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An Etruscan Urban Agenda

The Weaving Together of Traditions

ABSTRACT This article presents the results of the weaving together of two traditions. The first is the cultural history of Etruscan urbanism which has been widely presented in numerous accounts and is not offered in detail here. The second is the regional-survey tradition of settlement archaeology which has not previously been synthesized as one continuous historical process from the late second millennium BC into the first millennium BC. The combined result is a stronger balanced study that will, in time, allow comparison of Etruscan urbanism not only with the better known cases of urbanism in the Mediterranean, but with others in the Old and New World. From this combination of intellectual traditions, it is apparent that some features of Etruscan urbanism are distinctive and others exhibit important potential comparisons with other urban societies.

KEYWORDS Etruscan; historiography; community; descent group; primate; demography; delicate.

Introduction

The Etruscans were the communities which flourished in the western (Tyrrhenian) area of central Italy during the first millennium BC (Fig. 7.1). Their achievements have remained relatively forgotten in global studies of urbanism, compared with their Greek and Latin contemporaries. This article makes the case for their greater prominence as one of the main contributors to European urbanism. Their relative absence from the urban debate has a number of causes, but two of the most important are the research tradition of their study and the fact that they were absorbed into the Roman world at the end of the first millennium BC. The Roman authors wrote histories of the importance of Roman urbanism and culture and generally underplayed the importance of their earlier rivals. For instance, the coverage of the Etruscan cities by Livy generally reflected political and especially military interaction, not a complete coverage of the full nature of Etruscan urbanism (Fig. 7.2). The cities he emphasized were those geographically closest to Rome, namely Veii and those in the Faliscan territory, which were their greatest political rivals.

Forty years ago Colin Renfrew published a provocative essay entitled 'The Great Tradition versus the Great Divide: Archaeology as Anthropology', the written version of the address he had given at the Archaeological Institute of America Centenary Celebrations the previous year (Renfrew 1980). In that address, he took care to mention the seminal work by George Dennis of 1848, *Cities and Cemeteries of Etruria*, which happens to be the specific topic of this paper's consideration of urbanism. His argument was that the Great Tradition of Classical Archaeology, of which Etruscan studies have been a major part, had much to offer as a systematization of cultural knowledge and accumulation of data, but also much to gain from a sense of problematization and drawing on other disciplines, notably science and quantified approaches. The study of Etruscan urbanism has much to gain from crossing the Great Divide between the accumulation of cultural knowledge and an interdisciplinary understanding of the underlying causes and development of urbanism in a comparative framework. This paper sets out the case for promoting the crossing of this great divide, by taking strength from both traditions. The paper will nevertheless concentrate on the current importance of quantification and landscape, and the future potential contribution of science, rather than engaging in either a cultural history, which has already been achieved by Etruscan specialists, or a developed

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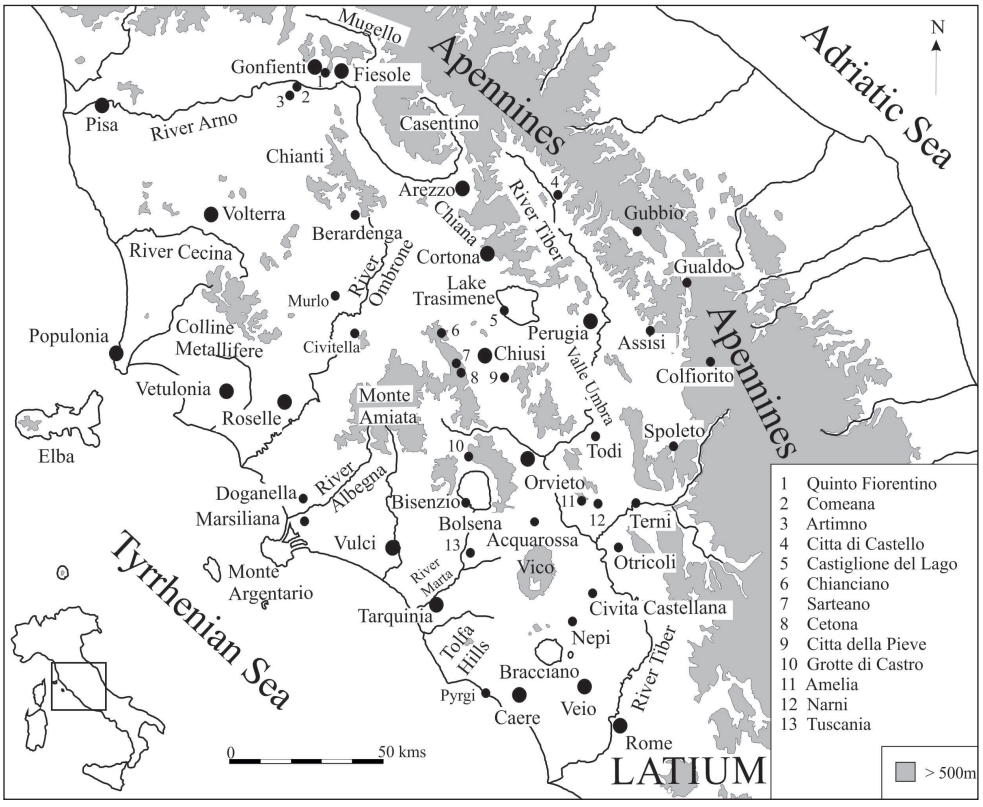

Figure 7.1. Map of Etruria showing principal places mentioned in the text. Created by author.

comparative framework, which has taken on a new momentum in recent years (Carballo and Feinman 2016; Drennan, Berrey, and Peterson 2015; Emberling 2015; Fernández-Götz and Krausse 2016; Fletcher 1995; 2012; Gyucha 2019; Jennings 2016; Kowalewski 2020; Scott 2017; Smith, A. T. 2003; M. E. Smith 2011; 2012; M. L. Smith 2003; 2014; Wright 2018; Yoffee 2015). It aims to provide the building blocks for the inclusion of Etruscan urbanism in these comparative studies, an achievement that has so far not yet been realized. Indeed it is notable how few comparative studies include the Etruscan example.[1]

The scholarship of Etruscan urbanism is coming of age in achieving this goal and it is critical to outline some of the personalized historiography of this process. For a long time, the study of urbanism was one of cultural performance, the strength of the Grand Tradition, most elegantly proposed, in the opinion of this author, by Luisa Banti (1960), who defined the distinctiveness of Etruscan urbanism in terms of the cultural individuality of the cities. This was a state of knowledge based substantially on cemeteries which had produced distinctive material, both local and exotic. From this, a rich differential pattern of Etruscan urban life was constructed inferred from death, and, to a certain extent, also from the excavation of some important sanctuaries. The dataset began to change first in the 1950s and 1960s, but more convincingly in the 1980s and 1990s with the inclusion of Etruria in the practice of surface survey in the Mediterranean. At this same time, some first attempts were made to draw on part of these new rural datasets, but it is only much more recently that new syntheses have been gathered together. Urban excavation has been slower to take off, with the incomplete excuse that many Etruscan cities were covered by later settlement. Rural settlement, at one stage even less studied below the surface of the soil, now has a number of researched examples which show the promise of this approach. Steps are also being taken to apply, albeit hesitatingly, normal science (*sensu* Kuhn 1970) to urban life. Animal bones are now more frequently collected as part of the main research strategy, but systematic large-scale sampling of sediments for carbonized seeds, phytoliths, and micromorphology remains much rarer. The deployment of the rich osteological record from funerary remains is only slowly being subjected to isotopic and ancient DNA analysis. Nevertheless, the time is now ripe to provide new syntheses that draw a coherent linkage of the key elements of Etruscan political and social life: the genealogies, both biological and fictive, of the descent groups from the tombs; the nature of community action read from the nucleated centres; the density and identity of the rural population.

