

7 Summary

The aim of this book is to obtain a better understanding of the settlement dynamics in the part of central South Lazio that comprises the Latial Volcano, the Pontine plain and the western slopes of the Monti Lepini and Ausoni (fig. 1).

In this summary the chapters one to five, which present the data, are dealt with briefly while the concluding chapter six is presented in more detail.

The periods discussed are the Ancient Bronze Age (BA), the early phases of the Middle Bronze Age (BM1/2), the late phase of the Middle Bronze Age (BM3), the Recent Bronze Age (BR), the early phases of the Final Bronze Age (BF1/2) and the last phase of the Final Bronze Age (BF3, also called Roma-Colli Albani I). The Early Iron Age is divided into four Roma-Colli Albani phases (RMCA IIA, IIB, IIIA, IIIB).

7.1 - Chapters 1-5

The book starts with the introduction of the study area (chapter 1), the northern part of which is formed by the Tiber delta.

This zone is characterized towards the coast by alluvial sedimentation, and inland by low-lying flat zones that correspond to former lagoons. Towards the north the Volcano Laziale, with an estimated age of 560,000 BP, dominates the landscape as far as the promontory of Anzio. Volcanic eruptions, in combination with river sediments, through time covered the marine basin at the foot of the Monti Lepini and Ausoni. This basin is a vast zone now known as the Pontine plain. It is the lowest part of Lazio and was until its reclamation in the 1930s characterized by marshland and fens. The Pontine coast up to the Monte Circeo is lined with lagoons.

To understand the archaeological record presented and discussed in this book, some knowledge of the transformations through time of the various landscape

units was deemed necessary (chapter 2). Such knowledge was obtained for each landscape unit by studying historical, geological and pedological maps, and by using air photography, pollen diagrams and soil augering as well as observations in the field.

The resulting landscape reconstructions provide information on the nature, timing and extent of structural changes in the landscape that bear on the interpretations of the protohistoric settlement evidence discussed in the following chapters.

The presentation of the settlement evidence takes the form of a catalogue that lists 236 sites of which the location is known with certainty, organized by municipality (chapter 3). The location of a few sites is only known approximately.

These sites include settlements, tombs (both isolated and necropoleis) and ritual loci. The catalogue presents for the first time all available archaeological evidence from the study area in a single format. For each site a short biography and dating evidence - such as ceramic finds and, less frequently, metal finds - are given. The date of each find is based on parallels from the literature, preferably from stratigraphic contexts.

The chapter ends with site lists ordered according to various criteria (by ID, map sheet, municipality etc.) and with a representation on various cartographic backgrounds and at various scales.

Chapter 4 presents a typology of the catalogued sites according to morphological criteria elaborated in the Geographical Information System (GIS) set up for this research.

First, the spatial relationship between settlements and tomb groups was assessed in those cases where both types of finds were known. This assessment consisted of a calculation of the hypothetical walking distance between necropolis and settlement (in GIS terms known as a cost calculation) and of a recording of the orientation and elevation of the necropolis relative to the settlement. The

data allowed this only for the Late Bronze Age and Iron Age.

After identifying recurring characteristics in the spatial relationship between sites and necropoleis, these were then used to hypothesize the location of a series of settlements of which only the associated funerary areas were known.

Next, a number of locational variables for each site were analysed: height above sea level, distance to the seashore, distance to the nearest lake or lagoon, distance to the nearest water course and distance to the nearest spring.

All distances were calculated with the help of GIS and expressed in minutes walking distance; the results were then subjected to the Kolmogorov-Smirnov test to find out which variables were statistically significant. This allowed the identification of certain tendencies in the location of settlements.

Next, settlements were classified on the basis of their morphology only. This resulted in a diachronic overview of changes in site location preference for six typical locations. From the Middle Bronze Age to the phase Roma-Colli Albani IIIB, a steadily increasing preference - from 8% to 45% - could be noted for plateaus, while the preference for locations on flat terrain dropped in the same period from 72% to 19%. Sites located in isolated strategic positions appeared for the first time in the Bronze Recente (5%) with a peak in the RMCA IIA phase of the Early Iron Age (18%).

Chapter 5 deals with a functional analysis of the catalogued sites.

