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Phoenician Colonization of Nuragic Sardinia: A World-Systems Model of Periphery-Semiperiphery Interaction

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Phoenician Colonization of Nuragic Sardinia: A World-Systems Model of Periphery-Semiperiphery Interaction

by

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ABSTRACT

The arrival of the Bronze Age ushered in many changes in the Mediterranean, including the emergence of the Nuragic culture on the island of Sardinia (Italy). The Nuragic culture takes its name from the nuraghi, the more than 7,000 dry-stone towers that dominate the landscape. The Nuragic population engaged in an extensive trade network within the Mediterranean throughout the Middle and Late Bronze Age, trading with Mycenae, Cyprus, and mainland Italy. Contact with foreigners intensified the cultural exchange and facilitated the emergence of an elite group. The Phoenicians established colonies on Sardinia in the Early Iron Age, resulting in the incorporation of the island into a world-system that originated in the Near East. This study investigates Nuragic-Phoenician relations utilizing a proposed world-systems model of periphery-semiperiphery interaction. I demonstrate how the strategic use of ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture by the Nuragic population reflects their ability to negotiate their incorporation in a world-system.

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CHAPTER ONE
Introduction

The arrival of the Bronze Age (2300-900 BC) brought about many changes throughout the Mediterranean, including the emergence of the Nuragic culture on the island of Sardinia. The Nuragic people developed a unique material culture, including the construction of nuraghi (dry-stone towers) and *bronzetti* (bronze figurines), and remained somewhat isolated throughout the Middle Bronze Age due to the natural defense afforded by the sea and the island's mountainous interior. The culture continued to thrive into the Iron Age (900 BC), although the arrival of the island's first foreign colonizers about a century earlier, the Phoenicians, dramatically impacted the cultural landscape of Sardinia. Throughout the Late Bronze Age the Nuragic people engaged in an extensive exchange network within the Mediterranean prior to Phoenician occupation, attested by the presence of pottery from Mycenae, Cyprus, and mainland Italy. With Phoenician colonization we see a more intensive form of cultural exchange taking place. I argue that the establishment of colonies and the intensification of trade between the Nuragic population and the occupying Phoenicians resulted in Sardinia being incorporated into a world-system. In traditional world-systems modeling, polities are understood as one of three components: a core, semiperiphery, and periphery. Using this model, I consider the Nuragic population a periphery, with the Phoenicians semiperipheral to the Assyrian core. In the present study, I investigate the periphery-semiperiphery relationship that existed between the two groups and how it relates to the formation and continuity of a common Nuragic identity.

The nature of this relationship is addressed through the application of basic principles of world-systems theory as well as the adoption of the concept of negotiated peripherality (Kardulias 2007). According to this idea, native groups strategically exercise control over their incorporation in a world-system. The emergence of a common identity is one factor that enabled

the Nuragic population to resist becoming fully incorporated in the world-system as a dependent periphery. I seek primarily to investigate how the Nuragic population exercised this power by means of material items – ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture. I have chosen to examine these materials on the basis of their diversity and their potential to illustrate the interaction between the native population and the Phoenicians during the Early Iron Age.

In terms of ceramics, the Nuragic people had been acquiring these in the form of locally made vessels and foreign imports throughout the period of the Bronze Age. Approximately a dozen Late Bronze Age (1300-900 BC) sites feature finds of Aegean and Cypriot ceramics, including some local imitations of those foreign products (Webster 1996:140). By the Early Iron Age (900 BC), imports of Phoenician, Etruscan, Greek, Cypriot, and Sicilian ceramics made their way to over 40 Nuragic sites (Webster 1996:176). It appears that the distribution of imported ceramics and other trade items among Nuragic sites is related to their proximity to Phoenician settlements. The colonies were established along the eastern, southern, and western coasts. Relatively few imported goods traveled further than the middle-uplands region, with only the Nuragic sites in the south and near the eastern and western coasts having frequent contact with the Phoenicians. In the present study I investigate ceramics from the Nuragic site of Sant'Imbenia in order to understand one example of local and imported ceramic production and distribution.

Another important component of Nuragic society is utilitarian and symbolic architecture. The major architectural form that dominated the Middle to Late Bronze Age of Sardinia was the nuraghe, of which over 7,000 exist on the island (Balmuth 1992:663). It has been thought that the nuraghe, a single or multi-towered dry stone structure, served a myriad of functions including

defensive, ritualistic, and residential (van Dommelen 1998:78). The construction of nuraghi ceased in the Late Bronze Age, but the degree to which they remained the center of village life amidst the changing cultural landscape needs to be investigated. Evidence of village reorganization testifies to the development of a more socially complex society upon the arrival of the Phoenicians. The emergence of the meeting-hut, an architectural development in the Late Bronze to Early Iron Age, is closely associated with Nuragic elite activity. I investigate how the construction of meeting-huts at Nuragic settlements may serve as a response to the establishment of Phoenician colonies.

In addition to architectural change, the utilization of representational art forms by the Nuragic population reveals their degree of interaction within the world-system. The over life-size statues of Monte Prama are unique to the site, serving as funerary monuments for elites or authority figures. These statues are thought to have been modeled after the *bronzetti*, bronze figurines discovered at numerous Nuragic sites that take the form of humans, animals, boats, and nuraghi. Both of these representational art forms are often considered products of a society that was heavily influenced by the Phoenicians and indicative of a changing social structure. In the present study, I evaluate evidence for cultural continuity through the identification of both Nuragic and Phoenician traditions in these art forms and show how they represent the consolidation of a unified Nuragic identity.

Investigating changes in these forms can expose native reactions to Phoenician colonization, and thus reveal the degree to which the Nuragic population regulated their involvement in communication with Phoenician colonies. The investigation of these changes through a world-systems perspective reveals that colonization by the Phoenicians resulted in the active participation of the Nuragic population in determining their own incorporation into this

world-system. A review of literature is necessary in order to elaborate on the characteristics of Sardinia in the Nuragic age, followed by a discussion of the methods of research, the world-systems theoretical framework, a description of data, and a full analysis of the data. The ultimate goal of this study is to evaluate the means of Nuragic resistance to the Phoenician world-system through the investigation of the utilization of resources by the Nuragic population.

Literature Review

An overview of the literature regarding Sardinia in the Pre-Nuragic period is necessary in order to understand the characteristics of the Nuragic culture and the formation of a Nuragic identity. The trade in obsidian during the Mesolithic resulted in the introduction of the people of Sardinia into a Mediterranean-wide exchange network. Following this period, the emergence of the Ozieri culture in the Late Neolithic is an important precursor to the emergence of the Nuragic culture in the Bronze Age. I emphasize the purpose of the nuraghi and the distribution of these towers. A discussion on the establishment of Phoenician colonies throughout the Mediterranean reveals the motivations behind their expansion. This investigation centers on the dominant Phoenician settlements in the Levant and the differences between Phoenician and Greek colonization. Lastly I examine the Phoenician presence in Sardinia, with a description of the evidence relating to the earliest Phoenician activity on the island. The literature I review also examines the location of Phoenician colonies on the island and the zones of Nuragic-Phoenician interaction.

