## POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE 2 Degree in Architecture <u>Honors theses</u>

## Transformation by Glass architectural applications : o.g.r. from railway workshop to Science Center

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Choise of theme for our degree is based onto a fascinating material: glass. Throughout modern age, technology and structural applications of glass, as well as expressive implications for its use in architecture, have been matter of great importance for research in both the field of design practise and aesthetic criticism.

Today more than ever this is a very fascinating theme and a theme of great topical interest because transparency of architectural wrappings is symbol for a communication – society and information – society. Inside this changing society buildings become transmitting installations scattered around the city.

We want to compete, through our project, directly with this material and with its different application possibilities. The contest for this confrontation, that we make as realistic as possible, is represented by Turin and, in the specific, by a building that is an example of its past industrial connotation. The building is the H Pavilion of the ex Railway Workshop.



Sketch

We chose to develop the hypothesis of make the H Pavilion seat of new Turin Science Center because this agrees with some consideration of ours. Above all, with our willingness to use glass as a vehicle to convey an image of contemporaneity, and at the same time with considerations about Turin's actual situation of transformation in progress, a situation that will take the city to its new future, still to invent.

First part of degree thesis, that is a start point for project, is centred onto the material glass. Through collection and critical reading of contemporaneous buildings, we tried to put in evidence which value has today glass architecture, by the side of architectural language. The examples are divided under some keywords that we used in attempting to synthesize the multifarious meanings and messages you can transmit through expressive potentialities of glass.

In order to develop the project we maintain as important as the previous considerations the study of technological potentialities of glass, from properties and functions of material itself to problems due to its application and so due to design and calculation of structural glass elements and big glass surfaces.



Exhibit space of the Science Center: footbridges

The project starts up comparing glass potentialities and opportunities of contest, that means it is related with building lot and town-planning implications, with preexistent building and its own properties, with needs generated by new functions, and, not least, with technical-constructive matters, with the attention in calculating the iron structures that support glass elements and with the analysis of some of most important particulars.



Space for correlate activities: view to stairs

New image of building is made up by a series of concentric ellipses, almost waves that spread from central heart and that, materialised by iron and glass structures, have the role of mark all new spaces and the role of permit the distribution through different functional areas. These are permeable boundaries that be inserted in massive walls of the H Pavilion, these are elements that permit to transmit outside the being and the life of the building through graphic layers over glass transparency and through light, inseparable part of glass architecture.

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