First, it presents an analysis of potential natural harbours and anchorage points along the coast, taking into account the prevailing winds and their related fetch (i.e. the distance a wind blows unobstructed over water, especially as a factor affecting the build-up of waves). The conclusion of this analysis was that only Anzio and Torre Astura were suitable natural points for coastal anchorage, while all lagoons were suitable as natural harbours.

Second, the chapter presents an analysis of the catalogued sites in relation to their natural resources. As there are virtually no mineral sources in the study area, the analysis focused mainly on the evaluation of the agricultural potential of the sites' territories within an hour's walking distance. This potential was expressed as one of six possible classes.

The analysis indicated that, of all periods discussed, sites from the Bronze Antico contained the largest proportion of good soils in their territories (87%). This proportion was less during the early phase of the Middle Bronze Age

(53%) after which it increased again and became fairly stable from the Final Bronze Age onwards (between 69% and 76%).

Chapter 6 presents the main conclusions period by period.

7.2 - The Ancient Bronze Age

For the Bronzo Antico 18 sites were recorded. These are mainly located between Rome and the north-western slopes of the Alban Hills, in the eastern part of the Campagna Romana. A characteristic of all sites, including the find locations of (sporadic) metal finds, is their position in open, non-defensible locations.

The seeming preference for sites in the lower valley bottoms in the eastern part of the Campagna Romana may, however, be biased as a result of lahar sediments. These are former mudflows composed of pyroclastic material and water that flowed down from the crater lakes of the Volcano Laziale after an eruption, and that were deposited on the slopes of the Alban hills between 6000 and 3000 BP. These sediments may have covered, and excellently preserved, any existing sites on those slopes (fig. 6.2).

The north-western part of the Pontine plain likewise hides a buried protohistoric landscape that may have contained more sites from the Early Bronze Age than those that are known now.

However, in view of the fairly even research intensity in both the Pontine plain and the eastern part of the Campagna Romana, it seems fairly safe to conclude that the latter was more densely populated than the former.

The land evaluation indicated that the Campagna Romana is also the area with the most fertile soils. With regard to subsistence some scholars have proposed a form of shifting cultivation. Recent palaeobotanical research has indicated that cereals played an increasingly important role in the Early and Middle Bronze Age economy.

Compared to the societies living in the adjoining territories of South Etruria and Campania, settlement organization was, however, much less developed.

To summarize, during the Ancient Bronze Age in Central South Lazio

- Settlements were located in open positions. A preference for defensible locations is rare or absent, which may indicate a remarkable social

stability and a virtual absence of conflict.

- The settlement intensity of the landscape varied; settlement in the eastern part of the Agro Romano was very dense, but in the Pontine plain it appears to have been sparse.
- Single axes - although we know there were more in some cases - can be interpreted as a first sign of the accumulation of riches.
- The results of the functional analysis point to an important role for agriculture in the subsistence economy.
- The communities of the period were still based on lignaggio (kinship), and they probably displayed a distinct economic differentiation that remained stable through time.
- Societies in adjoining territories (Etruria and Campania) were already evolving towards tribal organizations, a process that in the study area is not yet perceptible.

7.3 - The Middle Bronze Age 1-2

For the early phases of the Middle Bronze Age, 32 sites were recorded. Most of these were located in open positions on more or less flat terrain, and newly founded (92%).

There was a notable preference for locating sites on the inland shores of the lagoons at fairly regular distances (ca. 6.5 km), which is typical for this period (fig. 6.10).

The large number of sites along the coast between Nettuno and Torre Astura is remarkable, a pattern that would continue in the following periods (fig. 6.11).

The number of sites also increased in the area of the Amaseno and on the southern slopes of the Alban Hills.

In the eastern part of the Campagna Romana sites disappeared for unknown reasons. The fact that sites were now located on less fertile soils indicates that the role of agriculture in the subsistence economy was less central than before or since (fig. 6.6).

The preference for locations along lagoons and lakes may indicate an increased emphasis on hunting, fishing and gathering, activities that have been well attested in the Villaggio delle Macine on the shores of the Alban lake. Some scholars have claimed a central role for this site in the study area. However, the fact that it is a rare example of an excavated Middle Bronze Age site, one that moreover has been preserved exceptionally well, should make us cautious. There may have been more 'central places' in the study area, whose archaeological record is perhaps poorly

preserved and which have not been excavated. Campana in the Nettuno area, for instance, has a surface distribution of protohistoric ceramics of c. 6 ha.

