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On colonial grounds: a comparative study of colonialism and rural settlement in first millennium BC west central Sardinia

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5 Between city and country. Carthaginian colonialism and Punic settlement in west central Sardinia

*Cartagine, ignoriamo sotto quali precise circostanze e impulse, favorita dalla sua eccellente posizione centrale, ove si incrociavano le principali vie commerciali fenicie, alzò il vessillo della resistenza nazionale, invitò ed obbligò le altre città sorelle, ad accettare la sua alleanza che divenne poi egemonia e dominio ...*¹

E. Pais, *La Sardegna prima del dominio romano* (1881), 308

5.1 From Phoenician to Carthaginian Colonialism

The end of the Phoenician era is conventionally situated around the middle of the 6th century BC, when the city of Carthage, itself a Phoenician foundation, rose to prominence in the western Mediterranean. The association of the demise of the Phoenician colonial network with the rise of Carthage, however, raises questions about possible causal relationships between these two developments. At the same time, the Phoenician origins of Carthage create a good deal of confusion, which goes beyond merely terminological matters because of the alleged chronological watershed between the two periods.

Most of the confusion arises from the term ‘Punic’, which is synonymous with neither ‘Phoenician’ nor ‘Carthaginian’ but which appears to cover the ground between these two words. Of these, ‘Carthaginian’ is the most straightforward one, simply indicating an inhabitant of or someone coming from Carthage. ‘Phoenician’ is the Greek word used to refer to people originating in the Levant, that is Phoenicia, who called themselves *Can’ani* after their homeland Canaan. It is generally accepted as a term for all their settlements throughout the Mediterranean (Aubet 1993, 11-12). Since the Phoenician foundations in the western Mediterranean differ from the eastern ones in various respects, including chronology, the term ‘western Phoenicians’ has found a ready reception (cf. p. 70). It is at this point that confusion arises, as these settlements are also defined as ‘Punic’ or — as is frequent in Spain — ‘palaeo-Punic’.

The crux resides in the contradiction between the derivation of the word ‘Punic’ from *Poenus* and its adjectives *Punicus* or *Poenicus*, which are the Latin equivalents of the Greek Φοῖνιξ and Φοινικός, and the use of this word in an

entirely different sense, namely referring to the Semitic-speaking inhabitants of North Africa in Classical and Hellenistic times. Since several of the Roman-period sources are written in Greek rather than Latin (cf. below) and use the term Φοῖνιξ, which is habitually rendered as ‘Phoenician’ as a translation of the Latin *Poenus*, the Greek word has eventually come to indicate both the people coming from the Levant in the Iron Age as described by Homer and those occupying the North African coasts in Roman times. In its wake the meaning of the Latin word has also been stretched considerably. In addition, in Roman contexts both terms have often been used interchangeably with ‘Carthaginian’ because of the dominant role played by Carthage in Roman times (Bunnens 1983).

As a way out of this disarray of terms and meanings which differed both geographically and chronologically, a strict scheme of definitions has been proposed, which adheres as much as possible to the original meanings of the words (Moscatti 1988b, 4-6). ‘Punic’ is thus redefined after the original connotations of the Latin term, restricting its use to the period from the mid 6th century BC onwards and to the western Mediterranean basin only. Likewise, the term ‘Phoenician’ is defined as basically applying to the period predating the middle 6th century BC in both the eastern and western Mediterranean basin, although it may also be used with reference to later periods in the eastern Mediterranean, Phoenicia proper in particular. ‘Carthaginian’ may finally be used regardless of time and place in the strict sense of referring to the city of Carthage only. In practice, the meanings of ‘Phoenician’, ‘Punic’ and ‘Carthaginian’ overlap to a considerable extent and can in many situations be used interchangeably. In other cases, however, an uncompromising use of the terms as proposed by Moscatti is helpful, indeed indispensable in order to distinguish the role of Carthage in the developments taking place. I shall therefore strictly follow this scheme in this and the following chapters. The coincidence of the decline of the Phoenician colonial network with the rise of Carthaginian dominance in the western Mediterranean in the central decades of the 6th century BC may give cause for supposing direct or indirect relationships between these two developments. One obvious interpretation is that a growing Carthaginian impact on the western

Mediterranean gradually ousted the other Phoenician foundations. An alternative indirect explanation is that the decline of the Phoenician colonial settlements and the rise of Carthage were both the consequences of one crucial event, which was the fall of Tyre to the Assyrian armies of Nebuchadnezzar in 573 BC. In this view, the disappearance of the metropolis would have entailed the decline of the entire colonial and commercial overseas network, while Carthage as the most developed and powerful foundation would have seized the opportunity to take over the role of Tyre in the western Mediterranean (cf. Lancel 1995, 81). However, plausible as this may seem, the crisis which the Phoenician settlements on the Spanish coasts were going through in the first half of the 6th century BC cannot simply be ascribed to the fall of Tyre. One indication for this is that the crisis was already evident before 573 BC, as e.g. in the lower Guadalquivir area of southern Spain, where the distribution of Phoenician imports abruptly came to an end in the late 7th century BC (Aubet 1993, 273). After its capture, Tyre moreover rapidly recovered from the Assyrian siege and regained its former position as a commercial centre. Direct Carthaginian conquest seems equally questionable, at least in southern Spain, where many of the smaller settlements on the Andalusian coast were abandoned in the earlier 6th century BC. Only much later some of them would be reoccupied.

The reasons behind the crisis in the western Mediterranean are in fact likely to have been manifold. First and foremost among these was no doubt the changing commercial and political balance in the western basin, in which the Greek expansion in southern France and Catalonia as well as in southern and central Italy played a central part. Nevertheless, it appears as if Phocaean expansion in southern Spain only took advantage of a Phoenician withdrawal from e.g. the lower Guadalquivir area rather than that they forced the Phoenicians to pull out (Aubet 1993, 274). Nor should internal changes in the western colonial network be underestimated such as an increasing nucleation, perhaps leading to urbanization, which may have undermined the settlement system as a whole (Alvar 1991). With regard to the westernmost Phoenician settlements on the Spanish coasts which were largely geared to the exploitation of the silver mines in the hinterland, the crisis is likely to have been deepened by the changed economic situation in the Middle East, where the demand for silver had dropped. The rather specific role of the westernmost Phoenician settlements in the colonial network and the resulting close ties with Tyre may well have made them exceptionally vulnerable to developments in the distant East, especially in comparison with the central Mediterranean foundations which seem to have suffered much less (Aubet 1993, 275; cf. Frankenstein 1979, 283-285).

Given the variety of causes and of impact, the crisis of the Phoenician colonial network in the early 6th century can hardly be regarded as a uniform phenomenon. While there may have been a significant 'eastern connection' for the Phoenician settlements on the western-most fringes of the Mediterranean, in the central Mediterranean the Greek presence seems to have been much more influential. Since the fall of Tyre in the Levant cannot easily account for the rise to prominence of Carthage in the western Mediterranean, the position taken by the North African city in the course of the 6th century BC must be examined in the contexts of both the western and the central Mediterranean area (fig. 5-1). The general situation of the western Mediterranean can be mapped out in some detail from the 6th century BC onwards, as after that date a number of historical sources offer a relevant and more or less coherent body of information.² The literary evidence focuses on Greek exploits in the western Mediterranean, as historiography made its appearance in the western Mediterranean together with large-scale Greek presence and colonization. In addition, none of the accounts handed down actually dates back to the 6th century BC, as only the centuries from the later 5th century BC onwards were covered by contemporary authors. Most of the available texts, whether in Greek or Latin, have been written in Hellenistic times or even much later, although several demonstrably go back on older sources. Later interpretations or simple misunderstandings are however a regular feature of these accounts. The confusion created in this way around the terms 'Phoenician' and 'Punic' has already been mentioned: Diodorus Siculus for instance reports (XIV.62.2-71.4) of a fleet attacking Syracuse in 396 BC which he alternately calls Phoenician and Carthaginian. All these accounts have moreover been compiled from a Greek or Roman perspective, which at best was close to the Archaic Greek one but which in many cases owes more to the Hellenistic Greek or Roman point of view. It is thus not only hindsight but also partiality which must be expected to constitute an inherent quality of all information offered by classical authors. The principal sources describing the western Mediterranean between the 6th and 4th century BC and reporting on Greek, Punic or Carthaginian, Etruscan and other activities are the texts written by Diodorus Siculus, Polybius, Trogus Pompeius/Justinus, Thucydides, Herodotus and Aristotle. All, except Aristotle, fall into the category of historical texts, while minor details can be found in passing remarks by other authors such as Plato, Cicero and Plautus, whose comedy *Poenulus* ('the little Carthaginian') has Carthaginians as its principal characters. Among the historians, Herodotus (ca 484-ca 420 BC) comes closest to providing near-contemporary first hand observations, as he participated in the Athenian foundation of Thurii in Calabria around 450 BC and spent some time in southern Italy. It is telling in this

respect that he is the only author who consequently distinguishes between Carthaginians and Phoenicians when referring to inhabitants of the North African and the Sicilian cities respectively (Barcelò 1989a, 22). Although his *Histories* describe the struggle between Europe and Asia and deal consequently mainly with the eastern Mediterranean, he regularly dwells on Greek activities in the West. Because of his involvement in the mid-5th century Athenian undertakings in Sicily and southern Italy, he is likely to have been well informed about the Carthaginian role in the entire situation. The most extensive accounts on Carthage and its enterprises in the Mediterranean are provided by Diodorus Siculus (fl. 60-30 BC) and Polybius (203?-ca 120 BC). The former wrote a history of the Mediterranean entitled *Library of History*, of which the extant chapters 11-20 cover the 5th and 4th centuries BC. The latter's *Histories*, of which only the first five books survive intact, report on the struggle between Rome and Carthage after 220 BC, but the first two introductory books relate previous events. Both authors recapitulated and reacted to earlier works by other southern Italian (i.e. Greek) and Roman historians, as e.g. the Sicilian Timaeus (4th century BC) and the Roman chronicler Fabius Pictor (late 3rd century BC). Polybius is moreover known to have consulted existing documentary evidence, such as treaties and commemorative inscriptions. Thucydides (455/460-399 BC) reports in great detail on the background and events of the Athenian expedition to Sicily in 415-413 BC in books 6 and 7 of his *History of the Peloponnesian War*, which is widely recognized as an outstanding contemporary historical account and analysis. Although his account is not first-hand, as he did not participate in the expedition, Thucydides offers a valuable insight in the late 5th century Greek representation of Carthage. Trogus Pompeius (Augustan period), who was born in Gallia Narbonensis, wrote among other works a history of the non-Roman world in 44 books entitled *Philippic Histories*. Since it has only been preserved as a synopsis compiled in Roman Imperial times (2nd century AD?) by an otherwise unknown Justinus, the information offered is often tantalizingly elliptic and fragmentary. It is moreover not always clear what was directly copied from Trogus' work and what was added or modified by Justinus (Develin 1994). Of an entirely different nature is Aristotle's (384-322 BC) discussion of the constitution of Carthage, which he included in his *Politics* on Greek political organization as a comparison for the Greek city state. Although again not based on first-hand observations, he provides a valuable contemporary account of 4th century Carthaginian institutions, with several references to the earlier situation. The transition of Phoenician to Punic or rather Carthaginian colonialism stands at the heart of this chapter. My main concern is not, however, the rise of Carthage or its struggle

with the expanding Greeks; I shall instead focus on the impact of Carthage in the western Phoenician network and the transforming central Mediterranean context of contending Carthaginians, Greeks and Etruscans worked out in Sardinia and more specifically in the regional situation of west central Sardinia. Chronologically, the crisis of the Phoenician colonial network in the first half of the 6th century BC provides a starting point, whereas the lower limit must be drawn when the Greek and Etruscan areas in the central Mediterranean were taken over by Rome. An emblematic date might be 287 BC, when the third treaty between Carthage and Rome was concluded, but Roman expansion into southern Italy in the later 4th century BC can generally be taken as a turning point.³ Sardinia, however, only became involved in the Carthaginian-Roman struggle in the later 3rd century BC (see chapter 6), which means that with specific regard to the island the greater part of that century must also be included in this chapter. In the second section of this chapter I shall therefore start with a survey of the general structural conditions of the western and central Mediterranean from the 6th to 4th century BC, drawing on a close examination of the extant literary sources, complemented by and contrasted with archaeological evidence as far as possible. The third section will be entirely dedicated to a survey and discussion of the available archaeological evidence in west central Sardinia as known from excavations, field survey and topographical studies. In the fourth section I shall then use the detailed archaeological information to review the Carthaginian or rather Punic presence in the region, examining its relationships to previous indigenous settlement and land use as well as to the wider structural conditions of the central Mediterranean. In the fifth and final section I shall finally outline some conclusions which have a direct bearing on specific archaeological and historical issues, while other more general points provide elements to be taken up in the concluding chapter.

5.2 Carthaginian Colonialism in the Western Mediterranean

The entire period under discussion has traditionally been characterized as being dominated by an enduring conflict between Carthaginians and Greeks, following the seminal account proposed by Gsell (1921, 1, 411-467). While this representation has largely, if not exclusively been based on literary evidence and is in need of revision, it remains undisputable that both Carthage and other Punic cities recurrently came into conflict with various Greek and south Italian city states during these centuries. The central Mediterranean was at the heart of it, if only because of its location. However, the focus of the conflict and the parties involved, and with them presumably the issues at stake, shifted repeatedly throughout the western basin. Initially, around the middle



Fig. 5-1. Map of the western Mediterranean area, showing the principal Punic and contemporary Greek and Etruscan sites.

6th century BC, Greek expansion to the northern coasts of the western basin made the Tyrrhenian Sea of crucial importance, involving the Etruscan city states as well. In the 5th and 4th centuries, however, Sicily became contested ground between the Punic and Greek cities on the island, involving Himera and Syracuse as well as Carthage. At the same time, the east coast of Spain, in the Alicante region, was also the stage of Punic-Greek clashes.

In this section I shall therefore begin with an overview of who was involved in which region in order to outline the generic context of Carthaginian expansion in the western Mediterranean. Subsequently, I shall turn to the role played by Carthage in the western Mediterranean regions before focusing on Sardinia and the Carthaginian undertakings on the island. Contrasting the rather limited number of written references to Sardinia with the archaeological evidence in general, I shall conclude this section with a sketch of the accepted representation of Carthaginian colonialism in Sardinia.

5.2.1 GREEKS, CARTHAGINIANS AND ETRUSCANS IN THE WESTERN MEDITERRANEAN

During the 8th and 7th centuries BC, the earliest phase of expansion in the western Mediterranean since Mycenaean times, Greek settlement had largely remained restricted to southern Italy and Sicily. Only the Euboeans had ventured

further North up to the Gulf of Naples, where they established Pithekoussai and slightly later Palaipolis and Cumae. Not accidentally, they appear to have operated in close contact with the contemporary western Phoenicians. From the early 6th century BC onwards, however, a second phase of Greek colonizers started to move further North. Whereas the colonies from southern Italy did not venture beyond Campania, others from Greece, Ionia and the Aegean islands, such as Phocaea, Rhodes and Knidos went up to the coasts of southern France, where they established the settlements of Massalia (Marseille), Monoikos (Monaco), Antipolis (Antibes) and Nikaia (Nice) in the course of the first half of the 6th century BC. Others were founded on the east coast of Corsica (Alalia) and the Lipari islands (Lomas 1993, 28-37). Contemporary Punic settlement could be found in approximately the same areas where earlier Phoenician foundations had been established, that is on the coasts of modern Tunisia, Algeria and Morocco as well as in southern and south-eastern Spain, the Balearic islands, Sardinia and Sicily. In contrast to Greek and most Punic colonial settlements which usually did not occur beyond the coastal area, the Etruscan city states occupied not only the west coast of the central Italian mainland but also the interior South and West of the Apennines down to southern Latium and Campania (fig. 5-1).

In the conventional representation of interregional relationships in the western Mediterranean from the 6th century BC onwards, Greek-Punic relationships were problematic from the start. According to Herodotus (I.166-167), the Phocaeans of Alalia and perhaps the Knidians of the Lipari islands threatened Carthaginian and Etruscan commercial activities in the Tyrrhenian Sea with piracy. When the Persian conquests in Asia Minor forced a large number of Phocaeans to leave their city and settle in the Corsican colony around 535 BC, Carthaginians and Etruscans joined forces and confronted a Phocaean fleet off southern Corsica in the so-called 'battle of the Sardinian Sea' (also 'of Alalia'). Both sides suffered heavy losses and the Phocaeans were forced to withdraw from Alalia to the Italian mainland, where some of them settled in the existing Phocaean settlement of Reghium in Calabria and others established the new one of Velia in Campania. Numerous Phocaean prisoners were taken to Cerveteri, where they were eventually killed. As a consequence, Greek influence was kept outside the Tyrrhenian Sea, where Corsica came under Etruscan dominance, while Sardinia became Carthaginian territory (Gras 1985, 698-715). Further South, the island of Sicily occupied a central position, as its north-eastern, eastern and southern shores had been settled by Greeks from the 7th century BC onwards, while the western and north-western parts of the island were dominated by Punic and indigenous Elymian settlements (fig. 5-1). The first conflict between Greeks and Punics or Elymians is reported by Diodorus Siculus (V.9) as having taken place around 580 BC.⁴ It arose from the second phase of Greek colonial expansion into the western Mediterranean which included among others the Phocaeans. It was caused by a group of Knidians who attempted to settle at Cape Lilybaeum near the Punic — originally Phoenician — city of Motya. Having been driven off by a joined Punic-Elymian force, they eventually settled on the Lipari islands. A similar incident took place around 510 BC according to Herodotus (V.42-48), when a band of Laconian adventurers headed by the Spartan Dorieus landed in north-western Sicily in Elymian territory. Having been defeated, they turned against a nearby Greek settlement, where the raid was finally finished off. Although Carthage was not explicitly involved in these events, they are usually regarded as symptomatic for the conflict between Greek and Punic interests in Sicily and in the western Mediterranean in general (Asheri 1988, 573-580). A Carthaginian military expedition to Sicily under the command of a general named Malchus is reported by Justinus (XVIII.7.1-2) but as the historicity of the general is disputed and it is uncertain who his adversaries were (Hans 1983, 7-8), it is questionable whether the event ever occurred (Barcelò 1989a, 20-21; cf. below, p. 123). Carthage came more explicitly to the fore in the central Mediterranean when it concluded a first treaty with Rome in

509 BC (see below, pp. 121-122). It is also around the turn of these centuries that the two inscribed gold tablets of Pyrgi must be dated: describing in both Punic and Etruscan the dedication by the sovereign of Cerveteri to the Punic goddess Astarte, they underline the close relationships between Carthage and Cerveteri (Moscati 1986, 347-351). It was the island of Sicily, however, which became a source of trouble in the early 5th century, when the Greek city states of Akragas and Gela conquered most of the southern part of Sicily under the tyrant Gelon. According to Herodotus (VII.158-165) Carthage intervened in support of the Punic cities of Sicily by sending an army under the command of general Hamilcar. The so-called 'battle of Himera' in 480 BC ended in a disaster for the allied Punic forces (Diod. XI.20-23) and Carthage had to negotiate a treaty with the tyrant Gelon, who subsequently made the city of Syracuse the centre of Greek Sicily. Although no territorial concessions had been made, it is generally accepted that the aggressive expansion of Syracuse in southern Italy and Sicily which culminated in the Athenian intervention against Syracuse in 415 BC, maintained pressure on Carthage. Despite a brief success in 405, when Akragas and Gela were captured and Carthaginian authority in western Sicily was formally recognized by the famous Syracusan tyrant Dionysius, the latter continued to threaten Punic Sicily and managed to destroy Motya in 397 BC. Although western Sicily would remain Punic territory until the Roman occupation of the whole of Sicily in 241 BC, the expansionist ambitions of Syracuse continued to clash with Punic and Carthaginian interests. Syracusan ambitions also included the southern Italian mainland, which resulted in several interventions against the Greek colonies of Calabria in the 4th century BC, and in 310 BC the tyrant Agathocles even led an army across the Sicilian channel to North Africa. It is reported to have taken a year and several minor clashes before the Greek troops were eventually driven off (Diod. XX.8.13).

Conflicts similar to the Sicilian ones are also reported for the western-most areas of the Mediterranean, where Carthage was said to compete with the Phocaean foundation of Massalia (Marseille) over access to the Spanish east coast. The rather scattered remarks of Herodotus (I.166-167), Thucydides (I.13), Pausanias (X.8.6) and Pompeius Trogus/Justinus (XLIII.5) explicitly mention repeated conflicts between the two cities during the 5th century BC, which were regarded as the leading powers of that part of the Mediterranean. There are moreover explicit references to a battle fought off Cape Artemision near Alicante and to a supposed Phocaean foundation still further South, which was called Mainake and which is assumed to have been destroyed by Carthage (Kimmig 1983).

A constant factor in the conventional representation of western Mediterranean interregional relationships is the

Greek-Carthaginian antagonism. As illustrated by the assertion that

three peoples — Carthaginians, Etruscans and Greeks —, which were suspicious, even hostile to each other, were all aiming at the domination of the western Mediterranean and attempted to eliminate each other,⁵

Kimig 1983, 15

this rivalry has generally been accepted as a logical and inevitable consequence of Greek and Carthaginian expansion. However, critical scrutiny of the same literary sources has recently called into question the natural inevitability of the antagonism. In the case of Sicily in particular, which is widely regarded as the best documented and most convincing one, many of the minor and major conflicts between Greeks and Carthaginians can be nuanced as strife between neighbouring city states. This was common between Greek colonies in southern Italy and Sicily and not surprisingly also occurred between Greek and other settlements. The two reported skirmishes of 580 and 510 BC are typical in this regard, as in neither case there is any mention of a Carthaginian intervention. It instead seems likely that they represent local conflicts which did not root in wider colonial interests (Barcelò 1989a, 19-22). Even the Carthaginian intervention which resulted in the 'battle of Himera' must on second thoughts be understood as support of affiliated Punic, Elymian and Greek cities against Syracusan and Akragantine aggression: as the same literary sources (Herodotus and Diodorus Siculus) make clear, the intervention was not so much motivated by colonial ambition as by commercial and more or less personal considerations, since most of the Greek and Punic elites of Sicily maintained formal and commercial contacts among themselves and with Carthage under the banner of *ξενία* ('hospitality'). Both sources report that the Carthaginian intervention had explicitly been solicited by the tyrant of the Greek town of Theron, who had been driven out by Gelon and who had appealed to the obligations of his close relations with Hamilcar, commander-in-chief of the Carthaginian army and member of a leading Carthaginian family (Hdt. VII.165: cf. Hans 1983, 105-118; Günther 1995). From this point of view, it appears that the 'battle of Himera' was hardly the disaster it is usually claimed to have been, as Syracusan expansion was contained, no territorial concessions had to be made by either Punic or Greek cities and the restored peace allowed commercial activities, including those with Syracuse, to be taken up again (Ameling 1993, 15-65; cf. Barcelò 1988, 155-160, 1989, 24-27). With regard to the Greek-Carthaginian conflicts on the Spanish coasts, it seems as if a lack of distinction between Carthaginian and Punic and between Massaliotes and Phocaeans has resulted in a confusion in which the Carthaginian-Phocaeen conflict in the central Mediterranean, which culminated in

the battle of the Sardinian Sea, has been transposed to the Iberian shores as a widespread conflict between Massalia and the Punic settlements of that region. The few available sources may at best offer evidence of local conflicts about fishing grounds and the like (Just. XLIII.5.2). It has moreover been demonstrated archaeologically that the Phocaeen settlements of Cape Artemision and Mainake have never existed as such (Barcelò 1988, 97-114).⁶

Because of the dependence on the one-sided and often much later Greek and Roman literary sources, there is much to be said against the conventional representation of the general situation in the western Mediterranean between the 6th and 4th century BC. Besides preconceived ideas about Carthaginian colonialism and an inability to distinguish between Punic and Carthaginian which can be found in both ancient and modern authors, it is the fragmentary state of the evidence which practically prevents the construction of a coherent historical representation going beyond a mere sequence of isolated events. Since virtually all relevant accounts are made up of digressions in very different narratives in which they fulfill a specific function such as a warning or illustration, these fragments cannot be considered in isolation. An obvious and well-known example regards the 'battle of Himera', which already in Herodotus' days was compared with the glorious battles at Thermopylai and Salamis against the Persians: according to several authors (e.g. Diod. XI.24.1) the former even occurred on the same day as that of Himera by 'divine arrangement' which concentrated Greek struggle and glory against the barbarians of the East and West on one and the same day (Ameling 1993, 15-33). Although Aristotle already dismissed any relationship between the two events (*Poetics* 1459a24), this obvious piece of Greek propaganda and rhetoric is right up the street of philhellenic thought and has frequently been considered as evidence for a mammoth alliance between Persians and Carthaginians (e.g. Lancel 1995, 89).

