

POLYTECHNIC OF TORINO
FACULTY OF ARCHITECTURE
Degree in Architecture
Honors theses

The " Naviglio d'Ivrea"

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What the work is for:

The program enables to visit the venues the Naviglio d'Ivrea gets across, to gain access to historical documents stored in the Archivio Canali Cavour di Novara, to browse the Testimonial di stato, to gain further knowledge on the Channel historical background, to pinpoint the most significant events properly sequenced and to listen to some interviews through one state-of-art desk-top system.

The way we set up the search engine was by simply exploiting the computation power of the computer. The features of the search engine were developed by considering as a typical end user the employees of the Associazioni di Irrigazioni Est and Ovest Sesia who are usually keen on being quickly driven through the various elements of the work no matter if text or visual information. The ultimate result is that the massive database of the above organisation may be promptly searched through in the frame of daily study activities.

As far the considerable amount of historical data is concerned, it is worthwhile noticing that the capability is given to visualise documents without running the risk of damages to the archived originals.

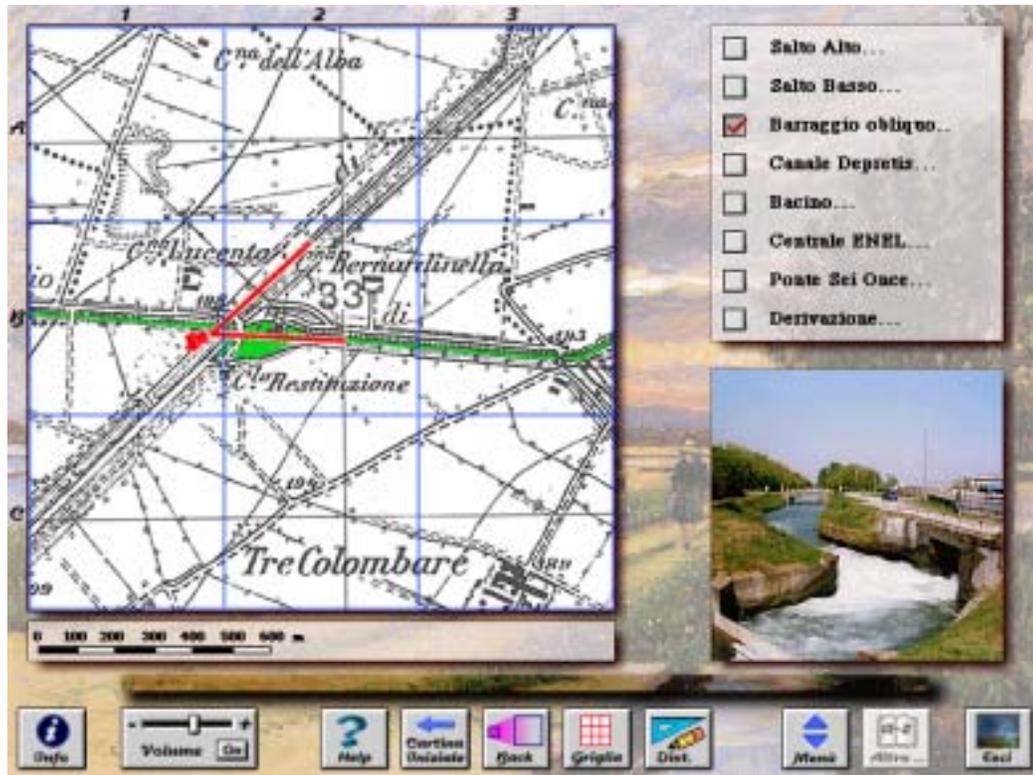
The functionality of the program is such to benefit the consultation of the thesis section dealing with the events related to the Naviglio d'Ivrea: the hyper textual functions of the program enable to quickly restore themes and topics which relate to each other. Moreover text pages may be flipped through in order to visualise the logically correlated topics. This function, defined by the authors as intra-text, enables the user to gain further support in the frame of the study of particular themes and , at the some time, reduces the search time.



Chapter 1 - Events. Standard view

The provided capability to overlap geographical maps at different scales as well as transparencies also becomes an interesting study tool for investigations on the evolutionary aspects of the considered areas.

