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*The Process of Urbanization of
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Project and Preliminary Results*

BY STEPHAN STEINGRÄBER

In memory of Nando and Sarah Cinelli

The following article is offered as a modest “alpnu” (gift) in memory of two marvelous persons, Count Nando Cinelli and his wife Sarah, who passed away during the first months of 2002 and who, during the last four decades, contributed much energy, enthusiasm, and many financial resources to the research and a better understanding of Etruscan culture, especially among Americans and students. I am personally very grateful for their gener-



figure 1 – “Etruscan Day” in the Hispanic Society at New York in March 1999: Sarah and Nando Cinelli surrounded by members of the Advisory Board of the Etruscan Foundation

ous hospitality and stimulating encounters since 1993 in New York, Washington D.C., and Spannocchia. The latter is the Cinelli’s beautiful Tuscan castle southwest of Siena where one could feel still the spirit of Nando’s Etruscan ancestors, and where we gathered almost every July in a friendly and relaxing atmosphere for a lecture on an interesting Etruscan topic, for the meeting of the advisory board of the Etruscan Foundation, for discussions, and for a delicious Tuscan banquet. I had the pleasure and honor to have been the speaker, once in Washington and New York, and twice at Spannocchia, the last time in July 2001, when I presented for the first time my new research project on the process of urbanization in Etruria. Unfortunately, Nando Cinelli was unable for health reasons to participate in this meeting. Now, more than one year later, I would like to return to this important topic, to explain in more detail the main reasons and aims of the project and to offer some first modest results.

It is well known that the ancient Mediterranean cultures developed mainly in cities. The definition of “city” in the ancient world is a much discussed theoretical problem, to be

considered according to different periods and different cultural areas. In the Greek and Roman world, “city” means mainly a community of citizens sharing a religious and cultural identity, and living in a settlement characterized not only by private habitations, but by public spaces and buildings for politics, religion, and trade. Such conditions were provided, for example, by the Greek “polis” created between the eighth and seventh centuries B.C. The “polis” included a kind of “urban center” and a clear division between public and private areas and functions, consisting of the Agora, public buildings, urban sanctuaries, and a possible city wall on the one hand, of living and working areas with private houses and workshops on the other hand, and finally the necropoleis with the tombs generally situated outside the city walls, often along the main roads. Generally we have to distinguish between “gradually grown cities” (i.e., Athens and Rome) and “regularly planned cities” (mostly colonial Greek foundations such as Megara Hyblaea and Selinus in Sicily and Metapontum and Paestum in Southern Italy or the Latin-Roman colonial foundations such as Cosa). We cannot transfer automatically such criteria from the Greek and Roman to the Etruscan world. On the basis of the future results of the author’s project, we will need to define what “city” in Etruria means and from what period and in which cases we really can speak about “cities.” The definition of F. Kolb (*Die Stadt im Altertum*, 1984: 11ss.) of an ancient city meeting six criteria may serve as a starting point:

1. topographic and administrative unity of the settlement;
2. number of population at least one or a few thousand inhabitants as a necessary condition;
3. clear division of labor and social differentiation;
4. variety of architecture and buildings;
5. urban life style;
6. function of the settlement as a center for the surrounding territory.

There were three main reasons for choosing the present topic as a research project:

1. Particularly in the last two decades, research on ancient cities, including many different aspects and specialists in different fields, has become a main focus of international archaeological and historical investigation. To cite just one example, the German Archaeological Institute (DAI) actually has fifty-eight projects in nineteen different countries, mainly in the Mediterranean and Near Eastern areas, but also beyond, concerning “Stadtforschung” that is, research on ancient cities and urban cultures (A. Dossert, ed., *Stadtforschung. Projekte des DAI*, Berlin 2001).

2. My own studies in the preparation of an article on “Etruscan Urban Planning” published in a reduced form in the catalogue of the recent exhibition in Venice (M. Torelli, ed., *The Etruscans*, Milan, 2000: 291-311).

3. Thanks to a series of excavations, topographical investigations, and particular studies mainly by American, British, French, German, Italian and Swedish scholars during recent decades, our knowledge of the long neglected settlements and urban areas in Etruria improved considerably in both quantity and quality of relevant data offering new stimulation for systematic studies and searches. The XXIII Congress of the Istituto di Studi Etruschi e Italici in October 2001 on the “dinamiche di sviluppo delle città nell’ Etruria meridionale: Veio, Cerveteri, Tarquinia, Vulci” and the most recent Congress, *Etruscans*

Now, held in the British Museum in London in December 2002 are clear evidence of this. Until recently one of the most frequently encountered assertions about the Etruscans was indeed that we know far less about their cities, settlements, squares, public buildings, and living areas and houses than we do about their often extensive necropoleis and magnificent tombs, the latter having been built or hewn out as if for eternity, and therefore much better preserved. This assertion, unfortunately, is still mostly true but it has to be revised and partly corrected. That we continue to know far more about the world of the dead in Etruria than we do about that of the living can be explained easily by a number of causes: cultural, religious, geological, and building techniques, as well as by the history of research itself. Etruscan tombs are generally more massive and lasting in form than other buildings, which were mostly constructed from far more precarious materials. The Etruscans were indeed conspicuous among ancient peoples for the working effort and financial resources they were willing to invest in their tombs and necropoleis and thus, so to speak, in what lay beyond. Another significant factor is that many Etruscan settlements, above all in northern and inland Etruria (i.e., Volterra, Arezzo, Cortona, Perugia, Chiusi, Orvieto), were later layered over by Roman, medieval, and/or modern towns, making systematic excavation and investi-



figure 2



figure 3



figure 4



figure 5

figure 2 – Ceri near Cerveteri located on a steep tufa rock; figure 3 – Blera in the South Etruscan rock tomb area located on a tufa rock; figure 4 – Tarquinia in the hinterland of Tarquinia: view from the acropolis hill with mainly Roman remains towards the Marta valley; figure 5 – Pitigliano in the hinterland of Vulci located on a tufa rock

gation almost impossible. Conditions are doubtless better in southern Etruria, where many of the former settled plains (i.e., Vulci, Tarquinia, Cerveteri, Veii) have since been built over only partially or not at all. The systematic excavation and exploration of the urban areas of these famous south Etruscan metropoleis are just beginning and are among the most important and fascinating tasks of modern Etruscology.