On balance, there can be little doubt about the widespread presence of Punic and Greek settlers, as these are also archaeologically attested. The excavations at Pyrgi, Alalia and Carthage similarly support Carthaginian-Etruscan cooperation in the later 6th and 5th centuries BC. The nature of Greek-Punic relationships, let alone the precise role of Carthage, are nevertheless much more difficult issues, which cannot easily be answered with recourse to the literary evidence alone. The uniform representation of conventional historiography must in any case be nuanced by considering both Greek and Punic settlements in their regional and local contexts, which include the indigenous inhabitants who have so far remained conspicuously absent.

5.2.2 CARTHAGINIAN COLONIALISM

Reconsidering the opposition between Carthaginian and Greek presence in the western Mediterranean, there is ample

cause for second thoughts about the assumed ‘natural’ expansionist ambitions of both ‘colonial powers’. The foregoing demonstration of the extent to which both the conventional representation of Carthaginian presence in the western Mediterranean and the underlying literary sources are biased has effectively called into question the very nature of the Carthaginian colonial ambitions and actions. It therefore seems useful to critically review the literary sources usually cited in evidence of a Carthaginian colonial policy.

The reasons for crediting Carthage with colonial ambitions are mainly based on two separate sources. In the first place there is the claim by Diodorus (V.16.2-3) that a fully-fledged Carthaginian colony named Ebesos was established on the island of Pithyuse (modern Ibiza) as early as 654 BC (fig. 5-1). In the second place the first two so-called ‘Treaties between Carthage and Rome’ are usually brought forward as evidence of Carthaginian colonialism and its development in the 6th and 5th centuries BC, following the fall of Tyre and the demise of the Phoenician colonial network. The recurrent clashes between Carthaginians and Greeks in Sicily and the ‘battle of the Sardinian Sea’ are also advanced as indirect evidence of a Carthaginian expansionist policy.

It is the text of the first treaty between Carthage and Rome in particular which is regarded as the most explicit and reliable source, however. This treaty, which is dated 509 BC, has been preserved by Polybius who claims to have recorded it from an original archaic Latin inscription kept in Roman archives (III.22.3). The first half of the text, after Polybius’ Greek translation, reads as follows:⁷

The Romans and their allies will refrain from sailing beyond the Beautiful Promontory, unless storms or an enemy force compel them to do so; if a ship is driven, despite itself, beyond this headland, the crew are forbidden to buy or sell anything, except what may be necessary to render the said ship seaworthy again or to offer a sacrifice. The ship must leave again within five days. For those coming to trade, no transaction may be concluded without the presence of a herald or clerk. Regarding settlement of the purchases made in the presence of these officials, the state will be answerable to the vendor — this applies to all sales effected in Sardinia and Africa. Any Roman going to Sicily, in the zone under Carthaginian authority, will enjoy the same rights as others.

Polybius III.22.5-10

The second part of the text stipulates similar obligations and injunctions for Carthaginians landing in Latium which is described as falling under Roman jurisdiction. As Polybius already added in an ensuing comment, the Beautiful Promontory (καλὸν ἀκρωτήριον) is the promontory extending northwards from Carthage — modern Ras ed-Drek, formerly Cap Bon —, which effectively bars navigation from the Gulf of Tunis to the rich Syrtis Major in the South.

More important is Polybius’ observation, which has since been echoed by modern commentators, that

the Carthaginians looked on Sardinia and Africa as their own domain, but [that] it was not the same as regards Sicily, where the part of the island subject to Carthage was explicitly distinguished.

Polybius III.23.5

The second treaty, which is dated 348 BC, is also preserved by Polybius. It shows that the territorial division of the first treaty for the central Mediterranean had remained valid, as only a clause regarding Spain was added. However, there is a significant difference, as ‘the Romans may not under any circumstance trade or found towns in Sardinia or Africa’ (III.24.11) while ‘in the Carthaginian province of Sicily and at Carthage he [a Roman] may do and sell anything that is permitted to a citizen’ (III.24.12). The latter would also hold for a Carthaginian in Rome, just as there is an explicit clause about Carthaginian behaviour in Latium and other parts of the Italian peninsula. In a revised version of this treaty dated to 306 BC, Carthage and Rome defined their respective positions still more precisely, in particular with regard to Sicily and the confused situation of rivalling city states and marauding *condottieri* in which Rome attempted to expand its influence (Lomas 1993, 39-57).

Since the first treaty already credits Carthage with the authority to supervise commercial activities in Sardinia and North Africa, it is generally regarded as an early version of the more explicit second treaty, leading to the conclusion that the first treaty similarly testifies to a firm Carthaginian control over both regions. This opinion was already advanced by Polybius (III.24.14-15). The exceptional position of Sicily is considered as additional evidence, as the contested state of this island is well known from other independent sources, as discussed above (pp. 118-120). In combination with Diodorus’ claim regarding Ibiza and the positive outcome of the battle of the Sardinian Sea of 535 BC, Carthage is consequently regarded as pursuing an expansionist policy from at least the middle 6th century BC onwards (Lancel 1995, 81-88) and as having established itself as a colonial power in the central Mediterranean by the end of that century (Bondi 1987b, 179-180).

While the second treaty effectively shields off Sardinia and North Africa from outsiders and thus leaves little room for doubt about Carthaginian power in those regions, both the first treaty and the Ibizan evidence are rather more equivocal. With regard to the latter, archaeological work has indeed discovered ample evidence of 7th century Phoenician presence, but both the cemetery and settlement area of the town of Ibiza show relationships with the contemporary Andalusian Phoenician establishments rather than with Carthage (Costa Ribas/Fernández Gómez/Gómez Bellard 1991). Moreover, since rural settlement on the island did not

emerge before the 5th century BC (Gómez Bellard 1986, in press), Diodorus' claim, and even more so its implications of a Carthaginian colonial presence in Ibiza are difficult to uphold. Only in the 4th century BC the archaeological remains suggest close ties with Carthage (Barcelò 1988, 25; cf. Gómez Bellard, in press). With regard to the first treaty, too, it is uncertain whether it can be interpreted in the same colonialist terms as the second one. Since Roman domination over southern Latium cannot be interpreted in territorial terms at the end of the 6th century (Cornell 1995, 293-304) and it is presented as corresponding to the relationship between Carthage and Sardinia and North Africa, there is no need to interpret the latter differently. Since Polybius moreover appears to have interpreted an archaic Latin word in a 2nd century sense,⁸ it is all the more likely that the first treaty regulates commercial spheres of influences rather than that it delimits colonial possessions (Barcelò 1989a, 28). It is significant in this respect that the second treaty does mention territorial issues such as conquest and the foundation of cities, whereas the first one is only concerned with matters regarding trade and merchants. It would seem to make much more sense therefore to represent Carthage and Rome as centres of commercial networks, of which the Carthaginian one was state-controlled, as suggests the clause about state officials supervising business activities (Whittaker 1978, 83). Protection against piracy may furthermore have been a motive for stricter control of shipping in important regions (Ameling 1993, 119-147).

Taking into account the historical evidence regarding Sicily which suggests that Carthage itself was not consistently involved in the territorial struggles on the island, that other Punic settlements acted independently and that on the whole much more localized considerations are likely to have motivated the military activities described by the literary sources, Carthage does not appear to have had territorial ambitions during the 6th and 5th centuries BC (Ameling 1993, 141-154). Carthaginian presence in the western Mediterranean can on the contrary be characterized as being guided by primarily commercial interests. The literary and archaeological evidence of commercial establishments (so-called *emporía*) within Greek and Etruscan cities, which can presumably be extended to other existing Punic settlements, fits well in this representation. Moreover, it does not exclude occasional more active Carthaginian undertakings of establishing new trading settlements in other regions (Whittaker 1978, 80-88). It also remains in keeping with recent archaeological findings regarding Spain, where the alleged 6th century crisis can largely be described as a general restructuring of the western Phoenician settlement system: while many of the small Phoenician foundations were abandoned in the earlier or middle 6th century BC, several others developed into larger independent centres (Barcelò 1988, 49-50). Among

these, that of Villaricos is exceptional in that it shows appreciably closer ties with Carthage than the other ones (López Castro 1991, 80-85; Wagner 1989, 150).

Further support for this representation of Carthaginian presence in the western Mediterranean is provided by recent archaeological work on the immediate hinterland of the city itself. During the entire Phoenician and the initial Punic phases, settlement in North Africa remained restricted to a limited number of coastal settlements, none of which seems to have been a secondary foundation of Carthage. An exception to this rule is the site of Kerkouane, established in the later 6th century BC. It is only in the course of the 5th century BC and in particular in the early 4th century BC that the immediate hinterland of Carthage became more densely settled and that other settlements were established along the Algerian and Moroccan coasts (Moscato 1994). The early 4th century BC has consequently been suggested for Carthage as the starting point towards a territorial policy and an economy based on landed property (Whittaker 1978, 88-89; Wagner 1989). The evidence of the middle 4th century second treaty (348 BC) of course fits in nicely with this representation. From the foregoing it must therefore be concluded that Carthaginian colonialism in a territorial sense during the 6th and 5th century BC is an *a posteriori* construction by ancient and modern authors alike who transposed the situation of the much better documented 3rd and 2nd centuries BC to the earlier 6th and 5th centuries BC (Barcelò 1989a, 13-14).

5.2.3 THE CARTHAGINIAN CONQUEST OF SARDINIA

Conventionally, Sardinia is assumed to have become entangled in Carthaginian colonial expansion in the aftermath of the battle of the Sardinian Sea in 535 BC and the first Roman-Carthaginian treaty of 509 BC. While the former has generally been accepted as evidence of Carthaginian interests in Sardinia by the mid 6th century BC, the latter has been read as demonstrating Carthaginian colonial domination over the island, which at the end of the 6th century BC 'coordinated all political and economic activities of the [Sardinian] region, which by then had become an integral part of its [Carthaginian] territories' (Bondi 1987b, 180).⁹ This representation has remained virtually uncontested, as archaeological findings appear to correspond with the conventional picture and Pompeius Trogus/Justinus provides more detailed literary evidence.

According to Justinus' account, the Carthaginians under the command of their general Malchus 'had long fought with success in Sicily, but when the theatre of war was transferred to Sardinia, they lost most of their army and were defeated in a critical battle' (Just. XVIII.7.1).¹⁰ Somewhat later, 'the Carthaginian general Mago was the first to organize military discipline and thereby to establish a Punic empire' (XIX.1.1). Under the command of his sons Hasdrubal and Hamilcar,

‘an attack was launched on Sardinia’ (XIX.1.3) in which ‘Hasdrubal was seriously wounded, and he died after transferring his command to his brother, Hamilcar’ (XIX.1.6). The outcome of the war is reported by Pausanias (X.17.9) as a Carthaginian occupation of the southern part of the island and the withdrawal of several indigenous tribes to the mountains of the interior, where they would continue their struggle against Carthaginians and Romans. On the basis of these scanty remarks attempts have repeatedly been made since Pais (1881) to construct a sequence of events making up the ‘Carthaginian conquest of Sardinia’, which for many ‘started off the millennia-long history of the island’s dependency’ (Lilliu 1992, 35). Chronologically, the two so-called ‘Sardinian-Punic wars’ are assumed to have taken place between 545 and 535 and from 525 until 510 BC, with the Carthaginians being commanded by respectively Malchus and Mago’s sons. The interventions, in particular the first one, were supposedly motivated by the Greek (Phocaean) expansion into the Tyrrhenian Sea, which was aborted in the sea battle of 535 BC. There is less agreement about the adversaries of the Carthaginian troops, whom some take to have been the independent west Phoenician settlements and who for others must have been the indigenous inhabitants of the island (see Lilliu 1992 for a detailed discussion). From an archaeological point of view, nearly all earlier Phoenician settlements remained occupied (fig. 5-2; cf. fig. 5-7), which implies a situation considerably different from that of the crisis-stricken Spanish Phoenician settlements and from that constructed on the basis of the literary sources. Nevertheless, several settlements have yielded traces of destruction and decay which have been advanced as evidence of the 6th century crisis in Sardinia. The most evident case is Cuccureddus near Villasimius which was destroyed by fire and abandoned around the middle of the 6th century, which could be interpreted as the consequences of an armed attack (Marras/Bartoloni/Moscato 1989, 234). Much more equivocal is the case of Monte Sirai, which was partly abandoned and which seems to have gone through a troublesome phase but which has not yielded clear traces of violent destruction (Bartoloni/Bondi/Marras 1992, 41-42). All other Phoenician settlements remained continuously inhabited.¹¹ The violent destruction and temporary abandonment of the indigenous settlement of Su Nuraxi (Barumini) has also been taken as evidence of Carthaginian armed interventions into the interior of Sardinia (Lilliu 1992, 29-30). The interruption of imported Greek fine wares during the third quarter of the 6th century BC and the replacement of the earlier eastern Greek (Ionian) products by Attic ones have finally been ascribed to the Carthaginian conquest of Sardinia and their control of imports in the island (Tronchetti 1988, 91-94). The foregoing discussion of Carthaginian colonialism suggests that these views about Sardinia may need to be

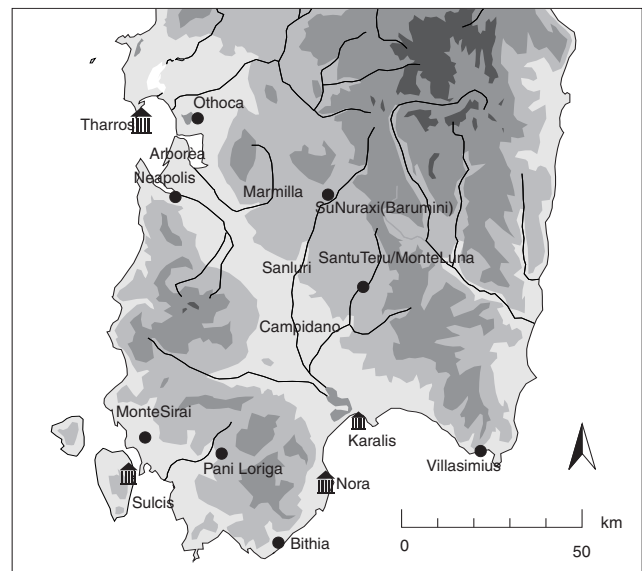


Fig. 5-2. Map of southern Sardinia, showing the principal Punic sites mentioned in the text.

adjusted, as the claim of a Carthaginian territorial occupation of Sardinia in the 6th century, let alone over half a century of armed conquest is at odds with the alternative, more commercial interpretation of Carthaginian expansion presented above (p. 122). It is therefore necessary to critically review the Sardinian literary and archaeological evidence. The account of Pompeius Trogus as outlined by Justinus is rather feeble, as it has been argued that most of book XVIII may go back to a Punic (religious) source, which has become seriously distorted in the reworked version of Justinus. The historicity of Malchus in particular is controversial, as it probably goes back on a Punic root MLK denoting a leader, a ‘general’ or ‘king’, not unlike Etruscan ‘macstarna’-magister (Picard 1983, 280; pace Lancel 1995, 111-112; Huß 1988). If the essence of Justinus’ account is nevertheless still accepted as proof that the Carthaginians had great trouble conquering Sardinia (Barreca 1986, 31-34), the reconstruction of the so-called Sardinian-Punic wars necessarily hinges on the *terminus ante quem* set by the first treaty between Carthage and Rome as the eventual date of conquest. It also presupposes that Carthage actually pursued an expansionist policy. Since both assumptions have been refuted in the previous section with evidence from the whole western Mediterranean, the supposed Carthaginian conquest of Sardinia comes up as a construction by Roman authors and their modern commentators, as Roman historiography apparently took Carthaginian expansionism for granted. There is moreover a remarkable resemblance between the supposedly troublesome Carthaginian conquest of Sardinia

Burial rites in colonial cemeteries

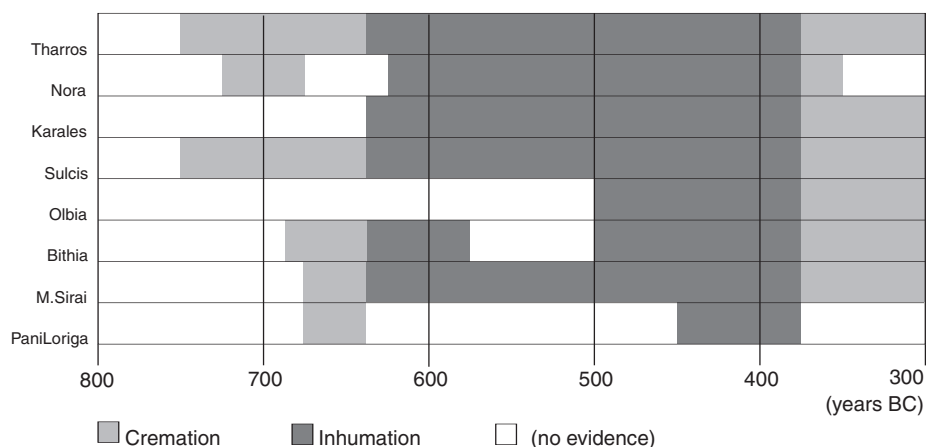


Fig. 5-3. Graphic representation of the dominant burial rites in the various colonial settlements from the 7th to the 3rd century BC (after Bartoloni 1981, fig. 3).

and the laborious establishment of Roman authority in the island several centuries later (see pp. 168-172). The mention of the Ilienses and Corsi by Pausanias (X.17.9) as the indigenous tribes who raided the Carthaginian troops from the mountains of the interior finds a perfect match in descriptions of the Roman struggle in which the same two tribes feature prominently. Livy's characterization of them as *gente ne nunc quidem omni parte pacata* ('people never nor entirely subjected': XL.34.12) was in fact a well-known one-liner, which was also subscribed to by Diodorus Siculus (V.15.6). The archaeological evidence usually put forward as proof of Carthaginian armed violence is equally ambiguous, even if several sites were undeniably destroyed by fire and abandoned. The question of who was responsible for these actions is much more controversial, however: both Carthaginians and indigenous tribes have been proposed in the case of Cuccureddus, whereas the evidence from Monte Sirai and Su Nuraxi has been argued to point to Carthaginian interventions. In all cases, however, these interpretations are rooted in the conventional representation of Sardinian 6th century history and accepting them as proof of the same historical framework would result in a circular argument. Although Carthaginian involvement in one or more of these destructions cannot be excluded, alternative explanations are just as plausible: the abandonment of Su Nuraxi fits in a wider pattern of destroyed and abandoned Nuragic sites in the Marmilla, which has been ascribed to internal strife (p. 107). Likewise, on the basis of literary evidence, the destruction of Cuccureddus can also be interpreted as a Phocaean pirate raid, as the destruction date (3rd quarter 6th century BC), the location of the site and the presence of both Punic and Etruscan imports all fit the situation of the Tyrrhenian Sea before 535 BC as described by Herodotus.

Since both the archaeological and literary evidence provide much less firm ground than usually assumed for a Carthaginian military conquest and occupation of Sardinia, it is uncertain — even unlikely — whether the so-called Sardinian-Punic wars ever took place. However, this does not mean that nothing changed in late 6th and early 5th century BC Sardinia. Several changes actually stand out in the archaeological record which need to be accounted for in an interpretation of Carthaginian presence in Sardinia.

The most prominent novelty was the change in burial customs: in nearly all cases known, the existing cremation cemeteries were abandoned and replaced by new ones in which inhumation was the dominant and often even exclusive burial rite (fig. 5-3); only in a few places, such as Bithia, the older cemetery remained in use for the new type of burial. In the larger centres such as Tharros, Nora and Sulcis, rock-cut chamber tombs of slightly different types became the norm, whereas elsewhere, as in Othoca or Bithia, simpler trench and chest graves were most common (Bartoloni 1981). At all of these places, however, a substantial continuity is attested by the uninterrupted and virtually unchanged use of the *tophet* sanctuary, whenever present. The introduction of inscribed or decorated *stelae* represented the only innovation in the *tophet*. The careful excavations at Tharros and Sulcis clearly demonstrate this point, which is all the more significant given the lack of reliable information on the settlement areas. In that regard, it is only in Sulcis that recent excavation has demonstrated continuous occupation (Bartoloni 1989, 58-59).

