



POLITECNICO
DI TORINO

Honors thesis

DEGREE IN
SUSTAINABILITY DESIGN

Abstract

**Accessibility to cultural heritage.
Enhancement project for Rivoli Castle**

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by

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The aim of the thesis is the study of accessibility for everyone in cultural heritage. The work wants to show that in order to conceive a project of accessibility, which can be defined as sustainable, it is necessary to take in question the man in his entirety: we have to consider, beyond mere physical access, also the individual's psychological and intellectual sphere. It is necessary to develop solutions that allow full accessibility and understanding of space for everyone. To do this, *synthesis tools* have been elaborated, in order to satisfy the needs of different users through a single medium. Thus, the thesis aims to go beyond the *project dedicated* to a specific audience. This demonstrates that we can, and we must, design being useful to the community.

The paper is divided into two parts: the *meta-project* and the *project*. The first one studies critically the basic principles of the issue of accessibility, with reference to the theories of *Design For All*. The second one implements what is contained in the previous phase and it proposes an enhancement project for the Rivoli Castle.

Concerning the first phase, the script focuses on the word *accessibility* in order to go over the consolidated common thought and to define the term more completely.

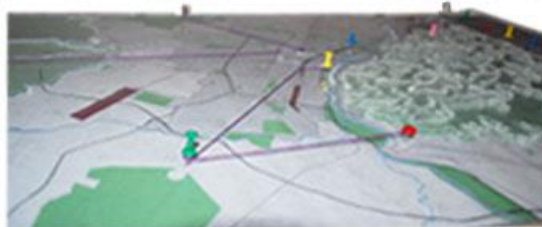
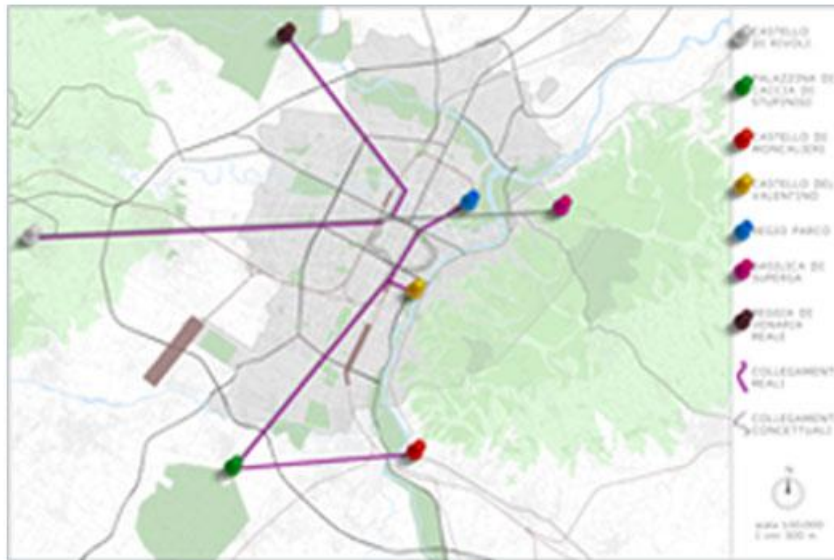
The ways, in which the man accesses to a building, define three facets, that characterize the notion of accessibility: the *physical accessibility*, the *accessibility to information*, the *accessibility experience*. The first one is the opportunity to physically benefit of a space; the second one is the possibility to learn the cultural information transmitted by the cultural heritage; the third one is the opportunity to participate actively in the visit and to achieve emotional enrichment from this. Through the description of the three spheres and through an in-depth analysis of actual national and European legal instruments, the thesis intends to overcome the legislative measures. This affirms that the legislation must consider the different facets of accessibility. In order that the project is socially sustainable, it is argued that there is no need to dwell only on vulnerable users (that are the only protagonists of the regulatory framework) but all users must be considered. So the thesis deals with a detailed study of the users by drafting synoptic tables containing the needs of different users, considering the three spheres of accessibility. Hence, the work will demonstrate that there is no single solution to satisfy every user, because of the multiplicity of the needs. Therefore, the goal is to understand, as much as possible, the different needs and to find an agreement between the multiplicity of demands, that change in relation to the building visited. Finally, the thesis asserts that a specific study of the project's place is essential. Therefore, it says that a standard solution for any cultural heritage does not exist.