Excavations of settlements and topographical surveys in Etruria and etruscanized areas of Italy by American, British, French, German, Italian, and Swedish scholars during recent decades took place mainly in the following sites (in alphabetic order): Acquarossa, Adria, Baggiovara/Case Vandelli, Bologna, Bolsena, Capua, Casalecchio di Reno, Castellina del Marangone, Castelnuovo Berardenga, Castiglione di San Martino, Castiglion Fiorentino, Cerveteri, Cetamura, Chiusi, Crespino/San Cassiano, Doganella, Forcello di Bagno S.Vito, Ghiaccio Forte, Gravisca, Luni sul Mignone, Marzabotto, Massa Marittima/Accessa, Montalcino/Poggio Civitella, Monte Castello di Procchio, Monterenzio/Monte Bibele, Monteriggioni, Murlo/Poggio Civitate, Musarna, Poggio La Croce, Pontecagnano, Populonia, Pyrgi, Roselle, San Giovenale, San Giuliano, Sant'Ilario d'Enza, Sovana, Spina, Tarquinia, Trequanda, Veio, Verucchio, Vetulonia, Vicchio/Poggio Colla, Volterra and Vulci. The level of our knowledge of these sites, of course, varies greatly and the settlements differ as to their importance and size, their geographic and geological situation, their chronology and duration. Each case, therefore, has to be examined in its own right. A great quantity of new documents, evidence, and perspectives, but also of new or still unresolved problems, result from these excavations and explorations, which were all done with different techniques and sometimes with new methods as well.

The principal aim of this project is a critical collection of all possible data for the documentation of the decisive phase in the formation process of Etruscan settlements into real "cities": the *Stadtwerdungsprozess* in Etruria; the birth of the Etruscan "metropoleis" (such as Tarquinia and Veii); the urbanistic development in Etruria, based on the archaeological remains (including those from ongoing excavations) both in the Etruscan mainland and in the etruscanized areas of the Padana and of Campania; the spatial and functional organization of the Etruscan settlements and necropoleis. A series of questions and problems of archaeological and historical nature, arising from this kind of critical catalogue of the archaeological data, will have to be analyzed, particularly as they concern the structure and function of spaces (*Lebensräume*) in the origin and development of public (-political), sacred religious, and private spaces. This process of formation has to be seen, of course, in the historical and cultural context with the Italic world, with Rome and with the Greek world, particularly with Eastern Greek Ionia and with South Italian Magna Graecia and Sicily. Etruria has to be considered as an important element involved in the history of ancient pre-Roman Italy, not as an isolated phenomenon. In Etruria the process of urbanization started apparently earlier than in the areas of other Italic cultures and was obviously conditioned also by a particular structure of society and by a more advanced specialization and organization of labor and life. The Greek colonies of Magna Graecia, especially those around the bay of Naples, undoubtedly contributed a lot to the acceleration of the urbanization process in Etruria. Interesting models and comparisons are offered by T. Hölscher in his study on the origins of public spaces in the Greek world (*Öffentliche Räume in frühen griechischen Städten*, Heidelberg 1998) and by D. Mertens on

the genesis and development of the Greek city in Southern Italy and Sicily (A. Borbein - T. Hölscher - P. Zanker, eds., *Klassische Archäologie. Eine Einführung*, Berlin, 2000: 229-250) particularly regarding the cities of Metapontum, Paestum, Megara Hyblaea, and Selinus.

Methodologically we have to consider first of all the analysis of the archaeological finds, but also, insofar as they exist, literary and epigraphic sources, the geophysical prospections (i.e., by the Fondazione Lerici in Tarquinia and the German Archaeological Institute in Selinus), topographical surveys, air photos, paleo-anthropological, zoological, and botanical finds (which can offer interesting information about the conditions of daily life). Maps and ground plans of the cities and the main architectural complexes should be computerized true to scale and according to the different phases of development. In the future we should also take into consideration virtual reconstructions. The project is highly suitable for interdisciplinary cooperation among scholars of different fields, and is being done in close contact with various colleagues and institutions of different nations specialized in Etruscan studies, including universities, academies and soprintendenze and with the directors of the main settlement excavations in Etruria. Concerning the technical aspects of the project, cooperations with the Fondazione Lerici and some Japanese institutions are being planned.

A systematic study of the remains of Etruscan settlements with an urban structure requires the consideration of many and various aspects, problems, and questions, among which are:

1. the specific geographical and geological situation of the site;
2. the extension of the urban area - approximate number of inhabitants;
3. the possible existence and type of city walls, gates, fortifications and roads;
4. the duration and continuity or discontinuity of the settlement;
5. the prevailing socioeconomic character of the settlement, such as agricultural, mineral, commercial, emporion, “potentato signorile,” etc.;
6. the type of city plan which reflects different systems of development, such as the so-called “ancient cities irregularly grown” and the so-called “cities of a more recent foundation regularly planned” (mainly situated in “colonial” areas or harbour towns and characterized by orthogonal “hippodamean” models with insulae and a regular street system);
7. the relationship between built-up areas and those without buildings in the urban area – density of built-up areas and exploitation of space;
8. the relationship between “city center,” “acropolis,” and “suburban” areas;
9. the position (and possible regularities) of public, sacred, and private spaces and buildings in the urban area;
10. the typological, architectural, functional and social differences among the various quarters of the urban area (i.e., craftsmen and industrial quarters);
11. the monumentalization and new techniques of architecture (i.e., clay bricks, walls with pillars, architectural terracottas);
12. the necropoleis as partial reflections of the city concerning plan, street system, squares, façades (i.e., in Cerveteri, Orvieto, and the south Etruscan rock necropoleis) and of Etruscan houses;
13. the relationship between city and territory/“chora” as an expression of a dialectic and dynamic process;



