

## KAINUA-MARZABOTTO: THE ARCHAEOLOGICAL FRAMEWORK

Marzabotto, as is well-known, is the best preserved city of all Etruria (Fig. 1): most of the urban fabric, domestic and craft spaces, cemeteries and sacred areas have been brought to light (GOVI 2007).

Systematic excavations began in the 19<sup>th</sup> century, revealing a city which E. Brizio had no hesitation comparing to Pompeii for its street system and *domus* houses. From these 19<sup>th</sup> century investigations, which involved all the southern section of the city, the acropolis and necropoleis, there remains meagre, incomplete documentation (SASSATELLI 1983). Unfortunately, much the same can be said of the documentation regarding the various excavations then carried out in the 20<sup>th</sup> century, especially under the direction of G.A. Mansuelli, the first to attempt to answer some unresolved issues, such as the real development and specificity of the urban structure, too hastily labelled as Greek and which he instead more correctly identified as belonging to an Etruscan religious sphere (SASSATELLI 1989, 38-40). His excavations in the *Regio IV, insula 1* and the discovery of the *cippus* with *decussis* opened an important discussion about Etruscan town planning and the origins and development of the typology of the *domus* houses. However, the lack of attention to the stratigraphy and the materials in context, together with the absence of complete editions of those investigations, present a lacuna that is still today insurmountable, a problem faced by current studies.

A notably different approach to the research was begun by Giuseppe Sassatelli, who, since 1988 has carried out uninterrupted investigations with a precise scientific goal not limited to merely adding context to our knowledge. At the same time, he set up an institutional network of contacts and agreements which focussed attention and resources on Marzabotto. Thus, the involvement of the Rector of the University Fabio Roversi Monaco has been strategic for the researches.

Marzabotto is the fulcrum of his work as an archaeologist and is where he has developed an investigative method based on scientific precision, constantly anchored by object and stratigraphic data, and involving a wide multidisciplinary spectrum, indispensable for correct historical reconstruction. Thus, with the excavation firstly of *Regio IV, 2 – House 1* and then of the town's peripteral Temple, he set up an integrated approach combining multiple perspectives in a graded scale from the individual excavation contexts to the entire urban situation, avoiding a sectorial vision; from the analysis of building and production techniques to the elaboration of general typologies; from object data to the interpretation of the historical and cultural phenomena

which involved them. The Marzabotto excavations have therefore been a training ground for many young people and Giuseppe Sassatelli has favoured the development of many of us, being constantly open to innovation regarding both methods and results, even when this has meant undermining previously held positions and beliefs about the research. This approach is today a consolidated investigative system, of which the Kainua Project is proof, set up with a wide, interdisciplinary perspective to tackle scientific issues with new, effective instruments. The following presentations aim to illustrate the wide spectrum of aspects covered by this investigative system. Giuseppe Sassatelli's teaching is responsible for the results of recent years which have radically changed the understanding of the city. This convention aims to be a tribute to his work.

So what does investigating a city such as Marzabotto mean today? Which are the most modern research perspectives and the most effective tools?

First of all, it is necessary to ask how many cities we have to investigate, because among the most recent discoveries is the awareness that the town plan was preceded by an urban settlement about which unfortunately little is known, since it was obliterated by the rebuilding between the late 6<sup>th</sup> and early 5<sup>th</sup> century BCE. The scarce traces found below the city's wall structures, together with significant imported materials, verify a building phase which can be dated to the second half of the 6<sup>th</sup> century BCE with sacred and residential areas, workshops and some burial areas (GOVI 2014, 104-108). However, what is still not clear is the planning of this settlement whose buildings display an orientation that is not unequivocal and above all differs from the subsequent plan of the city (GOVI 2016, 203-211). The problem we therefore face is understanding the dynamics of the building and rebuilding of the city and identifying indicators of such dynamics in the absence of sources which could shed light on historical events. The foundation of the town around the mid-6<sup>th</sup> century BCE, probably preceded by a settlement of huts, appears to be part of the wider, well-known phenomenon of development of the Po Valley Etruria, which led to the reorganization of Bologna, as well as the birth of Spina and Forcello di Bagnolo San Vito (SASSATELLI 2008, 73-76). By contrast, the rebuilding of the city in the late 6<sup>th</sup> century BCE seems to have taken on the traits of a communal rebirth in a political, sacred and institutional manner, also reflected in the name Kainua, meaning "new", like the Greek Neapolis (SASSATELLI 2017). The large-scale public works are the expression of a strong political will which the civil community, as a renewed social body, expressed through the appropriation of a sacred dimension through which to display strong community and identity values (GOVI 2017).

