

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture (Environment and Land)
Honors theses

Reading and representation of the ancient city of Aquileia and a domus with the organization of a Geographical Information System

by Daniela Maero

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The thesis is a contribution of a research in archeological sites conducted by the Politecnico of Turin with the University of Trieste.

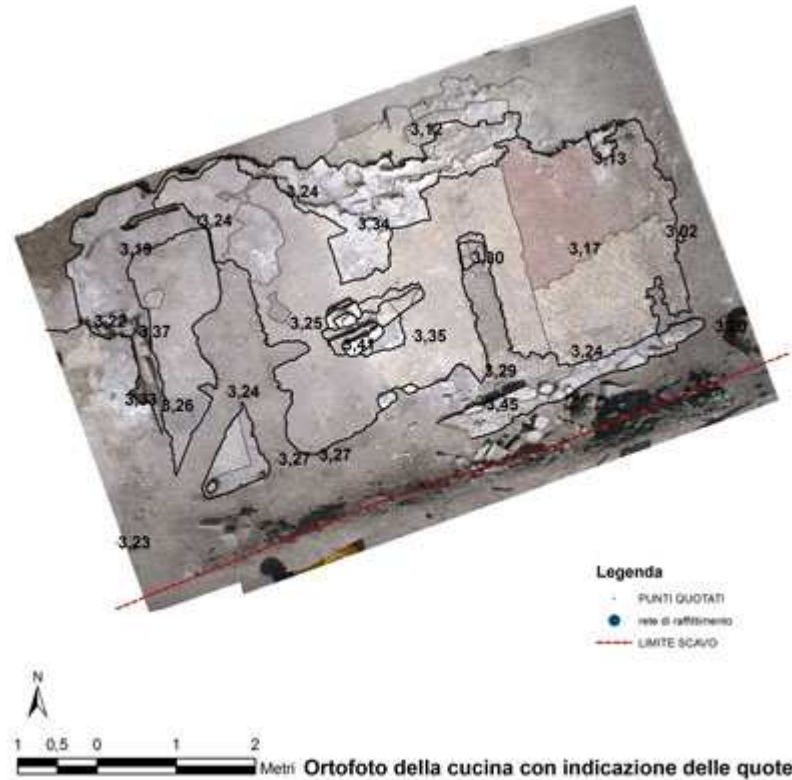
My work is a reading, analysis and representation of the ancient city of Aquileia faced by the organization of a Geographical Information System (GIS).

Today there is an increasing in GIS demand for the management of cultural heritage. This for the big potentiality of GIS. It manages, registers, brings up-to-date informations, moreover it analyzes, processes, gives the right representation of the informations. In this way GIS is today the best instrument for cultural heritage research and communication.

The object of this study is the roman city of Aquileia, one of the main port for strategic and economic importance during the roman period. The UNESCO commission have elected Aquileia as cultural world heritage for the enormous quantity of remains.

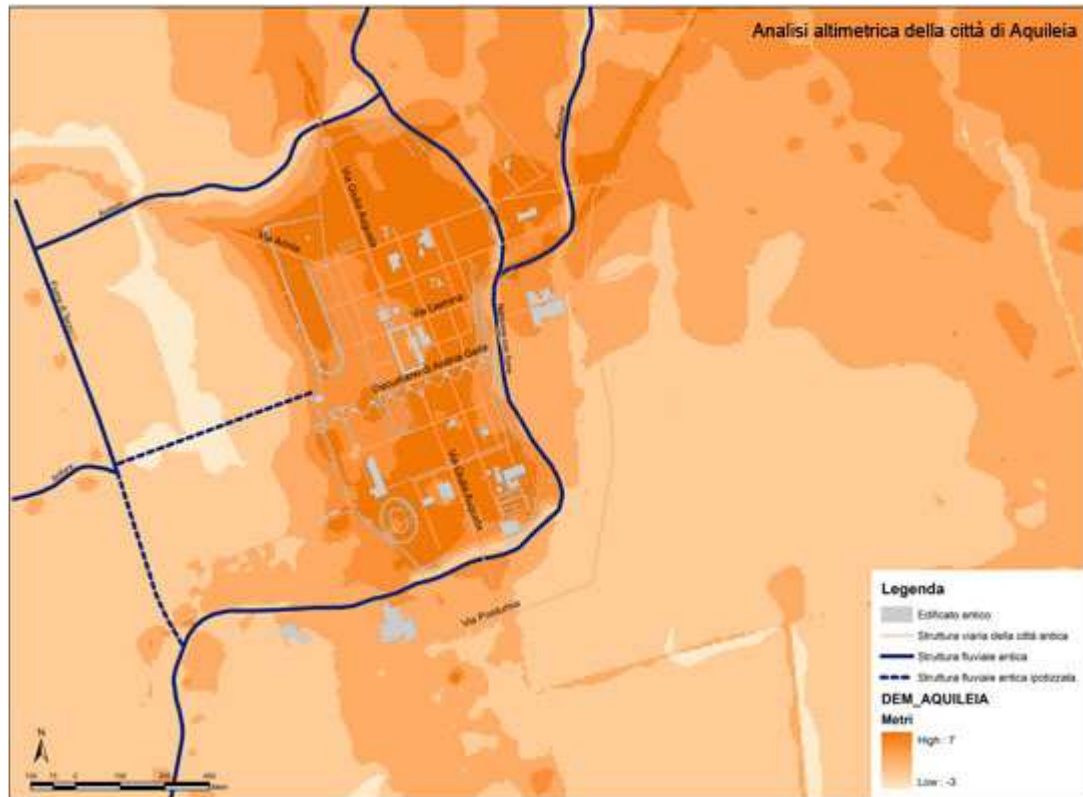
The informations used in the organization for the system are a summary of the principal bibliographical source and of the spatial data existing and measured by the Politecnico of Turin in 2009 and 2010. The measure was made by integration of photogrammetric system, GPS survey and traditional topographic way.