figure 6



figure 10



figure 7



figure 11



figure 8



figure 12



figure 9

figure 6 – Saturnia in the hinterland of Vulci located on a lime stone hill; figure 7 – The city hill of Ghiaccio Forte in the hinterland of Vulci; figure 8 – The city hill of Marsiliana d'Albegna overlooking the Albegna valley; figure 9 – The city hill of Populonia in a view from the San Cerbone necropolis; figure 10 – The southern city hill = Poggio Telegrafo of Populonia; figure 11 – Central area of the Etruscan and Roman town of Roselle; figure 12 – Archaic rectangular two-room building in the central area of Roselle

14. common elements and differences in the urban structure and organization between the Etruscan cities and the Greek poleis.

Among all these aspects and problems, the question of since when and where one can really distinguish between public(-political), sacred, and private space, and how these spaces can be defined and characterized, arises. The distinction between the political and sacred is particularly difficult in the earliest period, as it was emphasized by G.Sassatelli: "...sacro e profano intrinsecamente compenetrati." This process took place mainly between the Late Villanovan and the Archaic period, partially under influences from the Near East and the Greek world. For its reconstruction we have to examine especially some archaeological complexes excavated mostly during the last three decades, such as the "complesso sacro-istituzionale" (area alpha) and the "tempio-altare" (building beta) on the urban plateau of Tarquinia, the earliest buildings in the urban centers of Roselle and Pisa, the "acropolis" of Veii/Piazza d'Armi and the so-called "palazzi" or "regiae" of Murlo/Poggio Civitate, Acquarossa (building F), Cerveteri/Vigna Parrocchiale, Cerveteri-Montetosto, Rome, and perhaps Tuscania, Poggio Buco, Castellina del Marangone, Casale Marittimo and also Castelnuovo Berardenga. In South Latium we find parallels in Ficana, Cisterna, Velletri, and Satricum. We also have evidence from findings of architectural terracottas, which may indicate not only temples or religious buildings, but also aristocratic residences or public buildings. Possible models of these "palazzi", symbols of really important innovations and aristocratic seats both of public and private life, have been proposed in Cyprus (Vouni), Asia Minor (Larisa) and Anatolia (Tell Taynat).

The future publication of this project could be structured in the following way:

Prolegomena: History of research - methods - aims

- I. Critical catalogue of data concerning the archaeological finds in settlements of Etruria and etruscanized areas of ancient Italy.
- II. The geographic and geological situation and the territory context.
- III. Systematic part
 1. Public space
 - a) urban planning and street system
 - b) public squares
 - c) buildings with public(-political) character
 - d) city walls, gates and fortifications
 - e) harbors
 - f) water system: wells, cisterns, cuniculi
 2. Sacred space: temples, sacred buildings, altars
 3. Private space:
 - a) living houses
 - b) buildings for commercial, craft, trade, and industrial functions
 4. Sepulchral space: the necropoleis and their relation to the city
- IV. Historical and historico-cultural part: the Etruscan city in the Italic and Mediterranean context

1. Foreign influences
 - a) from Near East
 - b) from Greece and Magna Graecia
 2. Etruscan influences out of Etruria
 3. City - necropoleis - territory
 4. Economic bases - internal changes - social dynamics
- V. Prospects for the postarchaic period: second half of 5th - 3rd/2nd century B.C.
- VI. Summary and results - proposal for a definition of “city” in Etruria

In the following section I would like to present some summaries and preliminary results concerning the main aspects of this project.

Dimensions and Demographics:

Whether they were naturally defended by deep gorges (as often in South Etruria) or protected by surrounding walls (as mostly in North Etruria), the sites of Etruscan settlements varied greatly in extent. Chief among the south Etruscan cities was Veii with 190 ha, followed by Caere, Tarquinia and Vulci with ca. 150, 120 and 90 ha respectively. The inland cities of Volsinii-Orvieto and Chiusi were built on sites measuring respectively 80 and 26 ha. In the northwest, Populonia at 150 ha and Vetulonia at 100 ha were extremely large, while Roselle was significantly smaller at 41 ha. In the inland of northern Etruria, only Volterra had a site of over 100 ha. The northeastern towns Fiesole (30 ha), Arezzo (32 ha), Cortona (30 ha), and Perugia (32 ha) were much smaller. It may be assumed that the larger city sites were never fully built on and populated but used partly also for vegetable growing, pastoral agriculture, stock breeding and, in case of danger, as refuge for the population of the surrounding territory.

Population figures can certainly not be proved in absolute terms, and were in any case subject to fluctuation over the centuries in accordance with historical developments and varying importance of the individual centers. We may, however, gain some interesting indications as to population from the dimension of settlement, extent and density of necropoleis, certain literary sources (and also from the capacity of theaters and amphitheaters of some Etruscan cities in the early Roman imperial period). The remarkable population density of Cerveteri is stressed in sources, and J. Heurgon has estimated some 25,000 inhabitants for the city at the acme of its prosperity. That figure makes Cerveteri into a metropolis by ancient standards, at least in the pre-Hellenistic era, with a population density of 160 to 170 inhabitants per ha. On the basis of these various indices the following projections have been made for the most important Etruscan cities at the peak of their power: Veii 32,000; Cerveteri and Populonia 25,000 each; Tarquinia 20,000; Vetulonia and Volterra 17,000 each; Vulci 15,000; Volsinii-Orvieto 13,000; Roselle 12,500; Perugia, Cortona and Arezzo 6,000 each; Chiusi 5,000.