Equally remarkable is the establishment *ex novo* of at least two major settlements, namely *Karales* and *Neapolis* (fig. 5-2). Of these, the former presumably was — and certainly became — the most prominent one: it occupied the lower

end of the limestone hills of modern Cagliari along the S. Gilla lagoon, where traces of the settlement area have been found. A large number of terracotta figurines indicate a sanctuary near the lagoon, while a cemetery of several hundreds of chamber tombs extended over the upper slopes of the Tuvixeddu hill (Salvi 1991). On the west coast, on the southern shore of the Gulf of Oristano, Neapolis occupied the lower pediment terrace overlooking the Riu Mannu estuary and S. Giovanni lagoon. The approximate extent of the settlement area and the cemeteries of trench and chest graves suggest a sizeable town (Zucca 1987a, 99-114; cf. pp. 133-134). Surface finds from the Neapolis settlement area and several excavated burial contexts from the Tuvixeddu cemetery indicate the late 6th century BC as the most likely foundation date for both Neapolis and Karales.¹² What is perhaps most striking, however, is that these changes, no matter how impressive, are entirely confined to colonial settlement and that contemporary indigenous settlement apparently was not involved. The virtually absolute absence of evidence for indigenous settlements destroyed or at least taken over by Carthaginians cannot substantiate the claim of armed Carthaginian interventions into the interior of Sardinia: the destruction and abandonment of Su Nuraxi of Barumini can for instance hardly be ascribed to Carthage, since Punic reuse of the site only started 150 years later. A series of so-called 'Punic forts' which have been claimed to have been constructed at the end of the 6th century BC in order to consolidate the Carthaginian territorial conquest (Barreca 1978; 1986, 34-35, 88-89), may also be of a much later date: they cannot reliably demonstrate a Carthaginian penetration of the Sardinian interior as early as the late 6th or early 5th century BC. It is in fact the assumption of a Carthaginian military occupation of the southern part of Sardinia from the beginning of the 5th century BC which has provided the principal argument for dating these sites (see in particular Lilliu 1988, 477; cf. below).¹³ Considering both these changes and the arguments against a Carthaginian military occupation of Sardinia in the later 6th century BC, the first conclusion must be that Carthage assumed a major role on the island. However, its impact remained restricted to the colonial settlements and surrounding areas, as the archaeological evidence demonstrates. Since Carthaginian authority nevertheless became firmly established in Sardinia in the course of the 5th century BC, it follows that its establishment must have been a much less straightforward undertaking than has usually been supposed. A second conclusion regards the rather rash extrapolation of the changes in the colonial settlements to developments encompassing the whole of Sardinia: it effectively presents a clear example of a one-sided colonialist representation of the archaeological evidence, taking its lead from a preconceived reading of partial literary sources (cf. pp. 18-20).

The alternative interpretation of the historical evidence that Carthaginian colonialism was a primarily commercial expansion based on social and economic relationships with both colonial and indigenous parties (p. 122) in fact finds a close match in the observation that Carthaginian influence remained limited to the colonial settlements, as the commercial interests imply that Carthage did not foster territorial ambitions but instead focused on trading settlements. This point is further supported by the evidence of imported pottery: the replacement of Ionic imports with Attic products does not necessarily presuppose an armed conquest of Sardinia but rather indicates changes in wider trade and exchange circuits. It is in the latter context that Herodotus' account of the battle of the Sardinian Sea and that of the first Carthaginian-Roman treaty can be understood as describing the demarcation of distinct commercial spheres in the 6th century BC. A third conclusion finally regards the indigenous inhabitants of Sardinia, who have so far remained out of view. Given the strictly colonial focus of the historical sources, the Carthaginian role on the island and the connections between the foreign and indigenous inhabitants can only be examined though a detailed examination of the archaeological data.

5.2.4 CARTHAGINIAN DOMINATION IN SARDINIA

In later centuries Punic presence in Sardinia spread from the coastal colonies into the interior and gave rise to the 'Sardinian-Punic integration' (Barreca 1982a, 67-70). An instrumental feature of this process was the so-called 'capillary colonization', which is shorthand for the establishment of numerous rural settlement sites and cemeteries in the hinterland of the older Phoenician coastal settlements (Barreca 1986, 37). These have first been identified in the 1960s by topographical explorations in the Sulcis-Iglesiente region of south-western Sardinia (Barreca 1970). The prevailing opinion assumes that they were established between the 5th and 3rd centuries BC (Bondi 1987b, 181). The foundation of the town of *Olbia* on the north-east coast of Sardinia in the 4th century BC signalled a similar expansion of colonial settlement (Moscati 1986, 319-325). In addition, a series of small fortified sites has been distinguished running roughly East-West across central Sardinia (Barreca 1978; fig. 5-4). Among these, the sites of Monte Luna and Santu Teru in the fertile hills of the Trexenta (figs 5-2, 5-4) stand out because they present solid evidence for one of these Punic 'outposts' in the interior. The excavations in the Monte Luna cemetery show that a Punic community first settled in the area in the second quarter of the 5th century BC. The large number of chamber tombs which contained considerable quantities of imported pottery and jewellery as well as surface finds from the fortified acropolis and settlement area of Santu Teru suggest the existence of a thriving agro-town in the 4th and 3rd centuries BC (Costa/Usai 1990).

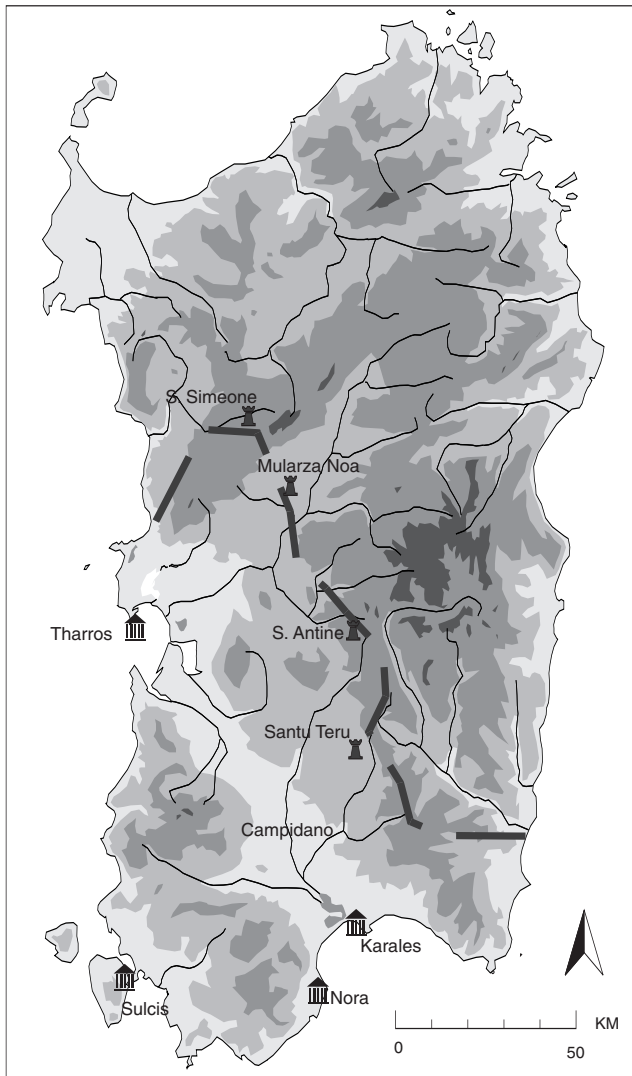


Fig. 5-4. Map of Sardinia, showing the major colonial settlements, the alleged defensive line of fortresses across the island and the four fortified sites discussed (after Barreca 1986, 40).

The military function attributed to the Santu Teru acropolis as part of a defensive line across central Sardinia is much less evident, however, even if heavy fortification walls have been identified. Still more problematic is the interpretation of many other sites which have been claimed as forts of the Punic *limes* (Barreca 1978, 125; 1986, 88-89). While in some cases a Punic toponym appears to be the only indication of Punic presence, as for instance at Macomer (Barreca 1986, 302), at other places surface finds demonstrate Punic reoccupation of a nuraghe. Since these towers are by their very nature 'fortified', however, the distinction between Punic reuse of a nuraghe and genuinely Punic-style fortifications is

not a straightforward one, as excavations have shown.¹⁴ Constructions of the latter type have in fact been documented at only three of the supposed forts. Of these, only at S. Antine of Genoni excavations have recently confirmed the Punic reoccupation and reconstruction of the abandoned nuraghe (Guido 1991), whereas at S. Simeone near Bonorva and at Mularza Noa di Badde Salighes of Bolotana only surface evidence is available (Barreca 1978, 122-124; fig. 5-4). Even at these sites, however, neither the early foundation date claimed by Barreca (1978) nor the alleged military function can be substantiated. Given the evidence of Santu Teru, they are therefore likely to represent sizeable Punic settlements of a predominantly rural (agricultural) character rather than military strongholds. This effectively means that the concept of a Carthaginian *limes* across central Sardinia in military terms (Barreca 1970, 36) can no longer be upheld. While military occupation cannot be confirmed, the uniform Punic material culture and burial customs of the Monte Luna and Santu Teru sites nevertheless demonstrate a territorial occupation of inland areas of Sardinia (Moscato 1986, 202-203). This expansion towards the interior (*irradiazione*) is furthermore documented by many small rural sites with a similarly uniform Punic appearance which were first identified by Barreca in the Sulcis area and which nowadays are known in most of southern Sardinia (Bondi 1987b, 183-185; Tronchetti 1988, 104-105). Despite a lack of precise chronological information, these sites seem to be of a slightly later date than the larger ones as Santu Teru/Monte Luna which was already established in the first half of the 5th century BC. The Punic character of the small rural settlements is underlined by their association with rural cult places of Carthaginian Demeter, which first appeared in Sardinia in the early 4th century BC.¹⁵ Conventionally, the rapid pace of this process, the Punic appearance of the rural sites and their close ties with Carthage are explained in terms of large-scale immigration from North Africa in order to take possession of the new territories under Carthaginian authority (Bondi 1987b, 181; Tronchetti 1995a, 729). Cicero's definition of the (1st century BC) Sardinians as 'sons of Africa' (*Pro Scauro* XIX.45) is usually cited as proof of the profound impact of North African immigration on Sardinian society. The rationale of Carthaginian domination over Sardinia is usually sought in the mineral and agricultural resources of the island. While there is no evidence of (Punic) mining activities,¹⁶ unless one regards the establishment of Neapolis in the relative vicinity of the Guspini/Montevecchio ores as such, agricultural exploitation of the Sardinian interior can archaeologically be recognized as the principal motivation of large-scale immigration. Literary evidence such as Diodorus' note (XI.21) that the Carthaginian troops in Sicily were supplied with Sardinian grain makes a similar point. More equivocal, however, is the remark in a so-called

'pseudo-Aristotelic' treatise¹⁷ that Carthage ordered the felling of fruit trees and prohibited the planting of new ones (*Mirab. Ausc.* 100): this directive is usually claimed as proof of a Carthaginian territorial policy geared at the exploitation of Sardinia as a granary, which entailed the promotion of cereal production at the expense of other agricultural activities (Hans 1985). Because the recurrent association of the Demeter sanctuaries with grain and the frequent depiction of ears of grain on Punic coins from Sardinia suggest a Carthaginian preoccupation with cereal production (Manfredi 1993), it has even been proposed that Carthage aimed at a colonial division of labour between Sardinia and Sicily for the production of grain and wine respectively (Gras 1985, 222-224).

In this view, large agricultural estates owned by leading citizens of the Punic cities and by members of the indigenous elite constituted the cornerstone of the Carthaginian 'territorial policy' (Meloni 1990, 123-126). The evidence for these *latifundia* primarily consists of Livy's description of the hinterland of Tharros in the 3rd century BC as being dominated by a wealthy Punic elite of partly indigenous roots who were based in the city and who were closely related to the principal Carthaginian elite families (XXIII.32.10 and 41.2; Meloni 1990, 59). Archaeological confirmation is usually found in the Santu Teru/Monte Luna settlement and the numerous small rural sites, assuming that the former was the residence of a wealthy elite living off the surrounding countryside and that the latter were inhabited by Punic immigrants of much lower social standing. It has in fact repeatedly been argued that most of these people were of African ('Lybian' or 'Lybian-Phoenician') descent and that they had been deported to Sardinia as labour force on the newly created *latifundia* (López Castro 1992, 54-56; Moscati 1986, 151-152).

Despite the widespread distribution of Punic rural settlement in the interior, the large coastal cities of Tharros, Sulcis, Nora and Karales remained the foci of Punic presence in Sardinia. Archaeologically, these cities offer abundant evidence of thriving activities and accumulated wealth. Monumental public buildings, usually temples, large houses and impressive fortifications show off the general well-being and demonstrate the increase in number of inhabitants. A similar picture emerges from the rich cemeteries, where large elaborated chamber tombs contained numerous imports and precious objects. All cities were major production centres of pottery and of other more specialized artisanal products such as the decorated precious stones (jewellery and scarabs) of Tharros (Moscati 1986, 178-179, 183-184).

By the end of the 4th century BC Carthaginian domination thus appears to have been firmly established in Sardinia. Punic administration was also well organized by that time, as is shown by the minting of Punic coins in Sardinia at the

start of the 3rd century BC and by inscriptions from the Punic cities: these attest relatively autonomous 'municipalities' with a political and administrative organization modeled after that of Carthage and similarly headed by two elected *suffetes* who shared power with an aristocratic 'senate' or 'Council of Elders' (Lancel 1995, 110-120). Of lesser importance was the much larger 'People's Assembly' which despite its restricted influence and oligarchic composition was regarded by Aristotle as the democratic aspect of the Carthaginian constitution (*Pol.* II.XI.5-6). Other lower-ranking officials took care of administrative matters among which taxes loom large (Bondi 1995a, 301). Among all officials attested, however, there are no clear indications of a Carthaginian military or colonial administration in Sardinia before the 3rd century BC, when a military officer (βοήθαρχος) was stationed at Tharros (Polyb. I.79.2). The herald (γραμματεὺς) mentioned by Polybius in the first treaty between Carthage and Rome (III.22.8) and in an inscription from Tharros (*CIS* I.154) seems to be primarily a market official rather than a colonial administrator. Likewise, there is no evidence of tribute levied by Carthage: even the grain sent to the Carthaginian troops is never referred to in these terms (*pace* Bondi 1995a, 299-300; Whittaker 1978, 71-74).

All these offices were only open to persons who could be defined as 'being among the people', or, in other words, who were in the possession of full citizenship, which must have been akin to the Roman notion of *civitas* (Garbini 1983, 158-160). The expression vividly illustrates an implicit categorization favouring a privileged group. The concept of citizenship was therefore fundamental in the constitution of (colonial) Punic society, as it included a restricted number of citizens and excluded a large mass of non-citizens: while the former could participate in political and administrative offices and were exempt from taxes, the latter who were defined as 'small ones' or *plebs* did not enjoy any political rights and were liable for tax, although they were formally free. Some additional privileges existed for people of 'Sidonian rights', inhabitants of other Punic cities, and perhaps for 'Lybian-Phoenicians', people of African origin under Carthaginian authority (Bondi 1995b, 347-351; Schiffmann 1976). With regard to Sardinia, it has frequently been argued (e.g. Bondi 1995b, 352) that as part of its territorial policy Carthage deliberately granted citizenship to the indigenous elite which allowed them to maintain their social position. The assumption is that through the creation of a new 'Sardinian-Punic' elite managing agricultural production at their *latifundia* Carthaginian interests in Sardinia could be secured. In the absence of any evidence, however, this interpretation must remain speculation, in particular since its close resemblance to Roman strategies of incorporating local elites betrays a 'Romanist' perspective.

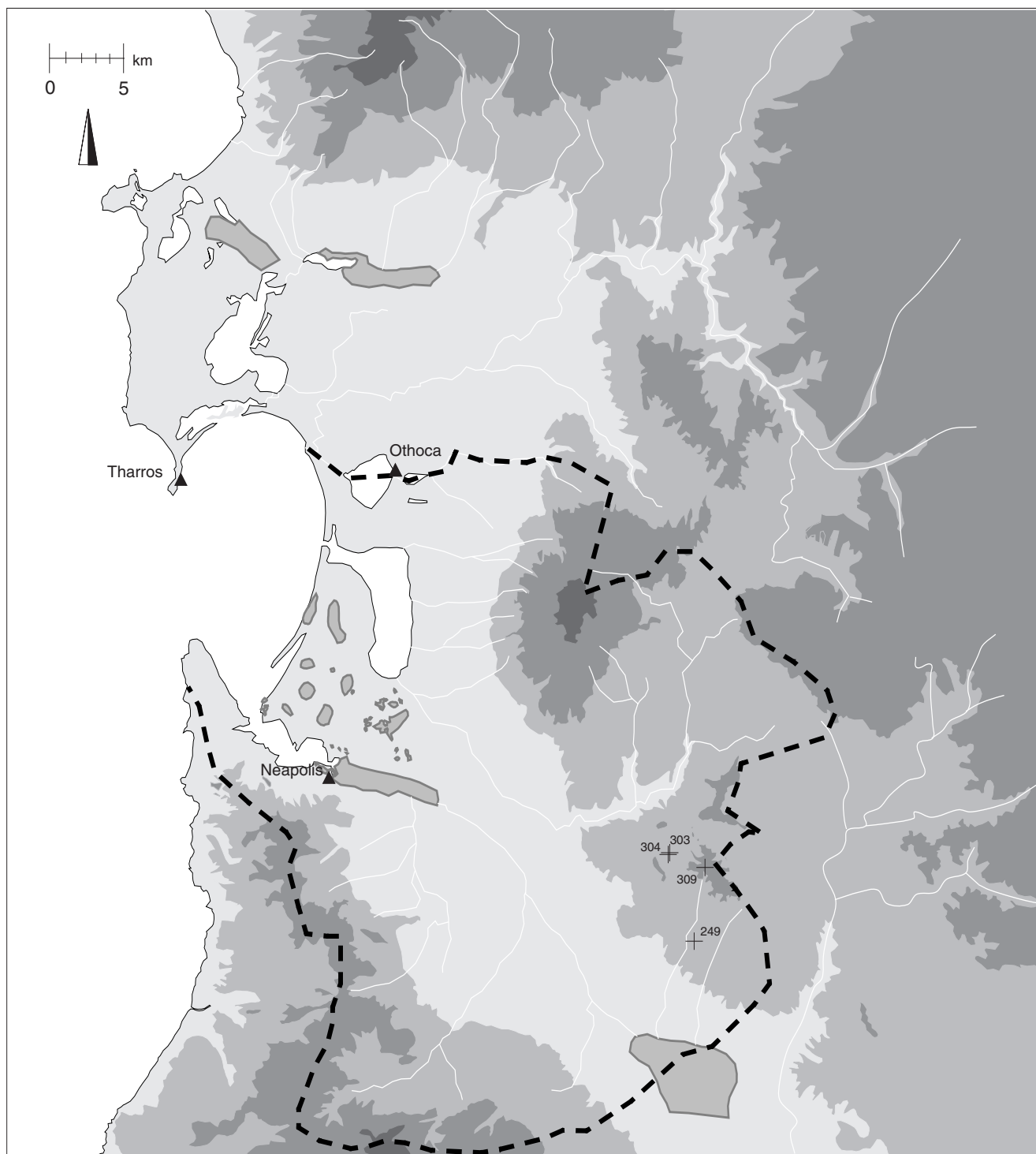


Fig. 5-5. Map of the study area of west central Sardinia showing the four (partially) excavated sites (cf. tab. 5-1).

No.	Toponym	Periodization
249	Ortu Comidu	Punic
303	Sedda sa Caudeba	Punic and Roman Republican
304	Sedda sa Caudeba	Punic and Roman Republican
309	Genna Maria	Punic and Roman

Table 5-1. Punic (partially) excavated sites in the study area (cf. fig. 5-5).

On the whole, it is evident that a ‘new’ society with a strong Punic imprint emerged in Sardinia in the 4th century BC. While the absence of formal colonial rule corresponds neatly to the commercial representation of Carthaginian expansion in the western Mediterranean (pp. 120-122), this does not mean that the impact on Sardinian society was any less profound. The archaeological and literary evidence unequivocally shows that the colonial cities were administered along Carthaginian lines and that Punic rural settlement found its way to the most remote corners of southern Sardinia. However, the majority of Sardinians have still remained conspicuously absent in this outline of ‘Sardinian-Punic’ society. Since only the local elite was incorporated in the new Punic elite, the implicit assumption is that all other Sardinians were ranked among the large group of people without full citizenship. It is precisely at this point that a controversy has arisen about colonial-indigenous relationships: were they implicated in a process of ‘integration’ or in one of ‘assimilation’ (Lilliu 1988, 472 *versus* Barreca 1982a, 68)? The former position is argued in terms of monumental and elite (material) culture and exclusively regards the new elite who is assumed to have been made up of prominent Carthaginians and Sardinians. The latter point of view concentrates by contrast on the lower ranking groups and sketches an entirely different image of ‘Sardinian-Punic’ society, arguing that ‘the local inhabitants were subjected to a process of acculturation, unable to contribute to a conscious cultural integration in an ongoing process of punicization’. Eventually, they were ‘profoundly transformed both materially and mentally to the point of being deculturized’ (Lilliu 1988, 472). Together, these arguments add up to a profoundly dualist representation of Sardinian-Punic society as divided between an ‘integrated’ elite and ‘assimilated’ lower classes. From a postcolonial point of view, it is clearly in need of reconsideration (cf. pp. 33-34). A crucial feature in both views is the alleged territorial policy pursued by Carthage: through the promotion of large-scale immigration and the creation of elite-owned *latifundia* it is assumed that the indigenous inhabitants were ‘deculturized’ and that a new ‘integrated’ Sardinian-Punic society was created. The notion of a territorial policy, however, is at

odds with the commercial interpretation of Carthaginian expansion in general, while the archaeological and literary evidence for *latifundia* is also open to alternative and perhaps more plausible interpretations (cf. pp. 205-206). Detailed consideration of the archaeological evidence can shed light on these issues and at the same time may also help overcome the dualist representation of Sardinian-Punic society.

5.3 Punic Settlement in West Central Sardinia

A major problem regarding the documentation of the archaeological record of the Punic period in Sardinia or elsewhere is its recognizability. Although Punic presence in Sardinia has never been questioned as such because of the explicit literary evidence, the *archaeological* ability to identify Punic remains is of a recent date. Punic pottery has long suffered from a lack of description and classification, which has made it difficult to identify. The first classificatory attempts have been Cintas’ *Céramique punique* (1950) and Bisi’s *La ceramica punica. Aspetti e problemi* (1970) which basically presented a general overview. Bartoloni’s *Studi sulla ceramica fenicia e punica* (1983) is an example of such a generic approach focused on Sardinia and Sicily in particular. As a consequence, Punic pottery has for a long time almost exclusively been identified in archaeological contexts which were of an otherwise unmistakably Punic nature, such as burial contexts and in particular the chamber tombs of the major colonial settlements. Most pottery studies have in turn concentrated on the limited range of ceramic products — mostly fine wares — which occur in these contexts. The publication of the Punic necropolis at Nora which reports exclusively so-called Phoenician and Punic ‘Red Slip wares’ and imported Greek vessels is a clear case in point (Bartoloni/Tronchetti 1981). Detailed studies of other categories of pottery are a recent phenomenon and have so far only concerned transport amphorae. For Sardinia, Bartoloni’s *Le anfore fenicie e puniche di Sardegna* (1988a) is instrumental in this respect. Other ceramic categories have only been considered in the context of brief excavation reports of settlement sites such as those of Tharros and the Via Brenta in Cagliari. As a consequence, it is likely that topographical explorations collecting surface finds have often failed to recognize small to medium-sized Punic sites, presumably classifying the pottery as Roman or at best as Punic-Roman. When a Roman phase was preceded by a Punic one, as frequently may have been the case (see below), the latter was even more likely to pass unnoticed. Because of the focus of pottery studies on complete vessel shapes, the fragmented state of surface finds has moreover complicated the identification of Punic pottery. Only the major colonial sites which included unmistakably Punic architectural features or chamber tombs and yielded well preserved fine wares could easily be identified as Punic. A notable exception is the fieldwork

conducted in the South-West of Sardinia by Ferruccio Barreca, whose experiences in excavating Punic sites such as Monte Sirai and Pani Loriga enabled him to recognize the 'weak traces' left by these sites on the surface (Barreca 1970, 25-27). The identification of 20 Punic farms and cemeteries in the territory of Sanluri (Barreca 1982b, 45-46; cf. below) presents a direct result of the same awareness of the Punic archaeological record and the enhanced ability to recognize Punic pottery. Other topographical studies or surveys with less experience, however, may have continued to overlook Punic pottery and thus to contribute to an underrepresentation of Punic rural settlement.

