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

The castles of Strambino by Alessandra Bertodo e Katia Massoglia Tutor: Carla Bartolozzi

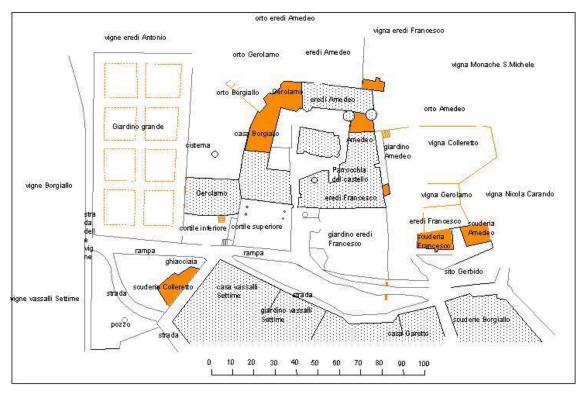
The complex of the castles of Strambino rises in the northern hill, situated above the village of the same name. These buildings were ever owned by the *Conti di San Martino*.

It is constituted by three different bodies belonging to three different period:

1. the castle named "Arduinico", the age of Arduino, former king of Italy in the XI century;

2. the Gothic castle, of the XV century;

3. the ladylike abodes, built in the XVII century, which are not considered in this work.



Planimetria 1722: in giallo le costruzioni oggi non più esistenti

The relief

It has represented the first direct phase of knowledge of the buildings. It has allowed to put in evidence forms, dimensions and particularity of the castles. The ruins of the *Arduinico* one are an imposing rectangular structure, long about 24 and wide 11 meters. It is constituted by walls in stone and bricks, whose thickness reaches cm. 120-130 and totally deprived of coverage. To the south front three towers are set in bricks: the central one is the most important and is it tall 24 meters. The Gothic castle is settled 10 meters toward south from the first one. It has a very irregular form: inside there wide saloons, decorated by chests ceilings and frescos on the walls. The prospectuses are enriched by ogival windows ogival, edged by friezes in cooked. Near it, there's the chapel of St. Michael, ancient parish church of Strambino.

The history

The reconstruction of the historical evolution of the castles, from the primitive plant to the present situation, has been effected using two references: the fundamental moments of the historical and town planning development of Strambino and the papers, especially maps, retrieved in the archives. These documents, very descriptive, character, have furnished remarkable information on the castle's plant, about his organization and his transformations during the ti

Through the comparison of it with the ichonographic material (especially a representative map of the place of the castles dated 1722 and two projects for the green areas, elaborated in the XIX century) it has been possible to recompose the castle's architectural evolution.

Between the end of the XIX and the beginning of the XX century, a very famous architect, Alfredo D'Andrade, bought a XIV century chests ceiling, first transported to the castle of Pavone Canavese then reproduced in castle of the *Borgo Medievale* in Turin.



The archaeological investigation

It gave us the possibility for a more precise dating, making up of the gaps left by the lacking available documentation. First we made a survey of some champions of masonry, then we collected and analysed the materials that compose them and finally we realized tailor-made filings. After that, we compared them and some similar **weavings building**, belonging to other buildings, situated in the Canavese, of the same ages.

We have allowed to elaborate a conclusive diagram, called *matrix*, in which the medieval castles' constructive phases are underlined in chronological order. The principal ones result:

• **before 1161**: original rectangular plant building ;

• **1161 – XIV Century**: building of the donjon-tower in the *Arduinico* castle's east corner;

• **XIV - XV Centuries**: Gothic plant's definition: inclusion of some building elements in Gothic

style in the Arduinico Castle;

- **XV Century**: Chapel's building;
- XVI XVII Centuries: restorations and enlargements in the Gothic building;

• **1821 - nowadays**: demolition of some parts of the castles and little restorations.

The degradation's analysis

This part has represented the conclusive phase of the study. The castles are interested by an advanced state of degradation: the *Arduinico* building is denoted almost of the presence of a strong physical deterioration, given by the antiquity of the elements and their wear and tear, while Gothic one is involved in a state of static disarrangement that interests the whole structure. The lesions are strong: some have reached by now the equilibrium but others are still instead subject to movement. There are many different causes: the realization of not perpendicular walls, some yieldings of the foundations, the not homogeneity of masonries' constitutive elements.

A strong contribution to that dangerous situation is also caused by the damp and by the absence of any seal's horizontal structures. Most of them are collapsed, so they can't offer any horizontal bond among the masonries, subject to turnover toward the outside.



The project

The desire to safeguard the value of this complex historicity, resulted of a long stratification, has suggested the road of an intervention of eminently conservative restoration. The project has to guarantee the full respect for every constructive phases.

For example, an hypothesis of intervention for the protection and the maintenance of the *Arduinico* castle's rooms foresees the coverage with an attic in glass. This solution becomes almost the representative emblem of the **nothing** in opposition to the imposing building masses that shut the skylight passage.

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