Foundation and Planning:

In theory the foundation and planning of a new Etruscan city followed strictly enjoined religious and ritual rules, which we know thanks to the Roman records of the Etruscan Libri Rituales and Libri Tagetici. Cities were to be laid out on axes determined by

the augurs after observing the flight of birds, a practice we are also familiar with from Etruscan temple building and orientation. A furrow, the *sulcus primigenius*, was ploughed in the soil to mark the confines of the site, and interrupted at the places where the city gates had to be placed. The ideological and religious purpose derived from the Etruscan belief that the heavens were divided into sectors following the coordinate system, and that the same division was reflected on earth: in other words, the geometrically ordered heavenly macrocosmos was reflected in the earthly microcosmos. Emblematic of this order, based on religion but also entirely rational, was the sacred and inviolable character of all boundaries, including those between properties, which were marked by cippi. Special stones, marked with a cross (decussis) to indicate the cardinal points, were buried under the main crossroads of a city. It must be emphasized that such “ideal” cities, laid out on a grid plan with rectangular insulae according to what the Greeks recognized as Hippodamos’s principle, were normally built only at newly founded sites and “colonial” settlements such as Marzabotto, Spina, and Capua. The strict application of this system, which the Etruscans most probably took from the Greek poleis in Magna Graecia, was in any case possible only if certain conditions were fulfilled by the proposed site. Excavations such as those at San Giovenale, Acquarossa, and Veii



figure 13



figure 14



figure 15



figure 16

figure 13 – Archaic Casa dell'Impluvium located on the slope of the northern hill of Roselle; figure 14 – Remains of archaic rectangular houses at Lago di Accesa near Massa Marittima; figure 15 – Remains of partly archaic rectangular houses at Doganella near Magliano Toscano; figure 16 – Archaic houses in tufa blocks of the so-called Borgo at San Giovenale



figure 17



figure 21



figure 18



figure 22



figure 19



figure 23



figure 20

figure 17 – Archaic houses in tufa blocks and sewer drain of the so-called Borgo at San Giovenale; figure 18 – Remains of aristocratic archaic multi-roomed house with well and sewer drain of zone F at San Giovenale; figure 19 – Banquet room of an aristocratic multi-roomed house of zone F at San Giovenale; figure 20 – Archaic monumental complex of zone F at Acquarossa; figure 21 – Archaic monumental complex of zone F at Acquarossa; figure 22 – Recent excavations of archaic building structures in Loc. Campetti at Veii; figure 23 – Late archaic rectangular house fundaments at Marzabotto

have shown that the cities of the Etruscan motherland, largely created through absorption and synoikismos of earlier Villanovan settlements around the eighth-seventh centuries B.C., tended to follow the typical so-called old Mediterranean plan with an irregular, not orthogonal, street system. Especially from the second quarter and the middle of the sixth century, however, new urban planning trends can be identified in the area of complex F at Acquarossa, and above all in the great necropoleis at Cerveteri and Orvieto, and also, to a lesser extent, in the rock necropoleis of Blera, San Giuliano, and San Giovenale. These innovations took the form of more rational utilization of space, stricter regulation, and a grid street plan layout, and have to be understood as a reflection of new tendencies towards a greater *isonomia* in Etruscan society. However, the necropoleis at Cerveteri and Orvieto pre-date by at least half a century the foundation of the new “colonial” town at Marzabotto, which provides a virtually perfect expression of the new urbanistic principles. Since the cities of the Etruscan heartland mostly tended to undergo continuous development in the Archaic period, the new principles no doubt were applied mostly only to the layout of single districts or individual complexes. Even districts from the Hellenistic period, such as the one in Vetulonia with tabernae along a street, are not uniformly laid out in the so-called Hippodamos’s system. Recent excavations and especially geophysical research on the “acropolis”-plateau of Piazza d’Armi at Veii have given us a lot of new information about the urbanistic and architectural organization of this area. According to the excavators G. Bartoloni and F. Boitani, the regular street system, with a larger main street (width 4,40-4,95 m) and smaller right-angled crossing side streets (width 2,80 m), a square (30 x 35-40 m) with a big open oval cistern, several insulae, an oikos with roof terracottas connected with the main street by a side street (temple or residence or perhaps a building for ancestor cult ?) and another aristocratic building goes back to the late Orientalizing period, meaning the late seventh and the first decades of the sixth century B.C. Thus it is the oldest known example of a regular urban system in an Etruscan settlement and clearly preceding the quoted new necropoleis of Cerveteri and Orvieto. Geophysical research by the Fondazione Lerici on the Piano della Cività at Tarquinia suggests an approximately regular street system with a *decumanus maximus* and sewer drains for the Late Archaic period. These systematic investigations on a surface of 50 ha have shown that the western part of the plateau was more densely built on than the eastern one, and proved the existence of a series of both private and larger probably public buildings going back to the seventh and sixth centuries B.C. Less clear is the chronology of an orthogonal city plan at Vulci. However, the first thoroughgoing applications of the so-called Hippodamos’s system, with intersecting streets (*plateiai* and *stenopoi*) on a grid plan and regular insulae of housing, date from no earlier than the Late Archaic period: typical instances are newly founded or “colonial” cities such as Marzabotto, Spina, and Forcello di Bagnolo San Vito (near Mantova) in northeast Italy, harbor towns such as Pyrgi, Regisvilla-Regae and probably also Gravisca on the southern coast of Etruria, as well as Doganella, sited inland from the mouth of the Albegna and identified by M. Michelucci with Kalousion. The prerequisite condition for these new developments, and for the new definition of the urban organism in itself during the sixth century B.C., was undoubtedly the formation and rise of a politically independent middle class. The new social stratum, probably founded on a census system and isonomy, had its own, quite different

