



**POLITECNICO
DI TORINO**

Honors thesis

**MASTER OF SCIENCE
in Sustainable Architecture**

Abstract

Biella as Loft

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February 2015

This thesis starts with the citation of its title from the publication entitled "City as Loft", in which the authors Martina Baum and Kees Christiaanse have collected some cases of reuse in the world, explaining and arguing the concept of "adaptive reuse" as a resource for sustainable urban development.

"adaptive reuse" deals the issue of reuse with a different perspective from the traditional one, aiming at a sustainable urban regeneration in terms of economic, environmental and social.

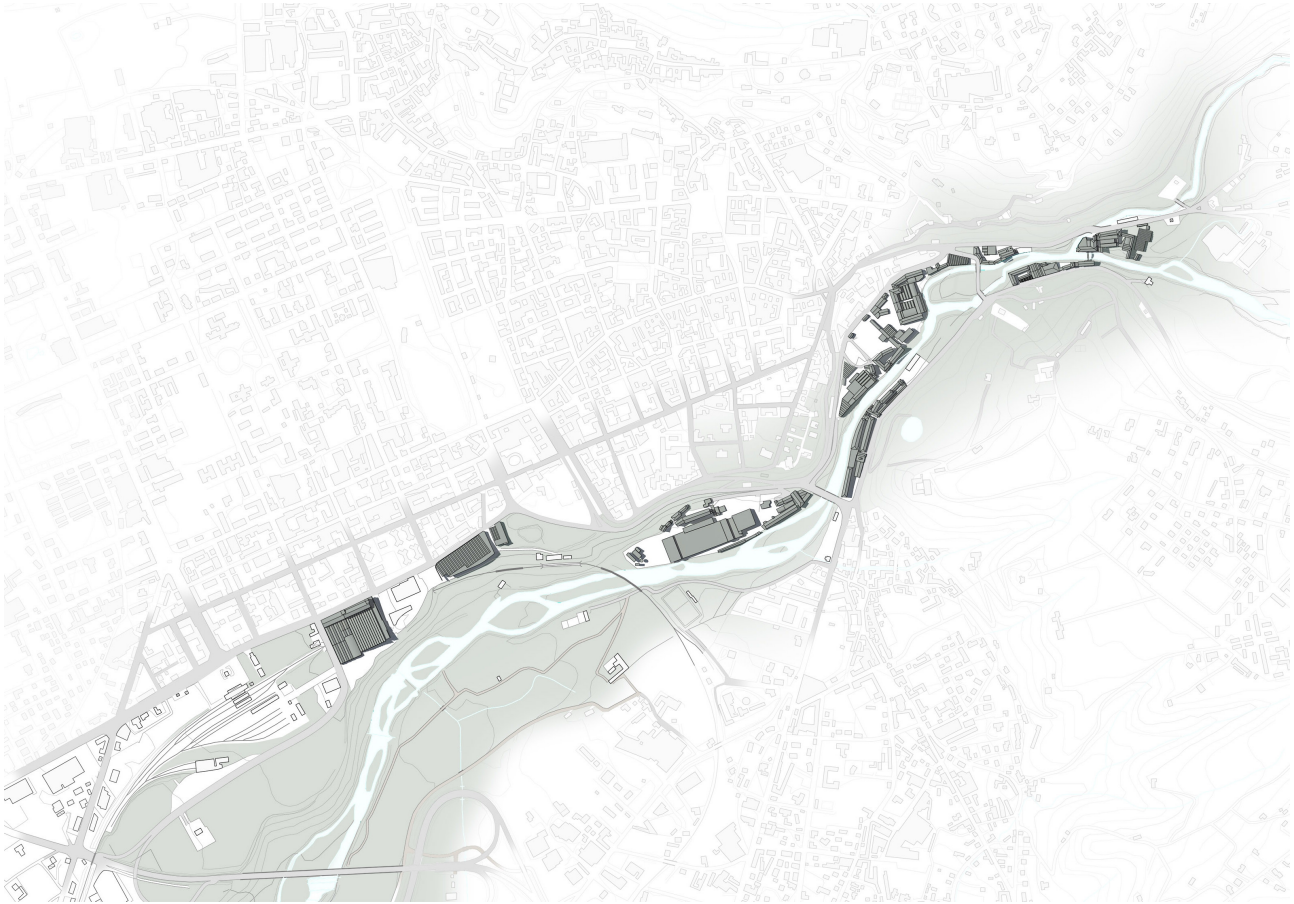
Biella is a city that is perfectly suited to an approach of this nature given the high number of unused spaces that are now part of the landscape, and that they urgently need to find new ways to be interpreted and used.

The initial phase of the work consist on the analysis and cataloging of some present buildings, through photographs and measures of their surfaces.



View of "ex Lanifici Rivetti" portion

After the cataloging a portion of the municipal area has been defined, which concentrates most of the buildings surveyed, marked by the presence of the Cervo river, the main source of energy for the factories.



Design area inside the town of Biella near the Cervo river

After an historical analysis of the territory in order to clarify the dynamics that led to the different locations of clusters (mainly textiles), has been tried to figure out where they had already been done projects to give new life to these spaces.

It should be noted that the method of traditional reuse, involves efforts that are no longer sustainable, especially on the economic side and because that "adaptive reuse" wants to propose a turnaround in the interpretation of these voids.

The recovery is not necessarily to be implemented considering the building in its entirety, but can and should continue to be realized by parts, avoiding to colonize the entire available area. This method can be realized with the use of minimally invasive structures, exploiting the existing structures, and can meet the regulations concerning energy performance and health standards today.

The historical path and the structures that characterize the buildings may lead to new design interpretations and new features that meet the evolving needs of the city. In certain cases, the nature can regain possession of what has been subtracted, favoring the insertion of buildings in the form of ruins in parks and predetermined paths.

The urban areas that are to be formed, are constituted by the superimposition of the primary and secondary architectures, which occupy only part of the available area.



Use of factories over time

In the final phase, the project proposals have been put forward, regarding three buildings, accompanied by guidelines including all the area described above.

The new interventions tend to include activities sometimes unusual, representing the new needs in the area and could reactivate some of these places not just physically, but trigger a new economy.

The textile focus and the inability to have other employment sectors has led to a delay in the take alternative routes, that today is instead decisive for the future of the city.

I think it's fundamental to reason horizontally and no more vertically about the places that we deal with, by connecting to networks that already exist, empowering with the particularities and uniqueness of a place that could not be found elsewhere.

What appears to be the decline of a city, a district, a population, it could prove a strength point throughout new readings and new shared concepts.

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