Pre-Nuragic Sardinia

The first inhabitants of the island of Sardinia arrive during the Upper Paleolithic in approximately 500-100,000 BC (Balmuth 1992:669). The earliest hominids migrated to the island after the glaciation of Europe, when the sea levels were significantly lowered, allowing for

migration via land bridges (Dyson and Rowland 2007:20). Evidence of occupation consists of quartz and flint flakes and blades related to the typologies of the Clactonian culture (Dyson and Rowland 2007:20). The last major glaciation facilitated the migration of Homo sapiens to the island around 20,000 BP (Dyson and Rowland 2007:22). Corbeddu Cave in Oliena provides the best evidence for human occupation during the Upper Paleolithic. In addition to Upper Paleolithic finds of fossilized remains of deer, the earliest human fossil discovered in Sardinia derives from this site, dating to 20,000 BP (Sondaar et al. 1994).

The Mesolithic marked the establishment of island-wide webs of communication with the trade of obsidian. One of the main sources of obsidian is at Monte Arci in west-central Sardinia (Dyson and Rowland 2007:25). The trade in obsidian also integrated Sardinia into a Mediterranean exchange network, with Sardinian obsidian discovered in Corsica and Liguria (Dyson and Rowland 2007:24). This would have brought new people and ideas to the island. In exchange for the obsidian, the Sardinians received cardial impressed ware pottery (Dyson and Rowland 2007:32). This type of incised pottery is found at both coastal and inland sites, and is thought to have originated in the western Mediterranean, being distributed throughout Italy, Corsica, North Africa, Iberia, and Provence (Dyson and Rowland 2007:31).

The transition to the Neolithic was most likely facilitated by the exchange of ideas and technology through the trade of pottery and obsidian. The early Neolithic sites suggest a population dependent on hunting, foraging, herding, and the cultivation of small plots (Dyson and Rowland 2007:34). The Bonu Ighinu phase is an important Middle Neolithic culture, showing evidence of the development of more highly decorated pottery and a growth of settlement related to the rise of the obsidian industry (Balmuth 1992:671). At a number of these sites is the presence of stone female ‘goddess’ figurines, suggesting further contact with the

western Mediterranean (Dyson and Rowland 2007:35). These sites also feature evidence of the first complex burials with grave goods in Sardinia (Dyson and Rowland 2007:34). This suggests the emergence of an ideological and religious system associated with the belief in the afterlife.

The Late Neolithic marks the emergence of the first island-wide culture (Balmuth 1992:672). The culture, named after the site of Ozieri, is characterized by unique ceramic forms, finishes, decorations, habitation in caves and huts, burials in rock-cut chamber tombs, and the earliest metallurgical work (Balmuth 1992:672-673). The Ozieri tombs of Sardinia have been named *domus de janas* ("House of the Fairies"), a type of necropolis that is unique to Sardinia. They are meant to resemble homes, and typically feature red and black wall paintings (Rampazzi 2007:559). The paintings are often depictions of bull horns or spirals (Dyson and Rowland 2007:41).

One of the most famous Ozieri sites is Monte d'Accoddi in Sassari. It has been defined as an altar, ziggurat, temple, or step pyramid (Melis 2011:207). This structure is located in the middle of an open plain, is fashioned out of cyclopean masonry, and features a monumental access ramp (Pili et al. 2009:61). Various characteristics provide evidence for its ritual use, including intentionally destroyed stone figurines and astronomical significance of the menhirs (standing stones) (Melis 2011:214; Pili et al 2009:65). The presence of this cult center attests to the presence of a socially stratified society controlled by an elite group, as an authoritative group would have been necessary in order to control its construction. It also indicates cooperation among the regional groups, as multiple communities would have visited the site.

Sardinia in the Nuragic Period

The emergence of the Nuragic culture in approximately 1700 – 1600 BC altered the landscape of Sardinia significantly with the construction of an estimated 7,000 stone towers

called ‘nuraghi,’ structures unique to Sardinia (Figure 1.1; Depalmas and Melis 2010:169). The earlier form of these structures is the corridor nuraghe, which consists of a single tower. All are constructed of dry-stone walls and are characterized by a long corridor, although the interior features no standardized floor plan. They may contain multiple floors and entrances, and range from 8 to 15 meters high (Depalmas and Melis 2010:169). A later development is the multi-towered complex nuraghe, consisting of between two and five towers and reaching nearly 20 meters in height (Depalmas and Melis 2010:172). The chamber is circular and often consists of multiple levels.

Figure 1.1. Distribution of nuraghi on Sardinia. The small dots indicate isolated nuraghi; the larger circles indicate villages (Source: Webster and Teglund 1992:450, fig. 2)

The purpose of the nuraghe has been widely debated. It seems to have been an island-wide development that became the defining feature of the Middle to Late Bronze Age. The general consensus is that they were originally constructed primarily for defense, suggesting that there was an insecurity felt within and between the Nuragic villages (Dyson and Rowland 2007:68; Webster 1996:96). These villages consist of round dry-stone huts, which developed concentrically around the nuraghe (Depalmas and Melis 2010:169). The presence of a nuraghe does not necessarily imply the presence of a village, as many nuraghi were isolated constructions. These may be interpreted as single-family residences. The towers were then transformed into residences of the elites, coinciding with the isotropic expansion of the surrounding village (Webster 1996:164). The use of the nuraghe as a residence would have benefited the occupants in affirming their authority due to its monumentality, centrality, and segregation. Their use as storage facilities and cult sites is also suggested (Depalmas and Melis 2010:176). Despite their various uses, construction of nuraghi ceased in the Final Bronze Age, although they remained in use throughout the Iron Age.

In terms of distribution, Dyson and Rowland (2007) have proposed that the Nuragic settlements developed first in the upland zones, only later establishing secondary settlements in the lowland zones. It is important to note that the lowland Campidano region in southwest Sardinia lacks any significant concentration of nuraghi. The hard soils of the region may not have been amenable to Nuragic subsistence practices, as they would require the use of plows. This might provide an explanation for avoidance of the area (Webster and Teglund 1992:451). However, the southwest region of the island is home to the largest concentration of later Phoenician, Punic, and Roman settlements. It has also been suggested that the lack of nuraghi in

this region reflects the dismantling of abandoned towers by the colonizers in order to reuse the stone (Dyson and Rowland 2007:61).

The quest for metal ores began to shape settlement location once bronze working became an important activity in the late 2nd millennium BC. Nuragic villages became more concentrated in the metal-rich area of Montevecchio in the southwest (Dyson and Rowland 2007:73). The presence of ceramic vessels throughout the island featuring repairs made with metal strips indicates that the use of metals was more economical than remaking an entire pot. The abundance of metal brought the island back into a Mediterranean-wide exchange network after the trade in obsidian decreased. The Nuragic people were not only exporting copper and tin, but were also importing copper oxhide ingots from Cyprus (Dyson and Rowland 2007:96-97). As Webster (1996:142) points out, however, the amount of oxhide ingots discovered in Sardinia is not more than the cargo of one shipwreck. He suggests that extra-insular trade was not formalized but rather more sporadic. It is not until Phoenician arrival on the island in the 9th century BC that an intensive exchange network is established.

