



POLITECNICO  
DI TORINO

# Honors thesis

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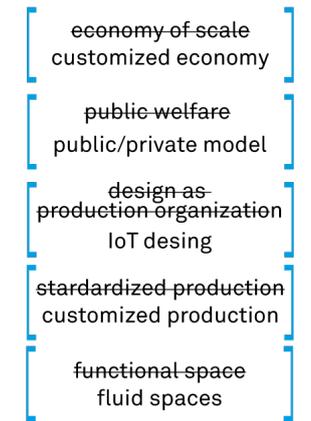
COURSE OF ARCHITETTURA, COSTRUZIONE, CITTA'

*Abstract*

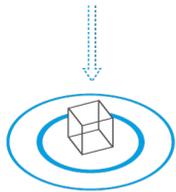
## **The places of the Third Industrial Revolution: Spaces for new economies.**

The thesis is part of a research project aimed at analysing the city according to its industrial components, through the actors that govern it and through the mutations of social and economic processes that affect the contemporary world.

Jeremy Rifkin in 2011, introduces the advent of the third industrial revolution as a result of the presence of what he considers as key factors for creating the conditions for a new productive revolution. He affirms the absolute need for a change on a grand scale, that takes into account from the individual user who lives in his house in the boundless American prairie to the Megacity with twenty million inhabitants on the Pacific coast. In this affirmation he defines the engine of this change, the scale and the interface: the industrial process.



[Re]Industrialization



**building**



/cluster - colocation  
/industrial heritage  
/new production space

**neighborhood**



/urban redevelopment  
/social interaction  
/mixed-use  
/knowledge spillover

**city**



/resilience and innovation  
/jobs and social mobility  
/private investment

Supporting a change in the industrial paradigm implies a change in the whole social sphere, in our culture, so deeply modelled on it. Man's history is inextricably linked to the mechanization and to the industry that have improved the quality of life so radically to overwhelm the natural rhythms, which have always run our world. Man's life is marked intimately by his relationship with industrialization and every change that takes place within it, has consequences on our lives.

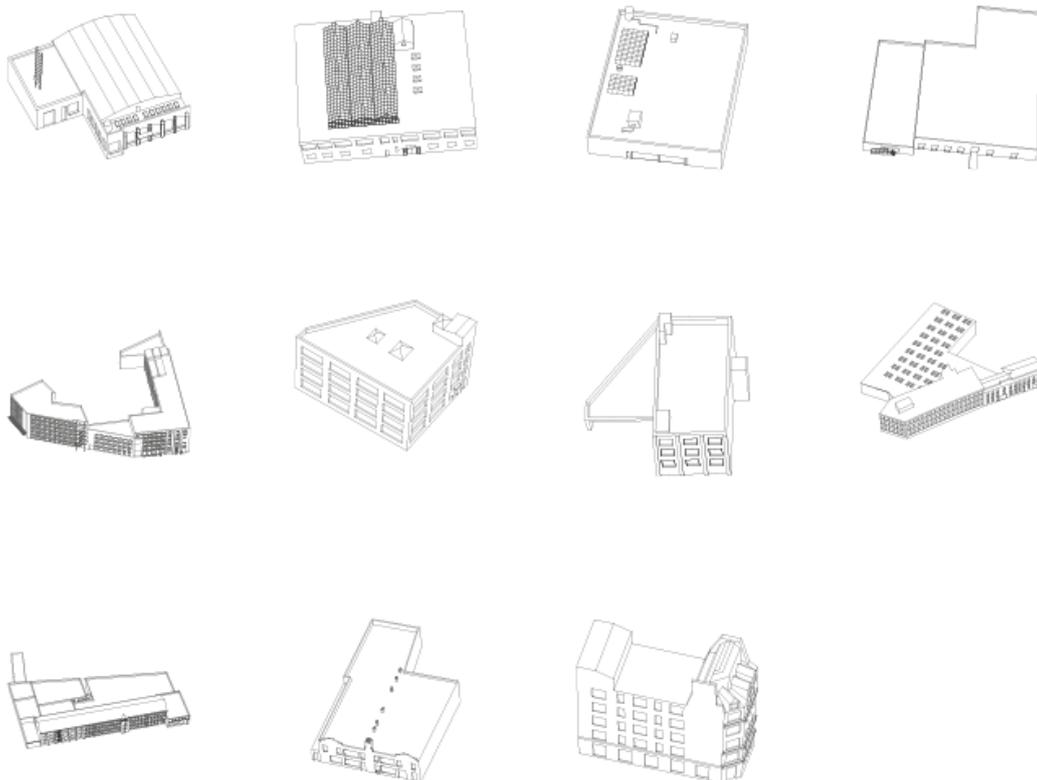
The aim of this thesis is to study the places of the Third Industrial Revolution, analysing where and how, during the XIX and XX century, the close relationship between society and industry was born and trying to hypothesize in what direction a change in this ratio can modify the space in which we live and the relations within it. The analysis of industrial processes that occurred during the two revolutions investigates the contact points between different industrial fields and how these affected the evolution of human living. Observing these phenomena and the manifestations resulting, it becomes obvious the importance assigned to a third industrial revolution and the impact that this can have on our urban life.

The research focuses on the relationship between the place of excellence of industrialization, *the factory*, and its renewed relationship with the city. Through the analysis of how new productions can be part of the contemporary urban space, it is outlined a narrative for its renewal, operating within that abandoned and decommissioned tissue that characterizes the industrial city.