1 For one exception, see Hansen 2000.

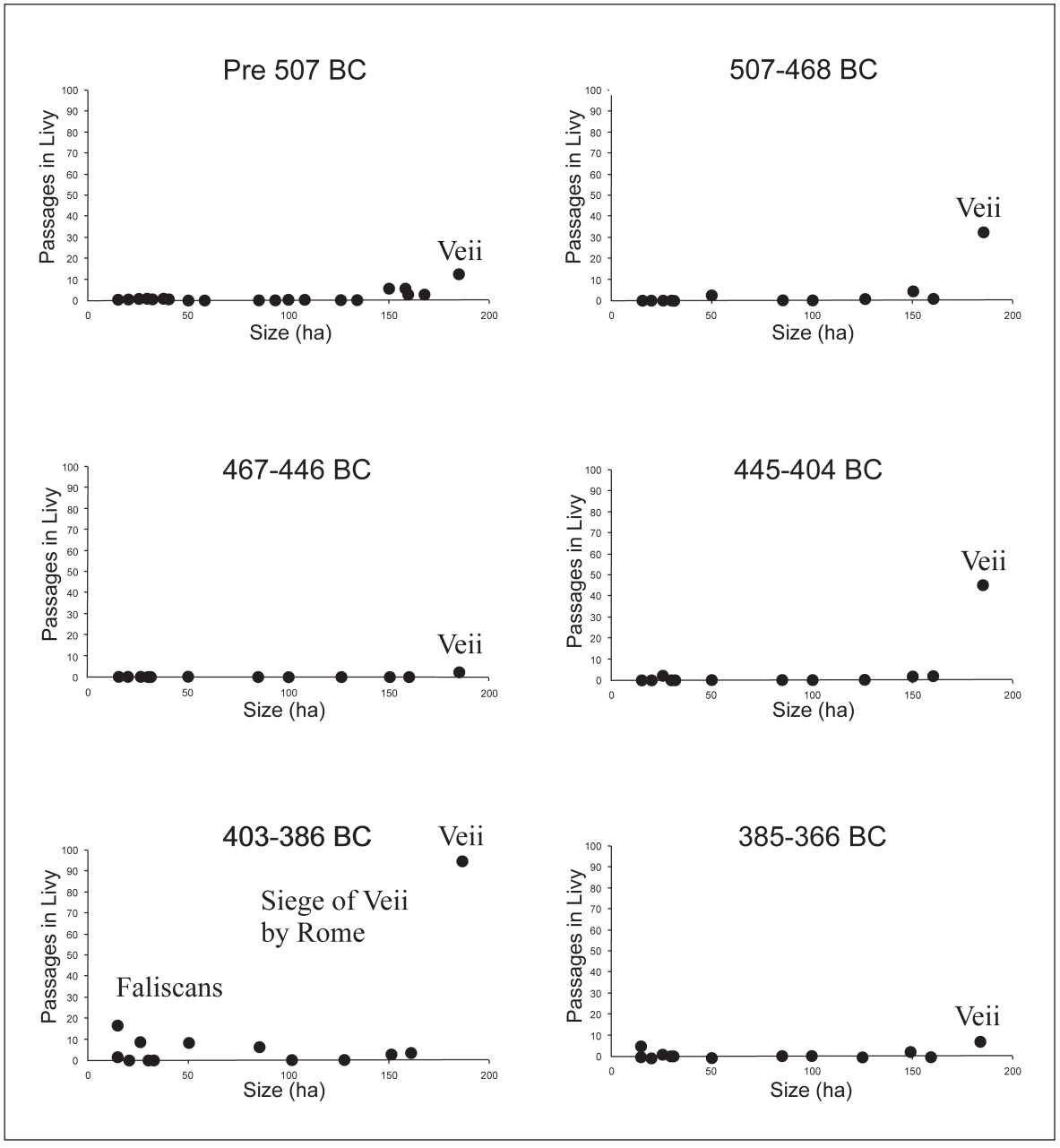

Figure 7.2. Comparison of frequency of references to Etruscan and Faliscan cities by Livy with their estimated size. Created by author.

The Broader European Context

The first millennium BC was a major period of transition in Mediterranean Europe. Indeed, the claim has controversially been made by scholars outside archaeology and history that the first millennium BC was an axial age at a Eurasian scale (Jaspers 1953). What is certain is that at the beginning of the millennium, urbanism was a phenomenon only known in the eastern reaches of the Mediterranean, where political power was still feeling the effects of the apparent collapse at the end of the Bronze Age. At the end of the millennium, urbanism had reached all parts of the Mediterranean (Sherratt and Sherratt 1993). Etruria played a major role in the transmission of this process. Yet this urbanism was highly varied. The received view is that urbanism was a stable phenomenon revolving around long-standing urban centres with long material and ideological histories, of which the best known are power places such as Athens (Greco and others 2011; 2014a; 2014b; 2015; Greco, Longo, and Monaco 2015; Morris 1987; Papadopoulos and Smithson 2017; Van Andel and Runnels 1987), Corinth (Sanders and others 2018),

and Rome (Fulminante 2014). The pattern is, in fact, more complex, and Etruria provides a good elucidation of this complexity.

Another different form of power affected the more upland zones of the Mediterranean (e.g. Grau Mira 2012) where alternative types of complex networks existed as a resistant counterculture to the lowlands. In the uplands of Italy these were normally accredited to peoples of other identities, such as Ligurians (Binder, Delestre, and Pergola 2008; De Marinis and Spadea 2004), Umbrians (Stoddart and Redhouse 2014), Picenes (Naso 2000), Samnites (Bispham 2007; Richardson 2013; Scopacasa 2015), and Sabines (Nicosia and Bettini 2009; Verga 2011), and took the form of smaller nucleated centres and/or hill forts and sanctuaries rather than the dense urban forms of the western coastal areas. A further delicate type of urbanism was located in temperate Europe, particularly in that zone which stretched from the Alpenvorland of Bavaria and Baden-Württemberg (Stoddart 2017) across the Rhine into north-eastern France. If one extends this survey to other parts of Europe, a mosaic of different urbanisms can be detected where the degree of stability varied considerably from region to region. Comparisons of size and other features can be made between the Heuneburg and Athens, between Manching and Rome (Winger 2017); however, what distinguishes the Mediterranean examples (Athens and Rome) is their relative stability, a condition that applies to many prominent examples of Etruscan cities. Within Etruria, there was the same range of urban form, from the stable primate centres to the unstable forms on the frontier. In the internal frontiers, these tended to be smaller nucleated centres. On the external frontiers, these tended to be small nucleated centres centrally located to their valleys, hill forts, and sanctuaries on the uplands.

The Banti Model of Etruscan Urbanism

Banti's (1960) concept of Etruscan urbanism is expressed from the very beginning of her book with an outline of the boundaries of the civilization, the division into North and South Etruria, and a division of these into the territories of the individual cities. She conceived of the patterns of Etruscan urbanism as formed of the natural, cultural, and political. She made distinctions between the commercial south and the inland agricultural north. She noted the more packed south and the more distributed north. All these observations were prescient of the details uncovered by later research. Yet it is only more recently that the quantitative elements of Etruscan urbanism and detailed studies of landscape have begun to be uncovered, allowing future comparison with the major studies of state formation from Mesoamerica and Mesopotamia. This article sets out a partially achieved agenda (cf. Stoddart 2020; Stoddart and others 2020) for constructing a quantitative as well as anthropological account of Etruscan urbanism in parallel with the already elaborate account of the cultural development of Etruscan urbanism, based on material culture still largely derived from cemeteries.

The Great Tradition of Qualitative Etruscan Urbanism

The work of Luisa Banti has been outlined above as exemplifying the substantial achievements of the Great Tradition (*sensu* Renfrew) of Etruscan Urbanism. This is, of course, a much longer tradition that would be very difficult to summarize here, but it has been covered very substantially also in more recent times as cultural histories that analyse in considerable detail the material culture of funerary remains and the ritual monuments of Etruscan cities (Bell and Carpino 2016; Gliwitzky 2015; Haynes 2000; Marzullo 2017; 2018; Naso 2017; Riva 2010; Shipley 2017; Smith and Lulof 2017). A number of these explicitly cover the material culture of urbanism and, as urban excavation gathers strength, the spatial organization of such cities (Baglione and others 2017; Bagnasco Gianni, Garzulino, and Marzullo 2017; De Grummond 2020; De Grummond and Pieraccini 2016; Della Fina 2016; Lulof and Sepers 2017; Mansuelli 1979; Miller 2017; Tabolli and Cerasuolo 2019; Tuck 2016). Important dimensions, with enormous comparative value, from these cultural studies are the power of literacy (Stoddart and Whitley 1988; Stoddart 2020; Whitehouse 2020), the systematization of time (Pfiffig 1975; Stoddart 2007–2008), monetary value (Catalli 2017), and weights (145 g) (Maggiani 2017). All these were different from those of Rome, showing strong evidence for a different urban culture. Although the evidence derives from the latter part of the first millennium BC, these necessities of the scale of urban life probably had a deeper history. The development of the bipartite naming system, increasing the specificity of individual identity in an increasingly crowded urban society, certainly had a deeper history into at least the sixth century BC and derives from the detailed studies of funerary epigraphy (Cristofani 1981). This has powerful anthropological implications and once again permits cross-cultural comparison, as well as contrast, at a more detailed level.

The Recent Historiography of Quantitative Urbanism in Etruria

Etruscan urbanism was for a long period relegated to a junior position compared with the longer-term importance of Latin and subsequently Roman urbanism dating back to Numa Denis Fustel de Coulanges (1864). Renato Peroni (1969) was one of the first scholars to investigate the origins of Etruscan urbanism from an innovative, and theoretical, perspective that privileged the archaeological rather than textual evidence as the most important data, and began to move in a more quantitative direction. At this stage, the evidence from surface survey — later to be developed by many of his pupils, often members of the controversial Gruppo Archeologico Romano (GAR) — had not yet surfaced as a prominent source of information. He did, however, intelligently infer the economic underpinning of Etruscan urbanism from the available data of material culture, particularly metallurgy, to provide a convincing pattern of an intensifying economy that would lead to nucleated centres and the urban form. Shortly afterwards, Renfrew (1975) was the first to give an indication of the modelled spatial context of Etruscan urbanism not by using Greece, the subject of his main Mediterranean research, but by presenting Etruria as the exemplification of the Early State Module. Earlier studies (e.g. Pallottino 1937) had employed historical models of territory. The study of Renfrew was the first application of the Thiessen polygon to Etruscan urbanism, producing a pattern that suggested a broadly equal distribution of territorial space between the Etruscan cities. This not only potentially ran counter to Banti's model of varied Etruscan urbanism, but has also subsequently proved to be a simplification of Etruscan geopolitics, rectified by the application of another model developed by Renfrew, that of XTENT (Renfrew and Level 1979; Redhouse and Stoddart 2011).

Another simplification was presented by the one Etruscan city that has been very substantially excavated, namely that of Marzabotto, and this rich evidence, for a time, differentially affected some interpretations. For Marzabotto was a city of its specific time (founded only in the fifth century BC) and of its geopolitical position (on a frontier). In the absence of other evidence, Marzabotto contributed the major model of the structure of urbanism, synthesized in the hand of its excavator of the time, Guido Mansuelli. His exposition of Etruscan urbanism (Mansuelli 1979) showed a city laid out on a grid system, with carefully articulated quarters and positions for tombs and ritual authority. More recent research on earlier cities has shown these systematic features to be exceptional, born out of the substantial greenfield foundation in a mediating zone between the long-established city of Bologna and the main Etruscan cities approached through the Apennines to the south. Other late foundations in Etruria such as Musarna (Cinque, Broise, and Jolivet 2017) have similar features of regular layout, and there is evidence that some longer established cities such as Tarquinia were regularized at the same time.

The first quantitative analysis of Etruscan urbanism, at its peak period in the sixth century BC, was undertaken by Sheldon Judson and Pamela Hemphill (1981). These scholars, the first a geomorphologist, the second a field surveyor, systematically analysed the known Etruscan cities of the time in South Etruria and placed them in rank order of size. The approach was entirely empirical, contained an error of scale in the y-axis, and failed to deploy the long-established geographical techniques for analysing rank size in urban systems. The work, nevertheless, showed visually the highly centralized nature of important parts of Etruscan urbanism. A small number of large urban centres dominated a relatively larger number of smaller nucleated centres and, by implication, their accompanying rural settlement, less than one hectare in size and not included in the analysis.

