

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture (Rehabilitation and Revaluation)
Honors theses

**Wood as a resource, the construction in the wood, international comparison:
from Salbertrand to Teijo**

by Filippo Ghilardini

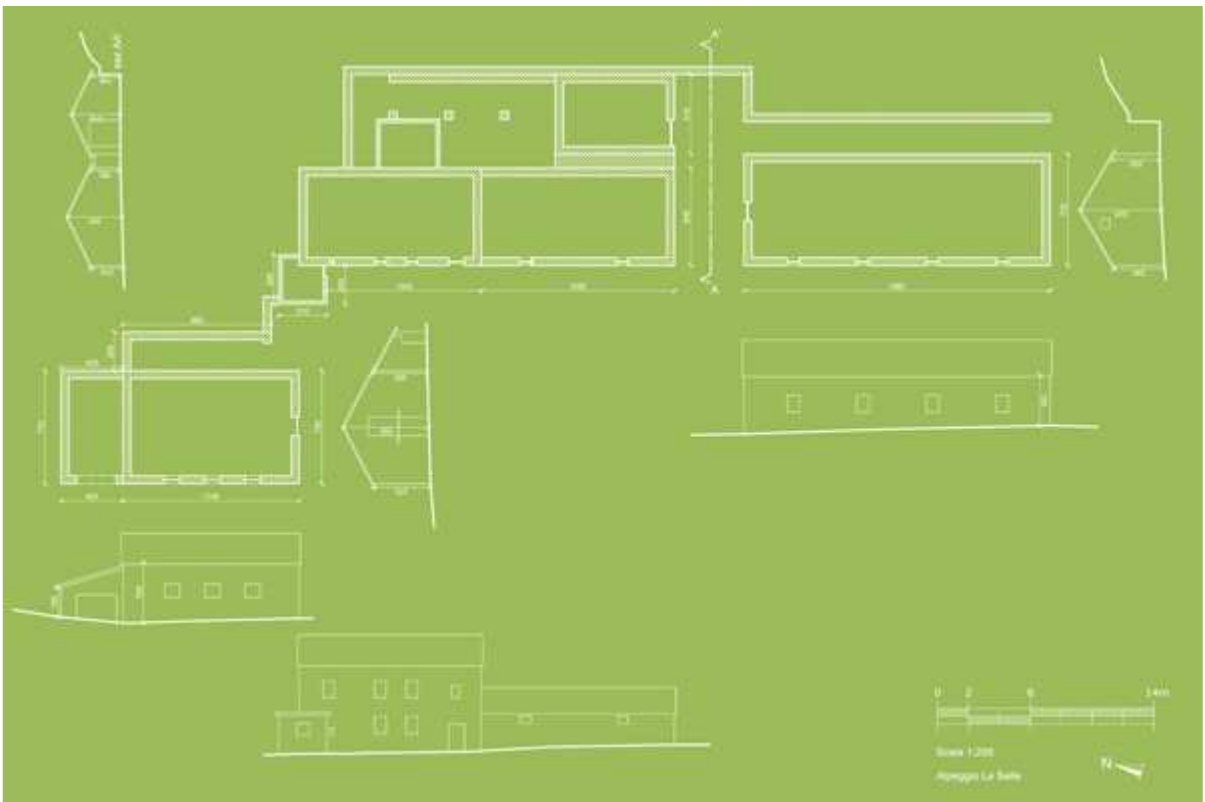
Tutor: Clara Bertolini Cestari

My thesis aims to valorise Italian Natural Parks, specially the “*Gran Bosco di Salbertrand*”, situated in the alpine landscape of the high Susa Valley, nearby Turin. To accomplish this goal, after the critical-technological analysis of the built heritage located on the territory of *Gran Bosco*, I performed an international comparison with Finland, excellent example both on social background as well as in the managing involving natural areas, developed to achieve profit, granting at the same time an high level of protection and conservation of the natural environment. The study case of comparison is the Teijo Hiking Area, situated in the South-West cost of Finland. This final project is developed with the methodology of the comparison and the analysis of the heritages of these two areas, specially architectural heritage, and analyzing the different managing experiences, finally suggesting ideas and strategies of valorisation to join the operative tool provided. So the guidelines for the conservation and restoration of both heritages are the link between the two areas and they allow the comparison between them.



Few images of studied rural alpine buildings, situated on the territory of Gran Bosco

It was considered essential and fundamental the phase of acknowledgment: discovering the real quantity, quality and location of all buildings situated on the territory, which are the heritage to be valorised. The awareness of the heritage owned was considered the base to be able to valorise it and to benefit from it. I proceeded, first at *Gran Bosco*, with tools such as metrical and photographic surveys, and critical-technological analysis organized in forms, with a methodology elaborated and re-invented on the base of examples given by IAM researchers (Institute of Mountain Architecture, founded in 1950s by arch. Carlo Mollino), of every single building placed on the territory of the Park, which consists in 3.775 hectares, involving seven municipalities, for a total amount of 179 parcels, divided in 34 localities, filed one by one, drawn in plant and prospects, and localised.




Example of metrical survey: Alpeggio Le selle, m. 2030, original scale 1:200

The survey form tool, together with the metrical surveys and an historical-architectural introduction produced, will be published in the new Area Plan of the Park and spread at national level, for the conservation of the architectural heritage of the Park; moreover, this methodology elaborated in Italy have been exported in Finland, where it was discussed and fixed with Professors of Turku *University of Applied Sciences*, restoration course.