The study of this planned city might also be channelled through the theoretical and methodological perspective which analyses the spatial dimensions of social life and considers the places as "lived space", imbued with meanings, identities and memories (SMITH 2007, 30-34; FISHER, CREEKMORE 2014, 3-8).

A. Rapoport identifies various levels of meaning in the built environment (RAPOPORT 1988, 1990) which must not be applied as pre-set labels but should help in understanding the factors producing the urban space. These perspectives on production of ancient urban places, summarized in eight bodies of theory by M. SMITH (2011), have never been applied to the Etruscan world. Marzabotto is an exemplar case-study, currently the only one.

Starting on a larger scale, the higher level of meaning is reflected in the shape of the city as a symbolic image. Following M. Eliade, A. Rapoport highlights some cosmological principles which are expressed in the urban layout, through which social values of order, stability, negation of time and death are sanctioned (SMITH 2007, 30-37). The city of Marzabotto was founded on astronomical and geometrical principles and the urban layout stems from observation of the movement of the sun (GUARINO 2011, 221-224; GOTTARELLI 2013; GOVI 2014, 97-102). The urban layout is therefore not a theoretical model; it reflects the transposition on the ground of the solar *templum* of the place. There is therefore a total assimilation of sacred and urban space: the city is not only a consecrated space, but within the urban structure the sacred dimension has a fundamental role because it determines the distribution of its inhabitants' space. In fact, the acropolis has a fundamental role in the founding of the city, hosting the *auguraculum* and the *mundus* sacred to *Dis Pater*: according to sources, it is from here that the *spectio* might embrace the whole plateau, identifying along the solstice diagonal the geometric centre of the future city, where the *decussis* was situated (SASSATELLI 1989-1990). A virtual reconstruction allows us to appreciate how the sacred buildings on the acropolis respect this view on the *auguraculum*, leaving it free of buildings.

Furthermore, we now know that the urban layout was highly influenced by the sacred area *Regio I*, where there are two Temples, one peripteral dedicated to *Tinia* and the other Tuscanic dedicated to *Uni* (GOVI 2017). It is no surprise to find the *Tinia-Uni* couple in the urban sanctuary of Marzabotto – in fact, this is an extraordinary confirmation of the contiguity of the sites of *Tinia* and *Uni* in the N-E quadrant of the *templum* and proof of the concentration of the sites of *Uni* in *Regiones II* and *IV*. So in Marzabotto the “sacred geography” appears to perfectly mirror the principles of the *Etrusca disciplina*, thereby having a profound influence on the urban layout, itself a representation of sacred space (GOVI 2017). The Tuscanic Temple (Fig. 2), uncovered in 2015 (GARAGNANI, GAUCCI, GOVI 2016; GOVI 2017), is placed at the centre of a space as yet not completely excavated, but it is already clear that it influenced the scansion of the blocks of buildings towards the S, subdivided in an anomalous manner. This Temple, which can be dated to the last decades of the 6<sup>th</sup> century BCE, can therefore be placed at the origin of the city and the whole northern development appears to have been arranged according to a sacred and institutional intention, dominating the city