The work of Francesco di Gennaro (1982; 1986) took the spatial analysis of the origins of Etruscan urbanism to another level. Di Gennaro, with other colleagues, mainly pupils of Peroni, organized a seminal conference in 1980, published in the key journal *Dialoghi di archeologia* (Atti 1982), to examine the spatial organization of settlement largely in central Italy. Interestingly, the influence on their approach appears to have come from Barry Cunliffe's (1971) work in Wessex, rather than Renfrew's brief 1975 illustration of Etruria. Territoriality and specifically the use of Thiessen polygons and site catchment were central to the methodology. Slightly later, Alessandro Guidi (1985) was the first to quantify urbanization in a systematic way for South Etruria in comparison with Latium vetus. For this he used rank size as his methodology, and introduced the concept of primate and log-normal settlement systems for the first time, but stopped short of applying the full statistical tests applied by Greg Johnson (1980; 1981), which led to a failure to appreciate fully the distinctions between the origins of the two urban systems. He also failed to develop this innovative approach by following up the potential implications explored by geographers. At much the very same time, di Gennaro (1986) extended the analysis in his *laurea* thesis to a detailed spatial analysis of South Etruria during the Late Bronze Age and First Iron Age, highlighting in spatial terms the dramatic tran-

sition between a village society of the Bronze Age and a nucleated society in the Early Iron Age. This work was based on meticulous, but targeted, surface survey concentrated on tuff outcrops, where earlier research of excavation and surface survey had suggested both Bronze Age and Iron Age communities were situated. In the same vein, a more theoretical approach was suggested, without much empirical detail, by Renfrew (1986), since he redeployed his Thiessen-polygon diagram in the exposition of peer-polity interaction. This, by implication, suggested that the Etruscan urban communities were a series of competing equals and that the interaction between them was a very important causative factor in their rapid development.

One issue with Etruscan urbanism has been, for many years, the substantially separate study of so-called proto-history (Final Bronze Age and Iron Age) from the Archaic and Classical periods. Much of the methodological innovation has developed amongst the pupils of Peroni studying proto-history, but they failed to study the full urban process, stopping short generally sometime in the eighth century BC. Simon Stoddart was one of the first to link these two phases with a quantitative methodology. His doctoral dissertation (Stoddart 1987), partly published in a number of syntheses (Stoddart 1989; 1990; Spivey and Stoddart 1990), applied XTENT analysis to the central Italian Etruscan landscape for the first time. The outcome was a more nuanced analysis of the territory of each urban centre modelled over time. This technique was based on the variable size of the urban centres, a factor not included in simple applications of Thiessen polygons. At the same time, he followed up the implications of the rank-size analysis of Judson and Hemphill (1981) and Guidi (1985), integrating the two chronological phases separated in their work. The application of the statistical tests of Johnson clearly showed two trajectories between (Roman) Latium vetus and South Etruria. The first was more integrated and log-normal. The second was more primate and competitive between the different urban systems. He also sought out inscriptions and distinctive material culture as measures of the spread of innovation and the processes of interaction. He was also the first to attempt a synthesis of the implication of rural rather than nucleated settlement. For this purpose, he brought North Etruria, the area north of the Albegna Valley, into the equation, a dataset, at that stage, more difficult to quantify because of a lower rate of application of surface survey and a lower density of rural settlement. Nevertheless, the combination of XTENT and preliminary studies of the distribution of rural settlement and material culture showed a complementary pattern to that of Banti, namely that each Etruscan city had a profoundly distinctive identity not only in their culture, that is a qualitative measure, but also in their urban trajectory measured by more quantitative means. Each city had a distinctive way in which the community thought about and managed its territory.

Whereas Stoddart was more involved in fieldwork in North Etruria and its margins, Marco Rendeli was much experienced in the fieldwork in South Etruria. Rendeli and Stoddart fruitfully discussed their synergetic interests, including the doctoral dissertation of Stoddart, when Rendeli was a visiting scholar in Magdalene College, Cambridge. One result, partly from this interaction, was Rendeli's important (1993) work concentrated on the Archaic period of southern Etruria, where his access to the surveys of Vulci, Cerveteri, and Tuscania was put to good use. The resultant work was the first systematic comparative account of these cities and their countryside at the peak of Etruscan urbanism, drawing on a number of geographical models to explain the patterns.

Understanding of the early nucleation processes of the Early Iron Age Villanovan cities had been largely inferred from indirect evidence until the last decade of the second millennium BC. Fortunately, a number of surface surveys were conducted at several of the most accessible of these urban centres (Veii, Vulci, and Cerveteri) in this last decade creating a new dataset. The important volume of Marco Pacciarelli (2000) drew these data together with funerary evidence and the patterning of non-nucleated settlement to create a comprehensive account of the Bronze Age and Early Iron Age, building on the work of di Gennaro. However, the work was once again limited to the period of proto-history, without following through the process into the apogee of Etruscan urbanism.

On the other side of the coin, Mario Torelli (2000), at almost precisely the same time, provided an account from the perspective of the classical archaeologist, offering a more qualitative than quantitative account, but nevertheless providing a considered linkage between the early foundations of Etruscan urbanism of prehistory with the text- and inscription-linked phases of the Archaic period. It is interesting to note that this account remains one of the rare occasions in which Etruscan urbanism was included in a comparative account of global urbanism. Etruria (unlike Greece and Rome) is more readily forgotten.

Alessandro Vanzetti (2004) contributed an update of Peroni, his mentor's 1969 account of the early phases of Etruscan urbanism, by comparison with the other regions of peninsular Italy. This synthe-

sis he situated in the historical context of the study of Etruscan urbanism. In this work, he succinctly and effectively summarized the achievements of the Peroni Roman school of proto-history, drawing particularly on the work of di Gennaro (2000), Mandolesi (1999), and Pacciarelli (1991).

Barbara Barbaro's (2010) work from the next generation of the Peroni intellectual genealogy has updated the detail of both cemeteries and settlements from the Final Bronze Age of southern Etruria. As the introduction of this volume makes clear, the work gives extra detail to the 1986 work of di Gennaro, drawing on all the discoveries in the intervening fifteen years. The work of Anna Maria Bietti Sestieri (2010) drew on all these developments in data and ideas to provide a comprehensive independent overview of both the Bronze Age and Iron Age of the entire peninsula. This work integrated material culture, settlement, and cemetery organization to provide a perspective for the precocious and distinctive activity of what was to become the regionalism of Etruria. Indeed, this volume highlights very effectively the origins of regionality in Italy, during this very important period, a point developed further below. The regionality of Etruria extended into other parts of peninsular Italy, providing a foundation for many of the patterns encountered even today.

The work of David Redhouse and Simon Stoddart (2011) applied the XTENT technique to the whole of Etruria so as to uncover the diversity of Etruscan territorial power. A number of improvements were made to earlier applications of XTENT (Stoddart 1987; 1990), centred on the full application of GIS functionality which permitted the application of the XTENT formula to the frictional surface provided by a digital elevation model. The outcome showed a new dimension of contrasts between different Etruscan cities, modelled over time from Villanovan foundations to full urbanization. This dynamic modelling explained very clearly the success of the major primate centres and the demise of smaller secondary centres in the frontier areas, since the primate centres exerted their power over the smaller centres (as discussed further below). It nevertheless remained a heuristic technique, since, in at least one case — the relationship between Roselle and Vetulonia — the model did not hold historically true, possibly because of the presence of the lagoonal morphology of the area intervening between the two cities, and the increasing importance of the Ombrone River, which led from Roselle into the internal parts of Etruria. However, apart from this one detail, the modelling of XTENT has provided a very clear basis for the divergent territories of the Etruscan landscape.

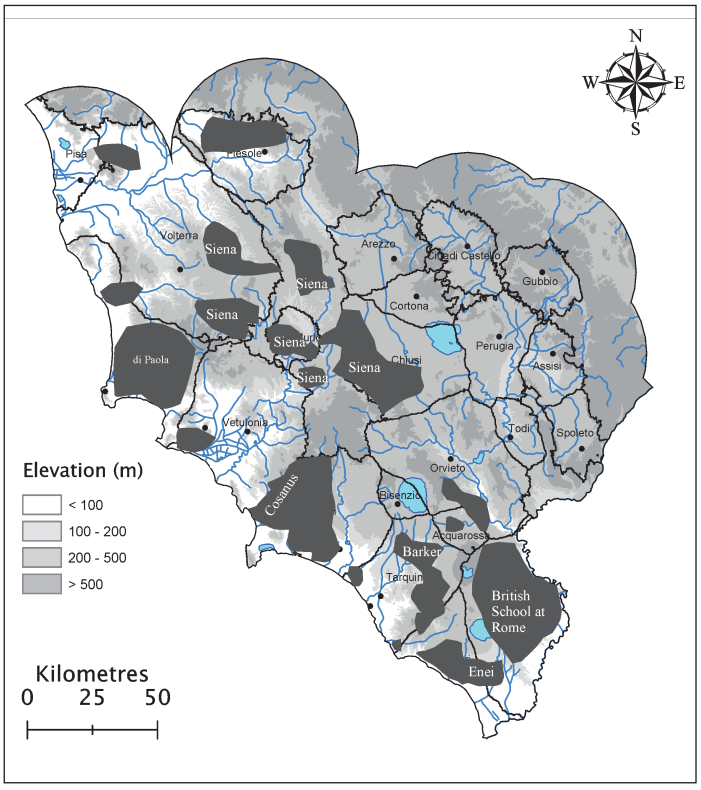

Figure 7.3. Location of the major regional surveys. Created by author.

