

KNOWLEDGE, ANALYSIS  
AND INNOVATIVE METHODS  
FOR THE STUDY AND THE DISSEMINATION  
OF ANCIENT URBAN AREAS



Proceedings of the KAINUA 2017  
International Conference in Honour  
of Professor Giuseppe Sassatelli's 70<sup>th</sup> Birthday  
(Bologna, 18-21 April 2017)

edited by  
Simone Garagnani, Andrea Gucci

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*All'Insegna del Giglio*

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## NUMANA AND ITS ANCIENT TERRITORY: NEW DATA AND RESEARCH PERSPECTIVES

Ancient Numana was located in the south-western lowlands of the Conero promontory: a high and indented coastline which protected one of the most important natural harbors of the Median-Adriatic coast.

The first testimonies of human presence on the site have been dated to 9<sup>th</sup> century BC. The funerary sets of two cremation tombs of this period highlight the strong relationship with the Villanovan culture and the Eastern Adriatic coast (LOLLINI 1969, 89-101; PERCOSSI SERENELLI 1998, 49; *Eroi e Regine* 2001, 58-60, 196-197).

The Numana territory has always been remembered in the ancient texts as a fertile site, with a rich countryside opening to a rocky coast, while the backlands are connected to a system of valleys allowing for a quick connection with the Appenninian inhabited areas and commercial routes.

It is difficult to obtain a complete perspective of the topography of ancient Numana: nearly the total amount of archaeological findings which were published are related to the necropoleis, spread on this territory (BALDELLI 1991, 104-108) (Fig. 1).

The Montalbano necropolis is situated on the slope of the hill backing onto the ancient docks, near the present town cemetery; it could be dated to the middle of the 6<sup>th</sup>-middle of 5<sup>th</sup> centuries BC (BALDELLI 1994, 217). The widest necropolis, known as Quagliotti Davanzali and located in the N of the city centre, provided more than 500 tombs dated between the 9<sup>th</sup> and the 2<sup>nd</sup> century BC (SPADEA 1977; LOLLINI 1985). A new and comprehensive sector of this necropolis, with more than two hundred and eighty excavated tombs, dated between the 7<sup>th</sup> and the 3<sup>rd</sup>-2<sup>nd</sup> century BC, was recently investigated in Via Peschiera, Sirolo (LANDOLFI 2007, 49-52; 2009, 51-53).

The so-called “I Pini” necropolis showed at least three large circle burials, the biggest of which is the so-called “Tomba della Regina”, sheltering, beside the resting place of a little boy from the beginning of the 5<sup>th</sup> century, a very rich feminine funerary set dated to the last decades of the 6<sup>th</sup> century BC (LANDOLFI 2012). Between the latter and the Montalbano necropolis, it is interesting to recall the Molinella findings (BALDELLI 1991, 106; ANTONIUCCI 2007).

Finally, the recently acquired northern necropolis is situated by Capo delle Vigne in Sirolo and is dated between the 8<sup>th</sup> and the 5<sup>th</sup> century BC (LANDOLFI 2009, 50-51).

As for the inhabited area, we point out faint traces of human settlement (mostly holes and ditches with waste material) in reference to straw hut-like structures indicated in correspondence with today’s city centre (LANDOLFI



