## POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE 1 Degree in Architecture <u>Honors theses</u>

## Project for the reuse of the fortress of Fenestrelle. A methodological proposal of intervention for re-integration

by Stefano Camusso and Carlo Macerata Tutor: Germana Bricarello

This text does not contain indications about the condition of the fortress of Fenestrelle due to lack of space. We apologise for this, and invite you to refer to texts and sites which may prove useful for further comprehension of our work.

The thesis that we have compiled imparts ideas which do not so much concern the purpose of the usage as the necessary infrastructure, in order to assure that reuse can be accomplished in accordance with certain limitations which are imposed by the situation of the fortress. These limitations, tied both to the fortress' architecture and to the mountain context in which it is situated, are the stakes around which the idea for a project which takes into consideration every part of the fortress without concentrating upon one part in particular developed. To summarise, this idea must respond to the following points:

- The possibility to access the fortress' resources,
- To provide service without losing sight of the central importance of the fortress,
- To maintain its current usage,
- To consistently present the same precise and recognizable features,
- To add only that which is strictly necessary,
- To take advantage of pre-existing elements for reuse.

The need to overcome the existing systems of connection has moved us to investigate what alternative possibilities exist in the field of non-conventional transport systems. Among the different possibilities, the funicular railway is the system which achieves the best compromise. To the possibility of following the broken procession of the fortress, in plain as well as in elevation, we also suggest foregoing construction of aerial parts and allowing the possibility of travelling below ground-level. These elements link the need for quick and easy transport with the necessity to uphold the majestic aspect of the stronghold.

We propose two tracks of funiculars, in order to render all of the fortified works within the walls accessible. This allows for arrival at any part of the complex in a relatively short time. In total, the lift system will make six stops.



Picture 1: plan

Each of these stops must carry out similar functions, but presents very different features each time. In order to create different objects belonging to the same idea, we have gleaned suggestions coming from the fortress itself. The small architectural properties of the new structure are connections, external to the walls, that allow attainment of the existing accesses of each fortified work. In the architecture of the fortress, the separation of the buildings corresponds to a separation of the functions. Correspondingly, the projected volumes which emerge from the ground are constituted by a composition of simple geometries, in which each volume represents and contains a function.



Picture 2: the stations at Fortress San Carlo and Fortress delle Valli – front elevation

However, the volumes' compositions, again in respect to the fortress, produce geometries that are always articulated in different ways. With the same spirit we have tried to assemble the volumes of the emerging parts in order to create a new object each time.

Since the direct comparison also occurs in the natural environment of Orsiera's Park, the "ravelin-stations" are composed of light volumes covered only with wood lamellae and crossed by air. It is our intention to emphasize with this choice the passage of time: the hostile mass of the fortress is confronted with an ethereal architecture, transmitting a message of peace.



Picture 3: render

Although we believe that the intervention must interfere as little as possible with existing structures, we also feel that, in order to adapt to new needs, it must be possible to operate even inside the walls. As they are already united by a common function, we have considered, for example, a connection between the bodies of the areas of the factory. These connections will serve to create closed areas of large dimensions that can be utilized at unique occasions to host certain functions, also considering the winter Olympic games of Turin 2006. The infrastructure that unites the volumes, in this case, of these areas, are intentionally explicit, visible from the inside and from the outside, and belong to the same codified language for the external works. Simple horizontal and vertical connections cross the existing buildings according to oblique axis.

For further information, e-mail: Stefano Camusso: s.camusso@alice.it