The preference for locations near lakes and lagoons has by some scholars been associated with a drier climate phase, as is indicated by pollen analysis. An argument against this hypothesis, however, is the non-significant statistical relationship between site location and rivers.

In contemporary Etruria the landscape was still very densely settled, but at the same time a tendency towards settling on naturally defensible plateaus can be noted that was still absent in central South Lazio.

In northern Campania the eruption of the Pomici di Avellino during the last phase of the Ancient Bronze Age led to the abandonment of large areas.

To summarize, during the Middle Bronze Age 1-2 in Central South Lazio

- As in the preceding period, settlements were located in open positions and a preference for defensible locations was weak or absent. The social stability that is assumed to have characterized the Ancient Bronze Age presumably continued.
- The landscape was now very densely settled, above all in the Pontine plain, in the Alban Hills and along the coast. Surprisingly, the population in the eastern part of the Campagna Romana, which was dense in the preceding period, had decreased.
- Most sites (92%) were newly founded and continuity was limited to the settlements of Villaggio delle Macine and Tratturo Caniò. This implies that there was still considerable mobility.
- The results of the functional analysis show that agriculture still played a marginal role within the whole spectrum of potential means of subsistence (hunting, fishing, gathering).
- Compared to the preceding period there are in this phase no indications for change in the social conditions within the communities.
- In South Etruria, on the other hand, the evolution towards a tribal organization seems to have entered a mature phase, and we find indications of a similar transformation in north Campania as well.

7.4 - The Middle Bronze Age 3

For this period only 19 sites were recorded, a notable

decrease.

The results of the analysis suggest that the Middle Bronze Age 3 was probably a period of profound changes, as parts of the landscape seem to have been abandoned, especially on the coast. This may have been caused by threats from the sea, as has also been postulated for the Aeolian islands and other areas.

A preference for naturally defensible locations can be noted for the first time, as for example at Pratica di Mare and Ficana. Both sites are located along a river and near a lagoon. This may imply that lagoons functioned as natural harbours in this period.

The percentage of fertile soils in the territories of sites increases, which may suggest an increasingly important role for agriculture. Curiously, of the sites surviving from the MBA1/2 it is not the ones with the highest percentage of fertile soils that continued to exist (fig. 6.13); rather the surviving sites are located inland at locations that seem more suitable for animal husbandry and that are defensible. However, locations on lake shores remained common.

Settlement preferences during the MBA3 therefore point to a variety of subsistence strategies.

Unlike the still non-hierarchical settlement organization in central South Lazio, settlement organization in contemporary South Etruria was already characterized by an incipient hierarchy. This process occurred around naturally defensible locations, as part of a process known as ‘selection and concentration of settlement’, and it would ultimately lead to the formation of proto-urban centres.

Renato Peroni has pointed to accumulation of riches (metals, animals) as an important characteristic of the formation of a social structure composed of gentes and clientes, at a stage when investment in land was not yet common. This is a form of society known in Italian literature as ‘comunità gentilizio –clientari pre-urbane’ (gentilitial-client society).

The presence of metals in Etruria and in the Mediterranean economic network in which Etruria partook certainly accelerated its development, causing profound changes in the settlement pattern in the Final Bronze Age.

In central South Lazio this was a more gradual process. It is remarkable that the majority of sites in central South Lazio that eventually developed into proto-urban sites had their roots in the MBA3 period.

To summarize, during the Middle Bronze Age 3 in central South Lazio

- Unlike the situation during the preceding phase, a number of sites were now located on defensible locations. This can be interpreted as a first indication of social conflict.
- The landscape was unevenly settled; it is particularly evident that the coastal zone became depopulated, maybe because of threats coming from the sea.
- Of all sites, 72% were newly founded; only five sites from the previous phase survived. Even though settlement mobility continued to be high, the first indications of stabilization are observable.
- The results of the functional analysis indicate that agriculture gradually acquired a primary role in the subsistence economy, but that it had not yet become an essential condition for the survival of settlements.
- During this period we see for the first time indications of an evolution towards an organization of the gentilitial-client type (see definition above), which in contemporary South Etruria was already fully developing.

