



**POLITECNICO
DI TORINO**

Honors thesis

DEGREE IN SUSTAINABILITY DESIGN

Abstract

RESHAPING CITIES. The Compact City concept.

Tutors

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by

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The Master Thesis “Reshaping cities – the Compact city concept” is an integrated part of the research project *Compact Cities? - Exploring qualities, drivers and strategies for promoting mixed-use urban development*, carried out at the Department of Architecture at Chalmers University of Technology and founded by the Swedish Research Council Formas.

In recent decades, the city landscape of cities has changed significantly because of rapid urban development. One of the major features of fast-growing cities is urban sprawl, which drives the occupation of large areas of land and is usually accompanied by many serious problems including inefficient land use, high car dependency, low density and high segregation (UN-Habitat 2013).

Cities are nowadays home to the majority of the humanity and the urban population continues to grow and by 2050 over two-third of earth’s population will be living in urban areas (United Nations 2011). Given this rapid scale of urbanization has become extremely important to think of urban development in a sustainable way (Un-Habitat 2015).

Nowadays the international debate argues on a new model of city that can lead to lessen the environmental impacts and improves the quality and the social urban life. Rethinking the current shape of the cities means to react to the decentralization of the cities outwards of the 20th century. We need to draw lines in the ground and say, “The concrete stops here.” That forces people to build in and up, rather than out - and there’s nothing wrong with high, dense urban environment as long as they’re planned correctly. They can be extremely liveable (Patrick Moore).

The European Union, OECD, the UN-Habitat, and several countries empathise the importance of the compact city in their development strategies, as they see in the concept one solution for a sustainable urban spatial planning. Despite some reservations that the concept brings, we can find several cities in Western Europe that have successfully implemented the policy of the Compact City, among them London, Stockholm, Copenhagen, Amsterdam and Hamburg. Their experiences clearly show that with the introduction of the compact city concept in city planning, these cities stopped their uncontrolled expansion to the periphery, not at the expense of green areas in the city, but rather with the redevelopment of brownfield areas that are in most cases abandoned industrial or port areas (Šulin Košar A. 2014). The concept of the Compact City is a successful way to achieve and to regulate modern cities in a sustainable frame.

Nowadays this urban planning strategy is still under debate, the parameters and the qualities of the Compact City model are still vague, however, some characteristics are taken into consideration into the international debate to define the compact urban model. Research and policy argue for more compact cities – referring to higher urban densities and mixed use – but there is little clarity on what actually needs to be made more compact to achieve all the purported benefits. There is also poor understanding of how different development drivers co-produce or counteract compact cities. Additionally, knowledge is lacking regarding how compact cities could best be achieved through strategy-making and

transition processes taking place within the different sectors and at different levels.

The aim of the thesis is to contribute to a more precise and operational understanding of the Compact City concept, which qualities this model needs to include and how they can be promoted and realized. Among others, the thesis studies the local interpretation of the concept in two specific case studies – Gothenburg and Torino- and tests a method for gathering place-based information to inform the design process.