The available average yearly precipitation maps, soil as well as water resources utilisation maps do not only constitute a hint to enrich the study of areas serviced by the Naviglio d'Ivrea, but they are deemed to be rather important information to enable the program user to gain further comprehension of the complex ecosystem which the Vercelli Agro is.

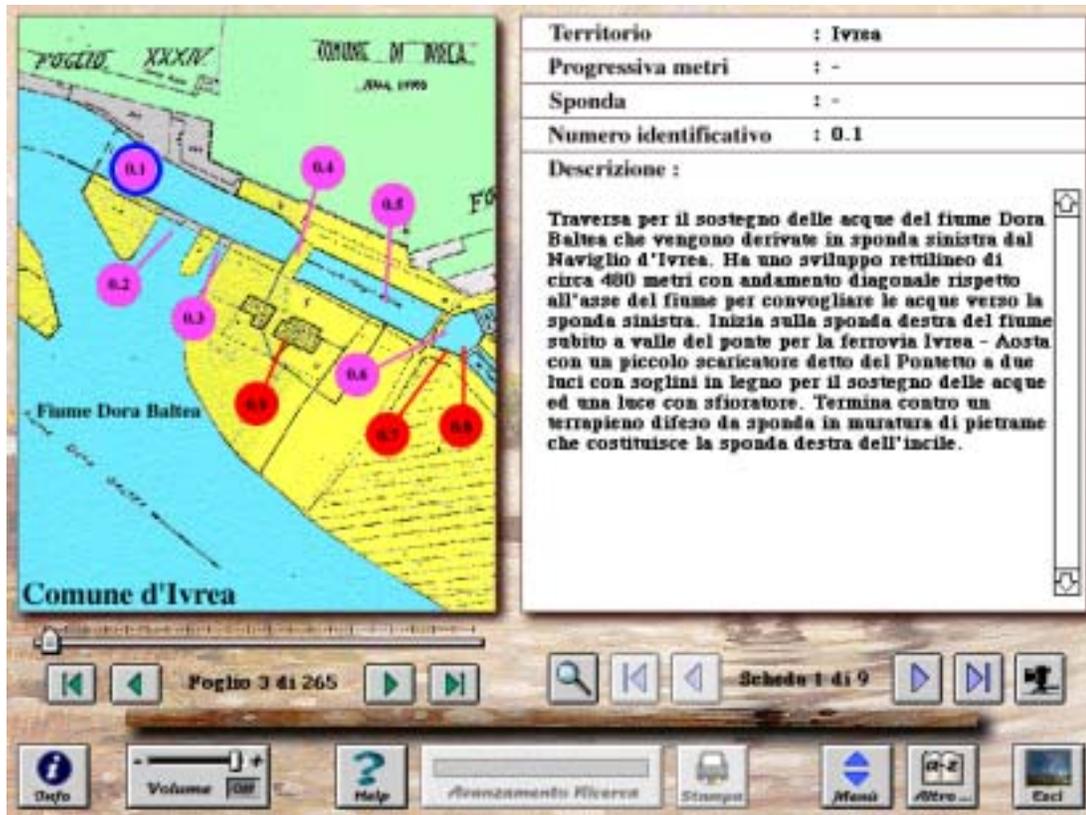


Chapter 2 - Places. Standard view

How the project was implemented:

Firstly, we gathered the information on the Naviglio d'Ivrea available at Libraries, Watering Associations, Government Archives. The associated photographic material was also produced on the spot, as needed. Later on, we had to team about the programming tools, techniques and graphical processing which were needed to handle the huge amount of the data we would have to deal with.

This process involved a long time to accomplish as a number of dedicated studies and S/W design had to be run on the digitalisation and handling of the images planned to be made available on the CD-ROM. All of the above would be meaningless without a careful study of the human-computer interfaces, vital to the friendly utilisation of the system itself. The capability to handle a vast amount of information coupled to user friendliness are two basic factors to evaluate the effectiveness and usability of the product as an integrated system. In the frame of this project we strive out to strike the best solutions in both fields of application.



Chapter 4 - Technology. Standard view

Program coding and information collection soon became the two outstanding issues we would have to confront with. Software tuning, de-bugging and the beta-testing phase tuned out to be very cumbersome. Moreover the collection of texts, historical references and technical data available as scattered information at the various involved organisations took a long time to organise into an electronic media compatible format. Photo graphical documentation was developed through several months given the difficult access to some of the areas crossed by the Naviglio d'Ivrea.

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