Evaluation sceneries about the system of Canali Cavour
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This dissertation has the objective to value the suggestion of an exploitation project about the imposing irrigation net of the Basso Vercellese (the stretch between the town of Chivasso, the stream Elvo and the surrounding environment).

We begin with an exhaustive and methodic well-known analysis of the territory and the hydraulic structures which make the irrigation net. It is formed by a thick net of canals and by all connected hydraulic structures (taking sewer, water derivation, bridge-canal, grave-siphon, towing-path,...), by the great number of water-mills along rivers and canals and by the Hydrometric Station in Santhià. Concerning this, there is an specific demand of safeguard and conservation through the individualization and the realization of a possible compatible project of rifunctionalization.

The first works of irrigation were made in XIII century, but the irrigation net got to the actual extension and were completed only with the construction of Canale Cavour which was inaugurated in the 1866, and its ramifications. This work is a masterpiece of hydraulic engineering: 82,23 km from the derivation in Chivasso to the mouth in Ticino. The agrarian economy of rice cultivation in the province of Vercelli and Novara is all supported by this system which creates a hydraulic system that is unique in the Europe Union, an “imposing natural work”.

To analyse and value the architectural and environment goods on which the exploitation project is based, we begin from the study of the territory on a large scale to get to a detailed analysis of the main hydraulic structures along the most important canals: Canale Cavour, Naviglio d'Ivrea and Canale Depretis. A series of reasoned forms were prepared and were filled in about each goods.
Example of form of hydraulic works

After this analysis, we have analysed three possible sceneries that are based on the realization of wide-spread interventions on the territory with two possible temporal reference:

- **2011**: 150th anniversary of birth of Italian Kingdom,
- **2013**: 150th anniversary of the laying of the foundation stone of Canale Cavour.

To make this important reality of our territory known, the proposed sceneries identify a series of alternative function that are suitable to be developed near the hydraulic works. At the same time we want to create a link between them and use a series of ecological passages that are along the principal canals.
First scenery: the nature

To support the decisional processes which are necessary to identify a project of revaluation, we have used the DELPHI method, a valuation method which helps during the first decisional stages, coherent and adaptable for the complex scenery we have supposed for this enormous area.

A panel of experts we have selected before for their competence have evaluated the three sceneries with a questionnaires. The result of these interviews have been processed statistically and, starting from established objectives we have identified the option to which the valuations most converge.
With the DELPHI method we can were able to identify a convergence between the public needs to devote the produced social, economical and cultural benefits to the community and the private subjects’ purpose of intervention that may take place in this type of projects. This kind of problem is often found during the development of a revaluation project to look for compatible functions with the work and the contest.

So the DELPHI method is used to foresee and value the project capacity to involve the public and private sector, to produce effect on local development, to start and reinforce process of territorial retraining and to restore the visibility of goods of hydraulic archaeology.

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