The implications for archaeological and historical interpretations of such a biased knowledge of the Punic archaeological record are considerable. An apt example is that of the case-studies of the territories of Serramanna in the southern Campidano and of Ozieri in northern central Sardinia, where repeated topographical explorations have failed to detect any Punic sherd at all (Rowland 1982, 30-34). This has been explained in terms of 'the Carthaginians' more limited conquest and more peaceful means of control adopted after the undoubtedly sanguinary imperialism of the sixth and fifth centuries' (Rowland 1982, 34). Given the considerable historical implications of these conclusions, the above considerations and the experiences of the Sulcis and Sanluri areas demand critical scrutiny of the archaeological evidence, as they suggest a far more widespread Punic presence in the interior of Sardinia than previously assumed or recognized. In this section, I offer such a detailed examination and critical evaluation of the archaeological evidence in west central Sardinia. In the first part I exclusively concentrate on the study area for an exhaustive discussion of all the available evidence. In the second part I shall widen my view to the adjacent areas of the Sinis, northern Campidano and upper Marmilla but I shall limit consideration to relevant sites which add to the evidence of the study area proper. In the final part of this section I shall compare both data sets in order to identify the strong points and biases of the information about the study area.

5.3.1 THE ARCHAEOLOGICAL EVIDENCE OF THE STUDY AREA

In order to gain an insight into the biases and lacunae of the documentation of the Punic archaeological record in the study area as defined in chapter three (p. 39), in the following overview I shall first discuss the few excavations carried out. Next, I shall present the relevant results of the *Riu Mannu* survey and finally I shall examine the various data sets compiled by topographical explorations and list some significant stray finds.

In the study area, four Punic sites have been excavated, of which only two have been published (tab. 5-1; fig. 5-5).

Two of these (249, 309) are Punic phases encountered during the excavation of a nuraghe and the other two (303, 304) actually make up one whole. All four are located in the southern Marmilla hills (fig. 5-5). Nuraghe Ortu Comidu of Sardara (249) was reoccupied at the end of the 5th century BC and remained in use until the earlier part of the 2nd century BC. The presence of a carefully laid floor of ceramic tiles in a lateral tower and of several Punic hearths or cooking-stands in two other towers indicate a resettlement of the nuraghe. The hearths are of the so-called *tabuna* type characteristically decorated with large finger imprints on the rim which is widely distributed throughout the Punic world, including Carthage (e.g. Lancel/Morel/Thuiller 1982, 218; cf. fig. 5-15.2-3). The associated Punic kitchen wares and amphorae as well as the imported Greek and Italian amphorae and fine wares show that the inhabitants of the nuraghe had settled permanently and participated in wider trading circuits (Balmuth 1986). Whereas the somewhat confused stratigraphy of Ortu Comidu cannot exclude nor confirm continuous indigenous occupation into the Punic phase, nuraghe Genna Maria of Villanovaforru (309) had clearly been abandoned before its courtyard and central tower were reused as a sanctuary dedicated to Punic Demeter (fig. 5-6). The minor towers had apparently already collapsed and become inaccessible. The central courtyard, which appears to have been entered from above, was the main ritual area where small animals were sacrificed and where a wide range of ceramic bowls and plates had been placed, presumably filled with foodstuffs. A particularly conspicuous class of objects are the numerous lamps. The central tower was used to store these objects afterwards. The nuraghe was thus essentially used as an open-air sanctuary with the central tower acting as a *cella*. The ritual activities took place in a more or less similar form from the later 4th century BC until the 5th or 6th century AD (Lilliu 1993). In the vicinity of a Nuragic *Tomba dei Giganti* at Sedda sa Caudeba of Collinas, excavations have brought to light part of a Punic building, which presents all characteristics of a small farm (304). At a distance of some hundred metres a small cemetery of three to five burials has been unearthed (303). Both sites clearly constituted one ensemble which was occupied from the third century BC onwards and abandoned in the course of the first century BC.

In the 15 transects investigated so far by the *Riu Mannu* survey, no less than 14 Punic sites have been discovered (tab. 5-2; figs 5-7, 5-9). Of these sites, eleven are situated in the southern Arborèa and only three in the Marmilla. Although some have yielded traces of previous Late Bronze Age or Iron Age presence (15, 533), only two (538, 539) are clearly associated with earlier Nuragic structures. At least in the case of nuraghe Siaxi (538), and probably in that of nuraghe Brunchiteddus (539) as well, there was no proper

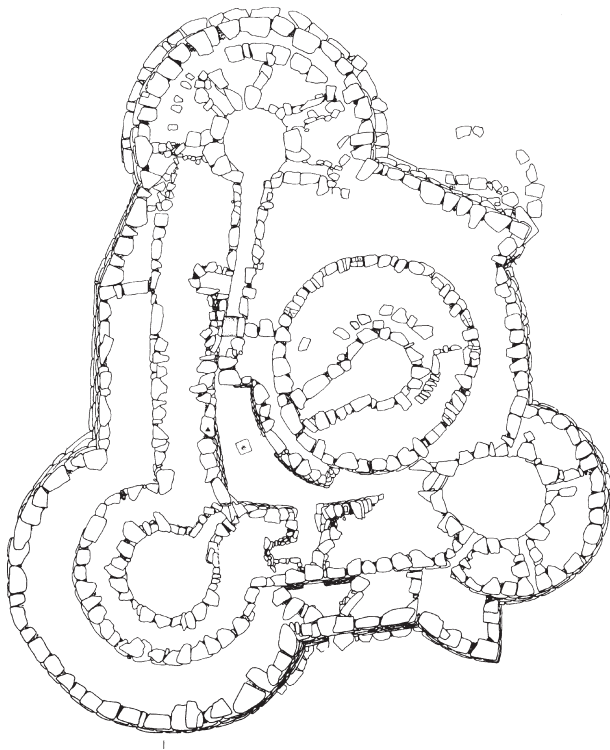


Fig. 5-6. Plan of the nuraghe Genna Maria of Villanovaforru showing the courtyard and central tower occupied by the rural sanctuary (after Lilliu 1993, tav. 2).

reoccupation of the nuraghe itself but a small house was built on more or less level ground just below the nuraghe. The latter is likely to have been reused as a stable or depository, although in neither case Punic sherds have been found on the nuraghe itself. All other sites were certainly newly established.

Apart from a possible cemetery (532) and a minor site which has provisionally been interpreted as a secondary building (535), all other twelve sites have been identified as settlement sites.¹⁸ The nine settlement sites located in the southern Arborèa have yielded comparable assemblages of numerous roof tiles, large storage jars (*dolia*), various types of transport amphorae, all sorts of utilitarian and kitchen wares, including cooking-stands (so-called *salvacenere* or *tabuna*), and fine wares. These sites measure between ca 3,000 and 4,000 m² with the exception of two significantly larger ones of nearly 1 ha (15, 534). Together with occasional stone construction elements, these finds identify the sites as moderately sized settlements probably made of mud brick walls on stone pediments and covered with tiled roofs; they are likely to have been inhabited permanently. Given their storage facilities and locations, they can be interpreted as farms involved in agricultural or pastoral activities of various kinds

(cf. Leveau/Sillières/Vallat 1993, 42-44). In some cases, a so-called 'halo' of off-site finds has been documented around the site (fig. 5-8), which might suggest that the fields immediately surrounding these farms were intensively cultivated (Hayes 1991; cf. Alcock/Cherry/Davis 1994). All these sites were established in the Punic period, most of them in the 4th century BC and some already in the later 5th century BC (at least 15, 86, 542, perhaps 8). Some farms may have been abandoned in the later 3rd or perhaps early 2nd century BC (533, 542, 537) but the others remained inhabited throughout most, if not all of the 2nd century BC. By the end of that century, all sites but one had been abandoned (15).¹⁹ In the probable cemetery 532 the oldest grave goods have been dated to the 4th century BC, while late Republican fine wares suggest that it was only abandoned by the 1st century BC. The small concentration of finds 535 has been interpreted as an annexe to farm 536, for which it may have served as a stable or depository.

Of the three Punic sites documented in the Marmilla by the *Riu Mannu* survey, only the two sites adjacent to a nuraghe (538, 539) have been intensively surveyed. These differ somewhat from the farms in the southern Arborèa described above, as ceramic roof tiles are absent and the quantities of finds are appreciably lower. The range of finds, however, is similar, as all categories from cooking-stands to imported fine wares have been attested. Chronologically, both sites have provisionally been dated to the 4th to 2nd centuries BC, which means that neither of these sites remained occupied in Roman times. The conclusion that they can be interpreted as small farms generically reusing the location of a nuraghe seems therefore justified. The third site at Perda Lada along the Mògoro river, which has been surveyed less intensively (540) may in contrast represent a hamlet rather than a single farm. The site further differs from the previous two ones because of the presence of roof tiles and its continuous occupation into the Roman period as demonstrated by amphora fragments. While the interpretation as a settlement corresponds to that of Puxeddu as marked on his map (1975), the presence of some burials is also likely (although their date remains uncertain).

Detailed study of the finds, 90% of which consist of pottery, has shown that by far most of it has been locally produced. This does not necessarily imply that all items were made at each site but rather indicates that they were produced in the area of the Riu Mannu estuary (see Annis/Van Dommelen/Van de Velde 1993/1994, 37-41). Imported materials occurred in only two categories of pottery, viz. commercial transport amphorae and fine wares. The latter category comprised so-called 'Attic' and 'Campanian' Black Glaze wares as well as probably some Carthaginian products. The Punic 'Red Slip' fine wares which have been identified — in nearly all cases the slip has been lost — also seem local



Fig. 5-7. Map of the study area of west central Sardinia showing the Punic sites and find-spots encountered by the *Riu Mannu* survey (cf. tab. 5-2; see also fig. 5-9).

No.	Toponym	Periodization
8	Pauli Putzu	Punic and Roman
15	Ingraxioris (Pauli Ummus)	Punic and Roman
86	Santa Chiara	Punic and Roman Republican
99	Santa Chiara	Punic and Roman Republican
532	Gioconi	Punic and Roman Republican
533	Casa Scintu	Punic
534	Bau Angius	Punic and Roman Republican
535	Putzu Nieddu	Punic and Roman Republican
536	Putzu Nieddu	Punic and Roman Republican
537	Putzu Nieddu	Punic and Roman Republican
538	N. Siaxi	Punic
539	N. Brunchiteddus	Punic
540	Perda Lada	Punic and Roman
542	Santa Chiara	Punic

Table 5-2. Punic sites and find-spots encountered by the *Riu Mannu* survey (cf. fig. 5-7).

products. The majority of the amphorae is made up of locally produced Punic transport amphorae but a number of different fabrics attest imported ones. Other shapes, in particular Graeco-Italic ones, also occur. Even if the actual provenance of Black Glaze pottery and amphorae remains difficult to establish, they nevertheless show that the inhabitants of these sites had access to international trading networks. Among the category of other surface collections and stray finds (table 5-3), a special place must be reserved to the site of Neapolis because of its exceptional size and its status as the only major (colonial) settlement of the study area. Unlike all other colonial towns in Sardinia, however, it is only known from surface finds. Although it has never been surveyed systematically and its long occupation from the 6th century BC until the 7th or 8th century AD may have deeply hidden the oldest remains, the frequently repeated explorations over a long period and the relatively favourable visibility and accessibility of the site can be assumed to have resulted in a fairly reliable investigation. The main features have been outlined by Raimondo Zucca (1987a), who draws on both previously published work and unpublished information gathered personally and by local amateurs from Guspini (*Gruppo Archeologico 'Neapolis'*) and Terralba (in particular G. Artudi and S. Perra). The ruins of Neapolis on the south-eastern shore of the S. Giovanni lagoon, where the Riu Mannu and Riu Sitzerri rivers originally flew into the marshes of S. Maria (fig. 5-9) were first extensively described by V. Angius in his contributions to the volumes of the *Dizionario storico, geografico,*

statistico degli stati di S.M. il Re di Sardegna edited by G. Casalis in 1839 and 1841. After a first excavation in 1841, Canon Spano undertook a brief campaign in 1858 during which he 'dug sixteen pits in three days'. He published the results in the fourth volume of his *Bollettino di Archeologia Sarda* (1859, 129-137). In the first half of the 20th century, Francesco Lampis from Guspini explored the site extensively and collected many stray finds of which he kept Taramelli accurately informed. Historical research regarding Neapolis was seriously taken up by Pais in his wider studies of Punic and Roman Sardinia (1881 and 1923). Fieldwork was again carried out by Lilliu in 1951 with a brief excavation campaign in the Roman bath complex which had already been exposed by Spano. A topographical exploration of the site and its surroundings in 1967 by Barreca and Moscati was the first explicit attempt to look into the Punic and possibly Phoenician antecedents of the site (Barreca 1970, 22, note 3). It has also remained the last official archaeological investigation of the site, which was declared a heritage monument in 1984.

The Punic phase of Neapolis remains largely unknown, as no structures are known nor have the limited excavations reached stratified Punic deposits. Only the walls are to some extent known from the descriptions by Angius and Spano and from air photographs on which their course can more or less be distinguished (fig. 5-10). Their total length measures some 4.5 km. On the basis of the available accounts and still visible architectural features of the few remaining stretches *in situ*, among which a 4 m high embankment along the edge of the pediment terrace in the North, Zucca has suggested a 5th century date for the first circuit, which was probably reconstructed in Hellenistic times (1987a, 99-100). In the absence of reliable chronological indications, a generic classification of the walls as 'classical Punic' (5th-3rd century BC) seems more appropriate, however. Surface finds from the settlement area mainly consist of pottery and include both Punic fine and coarse wares and imported fine wares (Attic Black and Red figured as well as Attic and Campanian Black Glaze wares). They thus cover the entire period from the late 6th century BC onwards. Coins of Punic Sicilian mint occur from the late 4th century onwards (Zucca 1987a, 183-199). Stray finds brought to light by deep-ploughing have revealed the location of at least one cemetery of trench graves situated to the North-West of the town. Punic and Attic imported pottery indicate a 5th-4th century date for this necropolis. Numerous amphorae from the S. Giovanni lagoon (Fanari 1989) suggest that the port of Neapolis was situated to the North of the town, where the S. Maria marshes border on the lagoon (fig. 5-10). The Roman road leading North through the marshes may well be of Punic origin, perhaps originally serving as a quay of the port (Delano Smith 1978, 26).

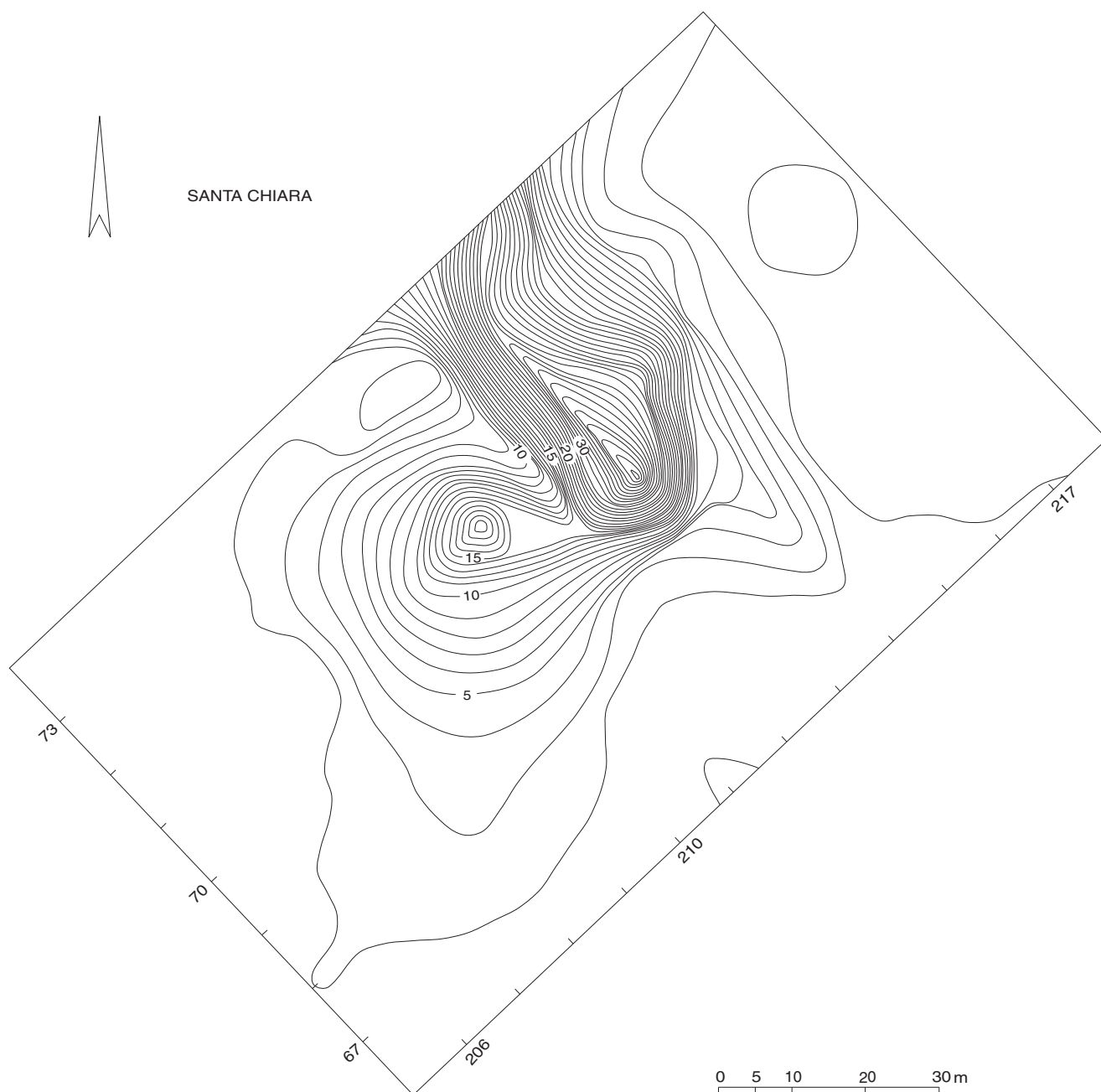


Fig. 5-8. Distribution map of pottery surface finds at and around a Punic farm in the Santa Chiara area (68) which has been intensively surveyed by the *Riu Mannu* project: both the site itself and the surrounding off-site finds can be distinguished. The densities (in fragments per m²) have been interpolated from the 10 × 10 m collection grid.

Where this road meets the northern perimeter of the walls, a healing sanctuary was situated between the 4th and 2nd century BC, as show numerous ex-voto statuettes and fragments of limbs (Moscatti 1992b, 66; cf. Zucca 1987a, 151-182).²⁰

Among the sites and findspots which are known from non-systematic — and consequently less representative — surface collections (tab. 5-3) several sets of information stand out as more or less coherent collections covering a usually well delimited area. In the study area, two such sets are

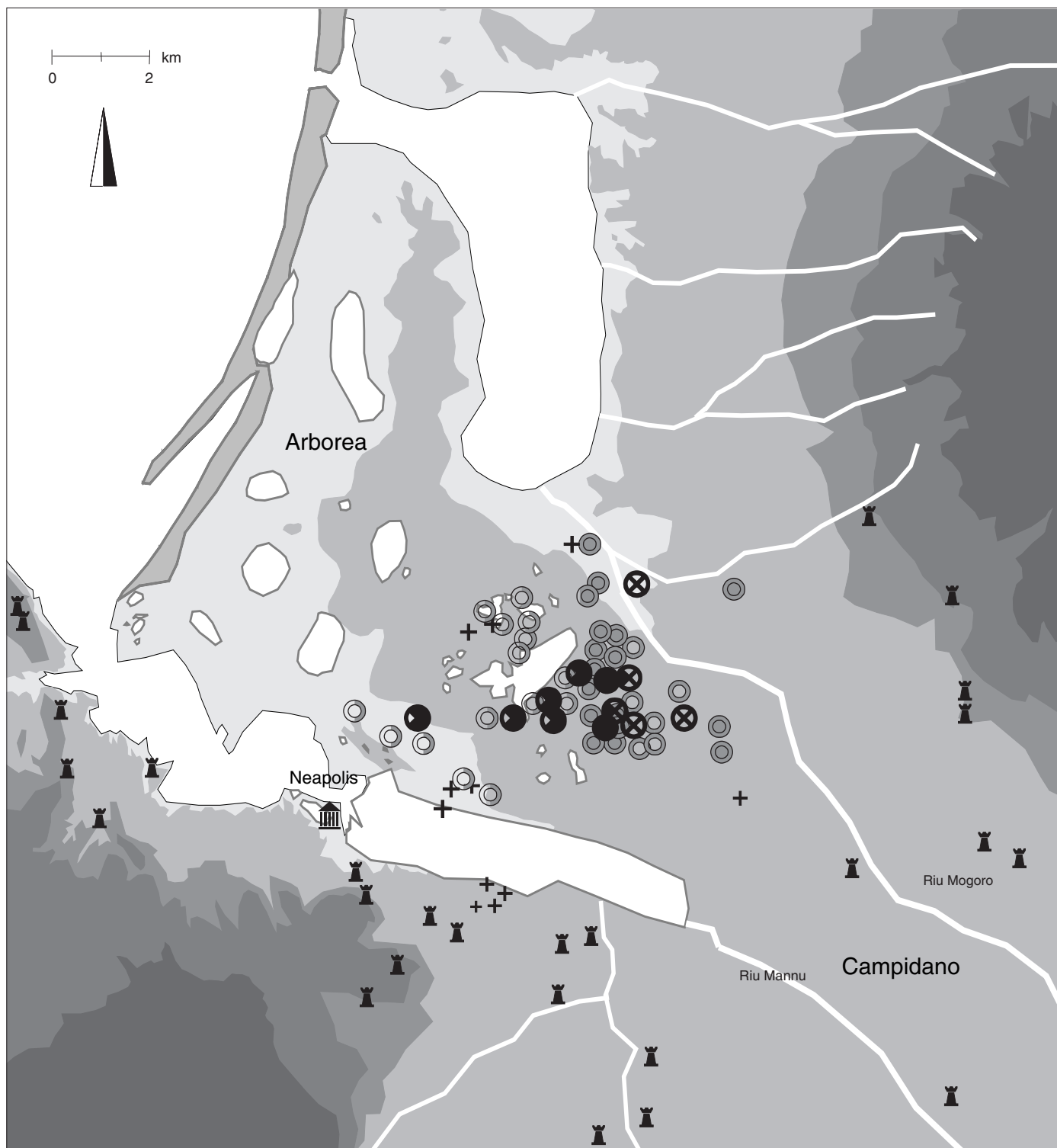


Fig. 5-9. Map of the southern Arborèa showing the site of Neapolis and the Punic sites and find-spots recorded in the territory of Terralba by the *Riu Mannu* survey (indicated by crosses) and the explorations of Gino Artudi and Sandro Perra (indicated by dots: the crossed, open and solid ones respectively denote a 6th, 5th or 4th century BC foundation). For site identification numbers, see figure 5-12.