7.5 - The Recent Bronze Age

For this period, 20 sites were recorded. The number of settlements in naturally defensible positions increased remarkably (fig. 6.17). One of the settlements, Colle Rotondo, was identified on the basis of a nearby necropolis called Cavallo Morto, a unique example for this period of a necropolis on the central Tyrrhenian coast with evidence for cremation rites.

However, the social equality apparent from the necropolis is unlikely to reflect equal social relationships in society: several other indicators suggest the contrary.

Significantly, inhumations in the Vittorio Vecchi cave in the Monti Lepini that had first occurred in the Ancient Bronze Age ceased with the introduction of cremation rites. At the same time settlements in the Pontine plain from previous periods were abandoned. The remaining sites of Tratturo Caniò and Caprolace both contain possibly cultic elements, which may have prolonged their existence.

The gradual depopulation of the Pontine plain set in during the final phase of the Middle Bronze Age and population densities were lowest in the Recent Bronze Age.

The Alban Hills, however, followed a quite different trajectory compared to the Pontine plain. Here, settlements appeared in naturally defensible positions along the rim of the crater, with a distance between them of ca. 7 km (fig.

6.20).

In the inland coastal zone some settlements along rivers, such as Casale Nuovo and Ficana, can be related to known sites on the coastline, some of which are characterized by large quantities of jar fragments of a reddish coarse fabric. These sites have been plausibly connected with the production of salt and with local pottery production, an “industry” that was to become fully developed in the succeeding period of the Final Bronze Age.

At the settlement of Casale Nuovo, a class of pottery labelled ‘pseudo-grey ware’ was produced that probably imitated wares from the Aegean. Likewise, the presence of Mycenaean and Italo-Mycenaean fragments is evidence of - probably indirect - contacts between the coastal societies and the Mycenaean world.

Specialization in pottery and salt production presupposes the organization of a work force by an elite. This would fit with the gentilitial-client type of social organization. The increasing tendency to locate settlements on the best soils available indicates that there was a shift towards an agricultural economy.

According to Carandini, Rome probably occupied in this period an urban space of no less than ca. 23 ha, including the Campidoglio and the Palatine. Compared to the average of 5 ha for Bronze Age settlements in central South Lazio, this would be a huge difference. Cazzella, however, is of the opinion that the Campidoglio was only fully settled during the Bronzo Finale, and the Palatine from the Iron Age onwards (RMCA IIA). The present author is inclined to follow Carandini’s interpretation (fig. 6.21).

In contemporary South Etruria the process of selection and concentration accelerated, with a preference for large naturally defensible locations, while many smaller settlements in open positions or on small naturally defensible locations disappeared. While settlement organization in central South Lazio during the Recent Bronze Age seemed to enter a period of stability, as reflected by settlement continuity, in South Etruria this process was still in flux; there, the disappearance of many smaller sites suggests social turbulence.

To summarize, during the Recent Bronze Age in central South Lazio

- The number of settlements on naturally defensible locations increased, an indication of political conflict
- Outside the northern area the landscape was unevenly settled. Especially obvious is the depopulation of the Pontine plain, where only sites that possibly contained cultic elements seem

to have survived.

- Of all settlements, 68% were newly founded. However, 32% of the sites from the preceding period survived, including those that continued into the Iron Age. There was a tendency for settlements to stabilize.
- The results of the functional analysis indicate that the role of agriculture became important again, since it appears to have been a decisive factor in the choice of settlement location.
- In the Alban Hills the transition towards a tribal organization was completed. In the coastal zone between Anzio and Nettuno, the first signs of the subsequent evolution towards an organization of the gentilitial-client type can be observed during this period.
- In South Etruria the process of settlement selection and concentration suddenly accelerated.
- According to Carandini - and partly confirmed by archaeological evidence - the Palatine was also settled in this period. If true, the settlement of Rome would, with its 25 ha, constitute an exceptional case for this period.

7.6 - The Final Bronze Age 1-2

For the Final Bronze Age 36 sites were recorded, 19 of which could, on the basis of the ceramics, be dated with certainty to the early phase. This number suggests a decrease relative to the preceding period. If, however, the total number of sites with Final Bronze Age ceramics is considered (including the Final Bronze Age 3) a remarkable increase is evident (fig. 6.23).