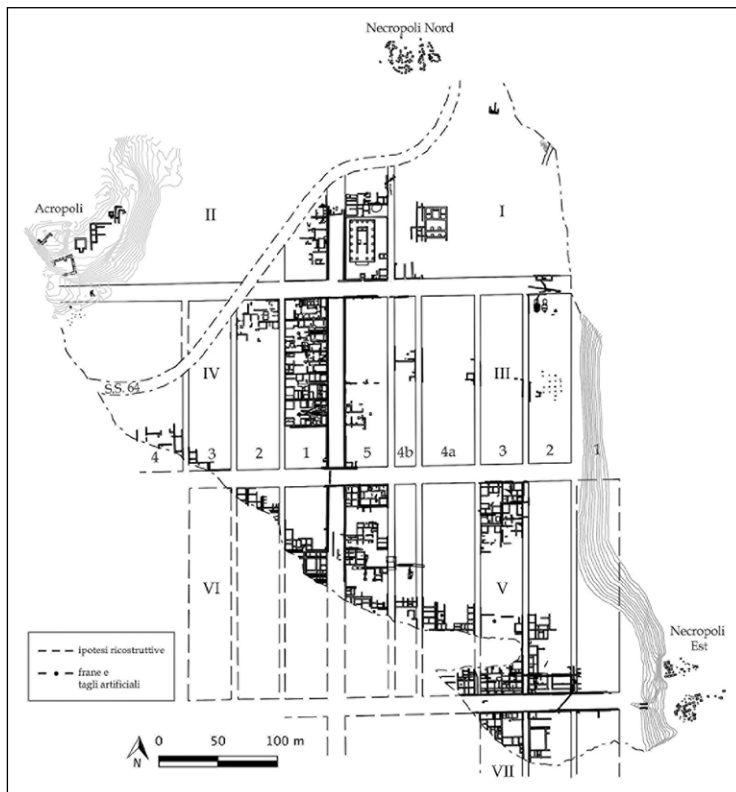


Fig. 1 – General plan of Marzabotto.

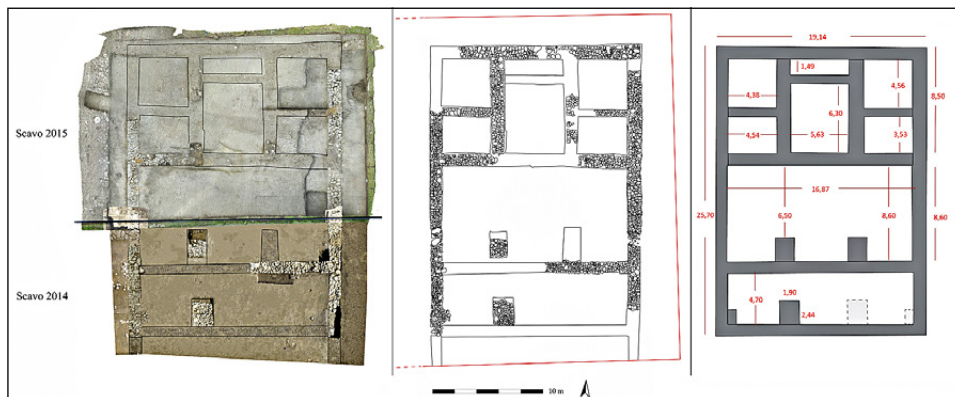


Fig. 2 – Tuscanic Temple uncovered in 2014-2015.

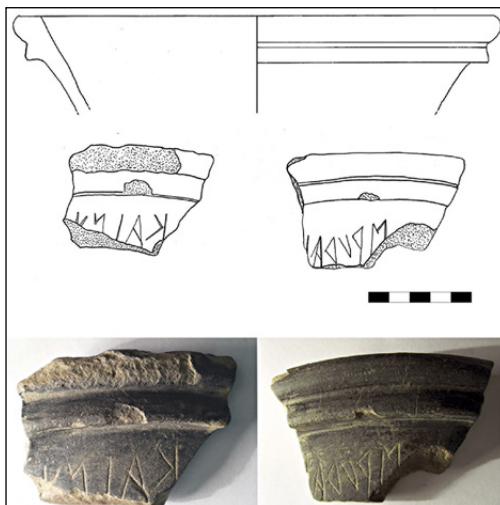


Fig. 3 – Etruscan inscriptions from the temple of *Uni*.



Fig. 4 – The two Temples of *Regio I* in the virtual reconstruction of the city.

on the plateau and the entire valley of the river Reno. Moreover, we know that the founding rite of the Temple required a solemn collective ceremony and its consecration by the community, the *spura* of Kainua, as extraordinarily revealed by a fragment of an inscription found among the stones of a



Fig. 5 – Virtual reconstruction of *Regio IV, 2* – House 1.

foundation wall of the Temple (Fig. 3). The topographic relationship between the two Temples has yet to be clarified, but it is obvious that the two Temples are separated by a special *stenopos* and that each of them appears to have been placed in a space with clear boundaries. The peripteral Temple of *Tinia*, built a few decades after the one dedicated to *Uni* on the remains of a previous building about which we know little as yet, is situated in a regular block and is of monumental dimensions, enough to obscure the sight of the nearby Tuscanic Temple. A virtual reconstruction of the Temples allows us to appreciate the impressive aspect of the Temple of *Tinia*, visible from all sides from a great distance, in contrast to the Tuscanic Temple, visible only from a frontal perspective (Fig. 4). It is interesting to evaluate how the same misalignment between two closely-placed temples can be seen at Pyrgi, but with a different chronological sequence between the peripteral and Tuscanic Temples and with a different sanctuary development of the space, which is singular there (COLONNA 2006).