The richness of the rural record of the Etruscans had been acknowledged for a considerable period, but only utilized on a few occasions (e.g. Cifani 2003; Di Paola 2018; Potter 1979; Rendeli 1993; Stoddart 1987; Zifferero 2017). Two sets of data can now be combined in one synthesis: the targeted sampling undertaken largely by the proto-history school of Rome (di Gennaro 1986; Barbaro 2010; Pacciarelli 2017) and a series of regional survey projects (e.g. Barker and Rasmussen 1988; Campana 2001; Enei 2001) which, although less effective in recovering the very specific topographic locations important for the Late Bronze Age and the Iron Age, have been very effective in recovering the rural settlement of the Orientalizing, Archaic, and Classical Etruscan periods found in open modern agricultural land. It is vital to point out the biases of these data rather than make a direct acceptance of these two records at face value. As archaeologists, we are very conscious of the complications of the formation of our record, and must avoid what have been recently coined 'number theatre' (Spiegelhalter 2019; 2020). Firstly, because the sampling by the Roman proto-history school of Final Bronze Age and Early Iron Age sites was based on systematic coverage of specific topographic locations, it has most probably uncovered one facet of the original pattern, but almost cer-

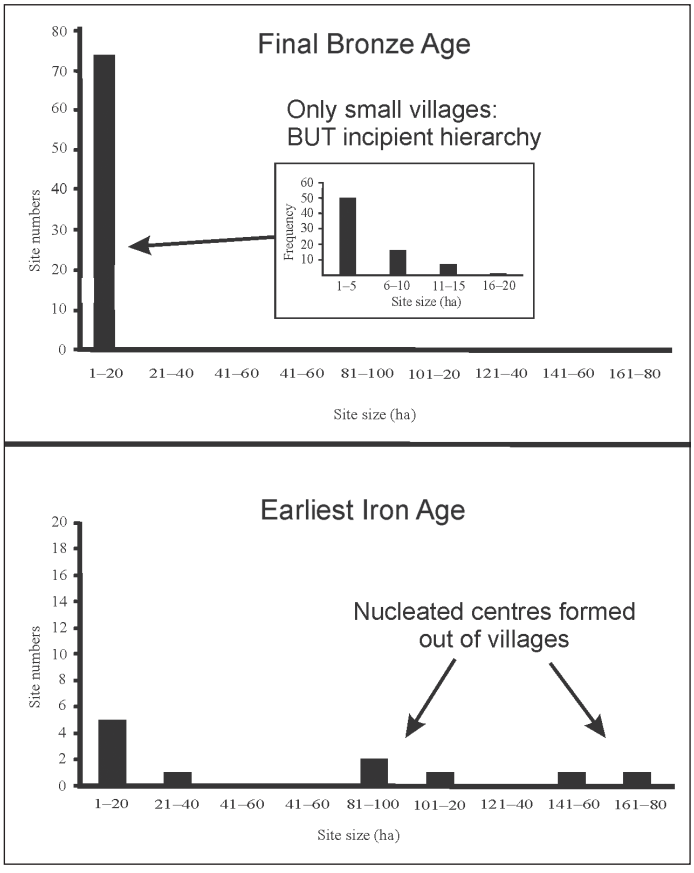

Figure 7.4. Contrasting frequencies of settlement size between the Final Bronze Age and the earliest Iron Age. The data of the Final Bronze Age are taken from Barbaro (2010), without consideration of the individual phases. She identified over 170 settlement sites of which seventy-four can be given a moderately reliable estimate of size. Created by author.

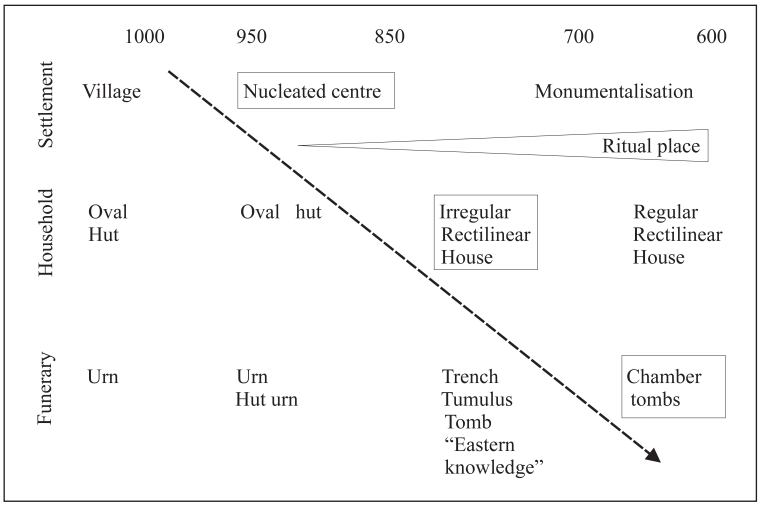

Figure 7.5. Staggered tipping points of transformation in different sectors of urbanism. Created by author.

tainly neglects the recovery of other sites that are not so well defined topographically. Secondly, the rural settlement of full Etruscan period has never been systematically recovered from the full territory of individual Etruscan cities as can be seen if the sample areas are set against the probable territories of those cities (Fig. 7.3). All archaeological data are samples of surviving samples, and the rural data of Etruria are no exception to this rule.

Very recently, a wider Leverhulme Trust project on the whole of the Mediterranean undertook the immense task of collating together all the rural-settlement data from the most reliable surface surveys in central Italy (Palmisano, Bevan, and Shennan 2017; 2018). The aim was to use relatively large datasets of sites and radiocarbon dates for comparison in modelling population change. Radiocarbon dates proved unreliable, because of the varying habits of use, but the changing size and numbers of archaeological sites proved more effective in demonstrating the substantial increase (and cyclical decrease) in population over the period of urbanization. Pollen data were added as a further proxy of the impact of demography in another synthesis that followed very shortly afterwards (Stoddart and others 2019). The special issue of *The Holocene* also included comparative data from other parts of the Mediterranean, allowing a comparative framework along similar methodological lines.

Stoddart (2020) has recently implemented an updated synthesis of a substantial part of these settlement datasets for the whole region of Etruria. The result shows the multiple trajectories of Etruscan and North Umbrian urbanism at the scale of the individual city state, running in parallel to the diversity illustrated by Banti some sixty years earlier. These results are considered in greater detail below, but the essential details are as follows. Large primate cities located on the coast towered over their rural settlement and contrasted with smaller urban centres in the north-east ranging over stepped hierarchies of secondary settlements. This broad trend concealed many variations, including the discovery that the large size of the urban centre did not necessarily correlate with a large territory and the territorial size depended very substantially on the geopolitical position of the urban centre. The analysis also uncovered the phenomenon of fragile urbanism lurking at the interstices on the frontier between the large primate centres. In these frontier areas, smaller, often ideologically flamboyant urban centres flourished for some generations and then disappeared eliminated by their larger neighbours. The logical progression of this integration has been even more recently taken a stage further by the full fusion of data on the power-

ful urban places with their encompassing rural settlement (Stoddart and others 2020). For this purpose, the data of Stoddart (2020) were combined with the data of Palmisano, Bevan, and Shennan (2017), enhanced by a further set of unpublished datasets from the Cecina Valley, Populonia, Tuscania, and Veii to produce a total dataset of 1894 settlement sites. This dataset still suffers from many of the sampling issues of differential research activity, problems of dating, and diverse methodologies of collection and preservation, but has for the first time developed a more comprehensive, self-critical account of the varied patterns of Etruscan urbanization. Further work on integrating cemeteries, industrial zones, and off-site data would be a further enhancement, although this would require even more attention to the differences in survey methodology.

This brief, but essential and reflexive, outline of the recent historiography of Etruscan urbanism has been presented to show how the study of this important civilization from an urban perspective has come of age. Even more importantly, it reveals the relevant strengths and weaknesses of the current evidence, a fundamental precursor to any comparative analysis. The current state of research has gathered together a rich combination of qualitative and quantitative data which can permit a developed comparison with better-known global cases of urbanization. Some important data for the complete understanding of Etruscan urbanism, particularly those drawn from systematic sampling for scientific analysis and the excavation of rural sites, are still very poorly understood, but these provide an agenda for the future. Nevertheless, the salient details of the character of Etruscan urbanism can now be outlined — the details that are the product of this combination of qualitative and quantitative investigation.

The Salient Features of Etruscan Urbanism

Some major implications of this quantitative analysis are as follows, bringing together the evidence of the first phase from the Roman protohistoric school for the Bronze Age/Iron Age with the regional surveys for the Archaic, Orientalizing, and Classical periods for the second phase.

The first phase was a remarkable transformation of a village society into a nucleated society (Fig. 7.4). As discussed above, Vanzetti (2004) has most recently confirmed a number of salient facts for South Etruria: the village landscape of the Final Bronze Age ranging in size from less than 1 ha to *c.* 15–20 ha; the relatively sudden transition to the

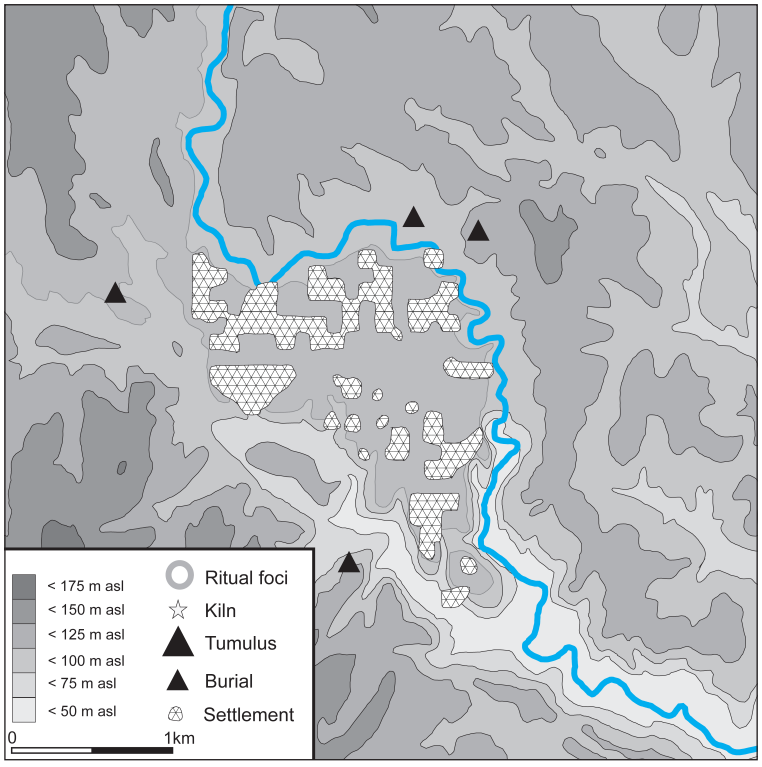

Figure 7.6. Veii in the ninth/eighth century BC. Created by author.

