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Honors theses

Technological and landscape aspects of a high rise building in a consolidated urban tissue. The case of “Intesa Sanpaolo skyscraper” in Turin

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The thesis regards the study about the inclusion of a high rise building in a consolidated urban tissue with a special look at its formal and technological aspects. The subject of the study is the “Intesa San Paolo skyscraper” designed by Renzo Piano.

The first part of the work is developed through the analysis of the formal and technological aspects that characterize the high buildings.

It also concerns the environmental sustainability related to the construction materials, the study of the relationship between shape and structure of the building, and the one between the height of the building, the use of the land and the energy consumption.



Fotoinsert of skyscraper Intesa Sanpaolo, panoramic view
www.nongrattiamoilcielo.org

The thesis continues analysing the context that clarifies the concept of urban landscape that, as a public and invaluable heritage is protected by environmental laws.

After the II world war the problem of reconstruction of urban centers rised in Europe. In this period the debates borned between those who sustained a modern reconstruction thorough high buildings and those who followed a conservative trend, thinking that the reconstruction must be realised looking back at the typical traditional forms of the local architecture, so not to ruin the urban landscape.



Fotoinsert of skyscraper Intesa Sanpaolo, perspective of Corso Vittorio Emanuele II, object of landscape's protection

www.nongrattiamoilcielo.org

Three cases of cities where skyscrapers are part of their ancient core, are studied to investigate about the consequences of this urbanistic choice.

The study of Buenos Aires, Paris and London show how the approach in a building design within a historic core has changed compared to past eras, when the architectural changes were characterized by slow rhythms, linked to the technological evolutions of the period. Today the fast growth rates of the expansions and technology are shocking for the territory and social structure. For this reason the relationship innovation / continuity regarding the built of high buildings is still a debate topic, especially in Turin, where the construction of the "Intesa San Paolo skyscraper" gives rise to many doubts because the city has a unique urban design that is heavily marked by the signs of an early expansion; an urban design that is unchanged in its essential character for four centuries.

The project boasts highly innovative technological aspects, that satisfy the energy needs of a building like this considerable height, as the connection of bioclimatic and structural logic.

The project area is near Porta Susa trainstation, the most suitable area in anticipation of a large increase of mobility due to this new attractive pole.



Render of skyscraper Intesa Sanpaolo

www.scyscrapercity.com

The area at the edge of the city of ancient formation, is located in an area straddling the homogeneous tissue of the nineteenth-century city and an area of more recent formation characterized by large volumes of architecture and wide open spaces. This area presents a change in the urban tissue of the city, already marked by the presence of sporadic and taller than the average buildings, however cut from one of the oldest and most important courses of Turin, Corso Vittorio Emanuele II. After the industrial crisis Turin tries to reinvent itself for the second time, choosing to invest part of its future on the skyscraper Intesa Sanpaolo.

From the point of view of accessibility features the location of the skyscraper is the most suitable, however, is unsuitable for the size of the building because it's too close to the urban core of ancient formation, the subject of protection. To preserve the homogeneity and functional hierarchy of the mesh of the historic city of Turin, the choice of a more isolated area, like for example the district of *La Defense* in Paris, could be probably less invasive.

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