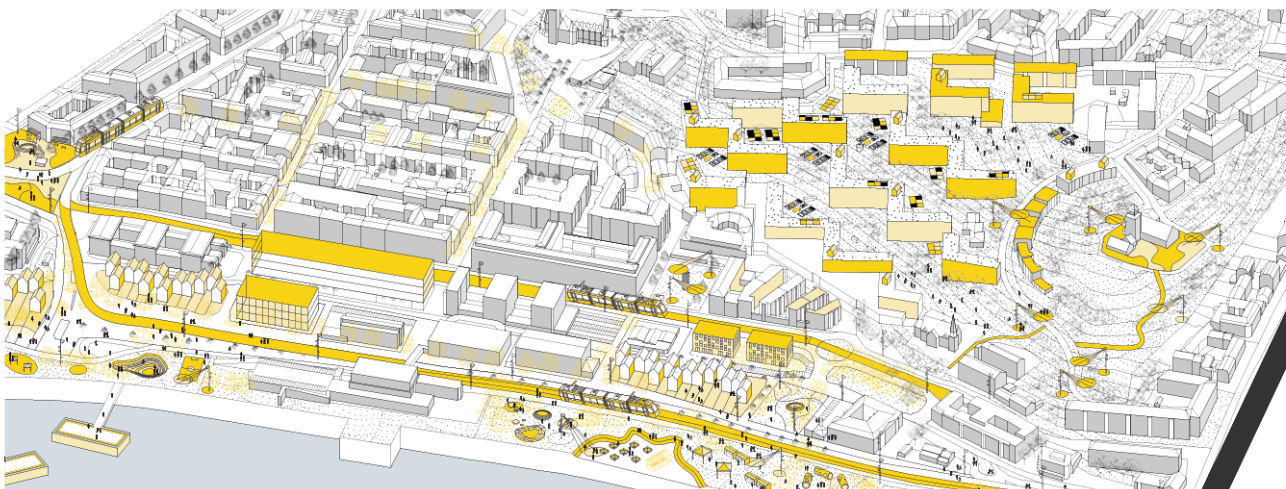
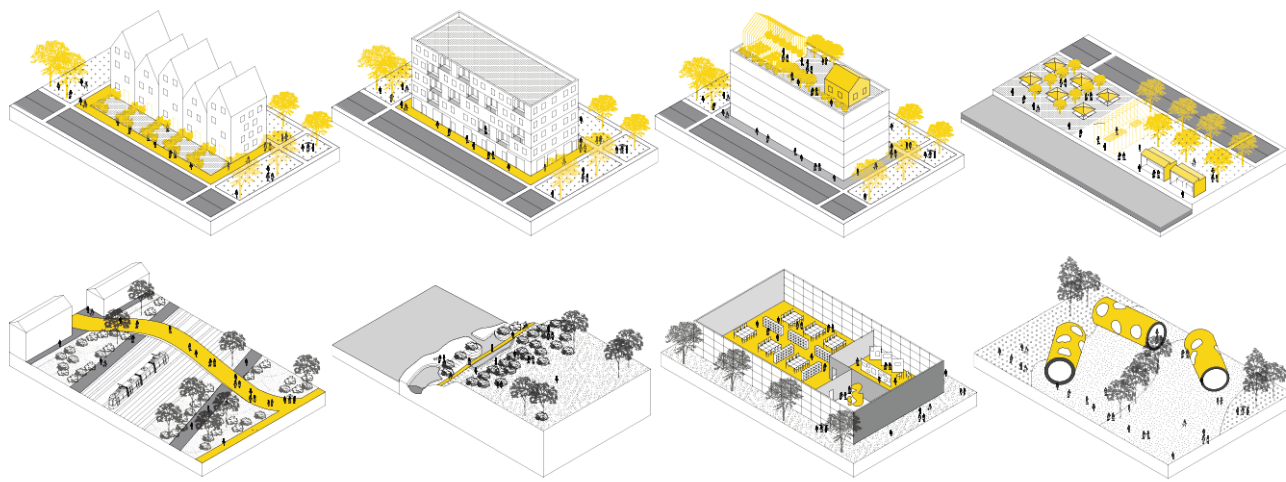


Gothenburg | Torino

This comparison seeks to understand how the model can be applied in different urban contexts and which declinations can be adopted. The practical part of the thesis was led by interviews with specific stakeholders and by the involvement of the inhabitants through an online survey realized with “Maptionnaire”. This Finnish software developed by the school of Aalto of Helsinki allows users to create a map-based questionnaire and to involve directly the citizens and the users of the area. Therefore, through the online survey outcomes, in relation with the previous theoretical exploration, it was possible to define different development strategies in order to achieve –and define- the meaning of Compact City in the two case studies analysed.



Maptionnaire, online survey outcomes in Gothenburg and Torino.



Some strategies developed in tools; Compact City concept applied in Gothenburg and Torino.

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