Iron Age in terms of settlement organization; and the subsequent occupation of large plateaux (of generally more than 80 ha) in the Iron Age. He also addressed the problems of continuity between the Bronze Age and the Iron Age, focusing on the best-known cases, such as that of Tarquinia. The relatively complicated topographic transition between the Bronze Age and the Iron Age at Tarquinia showed how the simpler models of a sudden switch between the two phases are not entirely effective. Like a number of other later Etruscan centres, Tarquinia was already partly occupied in the Bronze Age, and the complete transfer of population to the main plateau was not complete until well into the Iron Age. Barbaro (2010) has added subtlety to this picture by detecting micro-regions of higher density in the phase immediately prior to the nucleation of the First Iron Age. From this more detailed analysis, it became clear that the transition was more nuanced, as hierarchical pressure potentially built up in the final phases of the Bronze Age, so that what had appeared to be a series of matched egalitarian villages, in fact had one village which was emerging at the head of clusters of slightly smaller villages. Most of the later Etruscan cities already had some Final Bronze Age occupation, and these became further points of reception of population transferred from the dispersed village communities.

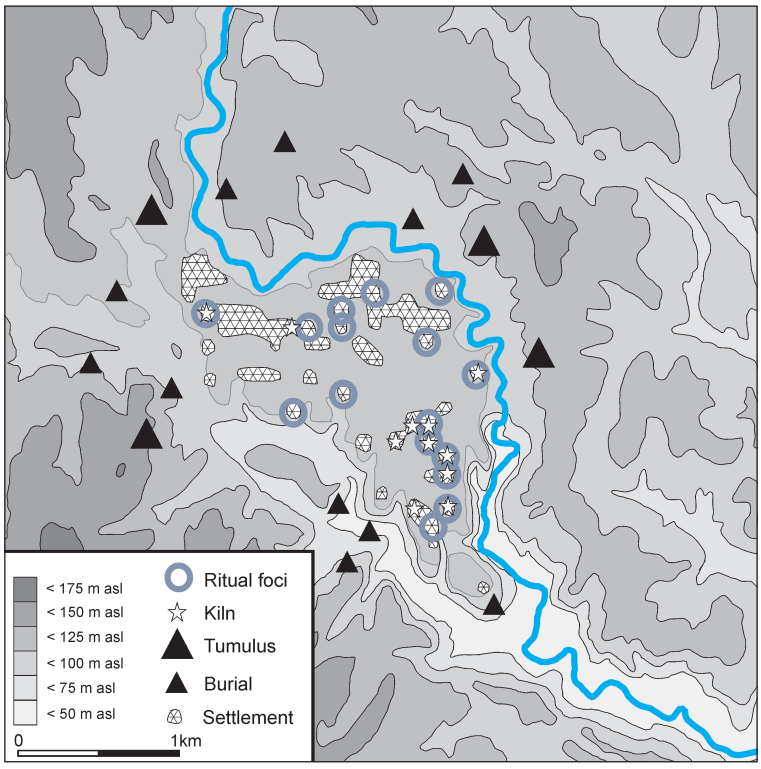

Figure 7.7. Veii in the sixth century BC. Created by author.

If we integrate this quantitative pattern of settlement organization with the qualitative information derived from urban excavations, a chain of staggered stages (Fig. 7.5) can now be detected in the transformation of the nucleated centres. At the first stage there was the creation of the nucleated centres from the village landscape already described, but the organization of the household was substantially retained as inherited from the original villages. The character of this nucleation has been the subject of some debate. Some early interpretations interpreted the nucleation as an integrated community (Guidi 1989), but more recent analysis suggests a clear pattern of local neighbourhoods (Fig. 7.6). This more recent assessment, based on the reanalysis of the work of John Ward-Perkins at Veii (Ward-Perkins 1961; Cascino, di Giuseppe, and Patterson 2012), in the light of other work by Marcello Guaitoli (1981; 2003), is broadly comparable to surveys, where available, of other major Etruscan urban centres (Mandolesi 1999; Pacciarelli 1991). Furthermore, the plateau of Veii was surrounded by clusters of cemeteries, which most parsimoniously are likely to correspond to the neighbourhood clusters within the city. Other major Etruscan cities also have neighbourhoods of the dead on surrounding visible prominences around the city; the topography of South Etruria generally lends itself to strong inter-visibility of cemeteries coupled with more problematic access to cemeteries from the mother settlement. The cemeteries were deliberately placed in classically liminal locations.

At a second stage (Fig. 7.5), the household was transformed in its organization, a change most easily recognized at this stage of research in the reorganization of households in a more rectilinear format. Vedia Izzet (2007, 165–93) has generalized the detail of these internal structures of the sixth-century city which are most evident in the late foundations of cities such as Marzabotto and Musarna. Her work has identified the increasing differentiation of the public from the private, defined by the street network, the public spaces, the ritual spaces, the walls and gateways, ritual halos around the city limit, boundary stones, and the formalization of the very countryside itself. We thus once again return to the example of Marzabotto which has now been interpreted as urban theatre, laid out along cosmological lines (Govi 2017), when a city was founded without need to consider preceding urban structures. The neighbourhoods at Veii herself endured into the sixth century BC focused on significant ritual places and production quarters, separated by open fields or gardens (Fig. 7.7). The general position of cemeteries also remained the same, although they were now multiplied in number, in a number of cases with prominent tumuli. In general terms, the enlarged scale of the population led to a response in terms of its internal community organization.

At a third stage, the cemeteries were frequently reorganized in response to the reorganization of the urban centres. The study of cemeteries is one of the most advanced areas of Etruscan urban research, and the systematic regularization of cemeteries in a rectilinear format (notably in Cerveteri (Steingräber 2016) and Orvieto (Bizzarri 1962; 1966)), accompanied by a much relaxed access to formal burial, was a very pronounced feature of urban life. A further recurrent feature of many of these urban sites was the construction of places of recurrent ritual memory within the city boundaries, themselves showing a number of similar features of regularization and monumentalization. The most researched example is found at Tarquinia in the 'Zona monumentale' which runs chronologically from the Final Bronze Age through all the phases of the development of the city (Bonghi Jovino and Chiaramonte Treré 1997). The end result was a cultural manifestation of Etruscan urbanism that had its own distinctive features. The ideal Etruscan city as a well-defined topographic entity with public monuments, encompassing walls and gates, encircling cemeteries, and rock-cut roads out into the countryside can devolve into an image frozen in time, as recorded by Dennis (1848). For the dynamic characteristic features of

Etruscan urbanism, we must, however, also explore variability in time and space, uncovering the different identities of its descent-based members not only in their cemeteries, but also in their practices within the countryside.

In this respect, there is remarkable confirmation of how different cities organized their local territory in contrasting ways, once the urban nucleation had been stabilized. This can be best illustrated by the comparison of five cities and their territories (Fig. 7.8) where survey data have been more reliably collected: three prominent 'primate' centres (Cerveteri and Veii in the south and Chiusi in the north); one subsidiary centre of Tuscania in the south; and one marginal centre in the north (Murlo).

One major contrast is brought out by comparing Cerveteri in the south with Chiusi in the north (Fig. 7.9). Cerveteri was one of the larger urban nucleations, but because of her geopolitical position, constrained by urban neighbours of similar or greater size. As a result, her territorial area was reduced and management of rural settlement organized directly. The secondary centres, only slightly larger than the rural settlement, were either found on the frontier of her territory, particularly towards Tarquinia (Cerasuolo 2012), or in her port of trade at Pyrgi. This port of trade was the portal for interaction with the Mediterranean world, which should properly be considered part of Cerveteri's territory at the height of her powers, in compensation for her small terrestrial control. Chiusi was an inland northern city with no direct access to the Mediterranean world. Her political strategy was very differently organized. The city herself was polyfocal, arranged on a number of hills, rather than concentrated in one plateau as was common in the south. In the same manner, her control of the surrounding territory was indirect, through a series of secondary centres whose activities appear to have been focused on agricultural production on the low hills which flank the well-watered Chiana Valley, only properly drained in modern times. In these two cities, both Etruscan, we have a highly nucleated primate city (Cerveteri) and a much more decentralized urban landscape (around Chiusi).

Another major contrast can be made by comparing the changing density of Archaic (*c.* sixth century BC) settlement as a function of distance from the urban centre (Fig. 7.10) in four cases where such data have been reliably collected (Cerveteri, Veii, Tuscania, and Murlo). In the case of Cerveteri, one of the most powerful primate cities, the area immediately around the city was occupied by cemeteries, since, as already remarked, this was a recurring feature of major Etruscan cities, and their presence

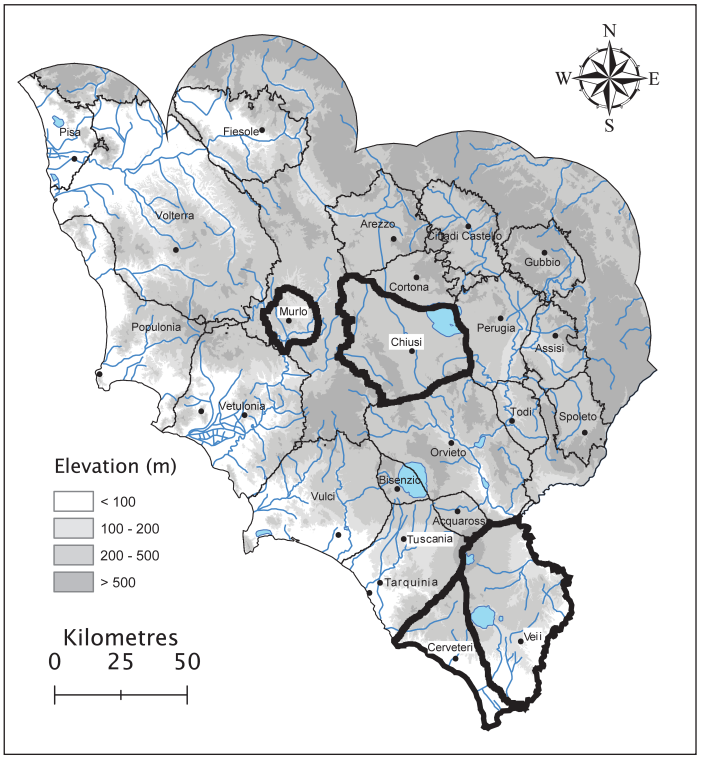

Figure 7.8. Map showing the territories of Murlo, Chiusi, Veii, and Cerveteri and the location of Tuscania. Created by author.