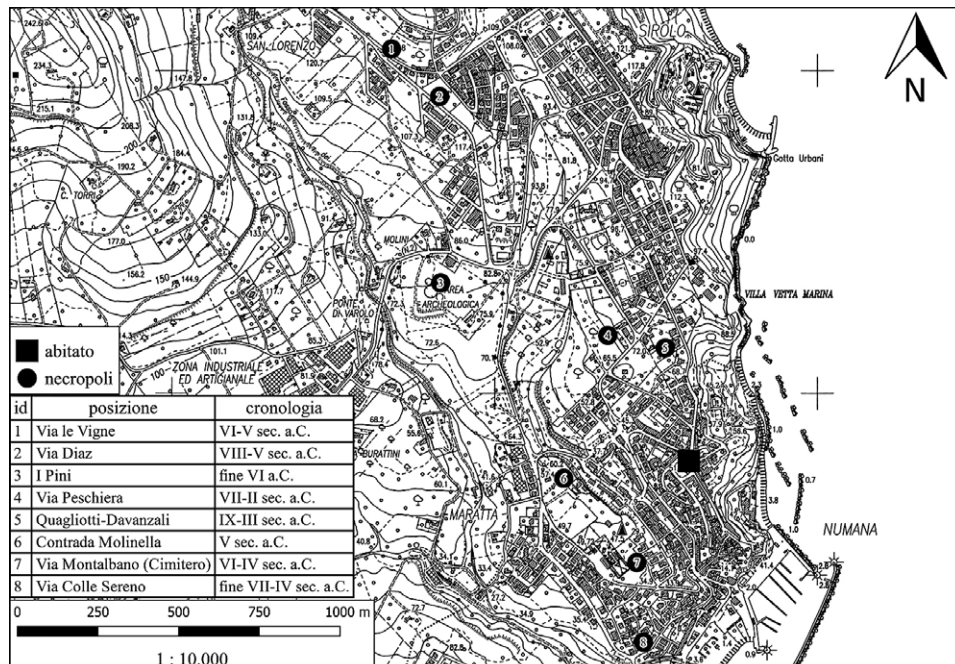


Fig. 1 – Numana-Sirolo territory, with locations of necropoleis and inhabited area.

2009, 48). The recent (summer 2014) finding of remains of a *pisé* wall structure with a drystone plinth (base) covered in tiles and shingles leads to the hypothesis that there was a presence of inhabited structures built in non-perishable materials, at least in 5<sup>th</sup> and 4<sup>th</sup> centuries as the excavated materials show.

In recent years Numana and its territory have been concerned with a series of project studies and initiatives, in order to create a wide and representative documentary basis as possible to face the large number of the unanswered issues. We remember briefly the study of the so-called Circolo delle Fibule (G. Bardelli, Römsich-Germanisches Zentralmuseum, Mainz): a burial area of the 6<sup>th</sup> century BC bounded by a ring-like ditch with at least nine burials inside; it was excavated between 1970 and 1972. Moreover, PhD dissertation (E. Sartini, Sapienza University of Rome), concerns the Picenian inhabited area and the definition of the topographical aspects and the local material cultural matters.

As for the territory, an Archaeological and Archaeological Potential Map has been drawn in order to adjust the programming instruments for the town territory.

S.F.

The Davanzali necropolis has recently been an object of study by a group of scholars of the University of Bologna, in cooperation with the Soprintendenza Archeologia, Belle Arti e Paesaggio and the Polo Museale of the Marche Region.

Due to the scarcity of the evidence of the habitation, cult and product places, our knowledge of the 1<sup>st</sup> millennium BC of Numana depends mainly on its richest funerary documentation, pertinent to differing necropoleis: they offer fundamental information in order to analyze the historical, economic, social and cultural aspects of that center of ancient Picenum.

Despite the abundance of findings, few contexts have been published, for the most part individually: therefore there is lack of systematic study of consistent and topographically homogenous groups of burials (DELPINO, FINOCCHI, POSTRIOTI 2017, with previous bibliography). This is the main objective to achieve in this research project, with the intention of integrating the results with the ones from other current research projects on Numana territory.

The Davanzali area, excavated in detail during the 1970s, brought to light more than three hundred tombs, along with the findings in nearby funerary areas, with which form a unique and large necropolis. The documentation available for these excavations is very detailed: as well as excavation notes, still unpublished, we can count on a rich graphical and photographic documentation (tombs, funerary sets and area). Unfortunately, as the documentation records, no human remains were collected during the excavations, even though we can postulate on the age or gender of some deceased, based on available data.

The Davanzali area was used for a long period (9<sup>th</sup> to the 3<sup>rd</sup> century BC) and nowadays has a complex stratigraphy, in which it is possible to observe different plans of uses of the space and the superimpositions of burials. In the light of that complexity, it is thus necessary from the beginning of the project to adopt a recording methodology and to manage the data that will allow us to interpret that archaeological palimpsest in its historical development. First of all, data on the territory (historical cartography, aerial images, geomorphological data) and on the necropolis itself were gathered, with all the details of single tombs and funerary sets. The management of this large amount of data was carried out by a GIS, realized with QGIS software, implemented with a PostgreSQL database, by means of the spatial extension PostGIS.

This software set – completely open source – allows us to co-relate in a dynamic way all the information on tombs and funerary sets, along with spatial data. It is therefore possible to investigate – through specific SQL queries – many aspects of the occupational dynamics of the necropolis and of the funerary rituality, through a necessary diachronic and spatial perspective.