requirements, which found clear expression in the egalitarian and levelling tendencies that can be seen in the building of both towns and necropoleis. Most of the old aristocratic sanctuaries on the acropolis, which largely consisted of rather simple, oikos-like temple structures with no fixed typology, were now given up, while the new urban sanctuaries were often situated within the area of the town itself. The maximum architectural effort was now devoted to the construction of new temples and public buildings, which are distinguished during the Late Archaic phase by particularly rich terracotta roof decoration. Examples of such new monumental temples, mostly (in accordance with Vitruvius and Varro) of the so-called Tuscan order, can be found at Veio (suburban temple of Portonaccio), Cerveteri (temples in Loc. S. Antonio, Vigna Parrocchiale and of Hera), Pyrgi (temple A), Vulci (big urban temple and suburban temple in Loc. Legnisisa), Orvieto (temple of Belvedere), Marzabotto (temple C on the acropolis and the recently excavated urban temple of Tinia) and also in the “grande Roma dei Tarquini” (temple of Capitoline Jupiter). The characteristic three-cella ground plan (or featuring a central cella flanked by two alae) appeared even earlier in domestic (Acquarossa) and tomb (Cerveteri and hinterland) architecture.

Marzabotto, built “ex novo” in the Late Archaic period on an important through route from Etruria into the Padana in the Apennine hills south of Bologna, provides the best known, and to date the most carefully investigated, example of a progressive “Hippodamian”



figure 24



figure 25

figure 24 – Late archaic rectangular house foundations and sewer drain at Marzabotto; figure 25 – Industrial buildings in the Porcareccia area of Populonia

urban plan and does not need to be discussed in detail here. The present state of research indicates that its urban plan was certainly not only the result of the disciplina etrusca, but was influenced above all by the innovative Greek planning models. As G. A. Mansuelli put it: “The plan of Marzabotto may well have been a compromise between the Etruscan doctrine which prescribed the intersection of cardinally orientated axes, and the experience of Greek urban planning.” As we already know, particularly in the Greek colonies of Magna Graecia (i.e., Metapontum, Poseidonia) and Sicily (i.e., Megara Hyblaea, Selinus) the regular urban layout of *strigae* predominated from the seventh and especially in the sixth centuries B.C. The relative uniformity of both dwellings (courtyard-houses) and tombs at Marzabotto points to a similar level of uniformity in social terms, i.e., a broad middle class or else a young “colonial society,” distributed among specific districts by trade or profession. The nearby fifth-century B.C. Etruscan city at

Casalecchio di Reno also revealed a grid plan, but with much simpler houses than at Marzabotto. Another city founded *ex novo* in the late sixth century B.C. and active until the fourth/third centuries B.C. was Spina, sited between the old course of the Po river and the Lake of Comacchio, and inhabited by a population which included a large portion of Greeks and Veneti too. In this instance the regular grid of streets was replaced to a large extent by navigable canals, as would be the case much later in Venice. The main settlement in Valle di Mezzano - there were other settled nuclei beside this - covered an area of some 6 ha and was surrounded by an agger 10-meter broad and fortified by a palisade. It was laid out on a grid plan. Stones with the groma cross were also found here at important roads. One stone with the inscription “*mi tular*” may possibly have marked off a public domain. The houses were built mainly from wood and *opus craticium* with lightly baked clay bricks; the same techniques were used for dwellings at Forcello di Bagnolo San Vito on the Mincio river near Mantova, where there was a 16 ha settlement of the fifth century B.C. structured in much the same way as Spina. The type of settlement, and also the necropoleis, with tombs made from simple wooden boxes but with lavish grave goods, point to a prosperous society of merchants and seafarers.

As of the fourth century B.C., most Etruscan cities, especially those newly founded, had a regular grid plan as evidenced, for example, by the cities of Ghiaccio Forte (in the hinterland of Vulci), Musarna (in the hinterland of Tarquinia) and Bolsena. The same is true in case of the new foundations and Latin-Roman colonies of the third/second centuries B.C. such as Volsinii novi near Bolsena, Ferentium-Ferento near Acquarossa, Falerii novi near Civita Castellana, and Cosa near Orbetello.

Development of Etruscan Urban Planning and Architecture: Selected Examples

The Villanovan settlements, which partly can be classified as “protourban” (such as the one at the Calvario locality on the Monterozzi hill at Tarquinia, which included twenty-five huts of different ground plan and size) were originally scattered in layouts with no regard to any regular plan and quite clearly no strict functional distinction between public, sacred, and private space and buildings, while the “*oikos*” was the primary status symbol of



figure 26



figure 27

figure 26 – Industrial building in the Porcareccia area of Populonia; figure 27 – Tabernae along a paved road of the Hellenistic period at Vetulonia

the head of the family. From the mid-eighth century B.C., however, a process of *synoikismos* led to the formation of larger settlements in what was to be a typical pattern for the area of Etruria and Latium. This process can be traced very clearly at Tarquinia and Veii, where there were originally ten Villanovan villages on a surface area of 190 ha. The main necropoleis became equally concentrated at the same time, typically on the Monterozzi hill in the case of Tarquinia and on the Banditaccia and Monte Abatone plain in the case of Cerveteri. A parallel monumentalization of tomb architecture took place, manifesting itself in large tumuli and chamber tombs. During the seventh and sixth centuries B.C. the process of urbanization was completed, with the functions of public-political, religious, and private domains clearly distinguished, the urban area demarcated by a wall or earthen rampart (*agger*) and the replacement of huts with mostly rectangular, more solid structures, often covered and decorated by roof tiles and terracottas (documented from the third quarter of the seventh century B.C.). On the other hand at Chiusi a polycentric model with several small settlements and necropoleis was predominating until the sixth century B.C.

Of extreme importance were the excavations of Piano di Civita at Tarquinia by M. Bonghi Jovino during the last two decades which have shown that massive timber-framed buildings were constructed along a 3 meter-broad street as early as the first half of the seventh century B.C. Prominent among these structures was a “megaron” or “altare/tempio” surrounded by an enclosing wall with a political and perhaps also sacred function, attested to by the “buried” bronze implements (shield, trumpet-lituus, axe) and their powerful symbolism. The origin of this “complesso sacro-istituzionale” or “area sacra / complesso monumentale” (area alpha, edificio beta) goes back even to the latest Bronze age and early Iron age. We are dealing here with the oldest complex in Etruria with a clearly not private but obviously political-religious function showing that we have to revise at least partially our idea of Villanovan (protourban) communities and society. This extremely instructive complex was also subject to several later changes.