On the basis of sites that were dated with certainty we can conclude that sites surviving from the preceding period (68%) for the first time outnumbered newly founded ones (32%) (fig. 6.14).

The preference for locations with fertile soils still increased.

With the exception of the Pontine plain the entire landscape in the study area was settled, and there was an increased preference for naturally defensible locations.

One more settlement, was added to those on plateaus along the coast. Tor Caldara is, however, not located in a naturally defensible position but near a sulphur spring, which may have influenced the choice of the location.

The industrial sites on the coast between Nettuno and Torre Astura continued to exist, and at Casale Nuovo metallurgical and ceramic production is attested.

Interestingly, the first signs at Satricum of its future as a proto-urban settlement coincide with the disappearance of all Bronzo Finale sites in the coastal zone during the Early Iron Age, which suggests a process of selection and concentration (fig. 6.24).

In the Alban Hills cremation rites are attested. The ashes were deposited in large ceramic biconical or ovoidal urns, sometimes with a cup (*tazza*) and/or personal ornaments.

In South Etruria, in a sample area with 70 Final Bronze Age sites, more than 90% of those are small and located in naturally defensible positions. These locations were probably abandoned during the last phase of the Final Bronze Age (BF3) in favour of a small number of large plateaus.

To summarize, during the Bronzo Finale 1-2 in central South Lazio

- The number of settlements in naturally defensible locations further increased, an indication of political conflict.
- Settlement of the landscape continued to be very dense, except in the Pontine plain.
- Only 32% of the settlements were newly founded, whereas 68% survived from the preceding phase. Settlements became increasingly stable.
- The results of the functional analysis indicate a steadily growing importance of agriculture that probably conditioned the choice of new settlement locations.
- There are strong indications for the existence of a social organization of the gentilital-client type along the coast between Nettuno and Anzio.
- In South Etruria the process of settlement selection and concentration, in combination with the search for naturally defensible locations, reached its apex just before the transition to the proto-urban phase.

7.7 - The Final Bronze Age 3 (RMCA I)

The last phase of the Final Bronze Age coincides with the first phase of the Roma/Colli Albani sequence. For this period 47 sites were recorded, 24 of which could be dated with certainty. The remainder could only be dated roughly to the Final Bronze Age.

Continuity with the early phase of the Final Bronze Age is evident from the increase in the total number of sites, the slight increase in the number of sites in naturally defensible locations, the very dense settlement of the landscape (with the exception of the Pontine plain) and the continuing

preference for good soils.

The Alban Hills stand out, in the sense that settlement density there increased dramatically.

There is evidence for the practising of cremation rites, with a preference for the use of a hut urn as a container for the ashes that, together with miniature grave gifts, was buried in a large container in the ground.

According to Bietti Sestieri and De Santis, such burials were the privilege of only those few members of society with special status, such as leading warriors and priests. Society in Latium Vetus, it is supposed, consisted at this time of a number of small communities that, although each politically autonomous and headed by a chief, were culturally and ideologically homogeneous. Also, according to Bietti Sestieri and De Santis these communities were probably essentially egalitarian.

According to the present author, however, the tombs could also be interpreted as a reflection of socio-economic inequality within these communities, as has been postulated by Pacciarelli for the contemporary mortuary evidence of South Etruria.

The exclusivity of the cremation rite as a privilege for only very few persons, the strong symbolism of the funerary gifts and the possibly hereditary transmission of social roles (both tombs of infants and of adolescents have been found), together with the dense and even settlement of the territory and the possible presence of large-scale productive activities between Nettuno and Torre Astura, are all strong indications of a system of gentes and clientes.

The settlement evidence in South Etruria may also point to this, as outlined in several studies by di Gennaro.

According to the present author the roots of this inequality are to be found in the final phase of the Middle Bronze Age, when the plateaus of the future proto-urban settlements were settled for the first time and when the necropolis of Cavallo Morto near Anzio during the Recent Bronze Age began.

In this last stage of the Final Bronze Age, settlements in central South Lazio were evenly distributed along the coastal zone and in the eastern part of the Campagna Romana.

There was also a dense settlement pattern in the Alban Hills around the crater, with settlements that were probably linked by roads that, according to the present author, were probably part of a network (fig. 6.31).

