# POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE Degree in Architecture Honors theses

# The architecture in watermill industry between knowledge and preservation: Mulino Nuovo in Settimo Torinese in an European experience of Ecomuseum itinerary

by Costa Sergio and Magnifico Santina

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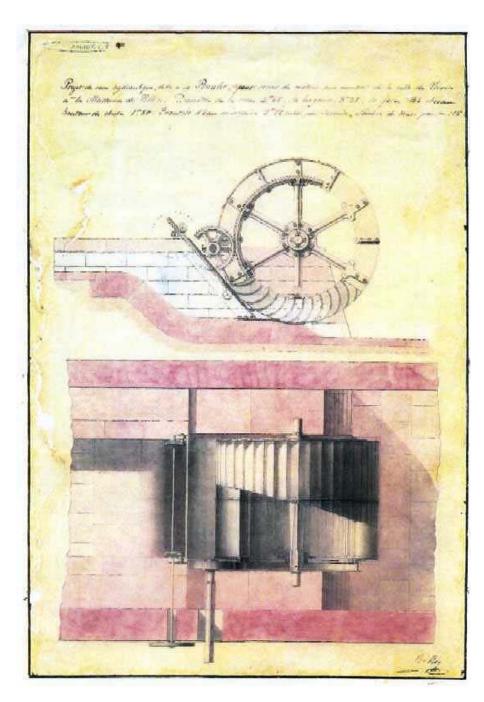
Mulino Nuovo is a watermill building complex with a remarkable geographical extent farther city borders. In 1897 G. Siber-Millot, an expert in watermill industry for cereal grinding in Italy.

The building complex is composed by many different building which were erected whithin the span of 150 years. Freidano river was the motive power for many factories in Settimo Torinese. About Mulino Nuovo we find a thermal power station (1886), a turbine premise (1862), a build where waters are derived from the river (1923), the tower of early silo (1886), the impressive silo by 5000 mc. (1897), the chimney stump (1886), on the side of the river.

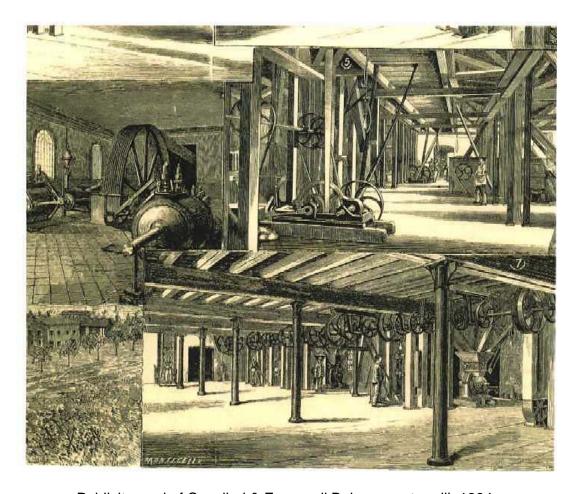
Indeed, we find on the side of courtyard the watermill (1859), the biscuit building (1885 on the ruins of 1806), the silo again (1897), the machinary store and the machine-shop (1923), the guard-house (1859).

Our degree thesis is characterized by:

- a thorough study of watermill history since Middle-Ages till today through the studies of mere textbook knowledge, expositions;
- a detailed historical research at archives that produced many unpublished historical documents (filed and catalogued in the 2° volume);
- an identification of construction periods: this spotlighted functional changes during a trasformation since a traditional grinding till an industrial production;
- a deep study of the factory before its restoration that modified the structural and space configuration if pre-existences. So our degree thesis is an histoical evidence itself;
- a detailed scale drawing of watermill building complex before its restoration with the marks of demolished parts, photos and videotapes;
- an analyses of following concepts: Ecomuseum, industrial archeology, material culture because Mulino Nuovo is a part of numerous buildings of the "Ecomuseo del Freidano" (http://www.regione.piemonte.it/turismo/ecomusei/freidano.htm). This kind of plan is promoted by Torino district. The whole study is graphically summarized with 13 coloured plates 70X100 size.



Section and plant of Poncelet's wheel (Turin, Madonna del Pilone watermills,1844)



Publicity card of Cavalieri & Franco di Bologna watermill, 1884.



The building complex today, after restoration

#### Summary

#### I° VOLUME

#### Presentation

#### 1. Watermill history: since Middle-Ages till modern ages

- 1. Introduction
- 2. Since whell till turbine: changes and innovations through the study of mere textbook knowledge
- 3. Traditional grinding: the millstone system
- 2. Tecnological innovations during XIX century
- 1. Watermill architecture: the relationship between factory and machine
- 2. Tecnological situation and novelties through the study of expositions, manuals and cultural debates

## 3. Modern watermills and corn current grinding and processing tecnique

- 1. Millstone grinding today
- 1. Different methods of corn processing in modern watermills: since storage till grinding

#### 4. Mulino Nuovo in Settimo Torinese

- 1. Introduction
- 2. Historical an productive phases : the installation in 1806
- 3. Space and tecnological changes during the second middle of XIX century
- 4. Mulino Nuovo architecture

#### 5. Freidano river : Industrial Archeology itinerary

- 1. Historical phases
- 2. The six mover canals derived by the river
- 3. First ideas of Freidano Ecomuseum : environmental ambient protection project

## 6. The Freidano Ecomuseum today

- 1. New concepts of european interest: from Material Culture to Ecomuseum for a safeguard of archeological industry patrimony
- 2. Mulino Nuovo and Mulino Vecchio
- 3. The ex-stone quarry, the Mezzaluna, the cycle-pedestrian itinerary system
- 4. Ecomuseums instituted by Torino District and by Piemonte Province

# **Bibliography**

#### **II VOLUME**

#### 7. The historical documents

- 1. Cards of archivistical documents
- 2. Enclosures

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