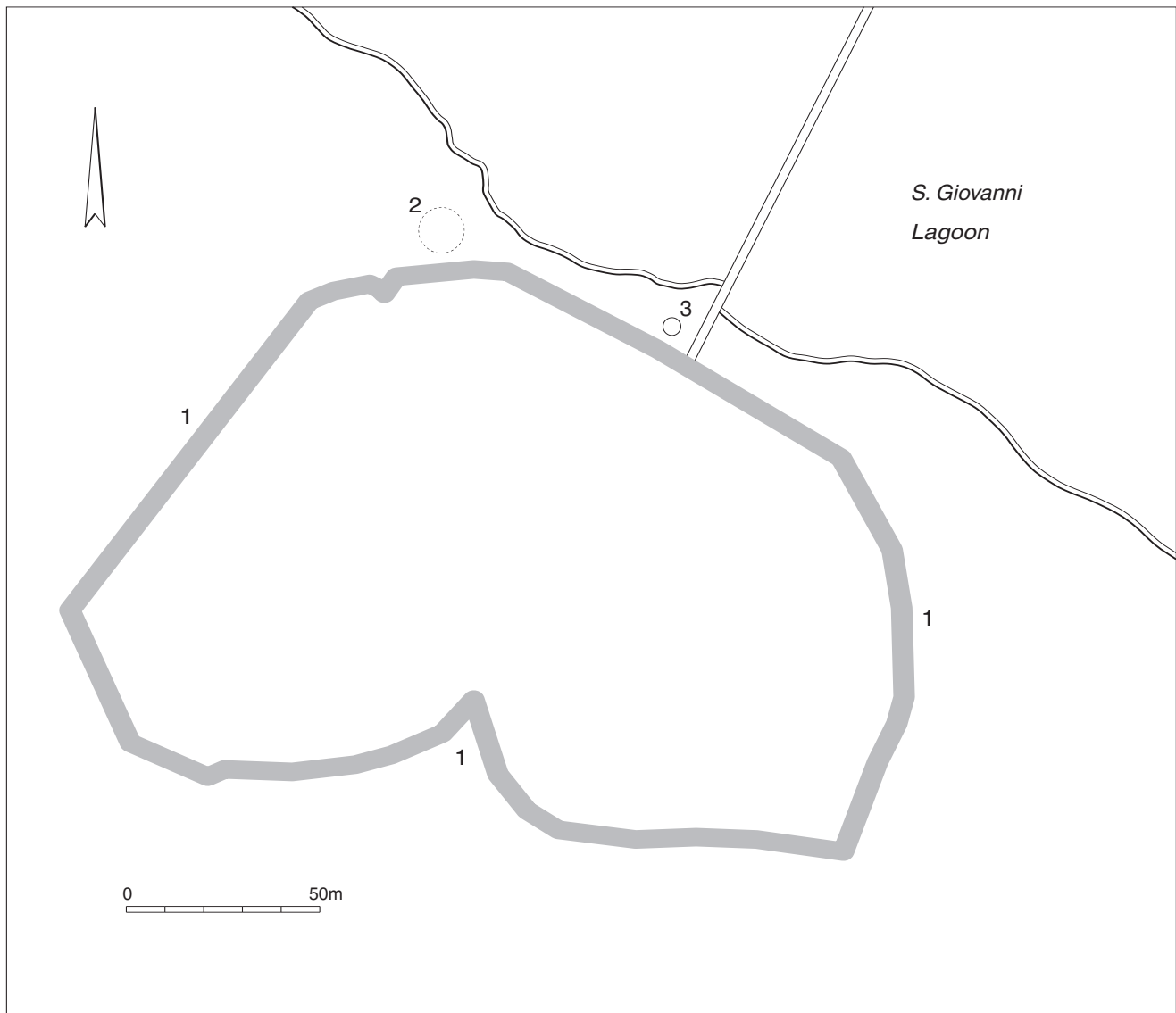


Fig. 5-10. Map of the town of Neapolis and surroundings showing the known Punic features.
 Legend: 1: town walls; 2: Punic cemetery; 3: Punic sanctuary (after Zucca 1987, tav. 13.1; drawing P. Deunhouwer).

present. The largest one covers the entire territory of Terralba and is the most exceptional one, as the meticulousness of the collection and publication of the results outdo all other explorations in the region (Artudi/Perra 1994, 1997).²¹ Although largely a two-person undertaking, the Terralba exploration has reached a high measure of reliability because of the often repeated visits of sites, which is nowhere less than 20 and often has reached as much as 40 or 50 times under all possible conditions of visibility. In the same way, by meticulously documenting which tracts have or have not

yet been visited under favourable circumstances, a virtually complete coverage of the Terralba territory of 34.65 km² has been achieved in the course of nearly 15 years of fieldwork. The familiarity of Artudi and Perra with both the territory and the owners of the lands has moreover enabled them to document numerous stray finds which otherwise would have disappeared without a trace in the many sand quarries and construction sites. The published sites gazetteer (Artudi/Perra 1994, 36-38) represents a summary of the analytic site forms which have been compiled over the years to record all

<i>No.</i>	<i>Toponym</i>	<i>Periodization</i>	<i>No.</i>	<i>Toponym</i>	<i>Periodization</i>
1	Coddu su Fenugu	Punic and Roman	75	Serra Prumu	Punic and Roman
2	Pomada	Punic and Roman	77	Ingraxioris	Punic and Roman
3	Cuccuru s'Arena	Punic and Roman	78	Bau Angius	Punic and Roman
5	Pauli Putzu	Punic and Roman	79	Bau Angius	Punic and Roman
6	Pauli Putzu	Punic and Roman		(Coddu is Sabios)	
7	Pauli Putzu	Punic and Roman	81	Santa Chiara	Punic and Roman
9	Pauli Putzu	Punic and Roman	82	Santa Chiara	Punic and Roman
10	Sa Ussa	Punic and Roman	83	Santa Chiara	Punic and Roman
11	Ingraxioris	Punic and Roman Republican	84	Santa Chiara	Punic and Roman
12	Ingraxioris	Punic and Roman Republican	85	Santa Chiara	Punic and Roman
13	Ingraxioris	Punic and Roman Republican	87	Santa Chiara	Punic and Roman
14	Pauli Annuas	Punic and Roman	88	Su Quadroxiu	Punic and Roman
16	Pauli Ummus	Punic and Roman Republican	89	Su Quadroxiu	Punic and Roman
17	Giogoni	Punic and Roman	90	San Giovanni	Punic and Roman
20	Via E. d'Arborea	Punic and Roman		(Su Coddu e Damas)	
21	Trunconi	Punic and Roman	91	San Giovanni	Punic and Roman
22	Murera	Punic and Roman Republican	92	San Giovanni	Punic and Roman
23	Sa Ussa	Punic and Roman	93	San Giovanni	Punic and Roman Republican
24	Fangariu	Punic and Roman	94	Giogoni	Punic and Roman
25	Fangariu	Punic and Roman	95	San Giovanni	Punic and Roman
26	Fangariu	Punic and Roman Republican	96	San Giovanni	Punic and Roman Republican
27	Fangariu	Punic and Roman	97	San Giovanni	Punic and Roman Republican
28	Fangariu	Punic and Roman	98	Santa Chiara	Punic and Roman
29	Murera	Punic and Roman Republican	100	Sena Manna	Punic and Roman
30	Murera	Punic and Roman Republican	101	Pauli Longas	Punic and Roman Republican
31	Murera	Punic and Roman Republican	102	Bau Angius	Punic and Roman
32	Murera	Punic and Roman Republican	103	Paulistincus	Punic and Roman
33	Murera	Punic and Roman Republican	104	Paulistincus	Punic and Roman
34	Murera	Punic and Roman	105	Sa Gora	Punic and Roman
35	Murera	Punic and Roman Republican	106	Pauli Putzu	Punic and Roman
36	Murera	Punic and Roman Republican	107	Giogoni	Punic and Roman
37	Murera	Punic and Roman Republican	109	Coddu su Fenugu	Punic and Roman
38	Murera	Punic and Roman Republican	110	Truncu e Molas	Punic and Roman
39	Murera	Punic and Roman Republican	111	Sa Ussa	Punic and Roman Republican
40	Murera	Punic and Roman	112	Narbonis (Pauli Margiani)	Punic and Roman
41	Murera	Punic and Roman Republican	113	Narbonis	Punic and Roman Republican
42	Serra Erbutzu	Punic and Roman Republican	114	Truncu e Molas	Punic and Roman
43	Candelaris	Punic and Roman	115	S'Arrideli	Punic and Roman Republican
44	Candelaris	Punic and Roman	116	Bau Angius	Punic and Roman
45	Candelaris	Punic and Roman	117	Fangariu	Punic and Roman
46	Candelaris	Punic and Roman	118	Candelaris	Punic and Roman
47	Serra Erbutzu	Punic and Roman Republican	119	Mattixeddas	Punic and Roman Republican
48	Truncu e Molas	Punic and Roman	120	Pauli Piscus	Punic and Roman
49	Truncu e Molas	Punic and Roman Republican	121	Paulincasu	Punic and Roman
50	Paulistincus	Punic and Roman	122	Mattixeddas	Punic and Roman
51	Paulistincus	Punic and Roman	123	Candelaris	Punic and Roman Republican
52	Paulistincus (Pauli Nicasu)	Punic and Roman	124	San Giovanni	Punic and Roman
53	Paulistincus	Punic and Roman	127	S'Ungroni	Punic and Roman
54	Truncu e Molas	Punic and Roman Republican	128	Arcuentu	Roman Republican and Imperial
55	Truncu e Molas	Punic and Roman Republican	130	Capo Frasca	Punic
56	Nuracciolu	Punic and Roman Republican	133	Punta sa Rana	Punic and Roman
57	Pauli Longas	Punic and Roman	144	Zairi	Punic and Roman
58	Truncu e Molas	Punic and Roman Republican	147	Bruncu sa Grutta	Punic
59	Pauli Longas	Punic and Roman	148	Coddu de Acca Arramudu	Punic and Roman
60	Serra Erbutzu	Punic and Roman	150	Conca Manna	Punic and Roman Republican
61	Truncu e Molas	Punic and Roman Republican	158	Is Trigas	Punic and Roman Republican
62	Pauli Zorca Republican	Punic and Roman	160	Montevecchio-Sciria	Punic and Roman Republican
63	Pauli Zorca	Punic and Roman	170	Pauli Planu	Punic and Roman Republican
64	Pauli Zorca	Punic and Roman	171	Pauli s'Enadi	Punic and Roman
65	Pauli Zorca	Punic and Roman Republican	175	Putzu Nieddu	Punic and Roman Republican
66	Pauli Zorca	Punic	180	S. Sofia	Punic and Roman
67	Pauli Pirastu	Punic and Roman	182	Sa Tribuna (Bangius)	Punic and Roman
68	Pauli Zorca	Punic and Roman	184	Sedda is Benas	Punic and Roman
69	Pauli Zorca	Punic	196	Ruinas	Punic and Roman
70	Pauli Onna Mannu	Punic and Roman Republican	199	Bonorzuli	Punic and Roman
71	Pauli Colostu	Punic and Roman	200	S. Maria di Cracaxia	Punic and Roman
72	Sa Gora Paugas	Punic and Roman	201	S'Argidda	Punic and Roman Republican
73	Serra Prumu	Punic and Roman Republican	202	Nuraghes	Punic and Roman Republican
74	Serra Prumu	Punic and Roman	203	Nuraghe Fenu	Punic and Roman

No.	Toponym	Periodization	No.	Toponym	Periodization
204	Sa Fronta	Punic and Roman	256	N. Tramatzza	Punic and Roman
205	S. Luxori (S. Sciori)	Punic and Roman	257	N. Su Sensu	Punic and Roman
208	Cuccuru 'e Casu	Punic and Roman	258	Melas	Punic and Roman
212	Funtana 'e Canna	Punic and Roman	264	S. Giovanni (Ponti Arcau)	Punic and Roman
215	Giba Umbus (Bia Umbus)	Punic and Roman	265	Su Nuracci	Punic and Roman
219	Ortillonis	Punic and Roman Republican	266	Codinas	Punic
220	Perda 'e Gruxi	Punic and Roman Republican	267	S. Maria Atzeni	Roman Republican and Imperial
221	Ruinass Mannas	Punic and Roman Republican	287	Brunku Predi Poddi	Punic and Roman
223	S'Acqua Cotta	Punic and Roman	288	Corti Beccia	Punic and Roman
228	Tuppa 'e Xebru	Punic and Roman	290	Masu Serci (Mitrixedda)	Punic and Roman
231	S. Pantaleo	Punic and Roman	291	Pauli Murtas	Punic and Roman
233	Acquae Neapolitanae	Punic and Roman	292	Sa Ruina 'e Stuppai	Punic and Roman
234	Arigau	Punic and Roman	297	Mar 'e Idda	Punic and Roman
235	Axiurridu	Punic and Roman	298	Corti Beccia	Punic and Roman
239	Canale Linu	Punic and Roman	300	S. Caterina	Punic and Roman
244	Lixius	Punic	308	S. Reparata-Donigala	Punic and Roman
246	Nuraghe Arrubiu	Punic and Roman	541	Neapolis	Punic and Roman
248	Nuraghe Perra	Punic and Roman	565	Nieddu Mannu	Punic
251	Roja sa Lattia	Punic	566	S. Arzou	Punic and Roman Republican
253	S. Caterina	Punic and Roman			

Table 5-3. Punic sites, find-spots and stray-finds as documented by topographical explorations in the study area (cf. fig. 5-12).

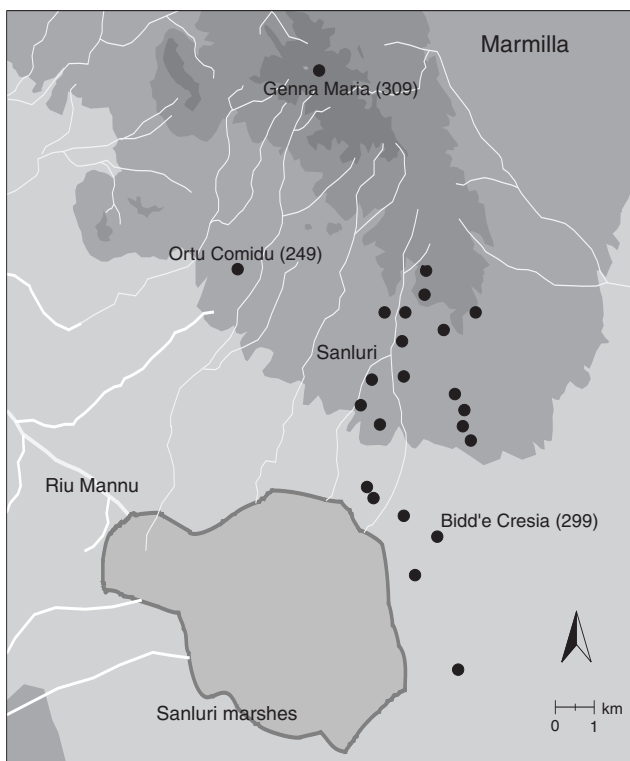


Fig. 5-11. Map of the central Campidano near the Sanluri marshes and the southern hillslopes of the adjacent Marmilla showing the Punic sites recorded in the territory of Sanluri. In addition, the nearby excavated sites of the Bidd'e Cresia cemetery (299), the Ortu Comidu nuraghe (249) and the shrine in the nuraghe Genna Maria (309) are numbered. For site identification numbers, see figures 5-12 and 5-13.

	6th BC	5th BC	4th BC	3rd BC	
settlement	12	39	*57	2	110
cemetery	0	5	2	1	8
	12	4	59	3	118

* Three of these probably comprise a certain number of burials as well

Table 5-4. Classification of Punic sites recorded by Artudi and Perra (1994) on the basis of their function and foundation date.

diagnostic finds and features noted on the sites. These have progressively been refined and now not only include estimates of maximal site size but also of artefact density. The chronology of the sites is mainly based on the classification of fine wares and amphorae, while other items such as coins or kitchen wares often provide additional information. For the Punic period the presence of Attic Black Glaze wares and Punic amphorae is a critical chronological element. The current gazetteer lists a total of 135 sites for the Punic and Roman periods. All but 17 of these cover some part of the Punic period. The remaining 118 have further been distinguished chronologically after their foundation date, as none was abandoned before the 1st century BC. They have also been classified functionally as either a settlement site or a cemetery. This results in the following overview (tab. 5-4). The second set of more or less coherent evidence has been gathered by a group of amateur and professional archaeologists involved in salvage interventions during land reclamation and irrigation works in the territory of Sanluri. It is



Fig. 5-12. Map of the study area of west central Sardinia showing Punic sites, find-spots and stray-finds as documented by topographical explorations in the study area. The inset shows the dense concentration of settlement in the Terralba area of the southern Arborèa (cf. tab. 5-3).



Fig. 5-13. Map of the wider region of west central Sardinia showing areas and sites mentioned in the text (cf. tab. 5-5).

<i>No.</i>	<i>Toponym</i>	<i>Periodization</i>	<i>No.</i>	<i>Toponym</i>	<i>Periodization</i>
129	Bruncu Espis	Punic and Roman	515	Cuccuru Ruinas	Nuragic and Punic-Roman
131	Genn'e Gruxi	Punic and Roman	518	Santu Brai	Nuragic and Punic
132	Pistis	Punic and Roman	521	Argiddas	Nuragic and Punic-Roman
268	Domu 'e is Abis	Nuragic and Punic-Roman	543	Brunk'e mesu	Punic and Roman
269	S. Uria	Punic	544	N. Su Mulinu	Iron Age
270	Cadreas	Punic	545	Bingia Arena	Punic and Roman Republican
271	S'Occidroxu	Punic	546	S'Abbadiga	Punic and Roman
272	Sa Murallia	Punic	547	Punta Zinnigas	Punic and Roman
273	Nuraghe Tunis	Punic and Roman	548	N. S'Omù	Punic and Roman
274	Banatou	Punic	549	Monte Benei	Punic and Roman
275	Is Ollaius	Punic	550	N. Abili	Punic and Roman
276	Prascocca	Punic and Roman	551	N. Lilloi	Punic and Roman Republican
277	San Nicola	Punic	552	Pala Naxi	Punic and Roman
278	San Martino	Punic and Roman	553	N. Melas	Punic and Roman
279	Donigala Fenugheddu	Punic	554	Riu Maiore	Punic and Roman
280	Perda Bogada	Punic	555	Is Ariscas Burdas	Punic and Roman Republican
281	Bau Marcusa	Punic and Roman Republican	556	S'Uracheddu Biancu	Punic and Roman Republican
282	Bruncu Cristollu	Punic and Roman	557	Prei Madau	Punic and Roman
283	Nuraghe Civas	Punic and Roman Republican		(S'Urachedda is Arisca)	
284	Nurracc'e Deu	Punic and Roman	558	Sa Ruxi	Punic and Roman Republican
285	Bia Collanas	Punic and Roman	559	Pisconti/N. Arrosas	Punic and Roman
286	Brunk 'e Cresia	Punic and Roman	560	Bacch'e Floris	Punic and Roman
289	Corti sa Perda	Punic and Roman	561	Bruncu Giantommaso	Nuragic and Punic-Roman
293	Fundabi de Andria Peis	Punic and Roman	562	Ordinada	Punic and Roman Republican
294	Padru Jossu	Punic and Roman	563	Su Nuraxi	Punic and Roman
295	Uraxi Mannu	Punic and Roman	564	Tana	Punic and Roman
296	Brunku sa Batalla	Punic and Roman	567	Cuccuru is Predas	Punic and Roman Republican
299	Bidd 'e Cresia	Punic and Roman	568	Vicolo Serra	Punic and Roman
301	Su Pauli	Punic	569	Via Parrocchia	Punic and Roman
302	Giliadiri	Punic and Roman	570	Crogana	Punic and Roman
305	Su Gutturu de sa Mela	Punic and Roman	571	Feureddu	Punic and Roman
306	Matta Sterri	Punic	572	Melas	Punic and Roman
307	Bidda Maiore	Punic	573	Sa Mitza	Punic and Roman
498	Su Cungiau 'e Funta	Nuragic and Punic	574	S. Giovanni	Punic and Roman
503	S'Uraki	Nuragic and Punic-Roman	575	Sedda Scalas	Punic and Roman Republican
509	Bruncu 'e Tana	Nuragic and Punic-Roman	618	Tharros	Nuragic and Punic-Roman
			632	Othoca	Punic and Roman

Table 5-5. Relevant Punic sites, find-spots and stray-finds outside the study area (cf. fig. 5-13).

claimed that the entire territory of 84.16 km² has been examined systematically but no further details of the methodology and intensity of fieldwork have been published (Paderi 1982a; Paderi/Putzolu 1982). This area covers the lower slopes of the southern Marmilla hills and the adjacent glaciis of the central Campidano which gradually descends towards the Sanluri marshes. About half of it lies in the Flumini Mannu river basin beyond the watershed marked by these swamps and thus falls outside the study area proper. In the entire territory 19 Punic sites have been recorded, eleven of which are settlements and eight cemeteries. Only five settlements and three cemeteries, however, are located within the study area proper (fig. 5-11). Three of each group have partially

been excavated, although only the excavation of the Bidd'e Cresia cemetery has regarded a substantial portion of the site (Barreca 1982b). All of these unfortunately fall outside the study area. Practically all settlements and cemeteries have been dated to the 4th and 3rd centuries BC, although all remained occupied in the Roman period (Barreca 1982b, 45-46; Paderi 1982c).