We can now present for the first time the general map of the Quagliotti-Davanzali areas (Fig. 2), including more than 500 tombs all together – most

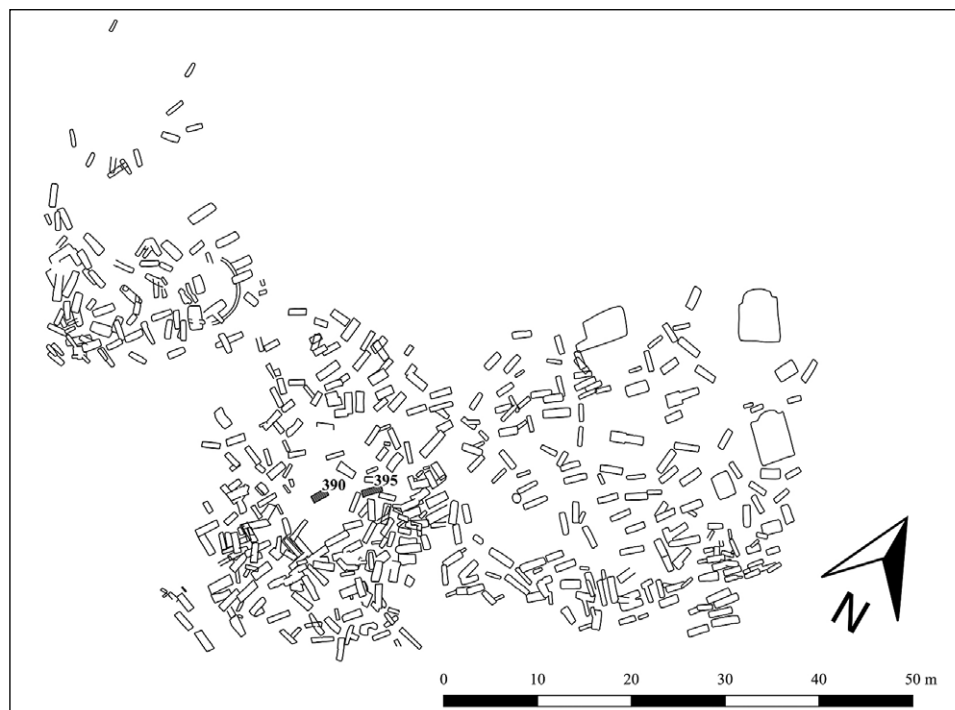


Fig. 2 – Plan of Quagliotti-Davanzali necropolis, with the location of tombs 390 (9<sup>th</sup> century BC) and 395 (4<sup>th</sup> century BC).

of them are unpublished; about a hundred tombs were studied by Daniela Novaro's PhD research (NOVARO 1999), to whom we are grateful for having shared the data.

A first reading of the map allows for many interesting aspects to appear, such as the presence of burial plots in circular formations, even when there is no trace of ring-ditches, as in fact it is attested elsewhere in Numana, from the late 7<sup>th</sup> century BC, at least, for instance, in the adjacent "Circolo delle Fibule" or in the faraway "I Pini" necropolis, or elsewhere in Picenum, as in Ancona and Matelica, already from the 8<sup>th</sup> century BC (*Eroi e Regine* 2001, 75-76; SILVESTRINI, SABBATINI 2008, 52). Such forms of structuring funerary space can provide elements of the utmost importance to investigate social and cultural aspects, for the most part still unknown for Numana.

A particularly interesting sector which drew our attention in the beginning stage of research was the area around tomb 390, one of the most ancient in Numana (Fig. 2): it is an inhumation of an adult, with a funerary set similar to those contained in the few other burials known from the beginning of the

