transform the site adapting the existing buildings to new uses and while the possibility of relocating certain wooden structures – or even demolishing some of them – remains open, the preferred strategy is to find them a second life. In Madrid (ES), on the other hand, the idea of a second life is brought in by the competitors as a proposed strategy.

In any case, the question ends up being about how to implement that strategy: the tactics.

### How to Transform Industrial into Domestic

In *Hyper-Txonta* (fig. I), the runner-up team in Eibar proposes a systematic approach to the repurposing of obsolete industrial buildings by means of very clear tactical elements, a series of addons to instil programmatic change, introduce services and manage energy balances. These elements follow the principles of industrial construction, as if they were parts of a catalogue, and are therefore changeable, scalable and to be implemented in stages by simply ordering more items.

The water harvesting roof is a self-referenced structure that may be added to any building as if it were just one more element in a scaffolding system. The low-tech façade envelope is also a generic product with which to clad almost any structure with wooden frames and woollen insulation. Prefabricated service cores are fitted in to house both wet and electric ducts to transform the usability of the spaces. The catalogue of add-ons includes nesting opportunities for birds, containers for plants to grow, etc., all fitted to the scaffold-like auxiliary structure.

The resulting image for the industrial structure transformed into housing focuses on living conditions with generous spaces and windows for humans and an oasis of peace for non-humans.

## How to Transform a Hospital into an Ecosystem

The runner-up proposal in Rennes, *Resuscitating the Blosne* (fig.2), also adds wood to a concrete structure, introducing smaller spans, which reduce the scale to a more domestic dimension, as well as warmth in look and feel. This new dimension is overlayed as an 'augmented grid' over the concrete spans, aligning with it to ensure adequate transmission of the added loads. Further wings following the wooden pattern are proposed, completing the concrete grid to create a new system of courtyards and transition spaces.

This proposal also looks at natural pre-existing features, to give them a second life. The buried Blosne river is resurfaced, breaking up the asphalt of the access roads, while the former parking structure is kept as an observatory of the rewilded expanse.

The tactical aspects of the proposal are emphasized in the presentation, showing the successive phases of the implementation, and including cranes and machinery caught in the act of transformation.

### How to Deal with Heavy Underground Infrastructure

The runner-up team in Brussels behind project 71.50 ASL a Manifest for Civic Infrastructure (fig.3) proposes a calendar to increase civic uses in the Jubilee Park through transformation rather than construction of new buildings, in parallel to the necessary evolution of means of transportation in the city.

On the site, a succession of motorway-like infrastructure for cars with tunnels, trenches and ramps, weaves through the park creating a barrier before diving under the cluster of cultural buildings.

The team assumes that there is a gradual shift in the heart of Brussels towards public transport and bicycles away from private cars. Bicycle lanes are much lighter than motorways and metro line



2 – Rennes (FR), runner-up – Resuscitating the Blosne > See more P.162





3 – Brussels (BE), runner-up – 71.50 ASL > See more P.118













4 – Grensen (NO), special mention – The Gatehouse: The Open Border > See more P.139

tunnels are much smaller, so the shift would free substantial footage within the infrastructures dividing the park.

The proposal takes advantage of the situation of those motorway tunnels diving right under the existing buildings to transform them into a large atrium linking all the programmes and providing an open space to accommodate civic activities within the large spans of the heavy infrastructure. The trench that used to divide the park becomes an agora. A new relationship is established between the different parts while maintaining a zero-new-building policy.

#### How to Change the Scale of Existing Constructions

The authors of *The Gatehouse: The Open Border* (fig.4) special mention in Grensen, need to transform an area including a cluster of small houses into a large student facility while adopting a strategic commitment for the radical renovation of the existing.

They solve the typological conflict by transforming the street into an atrium connecting the existing buildings. It is a simple operation that manages to modify the scale of the place while maintaining its character.

The domestic scale of the buildings is maintained, but the addition of this large shared long atrium linking all of them creates a larger body that, in turn, provides a link to a larger territory, acting as a gateway between two parts of the town. The atrium not only links the existing buildings either side of it, it also creates a connection between the educational facilities and the surrounding suburbs of Trondheim, as well as visually linking the Gothic cathedral on the other side of the river and the Neo-Gothic headquarters of the university.

Material continuity is provided by the choice of wood as main building construction, while the linear structure and its criss-crossing roof resonate with the Gothic character of its neighbours.

#### How to Care for the Second Life of a (Non-)Vacant Plot

In Carabanchel, *El Jardin de Ladrillo* (fig.5) winning proposal in Madrid, is not about the second life of buildings; it is about the continuity in time of public space, open space, vacant plots, courtyards and spontaneous greenery.

The task is to produce new buildings here, which would normally complete the urban blocks with new façades following the line of the planned streets and sidewalks. Contrary to that automatic answer, the team decides to offer a second life to the open spaces and their vegetation, concentrating the program on a smaller part of the intervention area.

In coherence, the new construction is not a formal building, but a layering of open spaces in height, with a scattering of small buildings to house the program. The four levels of open space are visualised in the main image of the competition documents as an unfolded perspective, where we see all the new open spaces in continuity with each other and also with the network of existing open spaces that the team decided to provide a second life for. The tactics here are as radical as the strategy, resulting in a really innovative kind of public space.

#### How to Prepare a Future Second Life

In other chapters of this catalogue you will find further tactical approaches. For example, the winning project in Østmarka (NO), A Home for All (see more P.227), maintains a number of housing blocks that were earmarked for demolition, while proposing a way for the old and new to be integrated as a holistic concept. Then, the winning project in Vaasa (FI), (me)tsö (see more P.239), proposes a typological approach reminiscent of Habraken's S.A.R. principles, as well as the early work of the author of this article, with a floor plan that leaves the structural elements out of the way of possible rearrangements and concentrates utilities along central strips to facilitate future adaptations.

An important role of this catalogue, not just this particular text, is to collect tactical ideas that will help people around the world implement the strategies that we can all agree on. I propose that we continue reading this book identifying valuable tactics, valuable ideas on just how to do it.



TITIT



5 – Madrid (ES), winner – El Jardin de Ladrillo > See more P.145