All other surface or stray finds as listed in table 5-3 have been reported either in older publications or by local amateur archaeologists. There is consequently little or no system or coherence to be found in this list. An additional problem is that all older reports fail to distinguish between Punic and Roman and simply report either Roman or at best

Punic-Roman finds. For the Campidano and Arborèa, in what was assumed to be the territory of Roman Neapolis, and in the immediate surroundings of ancient Othoca, this problem has been dealt with by Zucca who has revisited and described all sites reported. Thus not only a certain measure of uniformity of description has been achieved but also, and more importantly, a reliable description of the finds has been made available (Nieddu/Zucca 1991, 155-166; Zucca 1987a, 115-147). For the Punic period, 57 sites are listed in the Campidano and southern Arborèa which roughly cover the 4th to 2nd centuries BC (fig. 5-12). The bulk of these sites (36) has been interpreted as settlements, most of them as farms but some as small hamlets, eight have been classified as a cemetery, three as a shrine and one as an isolated hoard (tab. 5-3). In the northern Arborèa, of the 14 sites recorded in the supposed territory of Othoca, only one settlement and a hoard are situated South of the Santa Giusta lagoon and Riu Zeddiani stream and are thus located within the study area (fig. 5-12). Examination of the historical archives of the *Soprintendenza* and of all reports published in *Notizie degli Scavi dell'Antichità*, *Studi Sardi* and *Archivio Storico Sardo* has shown that all earlier relevant information for these areas has been incorporated in these two compilations. In those parts of the study area not covered by Zucca's studies, i.e. the Marmilla, it has proven virtually impossible to identify Punic settlement. Although many sites have been reported which may cover part of the period under discussion, it has not been possible to refine the generic classification of 'Roman', as descriptions of finds, if present at all, either mention only well-known Roman fine wares such as Arretine *sigillata* or refer to 'many Roman sherds of coarse fabrics' or 'many tiles and fragmented kitchenware'.²² The sites gazetteer of Punic sites compiled by Barreca (1986, 279-325) evidently suffers from the same problem, as it adds nothing to Zucca's list for the Campidano and Arborèa and mentions only three sites in the Marmilla (266, 267, 308). The latter two have been relatively well explored by partial excavations but remain unpublished. One more site (258), part of which had illegally been excavated, has been documented in the territory of Villanovaforru which is carefully watched by the local archaeologist Ubaldo Badas. Two more sites (256, 257) have finally been reported by the American survey of nuraghi in the Marmilla, which identified two of these towers as having been occupied in the Punic period (fig. 5-12).

5.3.2 THE WIDER CONTEXTS OF THE SÌNIS, CENTRAL CAMPIDANO AND UPPER FLUMINI MANNU VALLEY

As in the preceding period, the two colonial settlements of Tharros and Othoca (fig. 5-13) stand out in the wider region of west central Sardinia because of their size and the variety of material culture attested. Tharros in particular remained

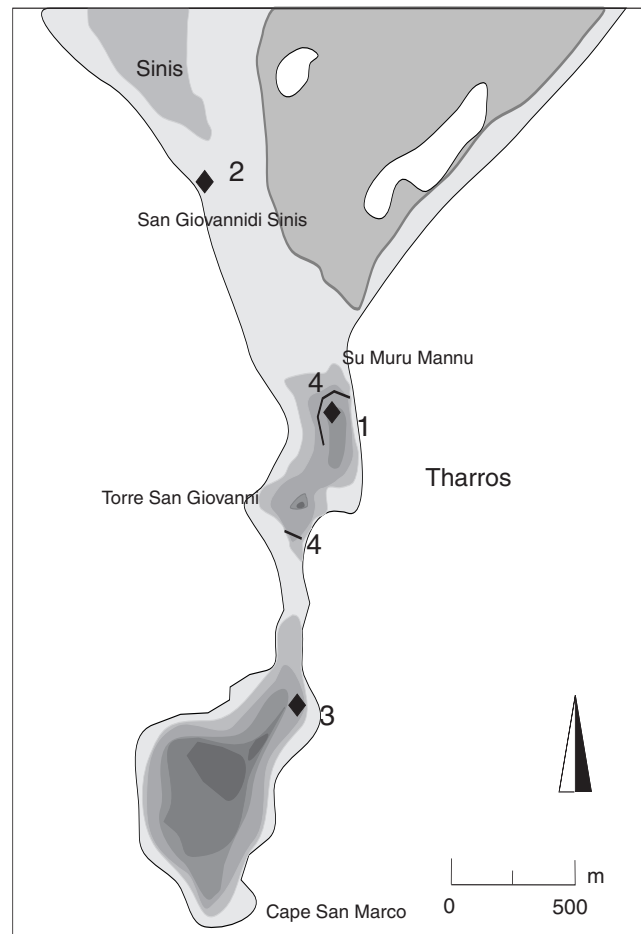


Fig. 5-14. Overview of the Cape San Marco peninsula showing the principal Phoenician and Punic features of Tharros. Legend: 1: Su Muru Mannu *tophet*; 2: cemetery of S. Giovanni di Sinis; 3: cemetery of Cape S. Marco; 4: fortifications.

unique as the only settlement of the region with an urban status (Van Dommelen 1997b). The onset of the Punic phase around the middle of the sixth century BC has been well documented in Tharros: in both cemeteries (fig. 5-14; cf. p. 81) the Phoenician cremation burials were replaced by inhumations which were deposited in rock-cut chamber tombs, simple trenches or pits, sometimes covered with stone slabs. At the same time, the first *stelai* were also erected at the *tophet* (Moscati 1986, 296-299). The settlement area was protected by a city wall and a moat which appear to have been constructed in the later 6th century BC; it blocked off the eastern half of the narrow peninsula immediately to the North of the *tophet* at the foot of the Su Muru Mannu hill. From there it followed the central ridge to the Torre San Giovanni, where it descended to the Gulf of Oristano. The area thus enclosed measured some 20 ha. Although later

Roman buildings and 19th century 'excavations' have erased most traces and many houses cannot be dated securely, the settlement area seems to have acquired a monumental aspect only from the later 5th and early 4th century BC onwards, when a number of temples were constructed (Moscati 1986, 292-293).

Othoca has provided similar evidence of inhumation burials replacing cremations in the second half of the 6th century BC. Like Tharros it was probably surrounded by a defensive wall and a moat in the course of the 6th century BC (Nieddu/Zucca 1991, 108). Since the settlement area has yielded an extremely limited number of 5th and 4th century finds, which may be due to the overlying modern town of S. Giusta, the Punic period is best represented by the burial evidence. In comparison with the preceding Phoenician period, the Punic grave goods found are not very abundant and in contrast with e.g. Neapolis, Attic imports in particular are relatively rare (Nieddu/Zucca 1991, 177-178).

With respect to the study area, the territory of Gesturi presents important additional evidence. The relevance of these finds arises from their location in the upper Marmilla, where in the study area the archaeological evidence is particularly wanting. The territory of Gesturi, which measures 46.87 km², of which 19.8 are located on the homonymous *giara* (table-land), has been studied intensively during four years by a group of local amateur archaeologists headed by a professional archaeologist (Caterina Lilliu). Their local knowledge of the area has of course contributed much to an intensive exploration of the territory. Thanks to the assistance of professional archaeologists for the identification of the finds of the various periods, the resulting documentation of the location and characteristics of the sites and of the surface finds (Lilliu 1985) is only matched by that of the Terralba exploration. In all, eleven sites have been identified as having been occupied in the Punic period which are all located in the hilly area below the *giara* (fig. 5-13; cf. tab. 5-5). Seven of these have been classified as settlements and four as cemeteries. While five of the former occupied the location and in most cases probably the standing structures of an earlier nuraghe, two others were apparently newly established (562, 564). The large size of several of these sites suggests that they may represent small villages rather than isolated farms. In three cases (509, 515, 561), the presence of imported fine wares (Attic Red Figured and Black Glaze) and amphorae demonstrates occupation as early as the 6th and 5th centuries BC, which in combination with earlier Iron Age pottery suggests continuous occupation of these sites from the Nuragic into the Punic period. Several other settlements were on the contrary not established before the 3rd century BC. All settlements and cemeteries remained in use throughout at least the earlier Roman (i.e. Republican) period. In the adjacent territory of Barumini, only the

excavations of the huge Nuragic complex and village of Su Nuraxi (cf. p. 78) have yielded evidence of substantial Punic settlement, including a small shrine dedicated to Demeter (563).

While no Punic finds have been reported from the wide Flumini Mannu valley which borders the Marmilla study area to the South-East, the explorations of the Sanluri territory already mentioned (p. 141) have recorded six settlements and five cemeteries outside the study area (fig. 5-13; tab. 5-5). Of particular importance is the Bidd'e Cresia cemetery (299), which has been estimated to have consisted of 340 burials, of which the 110 ones that have been excavated cover the period from the 4th century BC to the 4th century AD (Paderi 1982b, 1982e). Another cemetery (302) and two settlements (293, 294) have also been investigated in some detail after having been disturbed by land reclamation works (Paderi 1982d). Further sites have been reported in the adjacent areas of the south-eastern slopes of the Marmilla along the Flumini Mannu (fig. 5-13; tab. 5-5). One of these is the site of Santu Brai (518), where detailed surface survey and excavations have now disproved the existence of a Punic fortress. It has also been shown that Iron Age and Punic settlement was primarily situated in the open area below the nuraghe (Ugas 1989 *contra* Barreca 1970, 124; Ugas/Zucca 1984, 35). An interesting parallel to the Punic shrine installed in the nuraghe Genna Maria of Villanovaforru (310) can be found in the hills of the eastern Marmilla, where the Iron Age shrine in the nuraghe Su Mulinu of Villanovafranca (544) was reused from the late 4th century BC onwards (Ugas/Paderi 1990, 479-482; fig. 5-13).

Equally noteworthy are the Sinis and northern Campidano which have been relatively well explored. With regard to the northern Arborèa and the eastern-most part of the northern Campidano, twelve sites have been reported by Zucca in his study of the supposed territory of Neapolis (Nieddu/Zucca 1991, 155-166). These include eight settlements, two cemeteries and two shrines (fig. 5-13; tab. 5-5). An overview of the most important sites in the Sinis and the western part of the northern Campidano has been compiled by Barreca (1986, 304, 312, 318) but this evidence has significantly been increased by recent careful explorations (Tore 1991, 1992; Tore/Stiglitz 1987b, 1987c, 1994; Tore/Stiglitz/Dadea 1988). Central in these studies is the complex nuraghe S'Uraki (503), where limited excavations have been carried out and continuous occupation from the Iron Age into the Punic and successive Roman periods has been demonstrated (Tore 1984, 707-708). The sites reported for the Sinis and northern Campidano include three partially excavated cemeteries, which show continuous deposition from the Punic into the Roman period. Remarkable among the 21 relatively well documented sites in this area, besides two more cemeteries

and eleven settlements, are five shrines or sanctuaries which have yielded numerous fragments of incense-burners and statuettes (fig. 5-13; tab. 5-5). While a cemetery (547) and a perhaps continuously used well-sanctuary (247) have yielded 6th or early 5th century finds, all other sites do not appear to have been established before the late 5th or 4th century BC. At the foot of the western Iglesiente slopes on the Costa Verde (fig. 5-13), finally, excavations in the *Tomba di Giganti* of Bruncu Espis (129) have demonstrated Punic reuse of this older Nuragic communal tomb.

5.3.3 TOWARDS AN ASSESSMENT OF THE ARCHAEOLOGICAL RECORD OF PUNIC WEST CENTRAL SARDINIA

As even a cursory glance at the map reveals, Punic settlement is conspicuously absent in the Marmilla (fig. 5-13). If Punic pottery has been as often and as easily overlooked as I argued at the beginning of this section (p. 129), then this lack of evidence cannot be taken at face value but must instead be assumed to represent a gross under-representation of the Punic archaeological record in that area. This impression can now easily be confirmed with reference to the data listed in tables 5-2 and 5-5. The evidence of the *Riu Mannu* survey which basically is representative for the lower Marmilla indicates a settlement density of about one Punic site per km², which implies a much higher number of sites than the current five ones listed. Further confirmation comes from the Gesturi territory, which is in many respects comparable to the hilly country of the upper Marmilla. In the ca 27 km² of hills and valleys below the *giara* eleven Punic sites have been documented, that is ca 0.4 sites per km². A comparable density has been registered in the Sanluri district on the lower foothills of the south-eastern Marmilla along the Flumini Mannu. Although this area does not belong to the Marmilla proper, it does show that the hills were far from deserted in the Punic period. Even allowing for differences in settlement and land use between the lower and upper Marmilla, it is clear that many more Punic settlements and cemeteries than the current five ones must be expected in the approximately 150 km² of Marmilla hills and stream valleys.

Comparing the Gesturi evidence to that of the adjacent territory of Barumini, which has been explored with exceptional intensity by Giovanni Lilliu since the 1930s, illustrates the consequences of an insufficient familiarity with Punic pottery, as only two Punic sites are on record in this area. The contrast with 37 reported Roman sites of both Republican and Imperial date, amounting to a density of 1.4 sites per km², is equally remarkable (Lilliu/Zucca 1988, 13-30). The explanation of this biased site catalogue is that Punic ceramic surface finds have simply remained unrecognized: as a result, Punic occupation has only been found in the two excavations carried out in the area where recognizable finds

were available (281, 563). The observation of 'Punic presence' was in fact exclusively based on Punic coins (Lilliu/Zucca 1988, 12-13).²³ This means that no Punic sites at all have been recognized on the basis of ceramic surface finds alone. Yet, several sites go back to at least the 2nd century BC, as has been concluded on the basis of Campanian Black Glaze imports. If Punic pottery was not recognized, it cannot be excluded that still earlier Punic phases of these sites have remained unnoticed.

In the catalogue of Roman sites compiled by Cornelio Puxeddu, there is virtually no reference to Punic finds (Puxeddu 1975, 188-217). Since there is ample reason to believe that a substantial part of these Roman sites includes an earlier Punic occupation phase, re-examination in the field is the only way forward. This has partly been undertaken by Zucca who has revisited most of the over 100 Roman sites mentioned by Puxeddu in the Arborèa and Campidano. Evidence of a Punic occupation phase was found at 20 of these (Zucca 1987a, 115-147; cf. tab. 5-3). With regard to the Marmilla, where, especially in the lower zone, the evidence collected by Puxeddu is more reliable than in the Campidano or Arborèa, I have revisited six sites during a brief fieldwork campaign in 1995 and one more has been examined by a *Riu Mannu* survey team in transect 14. Apart from two sites which had virtually been eroded away and yielded few or no finds, two could be classified as having been occupied in the Punic period (200, 540). This shows that Puxeddu has either failed to recognize Punic finds or that he has not included this evidence in his paper, which was exclusively concerned with the Roman period. The mention of Punic occupation in one case (267) suggests that the former is likely to have been the case, as the Punic nature of this site was unmistakably signalled by a neo-Punic inscription on a Campanian Black-Glaze fish-plate. Although it can thus be assumed that a substantial number of Puxeddu's 'Roman' sites were preceded by Punic settlement, without specific fieldwork it remains of course impossible to decide which ones.

The remarkably low number of nuraghi with a Punic occupation phase recorded by the American Maryland-Wesleyan survey of 178 nuraghi in the Marmilla (two: Dyson/Rowland 1992b) must presumably also be seen in this light, as no less than 103 nuraghi have yielded Roman finds, in most cases Black Glaze and Red Slip (*sigillata*) wares. Since the two nuraghi intensively examined by the *Riu Mannu* survey in the Marmilla yielded unequivocal evidence of Punic occupation, the lack of evidence found by the American survey must be ascribed to the inability to recognize Punic pottery, while insufficient intensity of fieldwork may also have played a part (cf. p. 101). Since both nuraghe Siaxi (538) and Brunchiteddus (539) have also been examined by the American teams, who despite good visibility conditions

failed to detect any Punic sherd at all, the former must have been the case (Dyson/Rowland 1992a, 181, 190-191).²⁴ The lack of Punic finds in the American survey consequently does not imply an absence of Punic settlement.

To sum up, the scarcity of Punic finds in the Marmilla must be seen as the result of inadequate archaeological research rather than as a reliable representation of the archaeological record. The much larger amount of Punic finds in the Campidano and Arborèa can conversely be taken as the effect of a better knowledge of Punic materials. The leading figure in this respect is Raimondo Zucca who has been trained by Barreca and whose ability to recognize Punic materials has been instrumental in the re-evaluation of the archaeological record in the Arborèa and Campidano.²⁵ His re-examination of older findings and his standardized descriptions of the finds from both new and previously reported sites (1987a, 115-147) have provided a reliable basis for the identification of Punic occupation and as such underpin the sites listed for the Arborèa and Campidano in the Punic period (tab. 5-3; cf. appendix).

If the different densities of Punic settlement can be ascribed to varying fieldwork intensities, the key for assessing these variations lies in the territory of Terralba, where three sets of findings overlap (fig. 5-9). The starting point for the assessment is of course the representative sample of the *Riu Mannu* survey. The ten Punic sites which have so far been intensively surveyed in the Riu Mannu estuary key area result in an estimated site density of 2.6 sites per km².²⁶ In order to make a comparison with the sites recorded by Artudi and Perra, a distinction must be made between those sites located on the slightly higher sands of Terralba and bordering fine-grained fluvial sediments of the Riu Mannu and Riu Mògoro and those situated on the surrounding coarse-grained pediments of the Campidano, as the territory of Terralba consists exclusively of fine-grained sandy and clayey soils. The difference between the settlement densities of both physical landscapes is considerable: in the sandy area, Punic settlement is as densely distributed as 5.6 sites per km², while the coarse pediments account for only 1.2 per km². Most of the transects on the pediments which have been surveyed have actually yielded only sparse Punic off-site finds or even nothing identifiable as Punic. The only three Punic sites recorded on the pediments are located along the Riu Sitzzerri. The 118 Punic sites registered by Artudi and Perra in the Terralba territory amount to a settlement density of approximately 4.0 per km² (Van Dommelen, in press a).²⁷ A further indication of the measure of correspondence between the two surveys of the Terralba territory is that of the six sites documented by the *Riu Mannu* survey, all but two had already been registered by Artudi and Perra (cf. tab. 5-2). The descriptions and interpretations of the four sites examined by both teams correspond quite closely, with

two qualifications. The size estimates given by Artudi and Perra are in the first place consistently higher than those measured by the *Riu Mannu* survey. The difference probably means that the former is a maximum estimate including a substantial portion of the surrounding off-site scatter (the 'halo'). In the second place, Artudi and Perra have recognized a Roman phase at site 8 which had not been noted by the *Riu Mannu* survey: but this is no cause for concern, as the site had largely been levelled before it was examined by the *Riu Mannu* team in 1993, whereas Artudi and Perra had been able to survey it repeatedly when it was still undisturbed (Artudi/Perra 1994, 33).

By and large, the systematic survey and topographical exploration thus appear to correspond quite closely. The differences noted between the two can moreover be related to their respective characteristics and concomitant strong points: the somewhat lower density estimate of Artudi and Perra for example may be expected, as a complete coverage survey, no matter how intensive, is bound to overlook parts of the study area and consequently one or more sites. The repeated explorations of the area over a long period of time and under different conditions, however, offer a considerable advantage with respect to sample surveys, which usually examine their transects only once and revisit only selected parts of it. The intensive collection strategy of the *Riu Mannu* survey aimed at overcoming visibility problems (cf. pp. 60-63) may nevertheless have compensated to some extent for this drawback. Other topographical explorations and stray finds account for no more than ten Punic sites in the territory of Terralba, all of which have been documented by Artudi and Perra (tab. 5-3). The resulting density estimate of only 0.3 sites per km² evidently does not stand comparison with those calculated from the evidence of Artudi and Perra or the *Riu Mannu* survey. A total of 46 sites for the remainder of the Arborèa and Campidano (tab. 5-3, cf. p. 142) hardly gives any better results. In the absence of any coherent collection strategy it is of course inevitable that these finds are totally devoid of any representativeness. Only one trend can perhaps be discerned in these collections, which is, again not surprisingly, an overrepresentation of large and more or less monumental sites in comparison to the results of the *Riu Mannu* survey or Terralba exploration: of the 57 sites registered as stray finds in the study area, 13 are associated with a nuraghe, nine became a *villa* in Roman times and two cemeteries were demarcated by *stelai*. Most of the other sites were encountered during agricultural or construction works. This trend is even stronger in the evidence for the Sìnis and northern Campidano, where only four of the 21 sites registered are not associated with a nuraghe and those four have all been encountered during irrigation works. The relatively low number of monumental sites registered by the territorial explorations of Gesturi and Sanluri can therefore already be

regarded as indicative of a higher fieldwork intensity and better representativeness.

Despite claims of the opposite (Dyson/Rowland 1992b), Punic occupation of nuraghi has been noted throughout the region and poses the question of continuous occupation of the Iron Age into the Punic period. The few excavations in west central Sardinia unfortunately do not provide a straightforward answer. In the study area, the stratigraphical situation of Ortu Comidu (249) was apparently too confused to address the question of continuity. At Genna Maria (309), in contrast, there can be no doubt that the nuraghe had already been abandoned before the Punic sanctuary was established. Outside the study area, there was at least a century of abandonment at Su Nuraxi of Barumini (563). The case of S'Uraki of S. Vero Milis (503), on the other hand, is a strong one in favour of continuous occupation, although reliable stratigraphic evidence is again not available. Similarly, in the territory of Gesturi there are three nuraghi where the surface finds suggest settlement continuity (509, 515, 561).²⁸

The basic problem which thwarts any definitive answer regards the 'end' of the Iron Age, an issue which has rarely been addressed (Rowland 1992). Apparent contradictions of the canonical upper chronological limit of the Nuragic Iron Age have usually been denied and explained as post-depositional disturbances. Yet, in some cases the stratigraphical association of 'Nuragic-style' pottery with Punic or Roman ceramics has led to the conclusion that Nuragic pottery was apparently still produced after 500 BC (Rowland 1992, 169-174). An interesting example — published as early as 1946 — is that of nuraghe Marfudi in the territory of Barumini, where a Roman village was found next to the nuraghe. A test trench revealed a rectangular house, in which the oldest identifiable finds were Roman Campanian Black Glaze plates and cups dated to the 2nd century BC (Lilliu/Zucca 1988, 16-17). Since these were associated with several jugs of 'Punic tradition' and with 'Nuragic-style' sherds, the conclusion must be that so-called Nuragic pottery, which means hand-made coarse wares of local tradition, continued to be produced in the earlier phases of the historical period. It is even likely that in certain periods and areas such products made up the bulk of domestic pottery.

5.4 Society and Landscape in Punic West Central Sardinia

Despite the numerous flaws pointed out in the previous section, the archaeological evidence for Punic settlement in west central Sardinia provides sufficient leads for a detailed consideration of Punic settlement and society. A recurrent point in the conventional representation of Carthaginian colonialism in Sardinia is the seemingly uniform character of Punic material culture which spread all over the island at an

extraordinarily rapid pace after 550 BC. The discussion of the evidence for west central Sardinia in the previous section, however, has already revealed several discrepancies in the archaeological record of the region which suggest a far more nuanced situation. Since the Punic appearance and the far-reaching distribution of Punic settlement are frequently emphasized as evidence of the *penetrazione capillare* of colonial settlement and authority in Sardinia (Barreca 1986, 37; Bondi 1987b, 187), it seems obvious to begin with a detailed examination of the characteristics of Punic settlement.