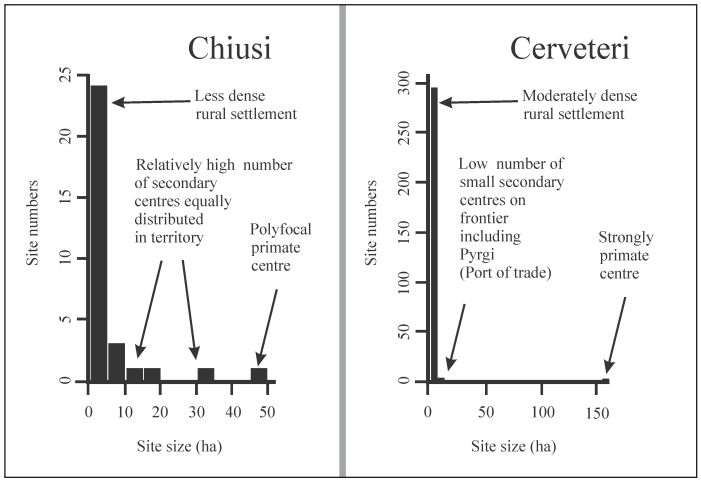

Figure 7.9. Comparison of Chiusi and Cerveteri. Created by author.

additionally had the effect of displacing rural settlement. In the tightly bounded territory of Cerveteri, the main density of settlement was located between 3 and 6 km from the city. The frontier of the territory of the city, a political buffer zone, was encountered not far from this band of denser settlement, and there was a consequent decline in rural density, sometimes marked by sanctuaries (Riva and Stoddart 1996). The territory of the more terrestrially expansive primate city of Veii, her immediate neighbour,

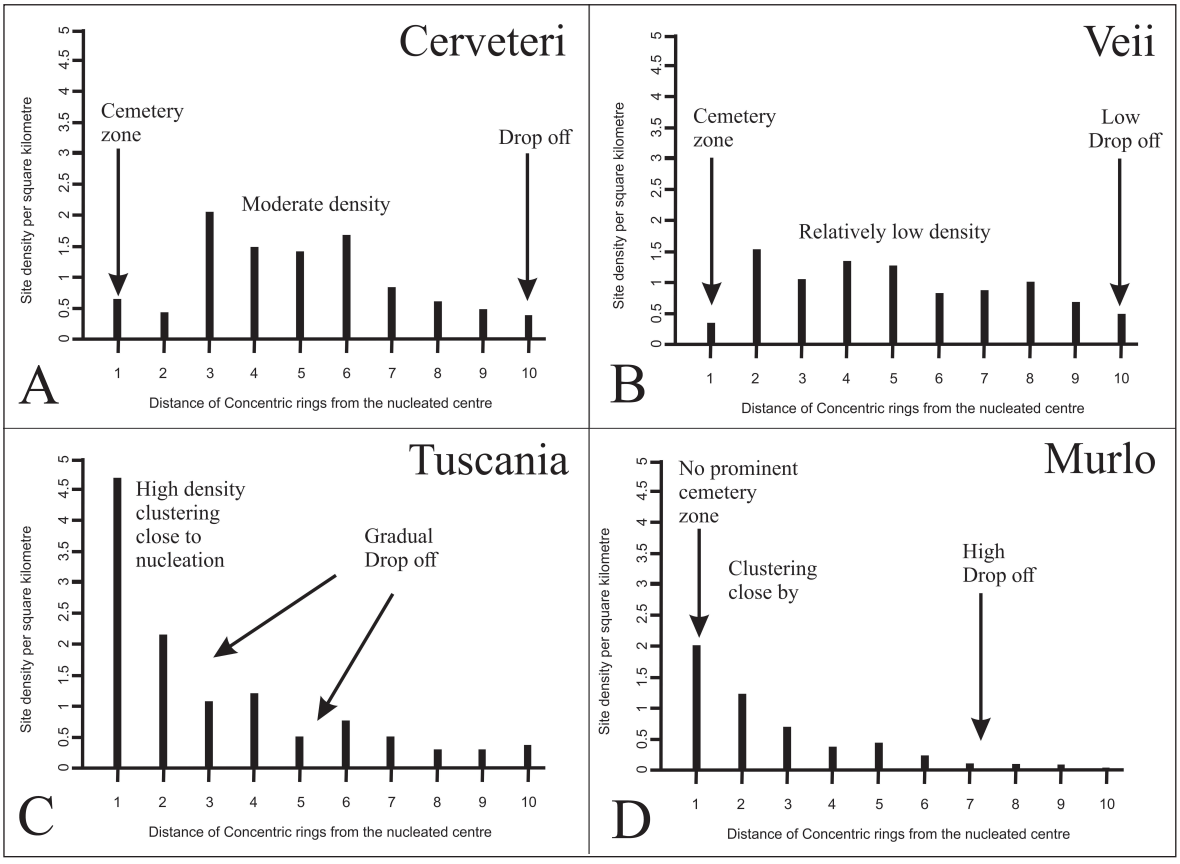

Figure 7.10. Comparison of the density of settlement as a function of distance from the urban centre: Cerveteri, Veii, Tuscania, and Murlo. Created by author.

showed both similarities and differences. Both cities shared a low density of rural settlement in the area occupied by cemeteries. However, the density of rural settlement (albeit at a lower level) around Veii extended further away from the city, most probably associated with her more expansive territory. In the case of Tuscania, a secondary centre under the control of Tarquinia, a much more intensive rural settlement clustered around this secondary centre. In the case of Murlo, a short-lived frontier settlement, a less intensive rural settlement also clustered around the very much smaller nucleation. In both these cases, the rural settlement sheltered under the local umbrella of the mother settlement. Even if we allow for some differences in the survey strategies behind these data (Stoddart and others 2020), these examples show very clearly how the organization of territories was profoundly affected by different political strategies, according to their place in the political landscape.

At a supraregional level, a major variable was the constraint of topography on the political landscape (Fig. 7.3). Recent research has shown that although Etruria broadly shared a language and some elements of material culture, there were many Etrurias. In part, this diversity was underwritten by a dynamic relationship with the physical landscape. South Etruria (the location of Cerveteri and Veii), substantially a volcanic zone, was bounded by the culturally significant Albegna Valley to the north, by the Tiber to the south-east and the east, and by the Mediterranean to the south-west. Furthermore, a string of volcanic lakes provided a boundary zone that bisected the region. To the south-west, three large primate cities, Vulci, Tarquinia, and Cerveteri, backed onto the volcanic lakes of Bolsena, Vico, and Bracciano. The drainage systems of these lakes provided water for their agricultural systems. Tarquinia's territory nestled into the catchment of the Marta River, whose source was in Lake Bolsena. This contributed to Tarquinia's position as the best exemplification of a type city of Etruria, with a port of trade in Gravisca, and a stepped hierarchy of smaller settlements (including Tuscania) located upstream on the river catchment. By contrast, Cerveteri was squeezed into a smaller territorial, but maritime-focused, position, backing onto Lake Bracciano that blocked a territorially expansive Veii. For a relatively limited period, smaller, probably independent, nucleated centres, such as Bisenzio and Acquarossa, sheltered in the

neighbourhood of these volcanic lakes until they succumbed to the political pressure of their larger neighbours. This physiographic framework gave greater expansive possibilities to Orvieto and particularly Veii on the eastern side of the volcanic lakes, projecting their political power into the less urbanized interior. Indeed, if Veii had not historically come up against a politically more powerful southern neighbour in the form of Rome, her expansion might conceivably have upset the dynamic equilibrium of the Etruscan world and perhaps even beyond.

Northern Etruria was similarly divided into two parts (Fig. 7.3), separated in this case by a large politically unallocated corridor of territory grounded on the high ground of Monte Amiata to the south and the Chianti Hills to the north, draining into the catchment of the major river system of the Ombrone. This buffer zone was occupied during the seventh and sixth centuries BC by smaller flourishing, but less nucleated, settlements, which for a few generations held onto their independence. The excavation evidence of the best known, Murlo, showed that it was destroyed at least twice. Three larger primate cities, Vetulonia, Populonia, and Volterra, developed to the west. Smaller polyfocal centres, Chiusi, Cortona, and Arezzo, often with a more stepped (log-normal in rank-size terms) profile developed up the major tectonic valley of the Val di Chiana to the east. To the north of this zone, the Arno Valley traversing from the high Apennines of the Casentino down to the delta around Pisa had a much more dispersed, unstable settlement system in the form of Fiesole, the recently discovered nucleated settlement of Gonfienti, Artimino, and Pisa itself.