Sant'Imbenia

Located in the Bay of Porto Conte in northwestern Sardinia, the Nuragic settlement of Sant'Imbenia was inhabited from approximately the 14th through 7th centuries BC (Figure 1.2). A coastal village with a complex nuraghe, it is bounded to the west by Capo Caccia and to the east by Punto Giglio. The location of the settlement is strategically situated approximately 1 km from the sea in order to maintain control of the coastline and to access inland resources (silver, copper, iron, cultivable land) (Depalmas et al. 2011:231). It remained an important center of activity for the trade of ceramics, evidenced by the number of Greek and Phoenician vessels and amphorae filled with bronze ingots discovered at the site (Depalmas et al. 2011). Phoenicians and Greeks

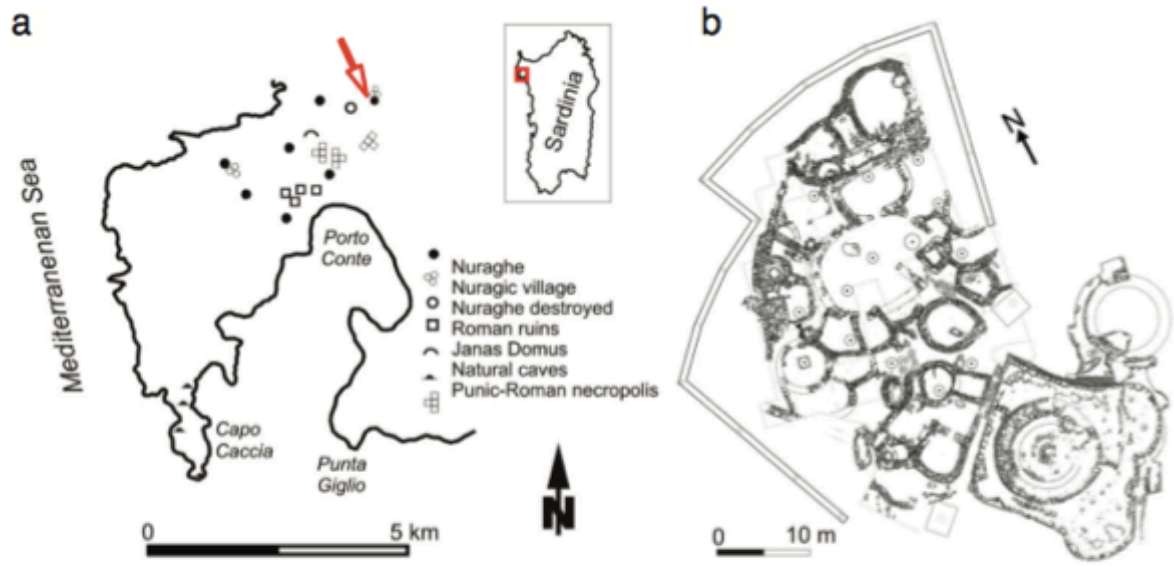


Figure 1.2. a. The Porto Conte archaeological area with Sant'Imbenia indicated via the red arrow. b. Plan of Sant'Imbenia (Source: De Rosa et al. 2012:315, fig. 1)

may have even taken up residence in the village during the Early Iron Age before its eventual abandonment in the 7th century BC (De Rosa et al. 2012:313). The area remained at an advantageous position, as nearby a Roman villa, also by the name of Sant'Imbenia, was constructed near the 1st century AD. It featured nearly 50 rooms and contained elaborate opus sectile flooring, a Medusa mosaic, and decorative elements of stucco and fresco (Testone et al. 2015).

Excavations at Nuragic Sant'Imbenia began initially in 1982 and continued until 1997 under direction of Anna Depalmas and Susanna Bafico (Rendeli 2010:323). Since 2008 excavation has continued at Sant'Imbenia under the direction of Dr. Marco Rendeli in collaboration with the University of Sassari. The main feature of the site is a nuraghe, although it has not yet been fully investigated. It appears to be of the complex type with two additional towers flanking the central one (Oggiano 2000:313). The focus of excavations has been on the village, which extends immediately out from the western side of the nuraghe. The village

features circular dry-stone huts, as well as a 'meeting-hut,' so-called based on theories of its utilization, which features a bench along the interior of the circular wall and a central basin. An additional important feature that has been discovered is an oven with a diameter of 1.5 meters in *ambiente* 50 (Garau and Rendeli 2012:898).

Two features of the site in particular have been extensively investigated: a storage hut and a central courtyard. The storage room indicates four phases of use-life. It was first constructed at the end of the 9th century BC. By the mid 8th century BC, the hut had been destroyed due to the collapse of the nuraghe. A rebuilding phase occurred at the end of the 8th century BC and a new slab stone floor was installed. It continued to be utilized until the 7th century BC. A particularly interesting feature at the site is a central courtyard. Four phases can also be identified that give insight into the development, height, and abandonment of the village, although its initial construction began much later than the storage hut. It was constructed using a slab stone floor before the 8th century BC (Oggiano 2000:236). A new floor was installed in the second half of the 8th century BC, and again in the 7th century BC until it was abandoned in the same century. The ceramics that were used to distinguish these phases serve as sources of data for my own investigation.

Phoenician Expansion in the Mediterranean

The dominant Phoenician cities in the Early Iron Age Levant included Byblos, Sidon, and Tyre (Aubet 2001:16; Peckham 1992:410-411; See Figure 1.2). Among these, Tyre is considered to be the most powerful seafaring Phoenician city in the Western Mediterranean. The city thrived during the Early Bronze Age (2900-2500 BC), was abandoned during the Middle Bronze Age (2000-1600 BC), and was revived during the Late Bronze Age (1650-1050 BC) (Aubet 2001:40). During the Iron Age, at the same time the Mediterranean was engaged in extensive trade, Tyre

experienced increased building activity and a thriving pottery industry (Aubet 2001:41). Hiram I is considered to be the founder of Tyre's commercial empire during this period – he managed to monopolize sea transport and maintain hegemony over the independent Phoenician cities of Byblos and Sidon (Aubet 2001:44).

These cities became commercial powers in the Mediterranean, with Tyre establishing the first Phoenician colony in the Mediterranean at Kition on the southern coast of Cyprus in the mid-9th century BC, as part of an effort to acquire the island's highly coveted copper resources (Aubet 2001:52). Kition was originally under Tyrian control until it became a self-governing polity by the late 8th century BC (Markoe 2000:170). Unlike Kition, Amathus had originated as a native settlement and was transformed into a Phoenician city. Located on the southern coast, west of Kition, Amathus became a center for Phoenician commercial enterprises, evidenced by the large amount of imported Phoenician ware ceramics within chamber tombs (Markoe 2000:170). The foundation of Phoenician activity in Cyprus resulted in the establishment of a trade network with Crete and Rhodes, and further expansion westward.

The factors leading to the creation of a Phoenician diaspora are manifold. The political and military imposition of Assyria on Phoenicia may have created pressure for Tyre to seek resources elsewhere in order to keep up with Assyrian demands (Sommer 2007:102). At this point in time, Tyre had become the dominant Phoenician city, with the others supporting Tyre's trade and military (Sommer 2007:103). It appears most likely that a combination of factors resulted in Phoenician expansion westward, as laid out by Aubet (2001:73). One problem faced by the Phoenicians was over-population, a result of the change in climate around 1200 BC that brought widespread drought to surrounding areas, and therefore resulted in a flood of people

Figure 1.3. Major Phoenician colonies in the Mediterranean (Source: Aubet 2001:160, fig. 34)

migrating to the prosperous coast around Tyre (Aubet 2001:75). This Phoenician city also produced luxury goods for the Assyrians and other neighboring powers. The increasing demand for precious metals encouraged the Phoenicians to seek resources elsewhere (Aubet 2001:79). This led to their exploitation of silver, copper, lead, tin, and iron resources in Anatolia, Cyprus, Etruria, and Tartessos (Aubet 2001:80). This evolved into a shipping network in which they established colonies along Mediterranean coasts, stopping first along North Africa, continuing to Spain, and establishing a system of ports on the Balearic, Sardinian, and Sicilian islands on the return journey (Figure 1.3).