The site of Murlo/Poggio Civitate southwest of Siena has been excavated by American archaeologists since the later 1960s. It is not an urban organism we are dealing with here but a *potentato signorile*, that is, an aristocratic residence or *palazzo/regia* dominating a large area of inner northern Etruria between Roselle, Volterra, Arezzo, and Chiusi. We can distinguish two phases, the middle orientalizing period (middle of the seventh century B.C.) and the late orientalizing period (first quarter of the sixth century B.C.). The three known monumental buildings, a residential structure, a workshop, and a large, tri-partite building that perhaps served a religious function, were destroyed by fire towards the end of the seventh century B.C. and represent actually the earliest example of a grouping of related monumental and highly visible buildings in Etruria which undoubtedly were not of simple private function. All three buildings displayed remarkably similar forms of terracotta roof decoration. The tri-partite building is considerably older than buildings in Acquarossa with a similar groundplan. The unique workshop consists of a large open hall (about 300 square meters) with several rows of wooden columns. It was used by craftsmen producing and working with bronzes, bones, ivories, textiles, ceramics and architectural terracottas. Soon after their violent destruction, these older buildings were replaced by the construction of a large new “palace” characterized by an almost square ground plan (60 x 60m) with four

mostly porticoed wings and a rich decoration of roof terracottas, including the so-called “Murlo Cowboys” who most probably represented images of aristocratic ancestors, the “*imagines maiorum*.” This Archaic isolated and much discussed “regia,” which belonged to the largest buildings of its time in Italy and the whole Mediterranean and undoubtedly also had some religious function, was ritually dismantled and “buried” during the third quarter of the sixth century B.C. and never rebuilt. This circumstance is clear evidence of the growing power of the main Etruscan urban centres, in this particular case of Chiusi.

The Swedish excavations of the 1960s and 70s in San Giovenale brought to light the massive remains of houses built in blocks of tufa (not only the foundations but also the walls) and dating to the late seventh and sixth centuries B.C. Two “urban districts” could be distinguished by urbanistic, typological, and social criteria: one, zone F, was an aristocratic quarter on a grid plan with three impressive, multi-roomed houses including a banqueting room and a courtyard; the other, the so-called Borgo, was a middle class district laid out on a terraced slope with simpler, more tightly-packed houses, narrow streets without regular plan, sewer drains, and wells.

Generally speaking, the Etruscan cities of the seventh and sixth centuries B.C. were not as yet organized completely on an orthogonal plan, as is indicated by the more or less haphazard distribution of buildings in several groups at such centers as Acquarossa and San Giovenale. Only in a few more monumental districts and complexes which may clearly be interpreted as seats of political and religious power, such as the “acropolis” area of Piazza d’Armi at Veii, the zone F at Acquarossa, and the aristocratic quarter F at San Giovenale, can innovative and more progressive tendencies in urban planning be made out.

The Swedish excavations of the late 1960s and 70s in the medium-sized city of Acquarossa (barely 1 ha of the total site area of 32 ha was systematically excavated) revealed sixteen such groups of buildings, dating from the early orientalizing until the late archaic period and totalling some seventy “oikos-like longhouses” and more innovative “broad-houses.” Often these were arranged around a courtyard with a well and had surface areas of up to 120 sqm at ground level. They were built either of tufa blocks, or else timber-framed using clay bricks or *opus craticium*. Beginning with the third quarter of the seventh century B.C. their roofs were covered with terracotta tiles and could be decorated with painted architectural terracottas. From among all the buildings a monumental complex in zone F clearly stands out. It was built in two phases (end of seventh century and second quarter of sixth century B.C.). The later building is characterized by two wings with a portico in front arranged around a courtyard. The tripartite nucleus of the east wing also includes a banquet room. The roofs of this complex were decorated by rich figural (partly mythological) terracotta antefixes and friezes whose iconography can be interpreted as a typical expression of an *ideologia aristocratica*. A small oikos-like temple is situated south of the *palazzo/regia*, separated by a street. This kind of “palazzo” points unequivocally to the existence of a still extremely hierarchically structured aristocratic social order, based on achievements and virtues; such indications are reflected in some of the more or less contemporary rock tomb façades in southern Etruria, notably in the house-formed three-chambered tomb fronted by a portico, with impressive stone sculptures on the roof in Loc. Pian di Mola at Tuscania.

Since the 1980s G. Camporeale has led an archaeological excavation at a “mining



figure 28



figure 32



figure 29



figure 33



figure 30



figure 34



figure 31

figure 28 – “Complesso sacro-istituzionale” (area alpha, building beta) on the Piano della Civita at Tarquinia; figure 29 – Detail of building beta with technique a pilastri on the Piano della Civita at Tarquinia; figure 30 – Monumental urban temple of Ara della Regina on the Piano della Civita at Tarquinia; figure 31 – Urban temple = tempio grande along the later Roman decumanus maximus at Vulci; figure 32 – Late archaic urban temple in Loc. S. Antonio at Cerveteri; figure 33 – Recently excavated Late Archaic urban temple dedicated to Tinia at Marzabotto; figure 34 – Archaic suburban sanctuary of Portonaccio at Veii



figure 35



figure 38



figure 36



figure 39



figure 37



figure 40

figure 35 – Archaic wall of the acropolis of Vetulonia; figure 36 – Remains of wall at Poggio Colla/Vicchio in Mugello; figure 37 – Remains of fortification in tufa blocks at Luni sul Mignone; figure 38 – Remains of city wall in tufa blocks at Sutri; figure 39 – City wall of Fiesole; figure 40 – Seaside wall in opus polygonalis at Orbetello; figure 41 – Northern city gate of Tarquinia



figure 41



figure 42



figure 45



figure 43



figure 46



figure 44



figure 47

figure 42 – Remains of city wall in *opus quadratum* with an arch at Tarquinia; figure 43 – Etruscan road near the so-called Borgo at San Giovenale; figure 44 – Etruscan road = Cavone at Norchia; figure 45 – Via Clodia on the plateau of Norchia; figure 46 – Cerveteri, Banditaccia necropolis: area with orthogonal street system flanked by cube tombs of sixth century B.C.; figure 47 – Orvieto, Crocifisso del Tufo necropolis: orthogonal street system with cube tombs built in tufa blocks of sixth century B.C.