The city planning therefore followed cosmological and religious principles which created a precise geometrical layout. The implementation of this geometrical layout inhabited by its citizens and the consequent division of internal spaces (streets, blocks and the division of public and private areas) led to reflections of a city-planning and geometrical nature which reveal undeniable comparisons with the Greek world. In fact, in the same period in Greece and Magna Graecia, geometrical principles were developing which had an effect on town planning (LO SARDO 1999), as demonstrated by the recent interpretation of the layout of Neapolis, organised in a circular structure with the Temple of the Dioscuri at its centre (LONGO, TAURO 2016). Marzabotto

reveals just how close the intercultural dialogue was, exactly as shown by the use of the Greek foot in the planning of the entire city and its buildings (GOVI 2016, 196-198).

Unfortunately we do not know if there were city walls, but there certainly had to be some form of delimitation of civic space, precisely because the city came into being according to the principle of the *templum*, a delimited, consecrated space. Furthermore, the “Porta Est” implies a demarcation and it is probable that every *plateia* had an access with a formal gate. It has been suggested that an *aggere* and a big canal delimited the northern sector with a curvilinear development which seems to follow the circular geometric shape within which the city’s quadrangle is placed (MALNATI, SASSATELLI 2008; GOTTARELLI 2013). Were such hypotheses to be confirmed, the geometric principle on which the urban layout was based would appear clearer and the comparison with Neapolis, founded in precisely the same years, would be more significant. According to the theoretical approach of M. Smith, Marzabotto thus reflects a very high level of central planning and coordination between buildings and spaces, since formality and monumentality are applied here through a common orientation of streets and buildings, axiality, the symmetrical arrangement of buildings, and the logic of accesses and internal networks (SMITH 2007, 8-12). Everything appears profoundly interconnected at a spatial and conceptual level.

The high level of monumentality and the deep commitment of the community in public works is therefore very evident today, in particular thanks to the excavations carried out in the last decade in the urban sacred area. This corresponds to A. Rapoport’s middle level of meaning, which expresses the political ideology of power through wide streets suitable for processions, wide-open spaces for public ceremonies, imposing accesses and above all architectural expression through public and private building (the architectural communication theory of SMITH 2011, 174-175). More recent studies on monumentality as directly correlated with power and with social complexity (OSBORNE 2014) help to examine this case-study of Kainua, without the aid of historical documents as a guide.

It is already known that the *plateiai* of Marzabotto have the same dimensions, yet they seem to have differing degrees of importance and different functions (GOVI 2014, 94-95). *Plateia* B now appears to be a sacred road that connected the city to the acropolis and a virtual reconstruction allows us to evaluate the ancient perception of this visual, conceptual axis, a connection allowing for religious processions which wound through the city to the acropolis during civic festivals (Space Syntax analysis has been employed by many archaeologists: SMITH 2011, 176; FISHER, CREEKMORE 2014, 8). Furthermore the virtual reconstruction of the city has also revealed the specific problem, still unresolved, of the relationship between *plateia* B

and the acropolis, 11 m overhead (GAUCCI in this volume). The importance of the case of Marzabotto goes without saying regarding this aspect, since in other Etruscan cities, albeit monumental ones, the acropolis is practically never included in the ancient urban plan (e.g. Cerveteri and Volterra). *Plateia* A crossed the whole city longitudinally and must have played an important role in the internal road network, as an obligatory route for those coming from the N, i.e. from Felsina, entering the city alongside the monumental Temple of *Tinia*. Large workshops also faced onto this *plateia* A as did the *atrium* houses of *Regiones* III and IV, belonging to members of the highest social classes. Geophysical explorations on a large scale have revealed the whole street network (BOSCHI 2016) and clarified that Block 5 of *Regio* III was entirely occupied by residential units, well-marked by dividing walls. It is important to underline that the division and typology of the houses within this block, facing onto *plateia* A, correspond almost exactly to the size and planimetry of the houses excavated by Mansuelli in the opposite block. This demonstrates the existence of precise modular and measuring criteria within the city and the hierarchical distribution of the houses, based on position with respect to viability and visibility (GOVI 2016, 196-203). Viewshed analyses can give an interesting perspective on the ancient built environment (SMITH 2007, 23-25; OSBORNE 2014, 6). So the best focal point at Kainua was the crossroads between A and B, which afforded full visibility of the urban sacred area with the Temple of *Tinia* in marked evidence, of the hill of the acropolis and, towards the S, of the prospect of the *atrium* houses along *plateia* A, visually dominating the two accesses to the city from N and S.

