

Honors thesis

POLITECNICO DI TORINO

Master of Science in Sustainable Architecture

Abstract

NUValta Education and research at high altitude

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The current project work aims at exploring the complex, yet fascinating, bond between alpine architecture and high altitude sports' infrastructures.

The architecture competition in order to develop an ambitious project in Pila's wide valley, an Aostan ski area known as "The gym on the snow", represents a chance to ponder over the matter and call into question the functional plan that is required. Through this thesis, a different strategic plan has been taken into account, in order to outline a hypothetical call for bids for the new project. Although any intervention on the territory cannot be avoided, the resulting architecture intends to become an example of sustainability in both shape and function, as well as witnessing a conscious bond between man, city and mountain. If the competition's purpose was that of updating the ski area, setting its focus on sport tourism, in this thesis the Alpine mountains were used as a research laboratory for new ways of living.

Starting with a thorough analysis of each and every feature of the territory, such as its history, biodiversity, city planning, demography, social dynamics and economy, we tried to highlight how important architecture could and should be in both sociocultural and environmental domains. In fact, the goal that this project sets for itself is to shift from an intervention, which used to be more economic-oriented, to a more sustainable one, in order to operate on the issues that might weaken the territory of the Alps. The nature of its vulnerability is to be found in environmental, socio demographic and economic issues, such as "fake snow", mobility-related pollution, lack of inhabitants with permanent residence, the discontinuous use of vacation houses and the general crisis in the ski industry. In other words, problems related to man's anthropocentric vision.



This intervention seeks to solve some of them by bringing an alternate approach to that of sport tourism. The idea is that of building a university campus and research centre, namely the substation of Valle D'Aosta New University, which is currently under construction in the centre of Aosta by Mario Cucinella Architects' project. Thanks to its bond with the Regional County Seat and to its prestigious alpine features, this branch could allow some in-depth analyses on new interdisciplinary topics about the mountain, switching from an anthropocentric to an ecocentric vision.

The new functions are tightly connected with the already existing ones. Vacation houses that are not used would become university residences, therefore contributing to the resettlement of mountain areas; besides, cultural events, as much as the interaction between students and tourists, could revive the town. The architecture was conceived to promote those interactions, particularly the cable car was designed not only for sport purposes, but also as means of transportation to link the different research areas. This strategy allowed to deploy university locations at different heights and contexts and to actually feel the fascination exerted by the surrounding environment. This would represent an unicum in the whole Alps area.