The issue at stake is not so much whether Punic material culture in Sardinia did or did not adhere closely to Carthaginian models but rather in which respects, how far and in which ways it deviated from colonial norms and in which cases it did not differ from them. With regard to rural settlement in west central Sardinia, an obvious question is where such norms were set: at Carthage or Tharros or perhaps rather in Neapolis? In order to obtain an understanding into the social dimensions of the colonial situation, such an analysis cannot remain confined to a comparison of material culture alone, which usually comes down to a comparative study of pottery shapes and decoration or an overview of colonial imports (e.g. Tronchetti 1988, 105-111). A much wider range of features related to the location and nature of the sites needs to be taken into consideration.

A prominent aspect to be explored in this light is that of landscape, as the evaluation of Punic finds in the southern Arborèa has already revealed a strong preference for a specific physical landscape, which is that of the fine-grained sands of the Terralba rise. Given the high densities of nuraghi in some areas (fig. 4-18), however, substantial parts of the Sardinian landscape are also to a large extent *cultural* landscapes and their relationship to colonial settlement evidently needs to be considered.

In the first part of this section I shall therefore begin by examining in detail a number of aspects of the archaeological evidence across the region as a means to re-evaluate the allegedly uniform nature of colonial Punic settlement in Sardinia. As a corollary, I shall look into any relationships between possible distinctions and features of the physical or cultural landscape. In the second part of this section I shall then propose an interpretation of these features and subdivisions in terms of colonial society and the position of colonial and indigenous groups.

5.4.1 SETTLEMENT AND LANDSCAPE

The conspicuous absence of references to the local inhabitants of Sardinia or even to a colonized population in the conventional representation of Carthaginian colonialism is at first sight firmly supported by the archaeological evidence (Bondi 1987b, 196). The outspoken Punic nature of the archaeological record which seems devoid of indigenous

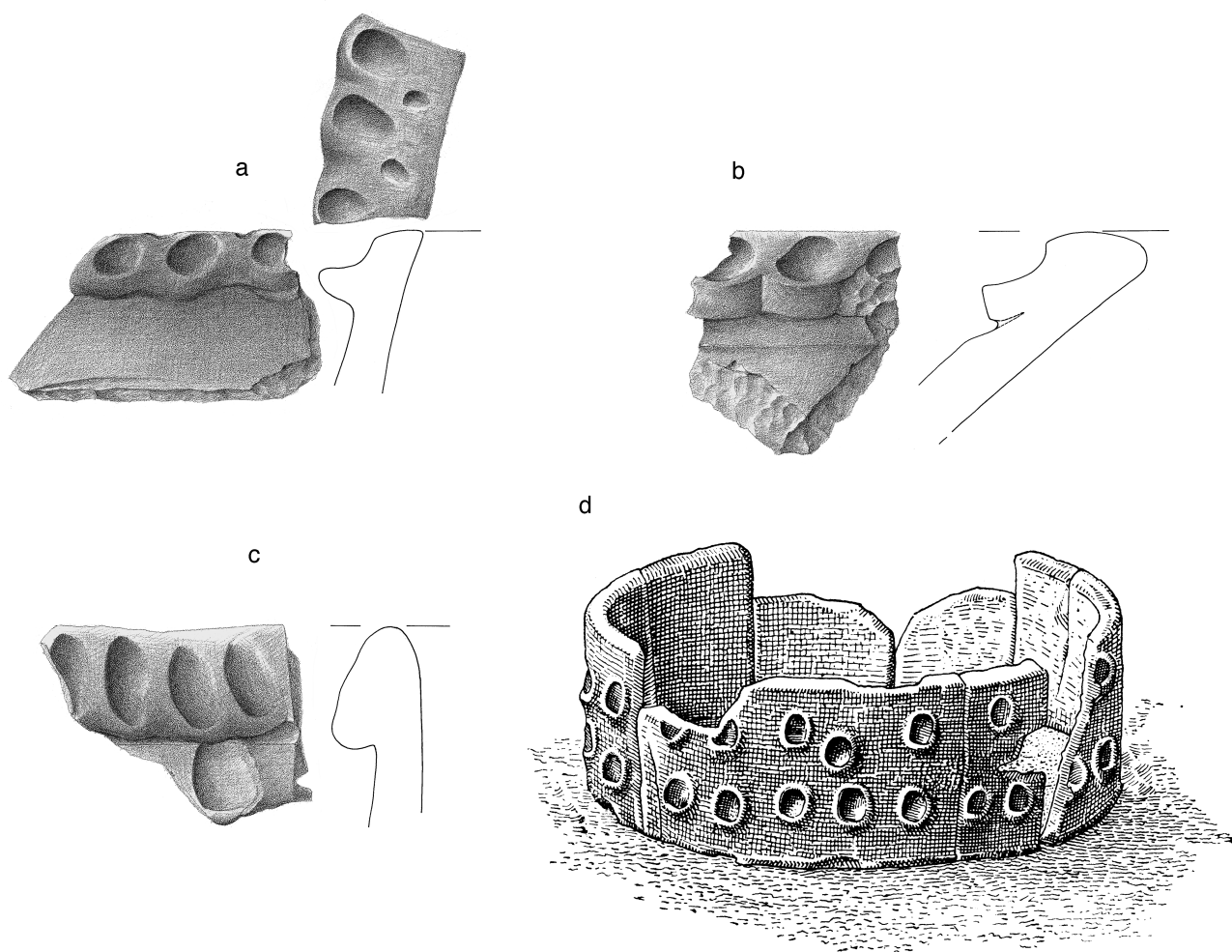


Fig. 5-15. Cooking-stands or *tabunas* from (a) S. Chiara, site 02-A of the *Riu Mannu* survey (86), (b) Tharros, (c) the so-called Byrsa quarter of Carthage and (d) nuraghe Ortu Comidu (249) (a: *Riu Mannu* survey find 025625033x; b: Acquaro and Uberti 1984, tav. 17, no. 1; c: Carrié et al. 1979, fig. 66, A 15-20; d: Taramelli 1918, fig. 114; drawings E. van Driel).

finds, can apparently only endorse such a representation. The finds mentioned in find reports indeed appear to be unmistakably Punic. Similarly, the bulk of the Punic finds of the *Riu Mannu* survey is made up of locally produced amphorae, storage, cooking and other utilitarian wares and roof tiles which all adhere closely to Punic models (Annis/Van Dommelen/Van de Velde 1995, 147-150). Both the appearance and shape of the pottery are thoroughly Punic and only the fabrics reveal the local origin of the vessels. Imported pottery, whether coming from elsewhere in Sardinia or from outside the island is restricted to a limited number of amphorae and fine table wares which also have close Carthaginian connections. The uniform and colonial nature of the material culture is underlined by the similarity of finds encountered in various places of the island and the

close parallels found in North Africa. A telling example is the shape and decoration of hearths or cooking-stands as fragments of the circular body or the thick rim are common finds on many Punic sites throughout Sardinia. While the sometimes very coarse fabric identifies them as local hand-made products, the shape and decoration of the thick rounded rim which is invariably decorated with large finger imprints, sometimes alternated with smaller impressions, show a striking similarity to the so-called *tabunas* from Carthage, which were equally locally produced (fig. 5-15). The uniformity and strongly Punic character of the archaeological record are most evident in the cemeteries, where not only exclusively Punic objects are found but which also attest strictly Punic burial customs. In the Bidd'e Cresia cemetery (299) for instance, inhumation was the exclusive



Fig. 5-16. Two Punic trench burials (tombs 53 and 78A) in the Bidd'e Cresia cemetery (Paderi 1982b, tav. 30).

norm of the 34 Punic burials, which were mostly accompanied by several cups, jugs and plates as grave goods. Punic-style domestic wares are best represented but most burials comprised at least one imported vessel of Attic or Campanian Black Glaze. In 20 cases the dead body had been directly deposited in a trench, with the grave goods at the feet of the deceased (fig. 5-16). The 14 other burials were of the so-called *enchytrismos*-type, which means that they comprised a large Punic commercial amphora, in which in one case the body of a child had been inserted; in most other cases it contained the grave goods. These burials are on the whole

the younger ones and did not occur before the 3rd century BC. Four of the trench burials were slightly larger and deeper, with the lowest part which contained the body being covered by large ceramic tiles. This type of grave, which appears somewhat older than the others, has been interpreted as a 'pseudo-chamber' (Paderi 1982b, 49). These burial rites and grave goods, which differ from previous Nuragic customs in all aspects, correspond to Phoenician and Punic burial traditions in a general way, despite certain differences with previous Phoenician burials in Sardinia. *Enchytrismos* burial for instance derives from the typically Middle Eastern tradition

of burial *en marmite* and can be found in both Phoenician and Punic contexts throughout the Mediterranean. In Sardinia and Sicily, however, it represents a specifically Punic custom (cf. Gras/Rouillard/Teixidor 1991, 133-138). On closer inspection, the uniform appearance of these Punic sites presents a number of subtle differences within the settlement pattern which point to a much less coherent situation. In the first place, there appears to be a marked clustering of settlement in the coastal area of the region: rural settlement in the southern Arborèa shows a remarkable density which has not been paralleled elsewhere. The largest settlement and only town of the study area, Neapolis, is moreover also situated in this area. The same holds for the town of Othoca, which was located in the coastal northern Arborèa just outside the study area. Because of the considerable biases in the available archaeological information, however, it is important to ascertain whether the coastal concentration of rural settlement is not a mere artefact of unbalanced fieldwork. Given the correspondences between the *Riu Mannu* survey and the explorations of the Terralba territory (p. 145), the density of four to five sites per km² is a reliable estimate for the sandy area between the Riu Mannu and Riu Mògoro rivers. The contrast with the immediately surrounding region is confirmed by the much lower settlement density which for the coarse-grained pediments of the Campidano has been estimated at slightly over one site per km²: only three Punic sites have been found in six intensively surveyed transects on the Campidano pediments of the Riu Mannu estuary key area. In the central Campidano and Marmilla the four intensively surveyed transects of the Riu Mògoro gorge key area indicate a settlement density of more than 1.5 per km². Although not entirely representative, the still lower estimates of the more reliable explorations of Gesturi and Sanluri suggest at least that settlement in the interior was much less dense than in the sandy Terralba area (p. 145; cf. Van Domelen, in press b). On the whole, it is clear that it was the southern Arborèa alone rather than the entire coastal zone which represented an exceptional area with a settlement density second to none. Particularly remarkable is the clear-cut definition of the area in which this density has been registered: outside the sandy rise of Terralba and the adjacent fine-grained fluvial deposits Punic settlement was much more sparse. The absence of comparable site densities around the town of Othoca in the northern Arborèa adds to the outstanding nature of Punic settlement in the southern Arborèa.

A second qualification of the allegedly uniform Punic archaeological record regards chronology: Punic sites datable to the 6th or earlier part of the 5th century BC occurred exclusively in the southern Arborèa (fig. 5-17): Attic Black and Red Figured cups and Attic SOS amphorae accurately datable to various moments of the second half of the 6th century BC

have in the first place been found in Neapolis and at twelve farms on the Terralba sands. Attic Red Figured *skyphoi* and other Black Glazed table wares have been encountered at 38 sites which could be classified as having been established in the 5th century BC. A detailed discussion of several of these finds (Zucca 1991, 1299-1304)²⁹ and comparison with the *Riu Mannu* survey results suggest that a limited number of these 5th century sites must be dated to the earlier half of that century, while most should be ascribed to the later part. The oldest Punic cemeteries of west central Sardinia, which are the only ones already in use before the 4th century BC, are also located in this area. Outside the southern Arborèa, 5th century Red Figured fragments have only been attested at the site of Codinas in the upper Marmilla (266). At three other sites, all located on the eastern fringe of the Campidano (202, 249, 253) late 5th century Attic Black Glazed imports have been recorded. Throughout the study area, however, as well as outside it, the bulk of Punic settlements was established in the course of the 4th century BC, many already in the earlier decades of that century, as suggested by frequent reports of Attic Black Glazed cups and plates. Outside the study area, 6th and 5th century finds are known from Othoca and one large farm at a short distance from it (277) as well as from a number of sites in the interior and the Sinis (fig. 5-17). The latter ones are all much older indigenous settlements, just as the site of Codinas in the study area. Since the reported fragments appear to represent isolated finds with respect to the other Punic finds, which usually date to the 4th century, they are better regarded as occasional imports in otherwise indigenous contexts. Instead of indicating the establishment of new Punic settlement, these finds can thus be regarded as evidence of continuous indigenous occupation. The same holds for the *bucchero* and East Greek fragments excavated at Santu Brai (518), where continuous occupation has been unequivocally demonstrated. The surface evidence of several other sites (503, 515, 561, 568) presents likely parallels to this situation.

A third differentiation of the Punic archaeological record regards the type of settlement. Many, perhaps most of the sites listed in the gazetteer (cf. appendix) represent small to medium-sized farms similar to those intensively surveyed and described in detail by the *Riu Mannu* survey (pp. 131-133). Yet appreciably larger concentrations of surface finds have been interpreted as representing more than one house, i.e. a hamlet or small village. The Gesturi explorations in particular have documented several clear instances (e.g. 282, 561, 564). In the study area, possible villages have been recorded at the foot of the Iglesias mountains and in the Campidano plain in the territory of Guspini (147, 158). At least three of the settlements recorded in the Sanluri territory (288, 293, 294) are also likely to represent sizeable villages, but as details of site size are lacking it is difficult to



Fig. 5-17. Map of the wider region of west central Sardinia showing the distribution of 6th and 5th century BC sites (denoted by crossed and open dots respectively) and isolated finds (denoted by crosses). For site identification numbers, see figures 5-12 and 5-13.

distinguish between a farm and a hamlet. The relative scarcity of cemeteries in the southern Arborèa in comparison to both the Sanluri and Gesturi territories, where almost each settlement can be related to a cemetery, suggests that in the southern Arborèa the inhabitants of several farms shared a communal burial ground. This implies that settlements in the Sanluri and Gesturi actually represented larger communities, i.e. hamlets or villages. The two small farms documented by the *Riu Mannu* survey in the lower Marmilla (538, 539) nevertheless show that single farms occurred throughout the region. However, these two farms differ from their counterparts in the southern Arborèa by the lack of tiled roofs and the general scarcity of pottery. The thus reduced visibility of these sites makes it likely that they are underrepresented in the current data. One could even speculate that the larger concentrations of finds which have been noted primarily represent hamlets and that most smaller farms have simply been overlooked.

Basically, then, two types of rural settlement can be distinguished, namely small farmsteads and larger agglomerations, which were not evenly distributed. While farms can be found throughout the region, hamlets were a more prominent type of settlement in the central Campidano and Marmilla. In the coastal area, by contrast, they were entirely absent and small to medium-sized farmsteads were the rule. A second distinction can be made between settlements, whether farms or hamlets, which were associated with a nuraghe and those which were established on previously unused locations. Although nuraghi appear to have been the only places examined by topographical explorations and many Punic settlements on record are consequently necessarily associated to them, both the *Riu Mannu* survey and topographical explorations have recorded Punic settlement at previously uninhabited places. In the southern Arborèa and surrounding area, by contrast, none of the numerous nuraghi, which still are eminently visible, have yielded evidence of Punic reoccupation, let alone indications of continuous occupation (fig. 5-18). This pattern is supported by the *Riu Mannu* survey results: none of the Punic sites in the Riu Mannu estuary key area was associated with a nuraghe, in evident contrast to two of the three Punic sites registered in the Riu Mògoro key area. Taken together, these considerations amount to a differentiation of Punic settlement in west central Sardinia on the basis of both locational and chronological criteria. Exceptional in all respects is the southern Arborèa, where not only the oldest Punic settlements of the study area are to be found but where also its only town was located. Defining Punic settlement in this area as 'nucleated' or 'centralized' and that in the remainder of the region as 'dispersed' is a fitting description of the basic differences between the settlement patterns in these areas. However, it does not offer much insight into the underlying socio-economic organization nor

does it cover all variations and aspects discussed above.

A much more encompassing characterization of the major and minor differences dividing and at the same time uniting west central Sardinia can be cast in terms of 'landscape'. In particular, when conceived in the broad sense as 'a cultural process [existing] as a part of everyday social practice' (Hirsch 1995, 22) the notion of landscape can bring together various social and economic aspects as widely ranging as those in the first part of this section (cf. p. 34).

In this way, two basic cultural landscapes can be distinguished in west central Sardinia: on the one hand a landscape in which a major central place is complemented by a large number of small rural settlements (a centralized settlement pattern) and which is also strictly confined to the fine-grained eolian and fluvial deposits of the southern and northern Arborèa. An equally distinctive trait of this landscape, which might be called 'coastal', is the absolute disregard of previous settlement: reuse of a nuraghe or megalithic tomb was apparently 'not done' for the inhabitants of this landscape or they simply did not 'see' these abandoned monuments, i.e. perceive them or their site locations as useful in any way. Both the northern and southern Arborèa with Othoca and Neapolis as respective centres belong to this type of landscape, where people lived and worked in more or less similar ways. Differences such as the lower density of rural settlement in the northern area should not be ignored but are of secondary importance.

The counterpart of the coastal landscape, which for obvious motives can be named 'interior', was on the other hand characterized by a 'dispersed' distribution pattern of larger agglomerations comprising several households. At the same time, many of these settlements have been found in close association with abandoned nuraghi and occasionally with other monumental constructions, such as the Giants' Tomb at Sedda sa Caudeba of Collinas, where a Punic farm and cemetery were established (303, 304). The direct link which often can be made between settlement and cemetery is also a distinctive feature of the interior landscape. As the situation at Sedda sa Caudeba shows, a variant of this landscape consisted of small isolated farmsteads at site locations marked by Nuragic monuments (538, 539). The characteristics of the interior landscape denote not only a specific pattern of land use, which may to some extent be related to the physical conditions of the area, but also show that the inhabitants of these settlements perceived their surroundings in markedly different ways from people in the lowlands.

5.4.2 COLONIAL SOCIETY AND LOCAL IDENTITIES

In terms of the colonial situation, the distinction between a coastal and an interior landscape at first sight suggests that these can be related to the colonial and indigenous sides respectively. The Punic sanctuary in the nuraghe Genna



Fig. 5-18. Map of the southern Arborèa showing the nuraghi, Neapolis and the Punic sites recorded in this area. For site identification numbers, see figures 4-18 and 5-12.

Maria (309; p. 130) apparently confirms this view as it represents a clear instance of the interior landscape and at the same time shows a strong indigenous component in the rural cult (Barreca 1986, 42; Bondi 1987b, 195). The available evidence, among which several silver ears of grain, indicates an agrarian propitiatory cult with fertility and feminine connotations along the lines of mainstream Punic religious and cultural traditions. The singular nature of the cult is most explicitly manifest in the large number of over 600 oil-lamps, which in comparison to 269 coins and occasional other objects constitute the bulk of offerings made. Lamps were particularly important during the Hellenistic and Roman Republican periods, as coins did not become a common offering before the Imperial period (Lilliu 1993, 13). While unusual elsewhere in the Punic and Classical world, offering oil-lamps was a regular feature of indigenous Bronze and Iron Age rituals in Sardinia (Lilliu 1993, 18-20). The hundreds of lamps found in the Iron Age ritual chamber of the nearby nuraghe Su Mulinu in Villanovafranca (544) underscore this point (Ugas/Paderi 1990, 475-479). Most of the lamps were simple coarse vessels bearing a striking resemblance to indigenous Iron Age products. The absence of Punic-style or Roman Black Glaze lamps, which are not uncommon on domestic sites, suggests that these were deliberately avoided (cf. Van Dommelen 1998).³⁰

The sacrifice of animals and the offering of food-stuffs are much more generic ritual acts. They have been observed as part of the rituals performed in the Nuragic Iron Age shrine of Su Mulinu (Ugas/Paderi 1990, 478) but they were also regular features of Punic and Greek religious practice. At the same time, the presence of a small number of Punic incense burners, some of which in the shape of a female head, a so-called *kernophoros* (fig. 5-19), show the familiarity of the worshippers with Punic religion and their awareness of similarities between the local cult and the Punic version of that of Demeter. The silver ears of grain even go back to Greek traditions of the Demeter cult; they also figure prominently on Punic coins of the same period (Lilliu 1993, notes 35, 66; Manfredi 1993, 201-204). The incense burners and other Punic items (usually Black Glaze pottery) show how people could combine certain 'foreign' objects and ritual customs with local traditions. Yet, certain objects must have been considered inappropriate for ritual purposes, such as imported Black Glaze lamps which apparently could not substitute the traditional coarse lamps. The resulting cult consequently presents a combination of both indigenous and Punic features which were not selected at random but which appear as the outcome of a specifically local selection. The overt dualist character of this representation (pp. 20-22) of Punic west central Sardinia as made up of a colonial and an indigenous landscape obviously cannot pass without comment. Reconsidering the two sides of the supposed



Fig. 5-19. Two Punic incense burners (the top one a so-called *kernophoros*) found in the Punic shrine of nuraghe Genna Maria of Villanovaforru (Lilliu 1993, fig. 1).

colonial divide, it is the town of Neapolis which gives food for second thoughts. Apart from its central position in the coastal landscape, Neapolis must also be considered in relation to Tharros, the colonial city across the Gulf of Oristano, as it seems evident that Neapolis and Othoca constituted together with Tharros the three colonial and urban foci of west central Sardinia (Moscatti 1988b, 8; cf. Tore/Stiglitz 1994, 785-787). The implication that the coastal landscape must be extended in order to comprise Tharros exposes the ambivalent situation of Neapolis:³¹ although habitually regarded as an 'urban centre', Neapolis not only lacked a *tophet*, which is the prime indicator of Punic urban status, but it also possessed very few urban features such as monumental and public buildings. The contrast with Tharros in this respect is revealing: whereas the latter city possessed a large *tophet* and boasted several monumental stone temples and heavy fortifications, Neapolis only presented town walls, as neither the town nor the adjacent sanctuary have yielded evidence of monumental decorations in stone or terracotta. The predominance of simple trench and perhaps 'pseudo-chamber' burials like the ones in the rural cemeteries in the Sanluri district, together with the absence of constructed or rock-cut chamber tombs usually found with the urban colonies (cf. pp. 127, 142) further underline the rural character of the town in obvious contrast to the lavish burials of Tharros. The central role occupied by Neapolis in the southern Arborèa yet again counters an exclusively rural representation of the town, as town-country relationships usually denote urbanization processes (Van Dommelen 1997b). The basic question, therefore, is whether Neapolis can be regarded as part of the urban core of the coastal landscape?