Although the Phoenicians established an extensive exchange network, perhaps the most well known colonizers of the Mediterranean throughout the Early Iron Age are the Greeks. They established over 90 colonies along the coasts of North Africa, Anatolia, France, the Iberian Peninsula, and throughout southern Italy (Hammond 1959:109). Nevertheless, Greek settlements differed in various ways from those of the Phoenicians, as pointed out by Sommer (2007). Increasing population and the search for more agricultural land were the primary motives behind Greek expansion (Sommer 2007:98). This search for land involved the movement of a much

larger population than the Phoenicians, resulting in larger settlements (Sommer 2007:98). Archaeological evidence from these Greek settlements indicates these communities absorbed less of the native styles in their material culture and transmitted a greater degree of their own. The Phoenicians did not have an equivalent to the Greek *chora* – the hinterland of the *polis* (Sommer 2007:98). They tended to maintain themselves at the established settlements alone and did not spread themselves out as much as the Greeks. This difference is key in understanding Phoenician influence in Nuragic Sardinia. The Phoenicians remained on the coast of Sardinia, rather than fully penetrating the interior. As a result, the inland Nuragic population was able to maintain contact from a distance. Nevertheless, both systems of colonization involved the transmission of ideas and material culture that significantly affected native populations.

Phoenician Colonization of Sardinia

The earliest Phoenician inscription in Sardinia comes from the Nora Stele, dated to the 9th century BC (Figure 1.4). Despite the early date attributed to the inscription, evidence of a Phoenician population at Nora is dated no earlier than the 7th century BC (Aubet 2001:208). This span of two centuries between the initial arrival of the Phoenicians and continuous settlement could indicate a pre-colonial phase when they sought only to secure resources and intensify trade. Two interpretations have been put forth as to the translation of the text. Peckham (1972:459) translates it as follows:

1. From Tarshish
2. he was driven;
3. in Sardinia he
4. found refuge;
5. his forces found refuge:
6. Milkuton, son of
7. Subon, the commander.
8. To [the god] Pmy.

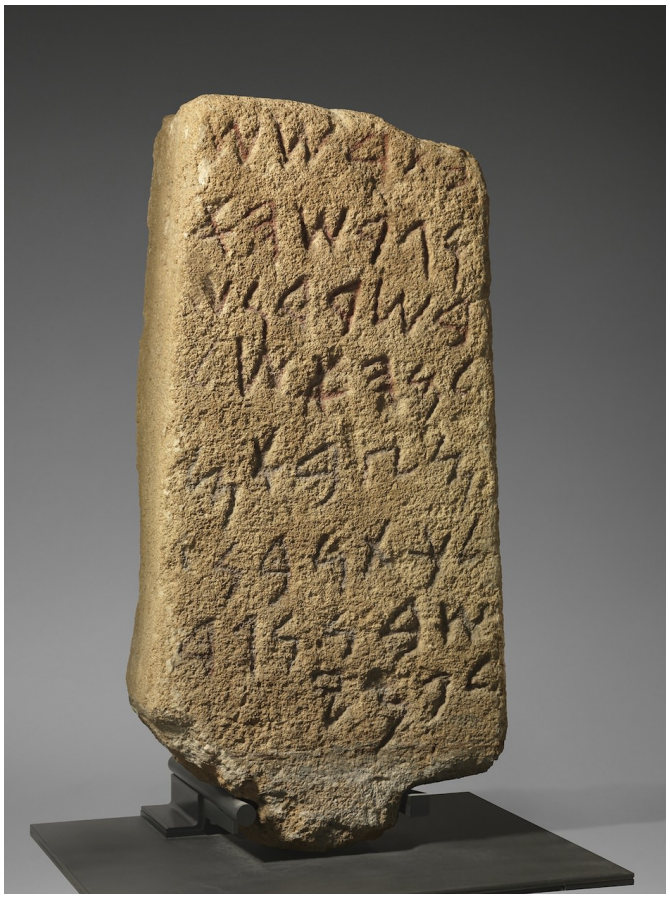


Figure 1.4. The Nora stele (Source: *Metropolitan Museum of Art*)

Cross (1984:56) offers a different translation:

[a. He fought (?)]
[b. with the Sardinians (?)]
1. at Tarsis,
2. and he drove them out.
3. Among the Sardinians
4. he is [now] at peace,
5. (and) his army is at peace:
6. Milkaton son of
7. Subna (Shebna), general
8. of (king) Pummay.

With the first translation, Peckham suggests that the stele was erected to commemorate a temple constructed for the god *Pmy*. Cross' translation indicates the arrival of a Phoenician army under Pummay, the king of Tyre. It further signifies that the initial arrival of the Phoenicians forced out

the Nuragic population, and that after this expulsion, peace was established and Sardinia served as a place of refuge.

Colonization of Sardinia consisted of autonomous colonies that were concentrated on the southwestern coast. Aside from Nora, the Phoenicians established coastal settlements at Tharros, Sulcis, Cagliari, Bithia, and Bosa (Peckham 1992:414). Sulcis has yielded one of the earliest traces of Phoenician settlement on Sardinia, evidenced by early dates from the settlement's *tophet* – the characteristically Phoenician location for the sacrifice and burial of children to the gods Moloch and Baal (Aubet 2001:237). The *tophet* appears also at Tharros and Bithia. As an act of demonstrating territorial domination, secondary interior defensive sites were founded, serving as a barrier between the interior Nuragic settlements and the Phoenician settlements on the coast. These secondary settlements include Monte Sirai, Pani Loriga, Monte Crobu, Corona Arrubia, Sa Turrita de Seruci, and Porto Pino (Aubet 2001:240). These sites would ensure the peaceful exploitation of the island's rich lead and silver deposits and agricultural land.

Reconstructing native-Phoenician relations is a complicated process, as it appears in some instances to have been a peaceful interaction and in others wrought with conflict. Indications of a hostile relationship between the two populations lie in the nuraghi that appear to have been destroyed or abandoned. One example is that of Monte Sirai, a Phoenician settlement constructed atop a destroyed nuraghe (Webster 1996:158). The Nuragic village at Sant'Imbenia, near Alghero, attests to a more cooperative relationship – in addition to Phoenician and Greek pottery, local imitations of Phoenician wares have been found as well as local and Phoenician vessels packed with bronze ingots (De Rosa et al. 2012:313; van Dommelen 1998:74). These finds are indicative of an exchange network between the native population and the Phoenicians in which both groups may have benefited from interaction.

