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

The citadel of Alessandria. Hypothesis for the reutilization of an XVIIIth century's military structure

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The thesis is devoted, by drafting a project hypothesis, to survey the possibilities of reutilization of an XVIIIth century's fortified structure in a medium/small-sized town like Alessandria.

The job developed at the same time in several directions, by a continuous confrontation with the teachers, both regarding the project's features and the fundamental relation with the vicissitudes which relate the fortress of Alessandria to the history of the Savoias' Piedmont and of the whole Europe. There has been a double liaison between the two specific subjects. At first a critical reading of the evolution of the formal repertory of the "Modern fortified architecture", since the time of its birth until now, through a progressive loss of its defensive function. Then a retrospect of some of the principal restorations of fortified architectures carried out in the last years.

An important part of the job has been made therefore on the texts mentioned in the bibliography, mostly found in the libraries of the Turin's Faculty of Architecture, and in the public libraries of Alessandria and Casale Monferrato. Furthermore the research has been supported by the consultation of the Historical Archive of Alessandria, of the I.S.C.A.G.'s archive, in Rome, and of the archive of the Turin's Ist Head Office Corps of Engineers.

During the elaboration of the project an important tool of control has been the whole of debates and interventions about the matter, printed on local newspapers and magazines. Moreover the instructions of the latest Master Plans (primarily the last one, approved in January 1999), have been considered in a critical way.



General plan of the project

The solution to the problem of the reutilization of the structure has been found in a set of functions, compatibles both with themselves and with the buildings in which they fit and all organized around the central presence of the University, placed in the citadel. The other destinations are: residences and offices, business, museum, residences for students and hotel. This solution coincides with the results of a preliminary study about the citadel promoted by the Faculty of Architecture of the Turin's Polytechnic in 1998.



Final model

The project is grown with drawings and models at the same time and it grounds on two fundamental concepts: a) to make the citadel more visible and understandable by the people which skirt it and enter in it and b) to fit the new buildings without competing with the old ones and without upsetting the site even though a project's autonomy is always present.

The first target has been joined by the set-up of the green in the whole site, with the proposal of a new organization of the vegetation which, now, is completely spontaneous and camouflages the entire system of fortification. This choice matches with the indications of the latest Master Plan and with the suggestions of the mentioned proposal by the Turin's Polytechnic, (i. e. the reorganization of the whole area as a river park).

Consequence of the second objective is the insertion of the new buildings directly in the ground, in the curtain, in the ramparts and under the central place, exploiting the existing high grounds as a structural element, proposing, in short, an architecture made by a subtraction of volumes rather than by an addition.



Structural details

The project has been elaborated in the scales of 1:2000, 1:500, 1:100, 1:20, each time making a careful study about the most interesting zone. This is the reason why the job is focused on the new buildings. But it's necessary to explain that a great care has been taken, during the assignment of the destinations, in considering the structural and distributive particularities of all the existing barracks to propose an appropriate utilization, harmonized with the site.

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