Based on the principles set out, the second phase presents the enhancement project for the Rivoli Castle. It proposes instruments dedicated to a "*wider pool of users*", that can implement the accessibility in relation to the three spheres described above.

In particular, considering the requests of the executive organs of the Savoy Residence and the analysis of the cultural heritage and of its territorial system, the tools have been designed to make available historical and architectural content, of the Castle and its garden, to all users. In addition to the design plans, the creation of tactile models and web pages, the framework of the proposals is completed by the prototyping of entertaining and educational games, designed so that the visit to the building may move the users.

Below, some pictures of the documents produced.

Model "The capture of the infinite"



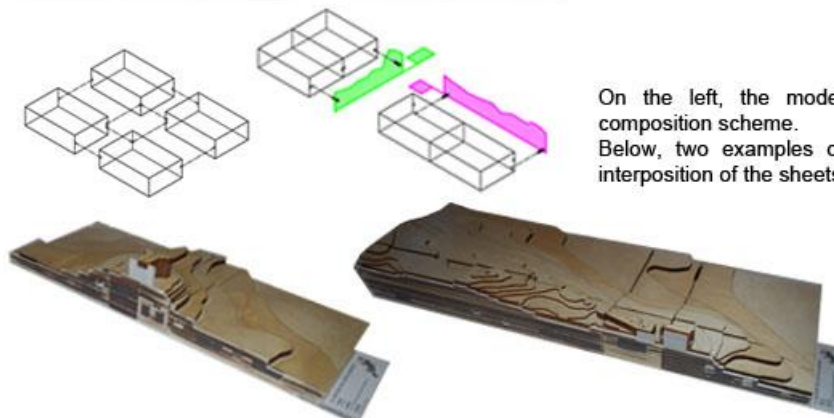
Model plexiglass, inspired by the image in L. Benevolo, *La cattura dell'infinito*, Laterza, Bari 1991.

Model "Historical puzzle"



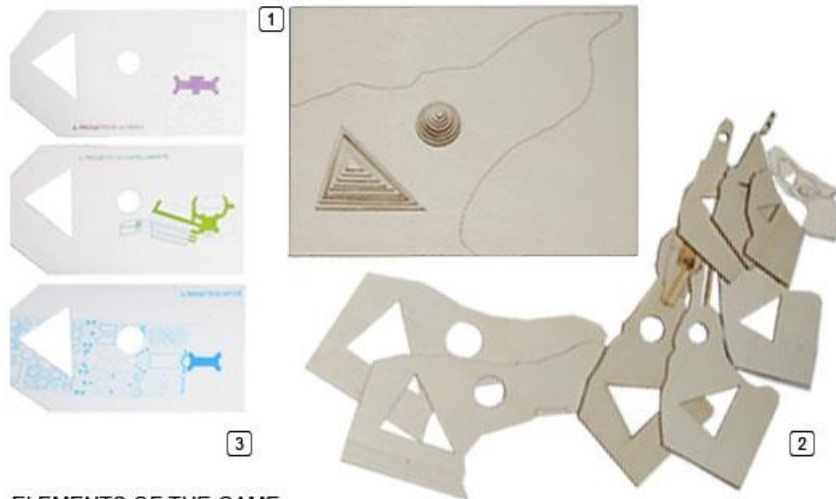
Model building and the hill.

The model breaks down into pieces and we can insert, between the different pieces, plexiglass sheets. These represent the historical projects of the castle and its garden.



On the left, the model composition scheme. Below, two examples of interposition of the sheets.

Game "Build the hill"



ELEMENTS OF THE GAME

- 1 base
- 2 hill's levels to superimpose on the base
- 3 tracing papers with plans of historical projects

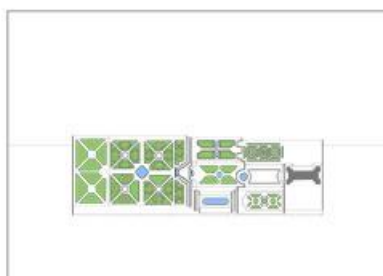


Model resulting from the composition of the pieces on the base



Model resulting from the composition of the pieces on the base with interposition of tracing papers representing the historical transformations

Game "The paper Castle"



Kirigami of the garden project of Michelangelo Garove - design to fold



Kirigami of the garden project of Michelangelo Garove - 3D model obtained by the folding design