In Finland the analysis and the forms were produced on about 40 buildings, in the Park and the surroundings, historically characterized by an high presence of industrial buildings linked to iron production. This step put the basis for the study of Metsähallitus, the state owned enterprise which takes care of the whole Finnish natural heritage, so the analysis on how they manage the woods, the use of forests for recreational aspects and for the wellness of Finnish population, a study on how they re-function and valorise the architectural heritage; Metsähallitus and other private enterprises active on the territory are study cases which can be integrated in the actual managing strategies of *Gran Bosco* and Italian Parks, with the final aim and with the principal goal of the repopulation of our mountains and the valorisation of rural alpine architecture.

SURVEY FORM - TEIJO HIKING AREA									
	<table border="1"> <tr> <td>RESEARCHER: Oksanen - Puroinen</td> <td>Form N°:</td> </tr> <tr> <td>Site: Metsähallitus</td> <td>2/3</td> </tr> <tr> <td>Location: Turjakallio</td> <td>Altitude: 25 m</td> </tr> <tr> <td>Dimension: 22x10x10m</td> <td></td> </tr> </table>	RESEARCHER: Oksanen - Puroinen	Form N°:	Site: Metsähallitus	2/3	Location: Turjakallio	Altitude: 25 m	Dimension: 22x10x10m	
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	<p>EXTERNAL WALLS: The building is constructed by logs, the basement is made by natural stones and the coating in pine-wood planks. On the main floor there is a fireplace which works as entry and balcony for the second floor. In the main facade is present a double wooden door as well.</p>								
	<p>Roof: Two gables roof, with a orthogonal smaller part as well made with pine planks. Structure is wooden and the exterior layer is made with pine-plank metal sheets.</p>								
	<p>Details, doors, windows: All windows and doors are wooden and painted in white, all windows have real frames. Particularly interesting the small windows just under the roof, typical from the second half of 1800, when gothic and neo-classical were popular in Finland.</p>								
	<p>Notes, remarks or other information: The building seems to have a recent restoration, it is approximately 200 square meters, used nowadays as residence for maximum four people and place for doing therapy people. Services include fresh water, electricity and drain. The building can't be dated exactly, but it is possible to say that was probably built around the middle of 1800, because of the gothic revival details, but that they re-emerged during 1930's.</p>								
	<p>State of conservation: Excellent. As said the building had a recent restoration which is barely made in steel, steel and painted, probably too much.</p>								
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	<p>Notes (new): Detail of the windows, which style recalls to the second half of 1800, with gothic and neo-classical. The narrow and vertically tending planks are as the other hand typical from the 1930's.</p>								
	<p>Notes (new): The fireplace structure which function as entry and balcony for the upper floor.</p>								

SCHEDA DI RILEVIO - PARCO NATURALE GRAN BOSCO DI SALBERTRAND											
	<table border="1"> <tr> <td>Comune: Cuneo</td> <td>Dist. Catastrale: T. n° 55, p. 349</td> <td>N° foglio: 41</td> </tr> <tr> <td>Località: Grange Grange</td> <td>Quota: 1227 m</td> <td></td> </tr> <tr> <td>Dimensione: 10x10 m</td> <td></td> <td></td> </tr> </table>	Comune: Cuneo	Dist. Catastrale: T. n° 55, p. 349	N° foglio: 41	Località: Grange Grange	Quota: 1227 m		Dimensione: 10x10 m			
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	<p>IMMAGINE DELL'ESPEDICIONE: Immagine dell'edificio contestualizzato, vista da valle.</p>	<p>Materiali (nuovi): Muratura in pietra legata con malta di calce; fessure murarie con malta di calce sul fronte Sud-Est e su una porzione del fronte Sud-Ovest, probabilmente facendo parte di una sopraelevazione successiva.</p>									
	<p>IMMAGINE DI DETTAGLIO: </p>	<p>Costruzione: La copertura è costruita da due tetti realizzati con struttura lignea e malta di calce.</p>									
	<p>Finestra ricavata da un blocco di tufo sul fronte verso valle.</p>	<p>Aspetti e particolari: Sul fronte verso valle sono presenti due finestre, di cui una ricavata da un blocco di tufo e l'altra che presenta un fessure grata in ferro, ed una porta con antistrada in legno. Sul fronte Sud-Ovest è presente una porta anch'incassata in legno con serramento ligneo.</p>									
	<p>Stato di conservazione: Medio. E' presente un solo serramento, la porta a Sud-Ovest, il resto è in discrete condizioni ma il fronte Nord-Est, in adiacenza con il fronte della particella n.148, presenta un ampio foro nella muratura.</p>	<p>Observazioni, remark, other information: Di particolare interesse la finestra ricavata da un blocco di tufo presente sul prospetto verso valle.</p>									
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Critical-technical forms: two examples of the main page, Finnish cases are in English language

Finally, I suggested and exposed ideas for reaching the goals, looking at the Finnish approach, so the rediscover also economical of the woods as a resource, in a way to grant the possibility to the Parks to act financially on the built heritage on his territory, to preserve and valorise them through the development of the recreational aspect of natural areas, and as well with the development of ecotourism.

This thesis is therefore the fundamental tool for the rediscover of woods as a resource, for the protection, the conservation, valorisation and design of the construction in the wood.

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