Commercial activities are likely to have played a significant role in Neapolis, as show the numerous amphora finds in what presumably was the port of the town (Fanari 1989). The abundance of similar finds all over the southern Arborèa and central Campidano stresses the central function of Neapolis. Yet there is also a rural connotation to these commercial activities, as agricultural products must have constituted the bulk of these transports. The persistent rural appearance of Neapolis contrasts sharply with the primarily artisanal and commercial significance usually attributed to Tharros. Scarabs, amulets of precious stone and jewellery but also stone *stelai* and ceramic statuettes, perfume burners and masks and even specialized domestic pottery were manufactured in Tharros (Moscatti 1987). Many of these products found their way to the Punic world of the western Mediterranean, while other products such as mortars with a stamped decoration were primarily distributed in west central Sardinia (Manfredi 1991). Neapolis has so far not been proposed as a production centre of other items than plain domestic wares and transport amphorae (Zucca 1987a,



Fig. 5-20. Ceramic figurines from Neapolis (top left), Tharros (top right) and Bithia (bottom) (after Moscatti 1992, figs 32a, 9b, 38a; drawing E. van Driel).

183-189). The one exception is a substantial production of ceramic votive statuettes, which epitomize the difference between Tharros and Neapolis and which shed light on the latter's nature.

The site of the healing sanctuary just outside Neapolis (p. 133) was marked by a large number of terracotta figurines which have been found together with a lesser number of ceramic anatomical *ex-votos* and other objects (Moscatti/Zucca 1989; Zucca 1987a, 151-156). Nearly all figurines were hand-made of a type exclusively known at this site and presumably manufactured there as well (fig. 5-20.1).³²

The Neapolis statuettes clearly differed from common standards of mould-produced figurines as known throughout the Punic and Hellenistic world and as produced in Tharros. In contrast to those from Neapolis, the products of Tharros closely adhered to Hellenistic models and were exported all over the western Mediterranean (Moscato 1992b, 25-32; fig. 5-20.2). Despite their departure from common Hellenistic models, the Neapolis figurines present several generic affinities with Punic and Hellenistic types which suggest a common background and a similar categorization of the products. The latter point is confirmed by the association with a limited number of mould-made figurines (5% of all 551 figurines found: Moscato 1992b, 66). Elsewhere in Sardinia, other figurines have been found in Punic sanctuaries which show a similar tendency to elaborate freely on conventional models but these have never resulted in items identical to those from Neapolis. In a sanctuary near Bithia on the Sardinian south coast, several hundreds of figurines have been excavated which also differ from traditional Punic products. However, differences such as the wheel-thrown base also exclude direct relationships with the terracotta figurines found in Neapolis (Moscato 1992b, 75-80; fig. 5-20.3).

Detailed examination of the stylistic and ritual connotations of the Neapolis figurines has revealed a remarkably pluriform background: several details such as the 'button eyes' can be associated with similar characteristics of indigenous Iron Age bronze statuettes, while the context of a healing sanctuary and offerings of terracotta limbs, which were unknown in Iron Age Sardinia, point to Italic, perhaps Etruscan, contacts (Moscato 1992b, 70-71, 80-83). These elements are moreover not merely juxtaposed but have been actively combined and mixed: the recurring presence of figurines which emphasize a particular part of the body, often a limb (fig. 5-20), point to a combination of the Italic practice of offering separate limbs for healing and the Punic use of portraits or standing figurines in funerary contexts. The combination of these elements shows that the figurines from Neapolis do not simply represent 'deviant' Punic products but instead sets them apart as a remarkable local invention. These statuettes thus underline the paradoxical relationships between Neapolis and Tharros.

In an attempt to characterize the differences between the two colonial settlements, the Neapolitan figurines have been interpreted as products of a rural 'popular culture' as opposed to an urban-based Punic-Hellenistic 'high culture' at Tharros (Moscato 1992b, 99-101). Yet this representation falls short of defining the colonial situation as a whole, because it ignores the interior landscape which shows explicitly 'rural' and indigenous traits. It nevertheless brings out the differences between Tharros and Neapolis and shows that a simple dualist classification of the Punic colonial

situation of west central Sardinia fits the archaeological evidence poorly. The same holds for the sanctuary of Genna Maria, where comparable processes of selection, juxtaposition and reworking have been observed as pointed out in the case of Neapolis: besides the indigenous contributions there was a substantial presence of Punic material culture, which cannot be dismissed as accidental or secondary. The ritual as a whole remained largely in line with mainstream Punic traditions. Less drastic and without indigenous inspiration but equally reworking canonical Punic traditions are the transformations of some burial customs noted in the interior (p. 148). Since the underlying common element in all these cases is Punic (material) culture which can safely be termed 'hegemonic' in the sense of Gramsci or Bourdieu, all these complex situations of varying degrees of mutual influence, imitation and creative subversion of the 'high' Punic culture by the local inhabitants of the region can be captured by the term 'hybridization' (cf. p. 25). The Neapolis statuettes in particular stress this point, as the ritual context to which the figurines belong relates to the Italian mainland, the overall typology of the figurines derives from Punic examples and several specific characteristics in shape and execution refer to indigenous traditions.

A significant aspect of these hybridization processes are the differences noted in the various aspects of rural life: whereas the material culture in rural settlements and in burials, whether in the southern *Arborèa* or in the interior, was of a virtually homogeneous Punic appearance, the religious contexts of Genna Maria and the Neapolis sanctuary presented a much more varied composition. These apparent contradictions in choices and behaviour can be interpreted in terms of different values attributed to distinct levels of colonial Punic society in west central Sardinia. The varying 'degrees of hybridity' of these domains then represent the outcome of just as many processes of hybridization, which were gradually accomplished by the local inhabitants acting within their own social and economic framework. This sheds new light on the values of colonial society in Punic west central Sardinia (cf. p. 34). Everyday production, or at least the ceramic material culture involved, thus appears as assimilated to the hegemonic Punic culture. At the ritual level of healing and fertility, however, a considerably stronger counter-hegemonic attitude was apparent, presumably because local people perceived it as central to their own identity and as providing a means to distinguish themselves from the dominant Carthaginian presence. From this point of view, the Punic appearance of rural settlement and burial would appear to define the realms of daily life and death as less important. However, given the transformation of some of the burial rites and the locational characteristics of rural settlement this representation cannot remain unqualified. The preference for settlement locations

near nuraghi in particular indicates that these landscape elements were highly valued by the inhabitants of the interior. An awareness of an ancestral presence in the landscape and particularly in the nuraghi may have contributed to this (cf. de Coppet 1985). The different settlement patterns in the coastal and interior parts of the region thus do not only suggest different systems of land use but also other ways of perceiving the landscape, which sets the inhabitants of the interior apart from those of the coastal areas. Particularly significant in this respect is the ambivalent nature of Neapolis, which corresponds in various respects to the postcolonial concept of a colonial '*évolué*': with respect to Tharros as the preeminently colonial place of west central Sardinia, Neapolis is, in Homi Bhabha's words, 'almost the same, but not quite' (Bhabha 1987, 86; cf. p. 25).

In the colonial context of west central Sardinia people thus regarded themselves as 'not quite' Punic in varying degrees. While Tharros constituted the undisputed stronghold of 'high' Hellenistic Punic culture with an outspoken urban and elite character, the inhabitants of the Arborèa, Campidano and Marmilla created a hybrid local culture within the framework of Punic hegemony. The variability demonstrates that the opposition between colonial and indigenous did not constitute an absolute watershed but shows that it shifted according to the domain of society involved. Even at one level, such as that of daily life, considerable differences have been noted which can be understood as the result of distinct hybridization processes which supported different local identities. It is obvious in this respect that at least the coastal area and the interior subscribed to slightly distinct senses of identity within the hegemonic Punic context.

5.5 Carthaginian Colonialism between City and Country in West Central Sardinia

The archaeological and historical issues at stake are those identified in the first section of this chapter (pp. 125-129). First and foremost among these stands the nature of Carthaginian domination in Sardinia; the question whether to define colonial society in Punic Sardinia as 'integrated' or 'assimilated' particularly needs to be reconsidered in the light of the above discussion. No less relevant is the question whether the establishment of Carthaginian authority over Sardinia consisted of several campaigns of armed conquest followed by the establishment of a network of military strongholds or rather represented a 'commercial' control over the island which only gradually developed into a more encompassing authority. Looming large in this respect are the foregoing conclusions about the distribution and nature of the earliest Punic settlements and about the chronology of rural settlement. Related points of interest regard the alleged Carthaginian 'territorial policy' of immigration and involvement of local elites: can a new rural and agrarian

organization comprising *latifundia* be recognized in the archaeological record? A final problem regards the controversy about Punic colonial society in Sardinia: what happened to the indigenous inhabitants of the island and how did they deal with Carthaginian colonial authority?

The above considerations have shown that the dualist representation of a thoroughly integrated 'Sardinian-Punic' elite and an utterly assimilated indigenous population must be substantially nuanced. The opposition between a city-based elite and a landless rural mass is exaggerated, because it contrasts the extreme positions of what was actually a social continuum: if elite is defined in local social terms and not *a priori* as a measure of Punic 'integration', the presence of local elites in many interior settlements must be acknowledged. The import of Punic and Attic products into the interior at an early stage of Carthaginian domination in Sardinia must be understood in this light, not unlike the slightly earlier 'precolonial' imports of the late Phoenician period (pp. 107-109). At the same time, the large majority of west central Sardinian inhabitants was not 'deculturalized' (Lilliu 1988, 472); they instead actively constructed a new colonial society and culture of an outspoken hybrid nature. The relationships between the indigenous tribal organization and the urban colonial core did not allow one to prevail over the other but instead gradually gave rise to a peasant society, in which indigenous and colonial elements were utterly reworked.

The contradictory claims of Barreca and Lilliu can be understood as being rooted in an essentialist notion of culture: if (material) culture is conceptualized as literally 'embodying' the fundamental features of a people, then the loss of one's 'own' culture equals the loss of any sense of self-awareness and capacity of self-definition. As the nativist claim of 'deculturalization' illustrates, such conceptions usually underpin one-sided or dualist representations of colonial situations (cf. pp. 18-22). The contrast emphasized by Barreca and Lilliu was in fact primarily one between city and country and much less one of a colonial-indigenous dichotomy.

This representation of colonial society under Carthaginian authority casts considerable doubt on the alleged Carthaginian 'territorial policy' of involving 'collaborating' indigenous elite members (pp. 126-127). It is even further undermined by the archaeological settlement evidence as discussed above: although Punic material culture was used throughout the region, new, presumably Carthaginian forms of land use have only been noted in the Arborèa. The extraordinary density of rural settlement and the relative well-being of the inhabitants of the farms in this coastal area hardly support the hypothesis of *latifundia* where large numbers of indigenous inhabitants were set to work. The situation must instead be interpreted as one of numerous independent peasant farms

socially and economically tied to Neapolis and Tharros. Since the interior landscape appears to continue previous forms of land use, the so-called 'capillary Punic settlement' of at least the west central Sardinian interior cannot be regarded as evidence of a Carthaginian 'territorial policy' characterized by the creation of *latifundia*.

The initial restriction of Punic settlement to the coastal area similarly suggests a modest Carthaginian territorial presence: it is only in the earlier decades of the 4th century BC that Punic material culture was widely adopted. The appearance in the course of the same century of Punic cemeteries and sanctuaries where largely Punic rites were performed shows that the hybridization processes did not take place overnight. The historical representation of the Carthaginian conquest of Sardinia must consequently be adjusted: although Carthage was immediately present in the region from the middle 6th century BC onwards through the establishment of Neapolis and a number of farms in the southern Arborèa, Carthaginian settlement remained restricted to the southern and northern Arborèa during nearly the entire 5th century BC. The new form of land use and settlement, the absence of any relationship with nuraghi and the close ties with Carthaginian material culture moreover suggest that many, perhaps even most of the inhabitants of Neapolis and these farms were immigrants from elsewhere, most likely North Africa. When Punic influence started to expand at the end of the 5th century BC, initially towards the eastern fringe of the Campidano and later into the entire region, hybridization and not so much military conquest or immigration must be held responsible. The absence of early Carthaginian settlement in the interior and the apparent non-existence of a Punic *limes* of fortresses further support this alternative representation of Carthaginian 'occupation' with only modest territorial ambitions. It does not mean, of course, that Carthaginian presence in Sardinia was necessarily peaceful: although the alleged 'wars of conquest' are not supported by archaeological evidence, they cannot be disproved; tensions and armed skirmishes between the inhabitants of Tharros, the coastal area and the interior or perhaps still other groups of inhabitants cannot be excluded and are to some extent even likely to have taken place.

With regard to the historical debate about Carthaginian colonialism, the archaeological evidence and the above interpretations of the (west central) Sardinian situation largely correspond with the alternative representation of Carthaginian colonialism as an initially much more commercial undertaking which only later on developed a territorial dimension (pp. 120-122). The different clauses about Sardinia in the two Carthaginian-Roman treaties of 509 and 348 BC can easily be related to the archaeological evidence: at the time of the first treaty, Carthaginian influence in west central Sardinia was hardly territorially significant, as it was

restricted to the San Marco peninsula and the coastal Arborèa. Because of the strategical position of Tharros, however, extra-insular transports could easily be controlled. At the time of the second treaty, Carthaginian influence had expanded all over the region, even though not through military conquest and large-scale immigration, and Carthage apparently intended to shield it off from outside influences. A similar development had apparently taken place in the Tunisian hinterland of Carthage, where Carthaginian domination had been established in the course of the 5th century BC (Lancel 1995, 257-262; cf. Ameling 1993, 250-260). While the juxtaposition of 'Libya' and Sardinia can therefore with Polybius be understood as indicating that both regions were regarded as Carthaginian territory, it does not imply that Carthaginian colonialism explicitly aimed at the military conquest and occupation of overseas territories. The gradual development and considerable degree of cultural autonomy of the west central Sardinian situation suggest that political and economic domination were on the contrary achieved with other means which were less violent but no less effective. Perhaps the principal contribution of the archaeological evidence to the hitherto largely historical debate about Carthaginian colonialism regards the indigenous inhabitants of Sardinia. On condition that the interpretation of the finds is not allowed to be shaped by literary evidence and a dualist representation is avoided, the archaeological data can show how the local inhabitants dealt with Carthaginian domination. From a postcolonial point of view, I have argued that they were actively involved in the construction of a new colonial society instead of being passive objects of Carthaginian colonialism: while there can be little doubt about the political and economic dominance of Carthage, I have tried to show with this interpretation that the so-called 'hard reality' is not the only dimension of a colonial situation but that it also comprises a cultural side which is anything but mere 'superstructure' in a Marxist sense. If, however, understood in the sense of Gramsci's 'contradictory consciousness' (cf. p. 29), the hybrid colonial culture of Punic Sardinia can be seen as an instrument of local people to define their position in the newly developing colonial context, which not only consisted of political and economic domination but which also comprised novel ways of land use and new forms of material culture.

notes

1 Under as yet unknown circumstances and pressures but favoured by its outstanding central position at the cross-roads of the principal Phoenician commercial routes, Carthage raised the standard of national resistance and invited as well as pressed its sister cities to accept its alliance which then turned into hegemony and domination.

2 For the earlier periods, the written sources consist of a large number of myths, such as that of the foundation of Carthage by Dido, or, with regard to Sardinia, the arrival of the hero Norax (see Castia 1996). Although many may go back on older oral traditions, the later codification, often in different cultural situations, renders the use of these sources highly problematical (cf. Lancel 1995, 23-25; Ribichini 1983).

3 The general periodization thus comprises the later part of the period conventionally known as 'Archaic' (720-480 BC), the whole of the 'Classical' (480-323 BC) and the earlier part of the Hellenistic one (323-31 BC). Despite its frequent adoption (e.g. Tronchetti 1988), I do not follow this convention, as it has no practical bearing on the Sardinian situation.

4 An older but not very different version by Antiochus of Syracuse (fl. later 5th century BC) has partly been preserved (Asheri 1988, 748-749). For a detailed discussion of all relevant literary sources, see Hans 1983, 5-103.

5 'Drei sich mißtrauisch, ja feindlich gegenüberstehende, alle um die Vorherrschaft im westlichen Mittelmeer bemühte Völker — Karthager, Etrusker und Griechen — versuchten sich gegenseitig auszuschalten.'

6 The identifications of the latter with the Phoenician settlement of Toscanos suggests that the late sources which mention the two Phocaean colonies (Plinius, Strabo) have taken a Greek name for a Phoenician or Punic settlement as evidence of a Phocaean foundation (Niemeyer 1980). The existence of the Greek names might even indicate rather close contacts between the Greek and Punic inhabitants.

7 The translation of this and the following fragments of Polybius is by Lancel 1995, 86-88.

8 In the first treaty, the word ἐπάρκουσι is surprisingly not used with reference to Sardinia and Lybia (North Africa), where Carthage is supposed to have been dominant; it seems to distinguish the contested Punic part of Sicily from the rest. In this context, this word thus appears to stand for a 'sphere of influence' rather than testifying to a territorial domination. Since the archaic Latin equivalent of the Greek word must have been *provincia* or *imperare*, the contradiction is easily resolved, because these words originally meant 'to control' in a more generic sense and acquired a territorial connotation only much later (for a more detailed discussion, see Whittaker 1978, 62-63; cf. Hans 1983, 119-120).

9 '.. come coordinatrice dell'intera attività politica ed economica della regione, che fa ormai parte integrante dei suoi territori.'

10 Translation by Yardley and Develin 1994.

11 The case of Bithia is contested: Bondi claims that both the cemetery and the *tophet* were abandoned after the middle 6th century BC but he fails to mention traces of destruction (1987ab, 177); Tronchetti insists on a continuous use of the cemetery, although somewhat less intensive in the 6th century BC, and points to 5th century surface finds from the settlement area (1988, 91-92). Moscati's detailed discussion states that the later 6th and early 5th centuries are covered by the '2nd stratum' and that the next phase of burials starts only around the middle 4th century BC.

During most of the period under discussion here, however (5th-3rd centuries BC), the cemetery was certainly in use (Moscati 1986, 231-232).

12 Older foundations dates have frequently been proposed for Karales (e.g. Moscati 1986, 188) but these are all based on the presence of 7th century BC colonial imports in the hinterland of the *Campidano di Cagliari*. Although 7th and early 6th century BC finds have occasionally been attested, these do not imply an earlier Phoenician settlement (cf. p. 82).

13 For all four forts discussed in detail by Barreca (1978, 122-124), the Punic style of construction and lay-out of the fortifications were proposed as the best chronological indications, which might point to the early 5th century BC but which could also indicate a date as late as the 3rd century BC (cf. Barreca 1986, 281). Recent excavations in two of these alleged forts have eliminated the one of Santu Brai (Furtei) as a Punic fort altogether (Ugas/Zucca 1984, 35) and have documented only hellenistic Punic pottery in the one at S. Antine near Genoni (Guido 1991, 933-934).

14 Excavations at N. Arrubiu (Orroli) and Santu Brai (Furtei) have clearly disproved the existence of a Punic fort at these sites which Barreca originally considered part of the defensive line (Lo Schiavo/Sanges 1994, 21; Ugas/Zucca 1984, 35). The same holds for the site of Monte Sirai, which is usually cited as a Punic fort but which has yielded no evidence of any military function other than its strategic position (cf. Bartoloni 1995).

15 This date corresponds closely with the official introduction of the Demeter cult in Carthage in 396 BC, which once more confirms the close relationships between Sardinia and Carthage (Lancel 1995, 345-347).

16 Comments by classical authors on state-directed mines all regard southern Spain under the centralized authority of the Barcids in the 3rd century BC (Diod. V.35; Pol. XXXIV.9; Pliny, *NH* XXXIII.96-97) and need not have a bearing on the Sardinian situation of the 4th century BC (cf. p. 166).

17 Several writings traditionally included in the *Corpus Aristotelicum* have been identified by modern scholarship as being of (much) later date. *De mirabilibus auscultationibus* ('on wondrous rumours') is a curious compilation of all sorts of anecdotes and small facts, which has been ascribed to the so-called *Peripatetic School* founded by Aristotle's pupils after his death. It must presumably be dated to the 3rd century BC. The fragment cited has been adapted from Timaeus (4th century BC), as a reference by Diodorus Siculus shows (IV.29.6).

18 Sites 537 in the southern Arborèa and 540 in the Marmilla are not part of the *Riu Mannu* survey sample and have therefore not been surveyed intensively. Good visibility conditions and repeated visits during the 1994 season have nevertheless resulted in a small but reasonable collection of diagnostic finds from the former site. The latter was thoroughly hidden by a eucalyptus grove and thick undergrowth but a conspicuous quantity of off-site finds collected in the *Riu Mannu* sample suggests a sizeable settlement, perhaps a hamlet, of both Punic and Roman date. Fragments of limestone slabs also suggest the presence of several chest burials.

19 One more site was reoccupied in the course of the 2nd century AD (533).

20 Late 6th and 5th century Attic fine wares suggest previous activities of an otherwise unknown nature in the same area (Zucca 1987a, 101).

21 All information about the methods of collection and description has kindly been provided by Gino Artudi and Sandro Perra during several discussions and excursions in the field between 1994 and 1996.

22 The brief reports by Lilliu in *Notizie degli Scavi d'Antichità* 1943, 176 referring to 'molti cocci romani d'argilla rozza' or in *Notizie degli Scavi d'Antichità* 1949, 284, note 1, mentioning 'numerosi embri e stoviglie in frammenti' are but two of many such reports, which were usually annually published.

23 The presence of the coins in contexts otherwise known as 'Roman' has been cause to change this classification into 'Punic-Roman' but no other Punic finds seem to have been recognized at these sites (Lilliu/Zucca 1988, fig 1, 19, 25).

24 At nuraghe Siaxi, however, so-called 'included ware' has been registered, which appears to refer to coarse pottery in general and which might be Nuragic or Punic (cf Dyson/Rowland 1992a, 185).

25 Zucca has also been instrumental in disseminating information about Punic pottery among the amateur archaeologists of these areas.

26 This estimate has been corrected for areas in the transect which were unavailable for survey, in this case a one km tract in transect

05 across the Pauli Putzu marsh, where sand quarries and a large rubbish dump had destroyed the terrain. The one site extensively surveyed outside the survey sample (537) has not been included.

27 The built-up area of modern Terralba ($\pm 2 \text{ km}^2$) and the largest marshes (Sa Ussa, Putzu and Annuas, together $\pm 3 \text{ km}^2$) have been subtracted from the total extent of the Terralba territory of 34.65 km^2 . Without this correction the estimated density would be 3.4 sites per km^2 .

28 The current excavations at Pinn'e Maiolu (316) are likely to shed some light on this problem.

29 In this paper Zucca has discussed and illustrated the principal 6th and 5th century BC sites reported by Artudi and Perra. His lower numbers of sites attributed to these centuries are based on an older and now incomplete overview by Artudi and Perra.

30 It was only in Roman Imperial times that imported oil-lamps were offered at some scale.

31 Othoca appears to occupy a broadly similar position but the much more limited distribution and density of small-scale rural settlement in the northern Arborèa sets the town apart from Neapolis.

32 The fabric of the statuettes has been described in somewhat imprecise terms (Zucca 1987a, 151). However, detailed examination and comparison to the fabrics and clays collected by the *Riu Mannu* project could easily settle this matter (cf. Annis in press).