

POLYTECHNIC OF TORINO
FACULTY OF ARCHITECTURE 1
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Honors theses

The Agliè silk factory: an archaeological outline of its industrial development along the canal of Caluso

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This study of the Agliè silk factory falls under the analyses of the activities which during the 19th century developed along the Caluso canal that passes through the Canavese from Spineto, a hamlet near Castellamonte, to the Mandria estate, near Chivasso.

The Caluso canal was carried out in the years 1558-59 by order and account of Charles Cossé de Brissac, a French lieutenant operating in Italy, with a view to irrigate the ancient feud of Caluso - at that time it was not very fruitful for the shortage of waters resources.

During the following centuries this watercourse became a source of hydraulic energy for numerous activities widespread along his banks. Nowadays it is possible to look at the course of the canal as if it was a sort of archaeological route providing a history of the industrial development thanks to the material evidence of its activities.



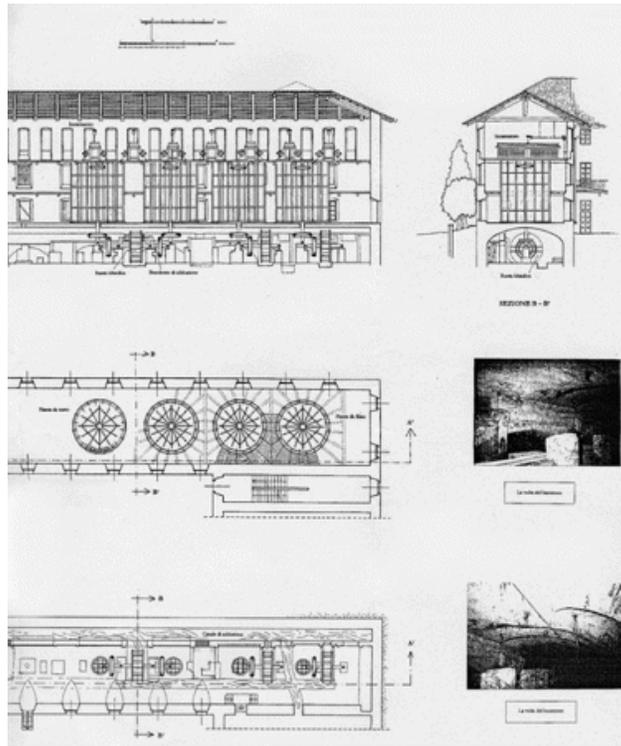
We basically focused on on the *Setificio of Aglié* (silk factory in Aglié), which was built in 1736 by the Count Joseph Franco Flaminio Gaetano of San Martino. This was subsequently sold to private citizens around the 1820s, and finally stopped production in the 1940s. This edifice provides the best preserved historical proof of such an important activity that was very profitable in the Canavese area, even though it totally disappeared years ago.

Piedmontese historians have often disregarded the economic importance concerning the manufacturing of silk, even though in the 18th and 19th century Piedmont was one of the main silk producers all over Europe.

We accurately studied the building as it represents a comprehensive source of information, speculating on its material remains, land use and on the location of the relevant machines. This helped us identify the areas where the different phases of the process took place within the architectural complex. The first phase, called *trattura* (silk spinning), was carried out in the southern gallery of the building - it was a kind of loft which still today preserves the arcades – where the silk thread was extracted from the cocoons. The second phase was named *torcitura* (throwing): in this case the thread was twisted in order to make it more resistant and shiny. This phase was carried out in the northern gallery of the building that abuts on the Caluso canal. In fact, the relevant machineries worked thanks to the water motive power. In the northern gallery basement, the hydraulic wheels were driven by the water from the Caluso canal thanks to vertical transmission shafts that speeded up the silk-mills positioned on the upper floor.

Our analysis of the relevant documents and of the traces left from the technological machineries in the *baratrone* (basement) allowed us to formulate two hypotheses about the original plant lay-out. Limestone traces on the brickwork (which were produced by the water); traces of the gearing lodgements; remains of the gully and of the head race; and the still-existing supports of the hydraulic wheels were especially useful for our study.

In the 18th century there were seven silk-mills: three throwing-mills and four spinning-mills. Even though the seven holes for the transmission shafts in the *baratrone* were filled in, one can still notice their marks in the vaults.



In the eighteenth century the number of the mills decreased: there were only four mills left, as the throwing had gradually lost its importance in this region - in this century silk-spinning completely replaced throwing.

Large building interventions, which were carried out in the 1970s, unfortunately modified the original design. These were the inevitable consequence of previous changes affecting the property after the Second World War, when the edifice was partitioned into three portions.

In view of a potential re-employment of the building, one has to restore the construction to its original design, in terms of volumetrical readability and features. On the contrary, ordinary deterioration problems can be easily solved.

An eventual recovery redevelopment would call for an exhibition-area-fitting, illustrating the different phases of the ancient manufacturing process and aiming to preserve and increase the value of this historical monument.

Moreover, a multimedia area, restaurants and small handicraft shops could be added to the restored complex.

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