Webster and Teglund (1992:456) have identified three socioenvironmental zones of Nuargic-Phoenician interaction. The first is the lowland zone of the southwestern coast that is characterized by good agricultural potential. However, as discussed above, it was sparsely populated by the Nuragic people due to the thick soil that would have required plowing. Instead it is an area concentrated with Phoenician settlements along the coast. A second zone is that of the central uplands, which are characterized by moderate agricultural potential and rich copper resources and is home to the majority of the native population. These native groups were actively engaged in an exchange network with the Phoenician coastal settlements. The third socioenvironmental zone is located in the areas of the highest altitude – the mountains of the eastern coast – that are characterized by the lowest agricultural potential. The native population here was not likely in direct contact with the Phoenicians.

The evidence certainly points to a social and commercial relationship between the Nuragic communities and the Phoenician colonizers. This kind of relationship results not only in the exchange of material goods, but also in a transfer of ideas. An investigation of Nuragic material culture can reveal the ways in which the native population engaged in this Iron Age world-system, particularly regarding the materials previously identified as composing the data that is investigated in the present study: ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture. What follows is a theoretical evaluation grounded in the world-systems perspective in an attempt to establish a framework within which the nature of this cultural encounter is investigated.

CHAPTER TWO
Theory

In this chapter I discuss aspects of world-systems theory that are useful to my investigation of Nuragic-Phoenician relations. The term world-system has been defined in various ways. Immanuel Wallerstein has described it more recently as a "social system, one that has boundaries, structures, member groups, rules of legitimation, and coherence" (2011:347). Various scholars, including Wallerstein himself, have reworked this definition. I adopt the explanation provided by Chase-Dunn and Hall (1997:28), who identify world-systems as "intersocietal networks in which the interactions…are important for the reproduction of the internal structures of the composite units and importantly affect changes that occur in these local structures." Additionally, there are scholars who prefer to reject the hyphenation of world-system, indicating their support for the existence of a single and continuous system (Frank and Gills 1994). In the present study I support the multiple world-systems approach, in which it is believed that there have been many world-systems throughout history, coexisting and replacing one another.

World-systems theory was not originally devised for an application to the investigation of ancient societies. Immanuel Wallerstein (1974) developed the theory to investigate the rise of capitalism in the 16th century European world-economy. Wallerstein notes specifically the difference between a world-economy and a world-empire (Wallerstein 1974:15-17). A world-economy is often restricted by size, and the basic functions of the system are tied together by the economy. The basic unit of a world-empire, in contrast, is the political system. Wallerstein acknowledges that Europe was not the only world-economy in existence in the 16th century, but it is the only one that developed into a capitalist system, allowing for the Western core to monopolize power through the exploitation of its peripheries. The concept of interacting cores

and peripheries is central to continuing the discussion on world-systems modeling and the application of this body of theory to archaeological circumstances.

In the present discussion of world-systems, I outline the various components, identifying the roles played by the core, semiperiphery, and periphery as these relate to my research area. A 'continuum of incorporation' conceptualized by Chase-Dunn and Hall (1997) places the periphery into types based on the impact of the core on the periphery, and vice versa. The highest level of incorporation, when a periphery is fully dependent, occurs when the impact of the core is strongest. Although this continuum is originally intended for an application to core-periphery interactions, I consider it in an investigation of periphery-semiperiphery interaction. In further chapters I will investigate how the Nuragic people of Sardinia were able to resist becoming a dependent periphery to the Phoenician semiperiphery. I presently consider studies completed by various scholars that demonstrate examples of key concepts applicable to the present investigation. Firstly, I discuss negotiated peripherality, which is defined as the ability of individuals to determine the conditions under which they are involved in interactions with the semiperiphery or core (Kardulias 2007:55). In this way, a group can serve as active participants in a world-system insofar as they too determine the conditions of their involvement. Germane to this is a discussion of identity and how it plays a role in the concept of negotiated peripherality. I follow with an analogous example from the Naco Valley, Honduras, in which the ancient site of La Sierra served as an actively engaged periphery to the larger Copan core (Urban and Schortman 1999). In this model, the authors identify the important role of allocative and authoritative resources.

Components of a World-System

A world-system consists of three parts – a periphery, semiperiphery, and core. The core regions accumulate resources through the exploitation of the periphery, thereby establishing an intersocietal hierarchy. The role of the semiperiphery is as an intermediary between the core and the periphery. Chase-Dunn and Hall (1997:36) identify two aspects of core-periphery relations. The first is termed core-periphery differentiation. In this instance, interaction occurs between societies of equal complexity within the same world-system. This is distinguished from core-periphery hierarchy, which occurs when different societies possess economic, political, or ideological domination within the world-system.

Semiperiphery

The semiperiphery is a major focus of the world-system in the present study, and a source of great debate within academic literature in regards to its role and delineation. Hall et al. (2011:236) provide a clear and concise definition: "Semiperipheries are metropoles [cores] in underdeveloped nations that exploit resources of their satellites [peripheries], while they in turn fall prey to exploitation by the Western core." Chase-Dunn and Hall (1997:37) offer five definitions of a semiperiphery. Put another way, these are five characteristics that may or may not define one semiperiphery in particular: the form of organization contains aspects of both the core and periphery, it is geographically located between the core and periphery, it is geographically located between multiple core regions, it is an area of mediating activities, and institutional features contain aspects of both the core and periphery. These characteristics are dependent on the nature of core-periphery relations in a single world-system.

Core-periphery Exchanges

These core-periphery relationships take the form of four different kinds of exchanges

(Chase-Dunn and Hall 1997:52). These include a bulk-goods network, prestige-goods network, political/military network, and information network. A bulk-goods network is one in which the exchange of raw materials or manufactured goods occurs. Prestige-goods networks typically link larger regions and are indicators of elite status, as they involve the trade of valuable goods (such as metal objects). These in turn may contain multiple political/military networks, all of which are contained within an information network, which occurs with the exchange of ideas. Different outcomes of these core-semiperiphery-periphery interactions may occur, all of which can be conceptualized as pertaining to a 'continuum of incorporation' (Chase-Dunn and Hall 1997:63). As the model portends, the degree of influence experienced by a periphery will vary in accordance with the degree to which it is incorporated into the world-system. Following this idea, if a periphery is heavily influenced by a core, it would be underdeveloped as a result of exploitation by the core region; this occurrence is termed *backwash effects. Spread effects*, on the other hand, is what occurs when the periphery adopts societal features of the core, essentially becoming more 'developed' (Chase-Dunn and Hall 1997:38). This is more likely to occur when the level of peripheral incorporation is weakest.