The paradigm of the *digital communication* and the derivate virtual world become key resources for its realization. The manufacturing space is resized when part of its production process is moved in the virtual space. The productivity that lives inside the city is defined

within the context of small and medium enterprises but is enriched with other new realities. Hubs and incubators, Fablab and coworking, research centers and “pop-up spaces” assume productive characteristics within their structure, thanks to the digital platform.

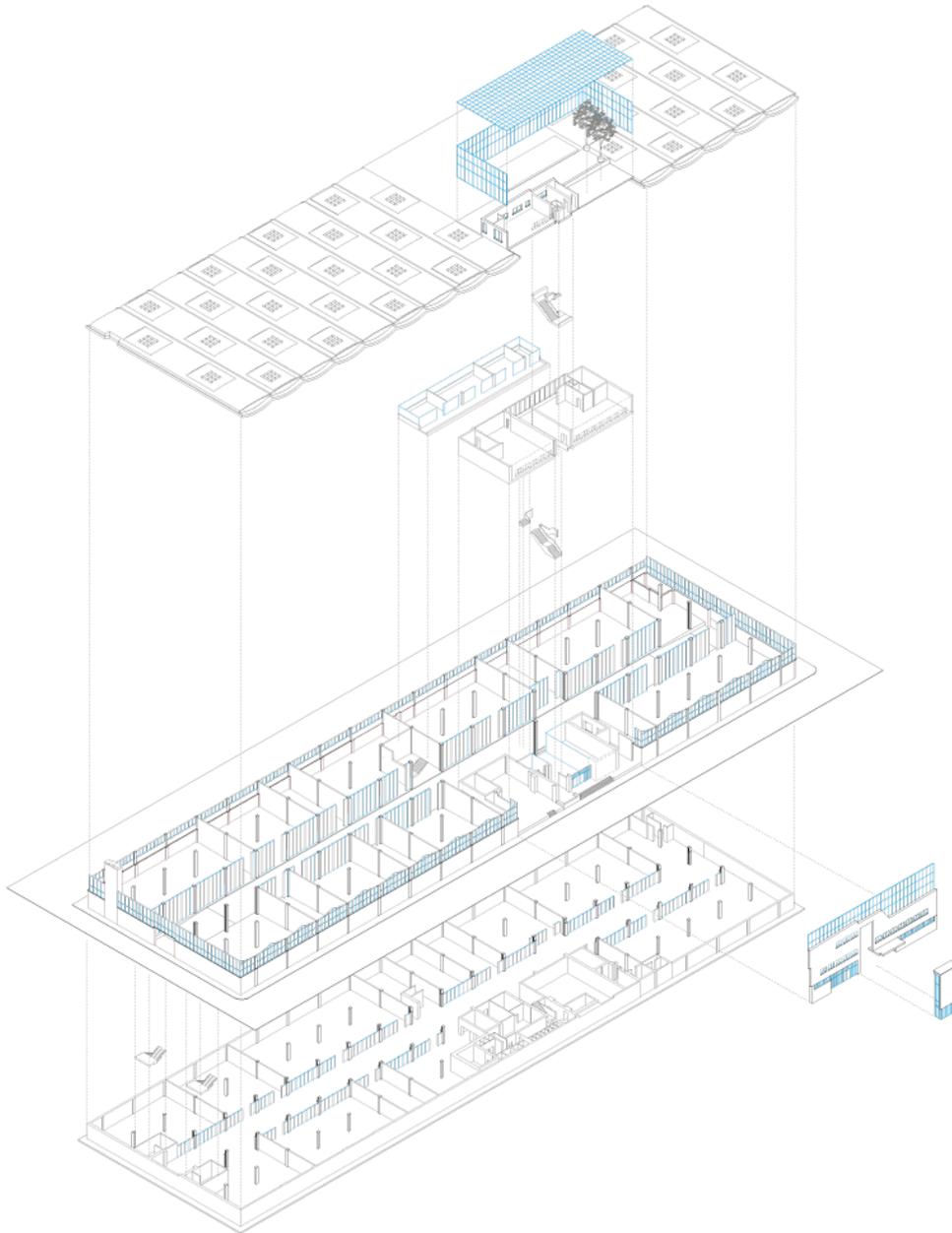
Fourteen case studies on the reorganization of the industrial structure in american and european cities, implemented by both public and private institutions, are analysed for mapping architectural and economic features of this spaces. The intent is to highlight the potential of an industrial tissue transformed again for the manufacture, a re-appropriation according to new paradigms of production and innovation for abandoned urban spaces.



The consequence is the need of a urban planning aimed at establishing economic and social value within these sectors of the city.

The result of the data analysis on the case studies allowed to work on the tissue of the Turin, mapping sixteen buildings having the characteristics for a potential strategy of industrial redevelopment and on two of these is proposed a project for the settlement of small and medium-sized production facilities.

The analysis output on the urban tissue with the documented purpose, gives us the opportunity to explore our city with a different viewing angle from what it has always been. *Generic space*, abandoned and considered poor, assumes new qualities and perspectives.



An economic and social value that is requested with strong voice by the urban fabric and by the neighbourhood derived from an industrial matrix. In Parallel it's point out the necessity of a review of the definition of manufacturing, taking into account the characteristics of new businesses and

their innovation factors. The observation of these elements must then be inserted into a matrix together with the characteristics of enterprises in the territory, with the existing clusters and with the evaluated potential for new entrants to the local market.

In this way it's pursued the goal of strengthening a redevelopment policy with a deep knowledge of the area, of clusters, of activities and elements that characterize new production spaces.

*Tutor*  
Matteo Robiglio

*by*  
Emanuele Protti

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