Safeguard and sustainability for a high mountain village
by Erika Favre
Tutor: Roberto Pagani

Rural architecture and landscape are documents of a territory in a slow and relentless transformation which require careful protection. The main aim of this study is to find a balance between the conservation strategies and the resolution of difficulties in translating ancient models into new projects that are modified to “contemporary life”, allowing rural heritage the chance to be re-discovered and then observed, understood and preserved.

The subject of this thesis is the eco-sustainable recovery of the Hobalté village, a tiny Walser settlement of the eighteenth century, situated in the municipality of Gressoney - Saint - Jean, in the Gressoney valley, at an altitude of 1804 metres above sea level, characterised by three buildings and a ruin, concentrated on a rocky terrace.

Views of the buildings in the walser village Hobalté
The village has been analysed by a geometric and photographic survey and an historical framework that covers the main stages of Walser colonisation, the characteristics of settlement patterns, building techniques and typical construction materials.

The project at village scale has three objectives:

- To preserve the historical and environmental worth, implementing a model of development in harmony with the environment
- To find new uses compatible with the morphological characteristics and the history of the buildings
- To draw up criteria for an environmentally sustainable recovery, bringing the village to a good level of energy self-sufficiency and management of resources

In order to exploit local resources, new activities related to sustainable tourism were included as were life activities that once marked the organisation of the village, such as farming.

The future prevision is for the village to become an ideal destination for visitors interested in sustainable rural tourism and it will be the tool for raising awareness to the theme of eco-friendly architecture.

In addition to the reuse of the three existing buildings, the project involves the construction of a new building for new uses and in which technological components will be integrated, thus finding a modern composition that raises typical aspects of traditional architecture.

Three-dimensional views of the new building
Action at village scale aims at achieving energy self-sufficiency based on the exploitation of two renewable sources of energy: the sun and biomass. The project at a building scale deals with the environmentally-friendly recovery of the buildings to improve energy performance, trying to find optimal technological solutions, for proper functioning and proper integration in a pre-existing building. The question that I seek to answer is: “By changing the intended uses and the users needs, is it possible to retain the character of old buildings, in a transformation process that does not lose traditional aspects?”

A new design approach is to combine respect for the historical identity of buildings and sustainable design, caring also for the compositional aspects, trying to achieve quality in the living environment and energy saving while respecting structures, construction techniques and traditional materials, finding solutions with low environmental impact and taking into account the feasibility of the interventions. For each building component examined a filing system was drawn up that includes details of the construction before the project and further integration of technologies, trying to provide a set of recovery actions and viable solutions for rural buildings in similar contexts.

Filing system of construction details of the coverage
The results show that new technologies can be implemented even on historic buildings with strong characteristics, without compromising the integrity of pre-existing constructions, but preserving them, through choices which respect the both conservation and sustainability.

For further information, e-mail: Erika Favre: erikafavre@libero.it