Continuum of Incorporation

According to the continuum of incorporation (Figure 2.1), there are four types of peripheries. A periphery is considered an *external arena* if it is not incorporated into the world-system. In this case, trade has not been established between the two groups. A *contact periphery* exists if the incorporation is weak and there is a low potential for impact of the periphery on the core. This occurs when contact has been established via trade, but when the periphery is not necessarily in direct contact with the group they are trading with. This type of periphery would have characterized Sardinia when the Nuragic population was engaged in trade with the

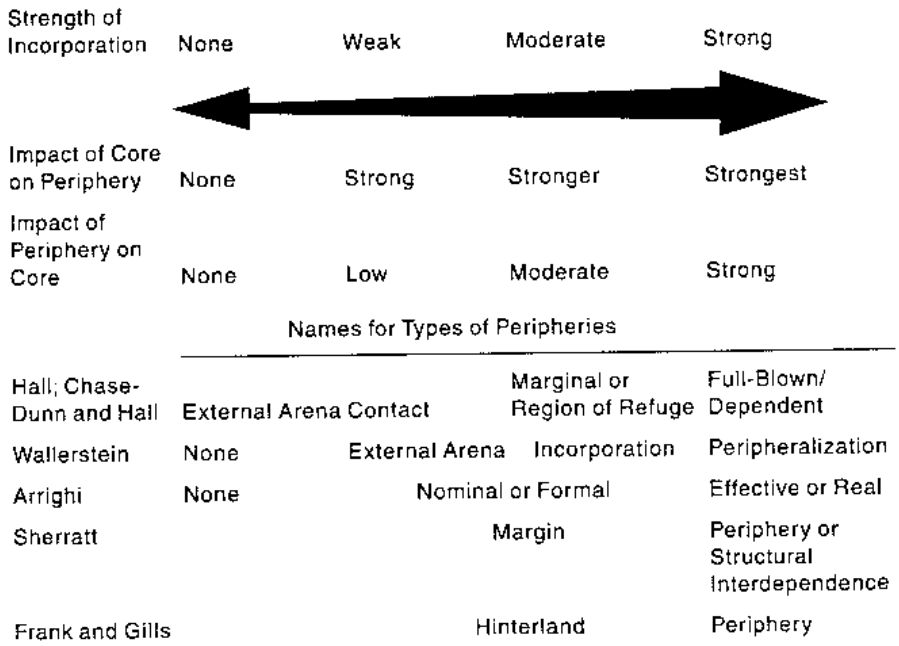


Figure 2.1. Continuum of incorporation (Source: Chase-Dunn and Hall 1997:63, Fig. 4.4)

Phoenicians prior to the establishment of colonies – the Nuragic population acquired ceramics from the Western Mediterranean by means of an indirect contact with the Levantine populations, as imports were carried first through other regions before they reached Sardinia. The next level of periphery is termed *marginal* or *region of refuge*, where the strength of incorporation and the impact of the periphery on the core are moderate. With the establishment of Phoenician colonies on Sardinia, the island can be classified as this type of periphery. It was no longer simply a region external to the reaches of exchange, but now an area occupied by a foreign population seeking to control resources and regulate trade directly.

At the extreme end of the spectrum, incorporation is at its strongest when the periphery is *dependent* or *full-blown*. The impact of the core on the periphery is at its strongest, although the impact of the periphery on the core is also strong. In this case, the core has absorbed the periphery under its authority and now determines societal processes and exchanges. Dependency suggests that there has been an economic penetration resulting in an unbalanced societal

structure (Tausch and Heshmati 2009:4). This leads to severe limitations on self-sustained growth in the peripheral society, which comes to depend on the economy of the core for sustenance (Tausch and Heshmati 2009:4). This never characterized Sardinia during Phoenician occupation, as the colonies remained politically autonomous and the Nuragic settlements continued to operate under their own terms. This is further evidenced by the lack of Phoenician construction beyond the coastal and interior colonies, the continued occupation and construction of native villages, and the maintenance of distinctly Nuragic architecture (nuraghi and circular huts) throughout the Phoenician presence. The Nuragic population was able to sustain an economy independent from Phoenician demands and did not become reliant on foreign exchange, as an analysis of the data will demonstrate.

Negotiated Peripherality

The concept of negotiated peripherality refers to the degree of power retained by a periphery, and is defined by Kardulias (2007:55) as "the willingness and ability of individuals in peripheries to determine the conditions under which they will engage in trade, ceremonial exchange, intermarriage, adoption of outside religious and political ideologies, etc. with representatives of expanding states." In support of this, I argue it is incorrect to assume that individuals in the periphery are completely subject to demands and influences from the core or semiperiphery. According to that view, peripheral groups are seen as passive recipients under complete control of the core. In some cases, the periphery could have considerable influence on the core, which negotiated peripherality seeks to illustrate. The potential for this sort of action taken by native groups lies in intersocietal interaction (Kardulias 2007:56). This contact can take shape in a variety of circumstances, whether in conflict, exchange of knowledge and ideas, or trade in ritual or utilitarian objects.

Kardulias (2007) applies this concept to the role of the Native Americans in the context of North American fur trade. Native Americans were active participants retaining considerable power, engaging in the "procurement, processing, and use/consumption activities that were embedded in the procurement sphere of the European market" (Kardulias 2007:67). Their actions cannot be considered a passive acceptance of European influence, but rather as being motivated by a strategic plan to benefit themselves. The Europeans simply provided a greater demand to a pre-existing trade network. Native American fur traders saw an opportunity to accumulate wealth by negotiating with the Europeans and therefore "had a means by which to obtain objects they desired, to augment existing alliances or build new ones, or to enhance status" (Kardulias 2007:78).

The Naco Valley World-System

A tremendous degree of peripheral power can be seen in Urban and Schortman's (1999) study of the Late Classic world-system in the Naco Valley, Honduras. Based on archaeological evidence, they determined that the Maya center of Copan acted as a core, with the Naco region, and the site of La Sierra in particular, serving as the periphery. Their argument is based partly on two types of resources that are deployed in power struggles, which were originally formulated by Giddens (1984). These are allocative and authoritative resources. Allocative resources refer to finished goods and other material features of the environment. Examples include water for irrigation, subsistence goods, and land itself. These are most easily accessible and are utilized by all intersocietal groups. Authoritative resources refer to the "practices through which meaning is imposed on life and nature" (Urban and Schortman 1999:126). This might include religious ritual or other public displays. It is through the control of these two types of resources together that economic and political domination is maintained by elites or authority figures.

The primary allocative resources that bound Copan and Naco within a world-system are obsidian and shell. The principal evidence lies in the existence of three marine shell workshops within and around La Sierra. Despite the presence of these workshops, only one finished shell artifact has been recovered from the Naco excavations (Urban and Schortman 1999:132). Only one workshop of this kind was discovered at Copan, although several finished shell artifacts were found in elite contexts with high symbolic meanings. This evidence suggests the presence of a highly controlled prestige-good network, in which the material was prepared in the Naco Valley for export to Copan. According to Urban and Schortman, this exchange did not result in the systematic underdevelopment of settlements in the Naco valley. The situation is what Chase-Dunn and Hall would call 'spread effects,' where La Sierra and the other polities adopted some features of Copan society and experienced economic growth. The demand at Copan for prestige goods resulted in the intensification of craft specialization in the Naco Valley. Elites at La Sierra strategically set out to monopolize production within the Naco Valley, exercising a degree of power in doing so. Negotiated peripherality therefore characterizes the elites of La Sierra in this world-system due to their ability to negotiate their incorporation.

Investigating authoritative resources is slightly more problematic, as ideologies must be interpreted from the material remains of ritual rather than primary observation of the action. The evidence that Urban and Schortman consider as important ritual symbols include:

I. *Incensarios* (censers)
II. Modeled ceramic effigies
    a. Figurines
    b. Whistles
    c. Ocarinas
III. Esoteric objects
    a. Spondylus shell
    b. Sculpture
IV. Special-purpose, non-residential buildings
    a. Temples

b. Ballcourts

V. Specialized deposits
   a. Caches
   b. Dedicatory burials

Through the investigation of these data they discover two distinct systems of ritual in the Late Classic Naco Valley. The first system "has a long history of continuous local development and is associated with commoners and secondary elites" (Urban and Schortman 1999:135). Secondary elites refer to those residing in smaller localities surrounding La Sierra. The evidence for this cult includes modeled ceramic effigies and simple incense burners, which were found at all surveyed sites in the Naco Valley. The second ritual system is apparent only at La Sierra, evidenced by "elaborately modeled censers, Spondylus bivalves…defaced and broken sculpture, distinctive temple forms, and a ballcourt" (Urban and Schortman 1999:135). Similarities in these materials with those found at Copan indicate the adoption of specific aspects of a lowland Maya ritual system by the La Sierra elite as a means of legitimizing political authority. In this way, the elites of La Sierra made strategically-minded choices in selecting those aspects of Copan social organization which they knew would be beneficial to their success, an example of negotiated peripherality.