To summarize, during the BF 3 (RMCA I) in central South

Lazio

- The number of settlements in naturally defensible locations still increased slightly.
- Settlement of the landscape continued to be very dense, except in the Pontine plain.
- Of all the sites, 56% were newly founded and 44% survived from the preceding phase. Apart from continuity in the existence of many sites, there are signs of a change in the way the landscape was settled and the territory was controlled.
- The results of the functional analysis show that agriculture was still an important factor in the choice of settlement location.
- The Roma-Colli Albani facies began. The cremation rites further reflect the existence of a true aristocracy.
- In South Etruria the process of settlement selection and concentration was completed with the occupation of the large proto-urban plateaus and the corresponding abandonment of almost all previous settlements.

7.8 - The Roma-Colli Albani IIA (RMCA IIA)

The distribution map of the Roma-Colli Albani IIA phase shows 40 sites, 28 of which could be dated with certainty.

The proportion of naturally defensible sites, as well as that of those that continued from the preceding period, steadily increased.

Pacciarelli has proposed that the necropolis of Osteria dell'Osa, where inhumation rites appeared in this period, reflects a society divided into families that were differentiated according to status and rank, and that it expresses incipient differentiation by wealth between the various groups (fig. 6.34).

At Rome, the displacement of the oldest necropolis near the temple of Antonius and Faustina perhaps indicates a further expansion of the settlement.

The first evidence of settlement at Satricum also dates from this period. As was mentioned above, at the same time all sites that were located near Satricum and that originated in the previous period disappeared.

The hypothesized road network from the previous period underwent a number of modifications (fig. 6.35).

To summarize, during the Roma-Colli Albani IIA (RMCA IIA) in central South Lazio

- The number of settlements in defensible positions further increased
- The territory, especially the Alban Hills, was still very densely settled, with the exception of the Pontine plain
- Of the total number of sites, 36% were newly founded and 64% survived from the preceding period. The settlements appear to have been very stable, and they display a strong continuity with the preceding phase
- The results of the functional analysis indicate that agriculture was still an important factor in the choice of settlement location, since a high percentage of fertile soils coincides with settlement continuity relative to the preceding period.
- Inhumation appears alongside cremation.
- At the end of the period the size of the settlement of Rome was comparable to that of contemporary proto-urban sites in South Etruria.

7.9 - The Roma-Colli Albani IIB (RMCA IIB)

The distribution map of the Roma-Colli Albani IIA phase shows 38 sites, 30 of which could be dated with certainty.

The period shows a strong continuity with the previous one. Especially during the IIB period some settlements expanded to areas outside those traditionally settled, as for instance at Pratica di Mare and Ardea.

The theory that the Alban Hills were abandoned at this time is not confirmed by the data.

The road network postulated for the preceding period appears to have remained essentially unchanged (fig. 6.37).

7.10 - The Roma-Colli Albani III (RMCA III)

The distribution map of the Roma-Colli Albani III phase shows 43 sites, 37 of which could be dated with certainty.

There was also a clear continuity with the previous period. Settlement continuity at the transition between RMCA IIIA and RMCA IIIB was 94% (fig. 6.14).

During the RMCA IIIB phase defensible sites formed 54% (fig. 6.17) of the total number.

The percentage of the best soils within territories was

reduced to 69% (fig. 6.6), which is the same as in the Bronzo Finale. This was probably due to a change in those factors that played a role in the choice of settlement locations (political, strategical).

In the necropolis of Osteria dell'Osa only one sepulchral area was in use, in the centre of which were found two exceptional tombs. A.M. Bietti Sestieri and A. De Santis conclude on the basis of this and other indications that the ritual "tends to emphasize (...) the unity of these tombs as a group and ancestry as a central concept" and that "the new funerary customs are an expression of gentilitial ideology."

The property of land, analogous to what had already happened in South Etruria at the transition between the Final Bronze Age and the Iron Age, was no longer collective but private. This placed the aristocracy in a position to develop their economic potential even more, which is reflected in the increasingly precious tomb inventories.

There is evidence that the first public votive deposits appeared in the mid-8th century, and at Rome the so-called wall of Romulus was built, which marked the start of the urban phase.

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