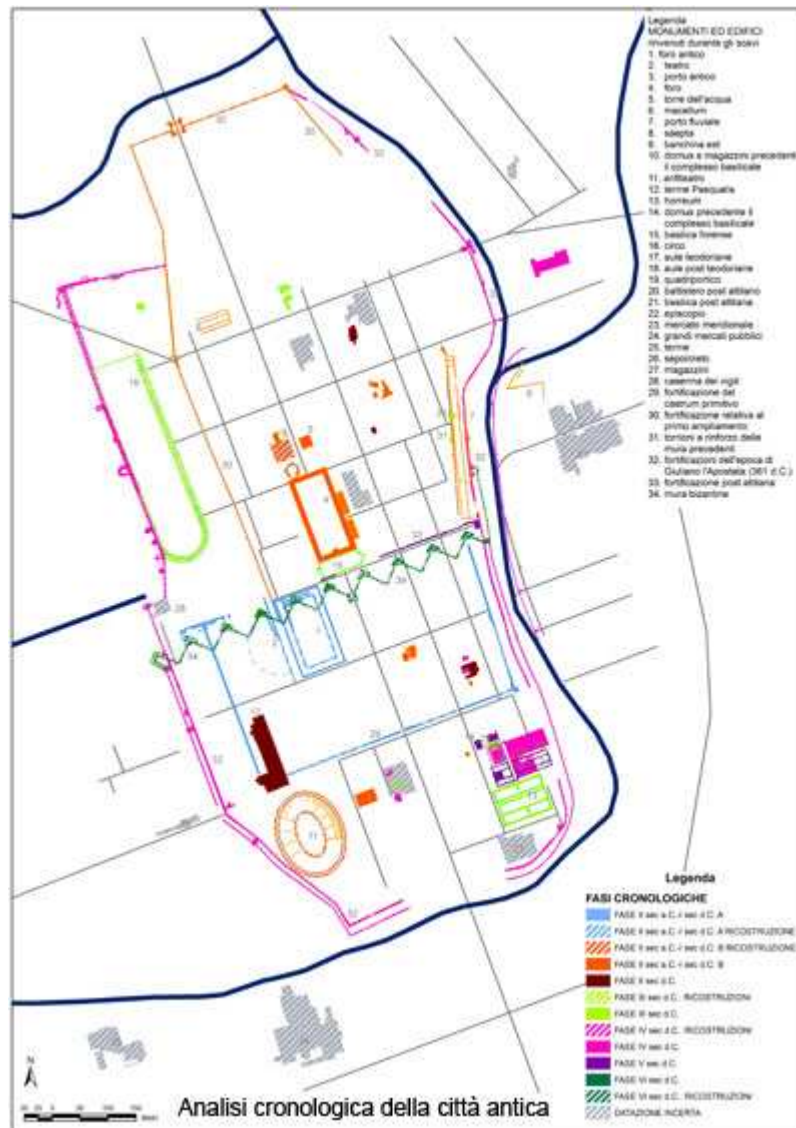
All these data were processed to obtain an urban map and ortoimages of the excavation of the University of Trieste (*fig. 1*). All the maps have been produced using georeferencing processes.



The level of my GIS are two: one is in urban scale and the other to the scale of the archeological excavation.

The information implemented on GIS was then analyzed and represented. I've studied the relation between the ancient and modern structures of the city, the leveling relation (fig.2) among the remains and their chronological development (fig.3).





Therefore the thesis is a contribution to the study of the ancient Aquileia conducted by one of the more advanced systems of information technology. The next interaction between the Politecnico di Torino and the University of Trieste will give new informations for the study of this city.

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