

New Acquisitions on the Aquileia's Map Inside the Roman Walls and Surroundings

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Abstract. The aerial photos of Aquileia, especially the orthophotos of the last decade, allow for a new and broad vision of the ancient city's extent. Together with V.Roberto we published some new findings. More recent orthophotos (2010), after data filtering and image processing, allow for newer insights into the roman city map .

Keywords: Archaeology, Aquileia, Orthophoto, GIS.

1 Introduction

We have a great deal of aerial photos of Aquileia. The most important ones were acquired in the years 1934, 1954, 1982 , 1990 – the latter being colour pictures for the first time. A few features were taken up and published several times, like the layout of the *via Annia* - but no efforts were made to analyze the images systematically; to correlate them with the available data; to produce comprehensive and self-consistent insights to update the map of the roman city. The digital images currently available, when geo-referenced - even with minimal distortions – provide a framework to correlate adequately the archaeological findings, in such a way that novel, abundant material is now open to comparisons and further analysis.

In the last years in collaboration with V. Roberto, new data have been published. I take here the opportunity to present some newer findings.

The area S of the Circus

S of the Circus and close to it, a large building shows up. We distinguish it on the 1934 photo and the orthophoto in Fig.1, enhancing the Visible Vegetation Index (VVI).



Fig.1. A large building S of the Circus (VVI image from orthophoto 2003).

Inside is a seemingly round space, S of which a sort of exhedra. A rectangular area resembles a large courtyard. The district seems *c.*140m long and more than 50m wide. Straight to the W a trace is seemingly a part of the centuriation. Along the same direction, further buildings appear well beyond the city walls.

The area E of the Forum

A new, better defined orthophoto was acquired by the Italian Civil Protection Department, october 2010, available by courtesy of dr. G.Berlasso. The plowed ground makes it impossible to recognize traces outside the city walls, but new details show up inside them. A few *tabernae* appear on the E side of the Forum. The N ones are seemingly longer: we recognize a corridor or passage towards the area (Fig. 2).



Figure 2. The *tabernae* E of the Forum (orthophoto 2010).

On the same orthophoto, S of a football field three blocks are recognizable (Fig. 3) separated by modern agricultural allotments.



Figure 3. Blocks S of the football field (orthophoto 2010).

The districts E of the river port

An area of intense urbanization *extra moenia* was E of the excavated port, on the E shore of the Natissa river. The area was excavated already in the 19th century. By the orthophotos and laser scanning, one individuates the sites with higher density (Fig.4).



Figure 4. District E of the river port, the probable site of a temple (orthophoto 2003).

They are likely to exhibit a unique orientation, following the *decumanus maximus* that ideally crossed the district. On the N side, traces of a Roman building are oriented according to the centuriation. One distinguishes them after the digital image filtering enhancing the *Visible Vegetation Index (VVI)* (Fig. 5). Its visible part is ca.10m wide and pursues some 30m ahead. We guess it is not the building partially brought to light by Brusin, whose plan is reported by Busana, 2009, p.180. It is certainly a *villa rustica* whose location marks the circuit of villas, located at this place 320m from the ancient city walls.



Figure 5. A Roman villa E of the port (VVI image from orthophoto 2007).

The photos uncover a rectangular building, *c.*28x15m, with thick walls and a round building right of the façade: it may be a temple. Within the same district, in 1901 the basement was found of a *Signum Dei Neptuni*, restored by the Emperor Decius (249-251 a.C.). In 1934, a dedication to the same God was found, settled by an aquileian *Sevir*, embedded into the defensive works of the river port. S of the latter, oriented according the centuriation, traces of buildings with a definite orientation (Fig. 6).



Figure 6. District E of the river port, S side (VVI image from orthophoto 2003).

The SW surroundings

A part of our research work concerns the SW suburbs. They lay between two rivers, N and S, bounded W by the Terzo river, and E by the city walls. Along the Anfora canal there were workshops. To the S, there was the S necropolis.

To the E, no houses can be recognized close to the walls of the late antiquity, but we distinguish road layouts, some of which following the pattern of the centuriation. Roughly at the centre of the area is located a large suburban villa. It is visible on a 1954 photo (Fig. 7).



Figure 7. A suburban villa in the SW surroundings (photo 1954).

It corresponds to the Italic villa with peristyle. Its size is slightly less than 6000m², about 80m wide and 72m long. Around it no traces of buildings appear, and in antiquity there was a park or a garden. Southwards, Brusin brought to light a portion of a monumental necropolis which is currently visible. Further tombs were recognized on the W side. The orthophotos taken in 2003 allow to identify a part of its continuation towards W. Here, the precincts are arranged into at least three rows parallel to the road trace, that is partially hidden by the modern buildings.

South of the ancient city

Where the road to Grado bends towards SW, one observes darker traces (ditches) marking the route ca.8m large (= less than 30 Roman feet). Outside, other ditches appear for ca.300m. Their distance is a dozen metres, about 40 Roman feet. Further ditches, in turn, divide the inner space. It's probably a rural cemetery in which – as observed elsewhere on the Aquileia's ager – the boundaries between the funerary precincts were made of trenches (Fig. 8).

I have presented some new acquisitions about the Aquileia's map, and I'm sure that quite soon, thanks to the efforts of many Colleagues, we will have at disposal a more accurate description of the ancient city.



Figure 8. The ancient road to Grado and the ditches (VVI image from ortophoto 2003).

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