Analysis of the different planimetric schemes adopted for the dwellings of the city allows us to observe the absence of any fixed architectural typology and conversely the variety of domestic solutions, which can begin to form a very articulated picture of the social complexity. Our excavations in *Regio* IV, 2 – House 1 (Fig. 5) have revealed the interpretation problems regarding residential architecture in Marzabotto, a central theme in studies on the city (GOVI 2016, 191-193). The difficulty in recognising domestic units due to the continuous construction of wall foundations in which the limits are not visible; the absence of usage phases which would clarify the function of the rooms; the minimal attention to the building phases of the dwellings – these are the main obstacles to our research. House 1 has shown how a dwelling was changed into a pottery workshop, thus also reflecting social changes, well-represented in written documentation which reveals a noble family structure for the most ancient phase. The social framework is an aspect that in Marzabotto has never been investigated, largely due to the dispersion of the grave goods, but analysis of the residential architecture may make a contribution. Fixed dimensional modules can be recognised, presupposing the use of the Greek foot as standard in the planning of the entire city. However, there is a wide



variety of results and the typologies of dwellings are different in terms of extension and vocation: the picture that has emerged is notably distant from past schematisms, while it is clear that the blocks were occupied in different manners and certainly those facing onto *plateia* A contained the largest houses, defined as *atrium* houses, with an area of between 600 and 800 m<sup>2</sup>, belonging to the city's elite. The city thus appears to have been subdivided according to strict geometrical principles, but the occupation corresponds to a differentiated use among the various sectors. It is therefore fundamental to carry out a systematic study of the material found during the excavation of the Mansuelli block, only recently begun, since it may contribute to confirming this perspective of social analysis of the city's domestic architecture. There is also the question of clarifying the development of the remaining *Regio* III, which would appear to be empty, though geophysical explorations have revealed residential structures in the southern sector, so the problem is still unresolved. Deeper excavations could help to counteract the impression of emptiness in this part of the city facing onto the sacred area of *Regio* I.

The low level of meaning is the most difficult to analyze because it relates to everyday and instrumental meanings and to social situations and behaviors, which are missing in Kainua. However, it is worth briefly mentioning the production and craft dimension of the city, where the phenomenon is very articulate on a gradation of solutions (MORPURGO in press). A dense network of production activities characterizes the urban space, where there is no manufacturing neighbourhood or functional area, but certainly the larger shops overlook the *plateiai*, which functioned as genuine catalyst. It has been noted that the workshops of Marzabotto are the largest ones in Etruria (NIJBOER 1998, 119-126), but the aspect most worth investigating is the social one. The workshops are annexed by large residential structures, as in House 1, in the large furnace of *Regio* II, 1 and in the foundry of *Regio* V, 5. It remains difficult to understand by whom they were run and, from a political and social point of view, to define these structures which recall rural or suburban structures such as the Villa dell'Auditorium in Rome, but transferred into a civil fabric. Similarly, we are not yet able to understand the social condition of the craft-workers who played such a large role in this city, very active in metallurgical and pottery production.

Finally, the sequencing of the investigations requires a vision beyond the city to the wider context of Po Valley Etruria and, even if it has often been stated that a regular urban layout and the ritual of foundation are characteristic, unifying elements of this territory, it still remains to be understood how common was the level of monumentality found in Marzabotto and certainly present in Bologna, and how diffuse was the spatial model so evident in Marzabotto. Following M. Smith's theoretical assumptions (SMITH 2007, 25), we could therefore say that in Po Valley Etruria there is evidence of a

standardisation of urban structure with the use in common of certain aspects, such as measurements using the Greek foot, also recognised in recent studies in Forcello di Bagnolo S. Vito and in the territory of Adria (QUIRINO 2012; PALTINERI, ROBINO 2016), astronomical orientation, and urban layout. However, the lack of data on public spaces in cities such as Bologna, Spina and Mantua makes analysis very difficult and future research very stimulating.

The Kainua Project is the result of the need to investigate in a coordinated, unified manner a very highly-developed urban context, data about which still have many lacunae. An integrated system of investigation has led us to ask many questions, trying to translate into concrete terms hypotheses which in turn generate further questions from a sequential perspective, forcing us to pass from individual details to the whole picture without ever neglecting the complexity of reconstruction.

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## ABSTRACT

The paper aims to analyse the Etruscan city of Marzabotto, the ancient Kainua, with an integrated approach which considers all the aspects, from the urban layout to sacred and domestic architecture, to handcraft production, as a reflection of community, identity values and social structure. With the aid of theoretical and methodological perspectives on production of ancient urban places, the most recent achievements are included in an archaeological framework which has now been completely revised.