The Nuragic-Phoenician World-System

I utilize a world-systems approach to understand the relationship and nature of exchange between the Phoenicians and the native Sardinian population. In locating these regions within the terminology of the world-system, the Nuragic population constitutes the periphery, with the Phoenicians comprising the semiperiphery. In the discussion in Chapter One on the motivations behind Phoenician colonization in the West, I identified the influence and domination of the Assyrians as a potential factor in this migration (Aubet 2001; Sommer 2007). As a dominant power in the Near East, the Assyrians exhibited a great degree of dominance over the Levant, in

placing a political and military imposition over the Phoenicians (Fletcher 2012). According to Frankenstein, the Assyrian state "rapidly extended political control, converting local relations of economic dependence and exchange to political relations of subordination and provision of tribute" (1979:270). These tribute relations resulted in the encouragement of trade across the Mediterranean, leading the Phoenicians to establish colonies along coasts and on islands. These sea-faring abilities of the Phoenicians proved to be crucial in the maintenance and development of Near Eastern empires (Frankenstein 1979:263). Considering the significant degree of Assyrian interference in Phoenician economy and exchange networks, I situate Assyria as the core region in this world-system. I argue the Phoenicians encompass the semiperiphery due to their exploitation and resultant expansion to seek external resources in order to provide the Assyrian empire with raw materials and other trade items. I therefore see Sardinia as constituting a peripheral region whose resources are exploited by the semiperiphery. Considering Sardinia's place in an extensive network of exchange, I do not presently seek to investigate the world-system in its entirety, but rather only one part of the interaction. Therefore, I attempt to understand one example of the relationship between a periphery and semiperiphery.

In order to more closely locate the Nuragic population within this world system, it is necessary to consider Chase-Dunn and Hall's (1997) 'continuum of incorporation.' Prior to Phoenician contact, Sardinia can be characterized as an external arena, as no direct contact existed between the two groups. Upon colonization, Sardinia was entered into the world-system more fully, as a marginal periphery or region of refuge. According to the continuum, the stronger the incorporation of the periphery into the world-system, the more it becomes completely peripheralized or dependent on the core. This did not characterize Sardinia at the time of Phoenician occupation, as the Nuragic population was able to maintain some control of resources

(as evidenced by production and use of locally produced goods) and to continually protect and occupy previously established settlements (as evidenced by the lack of island-wide destruction of Nuragic architecture or abandonment of villages). In the following chapters, I investigate how the Nuragic population was able to resist becoming a dependent periphery in this world-system. I examine various aspects of Nuragic material culture – ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture – in order to investigate the means behind the Nuragic population's resistance of Phoenician domination.

CHAPTER THREE
Methods

Information for this study derives exclusively from academic literature. The literature I employ involves descriptions and analyses of Nuragic material culture, as well as studies in world-systems theory. As I seek to understand the means by which the Nuragic population was able to resist becoming fully incorporated into the world-system by the Phoenicians, I have chosen specific data that, upon analysis, may relate a great deal of information regarding cultural interaction. This data takes the form of ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture.

Ceramics serve as important material resources because their study can reveal the level of interaction between the Phoenician colonies and the Nuragic settlements. The distribution of Phoenician colonies along the coast directly affects the extent of communication with the Nuragic population. The circulation of ceramics throughout the island is determined by these interactions and can indicate to what degree the Nuragic population took part in this exchange. I investigate the ceramic repertoire from the Nuragic settlement at Sant'Imbenia, Alghero, situated on the northwestern coast of Sardinia, in order to understand one example of Nuragic-Phoenician interaction. Utilizing various academic studies on the ceramics of the site (Depalmas et al. 2011; De Rosa et al. 2012; De Rosa et al. 2015; Oggiano 2000), I seek to evaluate the incorporation of this Nuragic settlement into the Phoenician exchange network. The analysis of variations in production of local wares and the presence of imported or locally produced Phoenician wares can illuminate this interaction.

I have chosen to investigate the *bronzetti*, bronze figurines that are unique to Sardinia in terms of style. These serve as examples of prestige items due to the fact that bronze was in more limited supply (as opposed to clay), and that their provenience often indicates controlled

distribution (within nuraghi and at ritual sites). I utilize various studies on the *bronzetti* to inform my own analysis of the function of these figurines. A large part of this information originates from a study by Gonzalez (2012), which expands on Lilliu's (1966) catalogue of Nuragic bronze figurines. From this study and others (Barreca 1986; Stary 1991) I collect data regarding the stylistic elements, Phoenician influence, and context and meanings of the *bronzetti*. The *bronzetti* are grouped into two stylistic categories – the Uta-Abini and the Mediterraneizzante. I argue a consideration of the shift from the former style to the latter reveals a conscious decision made by the Nuragic population to regulate Phoenician interest in the figurines, thereby restricting their incorporation in the world-system.

Following a discussion of ceramics and *bronzetti*, I investigate the life-sized statuary at the necropolis of Monte Prama. This site is especially significant because it is the only example of life-sized statuary belonging to the Nuragic people. As the production and installation of these statues occurred simultaneously with the establishment of a Phoenician colony at Tharros, their investigation provides an example of Nuragic reaction to the foreign occupation within a particular region. Much of the information on Monte Prama derives from a postcolonial analysis of the statuary (Tronchetti and van Dommelen 2005), although I apply evidence derived from this study and others (Tronchetti 1986) to a world-systems model. The geographic location and types of figures represented (warriors, archers, boxers, models of nuraghi, and standing stones) are discussed. An understanding of the location, purpose, and styles of these statues may illuminate their existence as evidence for a Nuragic response to the Phoenicians.

The evidence relating to architecture, particularly settlement reorganization and the introduction of 'meeting-huts,' stems from a study by Webster (1996) as well as by Holloway (2001) and Blake (1997). The expansion of Nuragic village population coincides with a shift in

the role of the nuraghe as a defensive tower to elite residence (as discussed in Webster 1996). I consider the meaning behind the placement of the meeting-hut next to the nuraghe and the elements of its interior features, which includes a circular bench and central podium often decorated with miniature models of nuraghi. The Nuragic settlements at Su Nuraxi (Barumini) and Palmavera (Alghero) provide examples of changing village structures as a response to foreign influence. The following chapter synthesizes these studies, organized by category of data (ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture), forming the collection of evidence for the present study. This evidence is then analyzed and considered within a world-systems model of Nuragic-Phoenician interaction.