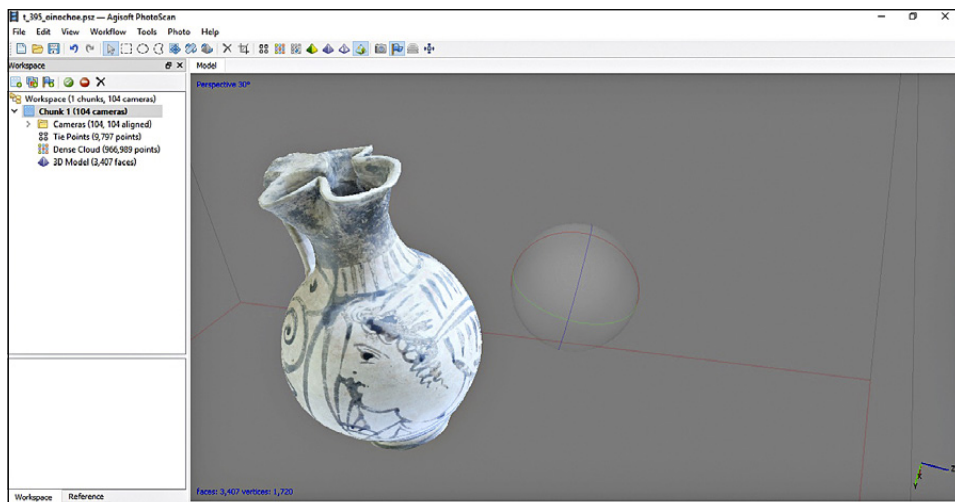


Fig. 3 – 3D image of the Alto-Adriatic oenochoe from tomb 395.

Picene civilization. The position of the body is particularly characteristic of the necropolis, crouched on the right side, as well as its orientation and the funeral pit with pebbles on the bottom. The funerary set is essential: there are only bronze goods, as it happens in the most ancient Picene burials: as a matter of fact, the lack of pottery could contain the chronology of the burial by the end of the 9<sup>th</sup> century BC (PERCOSSI SERENELLI 1998, 17). Numerous aspects of the burial testify its relevance: first of all, the paucity of the graves known in this period; indeed, we know only few other graves in Numana that can be dated to 9<sup>th</sup> century BC, tomb 496, an inhumation, and tomb 52, a cremation in the nearby Quagliotti area (for other tombs of 9<sup>th</sup> century BC in Numana: LANDOLFI 1993). Additionally, tomb 390 seems to be in a prominent location, as it is at the center of a circular area of respect with a ray of about 5 m maintained for a long period of time, since all the surrounding tombs are dated until the late 4<sup>th</sup> century BC at least. We intend to investigate further this phenomenon, like those other ones emerging from the GIS and the databases with other data processing and analysis as well.

We aim to use the current methods for 3D outputs, applying them to single burials first and to the entire necropolis afterwards, in order to examine in depth the usage of the funerary space, aspects of burial customs, the connections among tombs, the necropolis in its spatial and temporal development. According to this purpose, we are presently experimenting methods for the virtual reconstruction of funerary sets and tombs structures, starting from case studies, as tomb 395, located near the above-mentioned tomb 390. It is

a tomb dated to the latest phase of the Picenian civilization. In its funerary set there is an interesting group of vases, among which an Alto-Adriatic figured krater and an oenochoe of the same production, beside a black-glaze bowl. Other funerary goods are an iron fibula, two glass pearls from a necklace, a bronze vase of which remain only few fragments. There are also a few human remains, the corpse was oriented SN. For the time being, the experimentation is based on the photogrammetric image-based relief (software Photoscan), starting from the single object of the funerary set, reaching the entire tomb complex (Fig. 3).

Following on from the investigation we intend to test even the most advanced technologies – like laser scanning – to reach the desirable creation of a virtual model of the necropolis, as a valid instrument to integrate the large amount of data at our disposal and as a device to carry out the analysis of such a complex reality.

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#### ABSTRACT

Numana is one of the most important centers for the Picene civilization and prospered in the Marche and Abruzzo regions during the Iron Age. Almost all of the archaeological evidence found until now refers to the necropoleis spread over a broad territory, while data concerning inhabited areas are quite scarce. Although findings are plenty, the study of Ancient Numana is quite incomplete. As a matter of fact, all the published materials are related to single burials or finds and there are no overall studies on its territory. A recent research project involving a wider sector of the largest Numana necropolis (Quagliotti-Davanzali), has not been published yet but offers a detailed description since the excavation documentation is available. The project sets out to consider burials as organized systems, offering information on cultural transformations and on the social organization of the ancient community. The systematic analysis of the data from the burial and the single funerary sets – to be organized in a specific GIS – will be accompanied by an investigation of the ancient landscape in its many components – necropolis and inhabited area – in its diachronic development, thanks to the results of other recent analyses carried out in the Numana territory (geomorphology, GIS of the archaeological map, new surveys of the territory). The scope of the project is therefore to analyze times, ways of arrangements, shapes of the Ancient Numana, in its definition of a territorial, inhabited, rural space, by using methods and techniques to record and read new data, to build knowledge in a scenario which can be integrated with results coming from future research.

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