The geopolitical pattern is completed by two projections into other worlds. To the north, the Mugello Valley, which leads across the Apennines towards the late planned city of Marzabotto and the longer-established city of Bologna, had smaller nucleated centres. To the east, the lake of Trasimeno provided another boundary zone between main Etruria and a zone of later expansion, centred on Perugia, into what is generally characterized as Umbrian territory, even penetrating across the Tiber in the latest phases. The cultural identity of this region beyond is more difficult to characterize in terms of material culture, although the available evidence suggests a range of loosely connected languages and identities that were more connected to Latin than Etruscan. In terms of urbanism, both Perugia and a series of small nucleated Umbrian centres appear to have lacked a developed rural infrastructure until the very end of the first millennium BC. The area was filled with upland hill forts and sanctuaries and a number of smaller nucleated centres. The overall pattern was a mosaic of cultural identity and administrative organization.

A crucial variable in the mature development of Etruscan urbanism is that of connectivity, a point much covered by the Great Tradition of cultural history (e.g. Camporeale 2016) and more theoretically by scholars such as Francesca Fulminante (Fulminante and others 2017). On the one hand, there is now a consensus that the main, underlying momentum for what became Etruscan urbanism took place at a time that cannot simply be explained as a response to external contact. On the other hand, the full and intensive development of Etruscan urbanism once established was profoundly affected by access to Mediterranean trade. Many of the coastal cities of Etruria (Cerveteri, Tarquinia, and Vulci) had ports of trade which appear to have mediated the transit of external trade through ritualized liminal zones. Furthermore, the effects of maritime trade can be detected in the settlement system. Tarquinia quite clearly developed a classic dendritic settlement structure (Stoddart 1987; Rendeli 1993) in response to this activity, and simple distributions of a range of products (Spivey and Stoddart 1990) show how these products were distributed along these networks. From this later evidence, it can be explicitly shown that although connectivity was not crucial for the formative phases of urbanism, the pre-adaptation of central Italian geography certainly facilitated the intensification of the urban form. Etruria was focal to the central part of the Mediterranean and was served by three large river systems into the interior (Arno, Albegna/Ombrone, and Tiber) that further facilitated connectivity from the high-risk and low-friction medium of the sea to the rapid transit of products from the uplands to the lowlands through these river systems.

In spite of this varied mosaic, we can identify from both the cultural and settlement evidence another key, general characteristic of Etruscan urbanism: a dynamic tension between the community and its constituent descent groups. The detailed evidence of Veii's internal development and surrounding cemeteries gives strong support to this interpretation (Figs 7.6–7.7). The long tradition of study of cemeteries presented in increasingly sophisticated form (Iaia 1999; Morigi Govi 2001; Bartoloni 2003; Babbi and Peltz 2013), aided by the genealogy of inscriptions (Morandi Tarabella 2004), has allowed a detailed reconstruction of the ambitions and strategies of the descent groups which formed the fluid building blocks of the city (Stoddart 2014) and their mobility between cities (Cristofani 1996; Marchesini 2007). The ambitions of these descent groups were not always aligned to the community.

In the earlier periods, some ambitious descent groups were probably responsible for the founding of the smaller boundary nucleations on the frontier of the great urban centres (see further discussion below). In the later periods, it has been suggested (Terrenato 2019, 115–19) that one of the effective strategies of the Latins under the guise of Romanization was to dismember cities such as Veii from within. Descent groups were subverted and attracted away from cities such as Veii towards the emerging city of Rome, and the siege of Veii was not simply a modernist siege of wholesale destruction. This pattern probably occurred in earlier periods as well, in spite of the emerging patterns of land ownership not unconnected with immovable agricultural resources such as tree crops and permanent architecture increasingly invested in specific locations in the landscape. The community provided a counterweight to these internal tensions. Investments in communal ritual, walls and gates, as well as collective cemeteries, provided an enduring materialized symbolism of the city that the descent groups could not easily take with them if they deserted. Over the course of the sixth century BC, the centralizing tendencies of the great primate cities prevailed, incorporating the frontier areas into one urban landscape centred on thirteen pre-eminent centres. At the close of the Etruscan period the internal tensions of the heterarchical structure were part of a strategy exploited by the Romans to persuade the Etruscans that a Roman future was preferable to the old.

A further characteristic of the case of Etruscan urbanism is its long-term trajectory emerging from Neolithic and Bronze Age roots and a relatively sudden tipping point towards nucleation at the close of this long prologue. This long-term trajectory was quite typical of the Old World in general (Peterson and Drennan 2012). The tipping point had similarities with both the Greek world (Morris 1987) and some cases of Mesoamerican urbanization (Blanton and Fargher 2008). The central Italian area was part of the Neolithic agricultural world of the Mediterranean from the sixth millennium BC, albeit at a less intensive level than some other regions. It is difficult to assess the precise demographic levels during the Neolithic. Excavated settlements have tended to be focused on water-rich contexts (Malone and others 1992; Fugazzola Delpino, d'Eugenio, and Pessina 1993), but some demographic proxies suggest a higher level of impact (Stoddart and others 2019). Intensification of the landscape only really took place in the Middle to Final Bronze Age, and the first real signs of nucleation were limited even in the final stages of this phase, reaching a likely maximum of twenty hectares in size. It was in the tenth–ninth centuries that the tipping point took hold. A dispersed village society on small tuff outcrops (*c.* 1–15 ha) became a community nucleated on large tuff plateaux (80–180 ha) within a few generations. One element that still needs further elucidation is the tempo of this transition. Recent developments in chronology, incorporating the impact of dendrochronology, have subtly changed the tempo or urban formation. The early and middle parts of the Bronze Age, the period of village society, have largely stayed constant in length at about 450 years. The Final Bronze Age (late twelfth century BC–early tenth century BC), the period of slightly more nucleated villages, has, though, decreased in length by about fifty years, to encompass a period of about two hundred years. The following first phase of the First Iron Age (Villanovan 1), a phase of nucleation but suppressed burial wealth, has shortened by about thirty years to a period of one hundred years. The subsequent second phase of the First Iron Age (Villanovan 2), a phase of continued nucleation but acknowledged distinctions in burial wealth, has, in fact, lengthened by sixty years to a full century. Some periods of most rapid political change have thus shortened in length. The subsequent Orientalizing period, a phase of strong exhibition of differential wealth and exploration of the frontier regions, has also lengthened slightly to about 170 years. The subsequent archaic phase of consolidation of the urban form has remained much the same length of about seventy years in the sixth century BC. These subtle changes have led to a greater longevity of the crucial phases of accumulation and expression of wealth in the early phases of urbanism. Many of these details will be subject to challenge, particularly in settlements less rich than cemeteries in material culture, as the complexities of the Hallstatt plateau in the radiocarbon calibration are resolved over the period from the eighth to the fourth centuries BC (Paula Reimer pers. comm.). Further research on the chronology can be expected to add additional detail to this picture, especially in periods where generic coarse pottery is more common.

Another challenge is understanding the demography of the transition between the dispersed village system and the nucleated centre. The long-term trends of this transition have been studied recently using a number of proxies for population: radiocarbon dates, sites numbers, cumulative site size, and pollen (Palmisano, Bevan, and Shennan 2017; 2018; Stoddart and others 2019). These studies provide only relative trends. It has long been recognized that population cannot be read directly from the rich burial record, since in spite of the quantity of tombs access to them was restricted (Spivey and

Stoddart 1990, 143), fluctuating according to the level of social access and not according to demographic factors. An alternative more direct and simple approach is to make estimates from the site size of Etruscan cities, which range from 190 ha to 30 ha. Jacques Heurgon (1961) on this basis estimated the population size of the powerful city of Cerveteri at 25,000 inhabitants, and Stephan Steingräber (2001) has extrapolated this estimate to other Etruscan cities on the basis of 160–70 persons per hectare leading to a range between 32,000 for Veii and 5000 for a number of north-eastern Etruscan cities. A more refined approach has been to build demographic patterns up from the building blocks that have been excavated in the field, to provide grounded estimates from the density of urban space. The most sophisticated approach to this has been provided by the Swedish excavation of Acquarossa (Persson 1986, 43). This work calculated the density of houses within the excavated area on the basis that thirty-nine houses were found in the 1.3 ha excavated out of the total surface of the 32 ha city. Each of these houses was calculated to have contained between four and seven people. This was then calculated to produce a density of between 120 and 210 inhabitants per hectare, across the whole site of 32 ha, producing a total range of between 4000 and 7000 inhabitants. These calculations have the benefit that their principles and error range are systematically and clearly explained, but are naturally dependent on an unfluctuating density across the whole site. Recent research suggests that the pattern within the Acquarossa area might have been more polyfocal and thus less uniform, particularly after eighteen clusters of contemporary surface remains have been found on the adjoining plateau of Ferentum (Romagnoli 2014). Even if the original calculations of Swedish scholars are correct, there are considerable assumptions in transferring this level of density to the larger primate cities which have been much less extensively excavated and may have had larger open areas between neighbourhoods within their limits. It is also possible that smaller settlements had lower densities. Indeed, for the smaller nucleated centre of Nepi (*c.* 14 ha), Ulla Rajala (2013, 28–29) has suggested a much lower density of no more than twenty people per hectare in the earlier phases of urbanism, although estimates by other scholars for similar sites are higher (Guidi 2003).

These estimates generally, with the exception of Rajala (2013) in passing, do not take account of the role of the countryside. The work of Phil Perkins (1999) in the *Ager Cosanus* is one of the major attempts to look explicitly and systematically at the issue of comparing population in the city and countryside. One of the strengths of his analysis is that the *Ager Cosanus* survey was undertaken systematically, albeit by the application of transects across the Albegna Valley, leading to a consistent even if not entirely contiguous collection of site data. The study area was, nevertheless, not of the territory of one of the primate centres, but of an important frontier area between city states. The settlement sequence lacked any early ninth- and eighth-century BC nucleated centres and was subsequently dominated by intermittent stability since one important centre (Marsiliana d'Albegna) in the seventh century BC was replaced by another (Doganella) in the sixth. Thus, although this analysis is very important methodologically and provides one exceptional element of variation from the margins of urbanism, it is not representative of the more general patterns of the Etruscan city states. The analysis is further complicated by the fact that Marsiliana was only recognized as an important settlement nucleation after Perkins completed his analysis, and the detection of this 45 ha centre (previously only known from its burials) has substantially transformed the city:countryside ratio for the earlier period. We can, though, still consider Perkins's analysis of the sixth century BC as a pattern of the city:countryside ratio which applied to one part of the Etruscan political landscape. In this phase of this boundary area, dominated by the unusually large urban centre of Doganella, Perkins estimates that 70 per cent of the population was urban, a proportion that remained fairly constant for the following three centuries. Similar estimates are very difficult to make for other regions, but it is likely that other territories of southern Etruria, such as those of Cerveteri and Veii, may have been more equally distributed between city and countryside, and those of northern Etruria, such as Chiusi, were probably much less urbanized in this sense (Stoddart and others 2020), but these statements need to be better quantified through further research.

