POLITECNICO DI TORINO FIRST SCHOOL OF ARCHITECTURE Master of Science in Architecture Construction City *Honors theses*

The transformation of the "Spina 5": diachronic design for feasibility

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The present work focuses on the peripheral area of the city of Turin.

The main objective is to recover a degraded and underused industrial area in order to define a new trend of territorial development for it. Another goal is to understand how the project can describe the temporal phases of transformation and define the internal mechanisms through diachronic sequences. An economic evaluation of the project proposal was made to analyze its effectiveness in the present and in the future.

The intervention area is defined in the project "Spina 5", it is located between the station Torino Rebaudengo Fossata and Torino Stura within the boundaries of the first and second belt of Turin.

The transformation of the "Spina 5" is a broad and flexible design, which considers the development process of an area over time, the metamorphosis of "living" area. What is important for this research project is not only to make a final proposal, but to understand how it could change, improve and operate over the time; the financial and economic analysis are used to assess the project's feasibility, advantages and disadvantages.



This project proposes a major intervention in a "grey area" through the creation of a new railway station, residences, businesses, offices, commercial buildings, public spaces, public parking, parks and a system of bike paths. This transformation tries to solve the problem of accessibility to public and private buildings existing in the area. The whole area of intervention is connected by a linear park which not only isolates acoustically the projected buildings but also improves the landscape, respecting the railroad's buffer zone.

The area of intervention has a large and prolonged surface, so it has been divided in 6 construction sites: AREA 1, AREA 2, AREA 3, AREA 4, AREA 5, AREA 6. It is important to acknowledge that timing for such a transformation is a leading factor and not a secondary aspect, so for the economic valuation it has been considered along with a hypothetical economic development to propose two different scenarios:

- Scenario A "Station": Envisages the construction of the railway station as the first step of the intervention, assuming that the completion of this building will increase the public interest in the area.
- Scenario B "Spina": In this scenario the development goes from the center to the periphery, demonstrating the principle of linear urban development, such as the Spine of Turin.



The urban design is a complex mechanism in charge of building relationships and defining the actors for the realization of the project (Public Private Partnership) and which is composed by a series of interventions: creation of spaces and structures of public and private use, completion of existing standards and the implementation of new ones, integration of the existing and proposed infrastructure and lots to a new urban environment.



The research analyzes how urban design might work over time through the analysis of economic feasibility, which in conclusion is not only associated to economic aspects; it is strongly related to the accuracy of the design scenarios.

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