settlement” on Lake Accesa below Massa Marittima in the hinterland of Vetulonia, rich in mineral deposits. The site, which flourished from the end of the seventh to the end of the sixth century B.C., slopes down to the lake with four main groups of ten or so houses each (area A, B, C and D). The houses themselves had mostly two or three rooms, entered through a *vestibulum* of clay bricks. Each *contrada* possessed its own small necropolis. The tombs here are not clearly separated from the living areas, which is a major exception in Etruria. Although no uniform urban planning can be detected there are first signs of regulation. Interestingly, in contrast to most centers in southern Etruria, there were no marked social distinctions among the inhabitants, obviously mostly miners, of this settlement, as is made clear by the relatively uniform dwellings without any terracotta roof decoration.

In Roselle, one of the few cities in northern Etruria with favorable conditions for excavation, archaeological research carried out since the late 1950s has brought to light the remains of Etruscan clay buildings dating from the mid-seventh century B.C. in the “city center,” including a structure with an inner circular and an outer rectangular plan, and two *recinti* that no doubt served some political and/or religious purpose. In the same central area, much later covered over by the Roman Forum, was situated a rectangular two-room building dating from the sixth century B.C. Together with the construction of a first circular wall, using clay bricks on a masonry base, these remains point to an urbanization at Roselle already in the Orientalizing period. The older wall represents probably the oldest example of a city wall in Etruria. Concerning the development of Etruscan house architecture, the so-called *Casa dell’Impluvium*, excavated and published by L. Donati, is particularly instructive. It is located on the slope of the northern city hill and was built between the late seventh and the sixth centuries B.C. This large aristocratic house is characterized by a multi-room plan including for the first time in Etruria a kind of atrium with *impluvium*. Generally we can say that the northern city hill of Roselle was designated mainly for private buildings and the southern hill mainly for industrial and craft buildings (*quartiere artigianale*) whereas the valley between the two hills was occupied since the Orientalizing period by the public-political and religious center.

In the case of some monumental buildings decorated with terracottas, it is not always easy, especially in the Orientalizing period, to distinguish clearly between “temple” and “aristocratic residence” (including perhaps some religious cult functions). The *oikos* of Piazza d’Armi at Veii (15.35 x 8.07 m) with two pillars, gabled roof, and architectural terracottas dating from two different phases, and with a small rectangular annex, is a striking example of this problem: “tempio ad oikos” (reminiscent in a way of the Prinias temple) or “residenza di un gruppo gentilizio eminente con annesso culto?” Another problematic case is represented by the *oikos*-like building in a dominant position on the plateau of Poggio Buco, with a paved square in front decorated with terracotta friezes and acroteria dating back to two different phases (end of seventh/beginning of sixth centuries B.C. and ca. 560 B.C.). According to G. Bartoloni it was probably a public building with some cultic function.

During the Late Archaic period large buildings with a clear public function also appeared in Etruria as a result of changes in the Etruscan political system and society. This is documented, for example, in the central urban area, the so-called *zona monumentale*, of Cerveteri in Loc. Vigna Parrocchiale, characterized by a regular urban plan and by an oval structure of at least 35 m in length and 15m in width (from around 480-70 B.C.) built near

a new temple with three cellae (18 x 25 m) over older structures (among them a large rectangular structure with a central courtyard and architectural terracotta decorations interpreted by M. Cristofani as a “regal residence” and an expression of a previous power now superseded). The new building, similar to a Greek *ekklesiasterion*, was probably used for assemblies and performances related to the public life of the community. Possible influences from the poleis in Magna Graecia (i.e., the *ekklesiasterion* at Metapontum) should be taken into consideration. The two new monumental buildings at Cerveteri dating from the Late Archaic period were positioned around an open space, similar to a “piazza” or “agora,” to form part of a larger complex which has to be seen not only as an example of monumentalization of physical space, but also of symbolic political space, representing perhaps a kind of “forum.”

Public squares according to the Greek agora and the Roman forum are almost unknown in Etruria, even in the case of the best known and excavated Etruscan city, Marzabotto. This may arise, at least in part, from the fact that most of the Etruscan cities have been excavated only in small parts. The square with the big open cistern of Piazza d’Armi at Veii of the Late Orientalizing period, the “piazza” of Cerveteri-Vigna Parrocchiale, and the much later large square at Musarna of the Hellenistic period are exceptions.



figure 48



figure 49

figure 48 – San Giuliano: rectangular square surrounded by rock cube tombs of sixth century B.C.; figure 49 – San Giuliano: rectangular square surrounded by rock cube tombs of sixth century B.C.

In some Etruscan cities we are able to distinguish clearly so-called industrial areas or buildings, particularly for metallurgic work or for production of ceramics. Cerveteri (Vigna Parrocchiale), Vulci, Castellina del Marangone, Populonia, Marzabotto and later San Giuliano, Vicchio/Podere Funghi and Cetamura offer good examples.