Explanatory Frameworks for Urbanism

Major political change requires the right conditions. There is increasing evidence that at the time of the major tipping point between the village landscape and the nucleated landscape in the ninth century BC, Tyrrhenian central Italy was favoured by a wetter environment compared with the previously precocious eastern regions of the Mediterranean which appeared to have suffered from considerable aridity at this time (Finné, Woodbridge, and Labuhn 2019). This refugium of wetter conditions, in a zone that had been less intensively exploited in

the Neolithic and Early to Middle Bronze Age, may have been one factor that attracted the concentration of population within the Tyrrhenian region of central Italy. Furthermore, over the course of the following centuries, tree crops may also have played a role in providing a strong perennial tie to the land beyond the annual crops and moveable animals that had supported the previous Neolithic and Bronze Ages. The direct study of food remains is underdeveloped in central Italy so we cannot rely on accuracy of current evidence. Currently, the earliest direct evidence of probably domesticated grape from the region is from the submerged site of Gran Carro (Costantini, Costantini Biasini, and Scali 1987; Costantini and Loredana 1995) dating to the ninth century BC. The evidence for olive is even more elusive and has only been found securely in the sixth century BC (e.g. Perkins and Attolini 1992). More convincing evidence is found in the form of pollen which has shown earlier evidence of the growth of tree cover not only from the vine and the olive, but also of the chestnut over the course of the period of urban development (Langgut and others 2019; Stoddart and others 2019). The trends of pollen are generalized, and detailed pollen studies from the territory of individual territories of Etruscan centres are almost completely lacking. Other proxies of human impact such as erosion show gradual increases in damage to the landscape (Walsh and others 2019), perhaps associated with clearance for the new tree crops, but detailed territorial studies are in their infancy (Brown and Ellis 1995).

Another driving force of this urbanism was production beyond food. The rich tradition of Etruscan studies has concentrated on the production of ceramics to which scientific studies are increasingly being directed to understand both techniques and provenance (e.g. Bruni and others 2001). Metal production, particularly in the urban centres of Vetulonia and Populonia, was also of enormous importance, since this required the application of considerable levels of manpower and underwrote the reciprocity of the commercial prowess of the Etruscans. These activities are also increasingly under study from a scientific perspective (Benvenuti and others 2013) so that the flows of metalwork can be better measured and characterized. A major stride forward has recently taken place in the study of textiles (Gleba 2017) which has convincingly shown the importance of their production in underwriting urban life in ways that are cultural, economic, and political. Furthermore, the work has shown that the wool textiles of Etruria, principally made in a balanced 2/2 twill weave, with tablet-woven borders, were of a culture shared with Central Europe rather than Greece.

The fundamental question of urbanism is ultimately why nucleation took place, and it is clear from Etruria that this was politically driven. We can envisage political conditions at the end of the second millennium BC, when the gathering together of a larger community might have presented advantages that outweighed the difficulties of feeding a more densely placed population. Military security may have played an important part, perhaps signalled by the presence of artefacts charged with military ideology in many graves. By comparison with other accounts of state formation we can pose two contrasting alternative narratives that have also been proposed from the distant Valley of Oaxaca in Mexico. On the one hand, we can envisage the presence of a dominant alpha individual with the charisma to galvanize such a decision (Flannery and Marcus 2012). In the Valley of Oaxaca of Mexico, this was an individual personified by the jaguar glyph. In the Greek world of Athens, this was the mythical action of Theseus. Etruscan myths, as much as they have survived, are full of similar figures. However, the funerary evidence of Etruria (if it can be interpreted so simply) gives no hint of such a prominent individual. On the other hand, we can envisage a collective decision of a group of descent groups whose concerted joint action might be the preferred political route. The multiple cemeteries and the multiple clusters of huts in the early villages of the most researched cities, such as Veii, suggest that this was a more probable scenario. Indeed, the foundation of Monte Alban in the Valley of Oaxaca of Mexico has been seen in a similar light (Blanton and Fargher 2008) as a corporate decision. Some Italian scholars (Guidi 1989), however, consider the new nucleated centres to have been immediately unified into one coherent political authority, where rules against conspicuous consumption prevented the leaders of authority from displaying their personal advantage to posterity.

In these early conditions, many urban forms were highly delicate, in that their longevity was constrained by a lack of succession of power, as one generation replaced another. During the *c.* 170 years of the Orientalizing period (*c.* 750–580 BC), control by the urban community was insufficient to retain the consistent allegiance and loyalty of all the constituent descent groups. This is the problem addressed anthropologically by a number of authors, most notably in Africa but also in small-scale societies such as Malta. Jack Goody (1966), principally an African social anthropologist, explored the details of the processes of succession on the death of the previous power broker, pointing out the considerable uncertainty and the range of practices in choosing a successor that this often involved. Mary W.

Helms (1993) has explored through her work in Latin America how aristocrats sought to bolster their delicate power through material culture (particularly craft) and access to knowledge that, by implication, could not only sustain them in life but, by extension, pass on their power to chosen successors after death. Jeremy Boissevain (1969) has explored this same phenomenon at the next social scale in terms of competing factions which, within one nucleated community, compete for power. Some of these factions often had the opportunity to become more institutionalized, frequently employing ritual to this end (Barratt and others 2018). All these anthropological models may give some clue to the processes underlying the Etruscan instability. An even more powerful model of great relevance to the urban landscape analysis presented here is the work of Igor Kopytoff (1989) who explained the variation in robustness of urbanism in terms of the landscape of the internal, interstitial frontier. The spacious landscape of Africa gave enormous potential for differing levels of demography, for roles of factions on the margins of metropoles, often creating nucleations of short time-depth. By this model, Africa was pictured as in a state of constant flux, evocatively presented as a fluid weather map:

> the clouds on the map, like African societies over the centuries, would move, reform, disappear, break-up into pieces, the pieces would reassemble and new distinct areas would form; and the channels between them would expand, contract, and shift (Kopytoff 1989, 12).

This model was also strongly developmental and socially embedded. Ambitious individuals who disagreed with hierarchy (perhaps accused of witchcraft) started a new immigrant community in the interstices of the metropole on the frontier. This new settlement gathered new subjects, developed *new* ritual (ironically frequently drawn from the *old*) and, if successful, developed into a new kingdom as successful as the old, setting off a new cycle of domination and conquest.

Etruria has many candidates for this type of frontier settlement, Acquarossa and Bisenzio in the south, Marsiliana in the Albegna Valley, and Murlo and Cetamura di Beradenga in the north. However, after a few generations, the power of the primate centre prevailed, leading to the more or less stable equilibrium of the approximately twelve cities of the later written sources. The most focal characteristic of the development of the urbanism of Etruria is thus a tension between the central places and the emergent counter-politics of the frontier which was ultimately fully controlled by the dominant primate centres. This dynamic equilibrium did not last long, for within a few generations it was to be taken over by a political structure focused on Rome with many ingenious strategies for incorporating the pre-existing territories of the Etruscan period.

Future Agendas

The study of the Etruscan city has many rich data, forged from both old and new research. In this sense the study has come of age. However, there are many steps that will take this analysis further beyond the obvious steps of more open-area excavation of the primate centres themselves, especially outside the main monumental building searching for rich domestic deposits of stratified and spatially differentiated rubbish. Firstly, statistical analysis of the current dataset of the human landscape can be taken much further. Some attempts are currently underway (Stoddart and others 2020; Camilla Zeviani pers. comm.) to match the different datasets collected by surface survey and create a coherent comparative framework that has already been attempted for the Roman period (Launaro 2011). Secondly, many of these rural settlements deserve excavation, accompanied by the systematic recovery of the scientific information from their stratified sediments. This approach could be extended to geoarchaeological and palynological study of the landscape to understand more effectively the impact of the urban on the rural. Indeed, such analysis needs to be applied more widely across the primate urban settlements themselves to recover the infrastructure of urbanism. We still have a top-down picture of the Etruscans which needs to be balanced by the supporting system that enabled this extraordinary and distinctive richness of the urban form, presented in so many art-historical accounts (e.g. Haynes 2000). Identities from iconography need to be matched by identities of cuisine, perhaps even revealing distinctive identities of the invisible Etruscans who never earned a formal burial, but left their traces unconsciously in the midden deposits of the city. Even the elite deserve more attention by a programme of systematic scientific characterization of their human remains by techniques such as stable isotopic analysis and ancient DNA to recover their life histories, not limited to diet and travel around central Italy and the Mediterranean beyond. Scientific techniques will give an important understanding of how the people of the city were assembled and inscriptions will provide important insights into how they considered themselves once they became urban (Stoddart 2014). To conclude, it has too frequently been determined that the tempo

of urban change is well and sufficiently understood based on elaborate sequences of material culture. As the challenges of the Hallstatt plateau are solved by new calibrations of radiocarbon, it will be possible to understand on a generation-by-generation basis the nuanced changes in the urban form during the formative as well as culminating stages. The study of Etruscan urbanism has a substantial future by the systematic application of normal science (that is the regular study of seeds, bones, isotopes, and aDNA) to fundamental humanistic questions of which the understanding of formative urbanism is one of the most central to our modern existence. On the back of these data, innovative scientific and social-anthropological models can be deployed towards a deeper understanding of why the inhabitants of Etruria took the momentous decision to live in more concentrated and denser communities, and of what were the pressures — climatic, economic, geopolitical, and social — that underwrote their choices.

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