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

Historical building: problems of security and fruibility

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The thesis argument has as subject those building that, for a particular historical and artistic characterisation, are considered "architectonic goods", subjected to particular protection bonds according to law 1089 1 June 1939, which establishes the protection of goods presenting historical interest to whom a particular historical and artistical interest is recognised concerning military and political history, literature, art, culture and so on, a prescription to observ in a rigorous way, as a conservation warranty.

In the matter of "re-use" of the artistic-historical property, the main importance has given to the security fire, which for historical building, that takes its finality the security protection, people mobility and wealth, respecting the architectonic features of the same building.

Big care is given to historical building because they are crowed and they keep goods of exception name.

Safety is very important because it is acted to protect people and good in the inner of building.



Barolo Palace

System fire rilevation example optical bundle rilevator) in rooms with decorations and pictures.

Rilevators can be put on frames situated on extern al walls of rooms and on kerbs trying to minimize necessary technology intrusion.

The chapter dedicated to the fire security begin with a study of last 10 years fire that regards historical building, looking both to the possible causes (the main regarding the failure laws) and the factors which favourited the propagation of fire effects. Secondly security fire objective are analyzed, the alternative solutions which allow to reach an "equivalent safety" level, where bonds don't allow the law respect, and the measures are finalized both to avoid the fire birth and to reduce consequences.



Barolo Palace

Example of tubular instrument installation for rooms lightening with decorations and pictures that, put on decorative frames are "masked" in order to minimize necessary new technology.

In the historical buildings structural bonds sometimes don't allow the realization of an efficient way to hale the evacuation, so, in order to have a good safety for people, a good organization is necessary. These last costitute a measure reward of passive/active protection finding, as important parts of prevention activity, the responsable figure of made activities in the inner of building and the technical responsable.

The second question develops concepts of reachness, accessibility and fruibility.

Those concepts need to be integrated in the ideation process or ristructuration, with safety laws and with plant system.

In historical building all architectonic barriers are an important part for the architecture of building and designers must find the best solutions to some the accessibility problem of fruibility and of sureness avoiding to compromise the exterior integrity and the historical building.



Madama Palace

Example of exodus properly created for disables through the realization of an elevated grilled way in order to avoid the presence of steps and different levels that could cause many problems during the exodus.

After this first theorical part there is a second part in which proyectual aspects of some historical building in Turin are developed (*Carignano Theatre, Bricherasio Palace, Barolo Palace, Cavour Palace, Palazzina di Caccia di Stupinigi, Madama Palace*).

This work has reached a double result: both verify what in building was made in the respect of law, and giving some suggestions for innovative solutions. These cases analysis allowed to propose suggestions for project indicating specific solutions based on problem solving. In the thesis last part_we gave some guide lines to adopt respecting the existing ward giving some solutions and examples. Those solutions derive from the comparison and examination of laws and of possible solutions considering the intervent for making accessible a building (architectonic barrier strike).

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