Our knowledge of private house architecture, particularly of the Orientalizing and Archaic periods, has improved considerably thanks to several recent excavations, namely in Veii in Loc. Piazza d’Armi, Campetti, Macchiagrande-Vignacce and Comunita including large tripartite “broadhouses.” Among other discoveries should be mentioned three buildings in *opus craticium* at Sovana. During the seventh and sixth centuries B.C. the definite transition from the hut to the rectangular house, from transitory to more solid structures and materials including new building techniques (roof terracottas, *opus craticium*, clay bricks, walls with stone pillars) took place. The development from the

“longhouse” to the “broadhouse” shows possible influences from the Greek Prostas- and Pastashouse.

The existence and type of city walls in Etruria depend much on the particular geographical and geological situation. Many of the cities in southern Etruria occupied sites on high-lying rock plateaus (i.e., Orvieto, Cerveteri, San Giuliano, San Giovenale), given a large measure of natural protection by deep tufa canyons, and therefore had need only of short stretches of defensive walls. On the other hand, the hill towns in northern and inland Etruria (i.e., Roselle, Vetulonia, Populonia, Volterra,



figure 50

figure 50 – *Tuscania, Pian di Mola: reconstruction of a monumental rock tomb in house shape with a palace-like façade (second quarter of sixth century B.C.)*

Cortona, Perugia, Chiusi) were mostly ringed by a circuit of walls, built from materials determined by local resources and in different techniques. The earliest walls dating back to the seventh century B.C. in Roselle (clay brick walls on a masonry base), Tarquinia, and Castellina del Marangone are a clear sign of urbanization already in the Orientalizing period. In the sixth century B.C. notable defense systems included the mighty circuits at Vetulonia and Roselle (3.270 km-long limestone walls in *opus pseudo-polygonalis* with at least seven city gates and one postern), as well as the acropolis walls of Populonia and Veii-Piazza d’Armi, while the fifth century saw building at Tarquinia, Veii (over 6km in length with at least ten gates and a broad earthen rampart in the northwest sector, isodomic masonry in *opus quadratum*), Falerii veteres, and Capena. In Genova too, in the district of San Silvestro, remains of the fortification of an Etruscan *oppidum* with a double masonry shell have come to light, while remains of a clay brick wall have been found on the site of the Etruscan-dominated town of Aleria on the eastern coast of Corsica. In the fourth century B.C., during the period when the Etruscan cities were increasingly threatened by Rome and partly by the Gauls, and in part during the third century B.C. too, defensive walls were rebuilt and strengthened at Tarquinia (some 8 km long in *opus quadratum*), Roselle, Vetulonia, Populonia, and Volterra (7.283 km in length, gates with inner chambers) while entirely new circuits were erected at Caere, Vulci, Orbetello, Cortona, Fiesole, Perugia (almost 3 km long with at least eleven gates), Bolsena, and Falerii novi. From the point of view of construction technique, Arezzo proved an exception with its early Hellenistic city wall in clay bricks. Only in exceptional cases were the walls equipped with towers, as in one sector at Populonia and at Falerii Novi (third century B.C.). Especially in southern Etruria, some sections were fortified by ditches and earthen ramparts (*agger*). The walls of the Latin colonies such as Cosa, Pyrgi, and Saturnia were mostly built in the characteristic *opus polygonalis*. Monumental stone-built gate complexes with arches using dressed wedge-shaped stones and sculptural decorations were only introduced in the Hellenistic period, as in Volterra (Porta all’Arco), Perugia (Porta Marzia, Arco d’Augusto), and Falerii Novi (Porta Giove), and were certainly influenced by Greek and Magna Graecian models, such as the famous fourth century B.C. Porta Rosa in Velia. In the pre-Hellenistic period gates were

very likely often built from timber and sometimes provided with inner chambers.

Etruscan cities usually possessed paved streets and sewers, as has been documented by the particularly well-preserved network at Marzabotto, but also by the earlier remains found in the so-called Borgo at San Giovenale. On the hilltop plateaus of many cities, mostly in Southern Etruria, underground cuniculi have survived which functioned as drains. Big, partly open cisterns are documented, for example, in Veii-Piazza d'Armi, Cerveteri-Vigna Parrocchiale, and Castellina del Marangone. Wells are particularly well preserved in Orvieto and Perugia. The Etruscans' reputation as excellent hydraulic engineers is attested to both by the frequent mention of ancient writers and by impressive works such as the Pozzo Sorbello in Perugia, the Ponte Sodo at Veii, and the emissaria or outlet built at Lake Albano and Nemi.

Our knowledge concerning the process of urbanization in the Etruria padana has also improved considerably. In the most important center, namely Felsina-Bologna, the "princeps Etruriae" of the Etruria padana, the conditions for systematic excavations and researches are less favorable than elsewhere because of the many later strata of occupation. Nonetheless, it has been possible to trace initially a four-part Villanovan phase with scattered hut settlements (remains of some 500 huts), followed as early as the advanced Orientalizing and the Archaic period by unequivocal signs of *synoikismos*, a hierarchically-structured social order with magistrates and urbanization. Clear pointers to this are the monumental additions and alterations to important streets of necropoleis, remains of houses and streets, kilns and votive offerings, proto-Felsina stelae and the ritual complex uncovered in Via Fondazza. The latter has two large profiled stone cylinders which were perhaps more likely votive monuments than altars and whose decorations in relief with plant motifs in Late Orientalizing style testify to a considerable level of architectural culture. Two further cippi from Rubiera near Reggio Emilia, with relief decorations from the Late Orientalizing period and inscriptions referring to the magistrature, attest to a similar process of urbanization in western Emilia too, and a socio-political system that Mario Torelli has defined as a "repubblica aristocratica." Another site worthy of note among further Etruscan settlements in western Emilia is Sant'Ilario d'Enza. In Romagna at Verucchio, in the Apennines inland from Rimini, the settlement at Pian del Monte della Baldissera consisted of stone-built houses. The aristocratic tombs found there had very rich, sometimes almost unique grave goods, such as ornamented wooden furniture, and attest to a process of urbanization which also can be detected from as early as the seventh century B.C. in Romagna.

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