CHAPTER FOUR
Data

In this chapter I present the data that will be analyzed utilizing a world-systems framework. The data I investigate includes ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture. As stated previously, I regard these data categories as encompassing appropriate material culture that will permit me to understand the Nuragic-Phoenician interaction in the broadest way possible. All of these elements occupy a place in Nuragic society where Phoenicians may have interacted directly (trade of ceramics), or where they might have influenced particular qualities in art forms or introduced new material features (emergence of the 'meeting-hut'). As such, I investigate ceramics as an example of a resource utilized by the Nuragic population to interact with the Phoenicians. Reports and studies related to the Nuragic settlement at Sant'Imbenia, Alghero serves as the data source regarding ceramics. In particular, I focus on the various ceramic wares – Nuragic, local imitations, and imports – and their fluctuating presence at the site through time. In addition to ceramics, *bronzetti* serve as an additional example of a transportable and widely distributed resource. The description of the *bronzetti* derives primarily from studies by Gonzalez (2012) and Lilliu (1966), and is based on a collection of figurines from various parts of the island. This wide geographical spread is necessary for this study, since approximately half of all known *bronzetti* lack any particular provenience. The description of the bronze figurines focuses primarily on stylistic elements, with an analysis of stylistic change in the following chapter.

Following the discussion of the *bronzetti*, I investigate the Nuragic statuary from Monte Prama. The geographic location of the necropolis and the corresponding nuraghe is described, and the types of statues are identified. This provides an example of regional contact with the Phoenicians. Lastly, the development of a major Nuragic architectural form that emerged in the

Early Iron Age – the 'meeting-hut' – is interpreted as relating to decisions made by Nuragic authoritative figures or elites due to the changing role of the nuraghe. I analyze these categories of data in the following chapter and situate them within the theoretical framework.

Ceramics

Local types of Nuragic ceramics during the Late Bronze Age (1300-900 BC), also known as the Nuragic III phase (Webster 1996), include many storage, food-processing, cooking, and serving vessels. These essentially repeated Middle Bronze Age types, as the same vessel forms reappear in the Late Bronze Age. The large storage vessels found across the island indicate the importance of storing grain. Boilers and strainers are common types of vessels for processing milk. During this period we also see an increase in decorated vessels, often including comb-impressed striations as well as linear or geometric motifs. Decorated vessels are more common within the nuraghi rather than the surrounding village, indicating a high degree of prestige relating to the presence of greater decoration and its association with elite (Webster 1996:134).

The transition to the Iron Age (900-500 BC) marked the period known as Nuragic IV. This phase is sometimes further distinguished by the earlier 'Geometric' phase (ca. 900-750 BC, IAI) and the 'Orientalizing' phase (ca. 750-500 BC, IAII) (Webster 1996:157). The most common ceramic type in the Geometric phase are closed piriform jars, as well as *askoi* (water jars) which were often impressed or incised with geometric designs, especially concentric circles. These specific forms appear most often at ritual sites or at larger settlements rather than smaller ones, and most often within the nuraghe itself. The Orientalizing phase is characterized by an increased amount of native ceramics in association with local imitations or imports from Etruria, the Greek Isles, and Sicily. Phoenician-Cypriot lamps also make a common appearance. Other

common types include ovoid jars, carenated bowls and cups, bread pans, boilers, braziers, and cooking stands (Webster 1996:171).

Sant'Imbenia

In the first chapter I discussed the current literature on the excavations at the Nuragic village of Sant'Imbenia, the site that serves as the primary source for ceramics in the present study. The local ceramic repertoire at the Nuragic settlement of Sant'Imbenia is largely similar to that of other native sites. Common types include cups, bowls, jars, jugs, pots, and large storage vessels (De Rosa et al. 2015:309). As a primary center for trade during the Iron Age, a large quantity of Phoenician and Greek imports have been uncovered, including cups, jugs, dishes, and amphorae (De Rosa et al. 2015:309). The specific data I examine derives from four different studies and is summarized in Table 4.1. These studies include an examination of ceramics deriving from four distinct areas (*ambiente* 51, a storage hut (*ambiente* 23), and courtyard (30), and *ambiente* 24), as well as a collection of ceramics collected from the excavations prior to 1997 that derive from a random collection of units.

Ambiente 51 is located northwest of the nuraghe with an entrance in the south wall, which opens onto the central courtyard (see Figure 4.1). The eastern wall is partially rounded, although the northern and eastern walls are perpendicular. The interior space is somewhat small in comparison to the other huts. Excavation of this room occurred in the 2010 and 2011 field seasons, which uncovered ceramics dating to the Iron Age (9^{th} – 7^{th} century BC) (De Rosa et al. 2015:309). A sample of both local and imported ceramics were investigated utilizing X-ray powder diffraction and optical microscopy technology in order to understand technological production techniques (De Rosa et al. 2015). The Nuragic ceramics studied make up 60-70% of

PROVEN-IENCE	DATE	LOCAL TYPES	LOCAL CHARACTERISTICS	IMPORTED TYPES	IMPORTED CHARACTERISTICS	SOURCE
Ambiente 51	9th – 7th c. BC (Iron Age)	- common types	-60-70% of sample - polishing, smoothing, burnishing, patinating	-thymiaterion - Phoenician amphorae, slipped plates and bowls, lamps	- 30% of sample - parallels from North Africa, Malaga, Tell Es-Safi, Akhziv	De Rosa et al. 2015
Storage hut (*amb.* 23)	late 9th – 8th c. BC	- amphorae - common types	- handmade, 60 Cu fragments - body and handles recall Levantine tradition	- Euboean *skyphos* - Phoenician red slip	- semicircular patterns	Oggiano 2000
	late 8th – 7th c. BC	- amphorae - common types	- wheel-made vessel with 31 Cu fragments - Levantine characteristics	- Phoenician amphorae	- inscribed	
Courtyard (30)	8th – 7th c. BC	- common types - drinking set	- handmade	- Phoenician plain ware, oil bottle, Samaria ware, red slip - Euboean *skyphos* - fragments of Spanish and E. European origin	- inscribed cup - *skyphos* decorated with chevrons and bird - in vicinity of Egyptian scarab and clay seal	Oggiano 2000
Various locations (sample of 46 fragments)	Middle-Late Bronze Age	- pans, cups, jars, bowls, *askoi*	- smoothed, polished -porous - temper with high conc. of calcite	-----	-----	De Rosa et al. 2012
	Early Iron Age		- burnishing, patinating - low porosity - use of volcanic material - Phoenician imitations			
Ambiente 24	mid-8th c. BC	- *dolium*	- vessel contained 42 bronze and Cu fragments - uncommon local form - Nuragic-like handles	-----	-----	Depalmas et al. 2011

Table 4.1. Data on the Sant'Imbenia ceramics investigated in the present study.

Figure 4.1. Plan of the excavated area. Areas discussed in this chapter include 23, 24, 30, 51. (Source: Depalmas et al. 2011:235, fig. 1)

the total sample, which include a range of types. Surface treatments include polishing, smoothing, burnishing, and patinating. Many of the fragments feature imprints of straw and other plant materials. The amount of temper (such as calcite) appeared to be higher in cooking ceramics than in serving ones, due to their need to survive high thermal shocks. Seawater may have been utilized to mold the clayey material, since sodium chloride serves as a melting agent, producing ceramics with high resistivity to breakage. Imported ceramics deriving from *ambiente* 51 include cups, jugs, dishes, and amphorae, making up approximately 30% of the total sample. The Phoenician amphorae, slipped plates and bowls, and lamps likely derived from the Levant and Western Mediterranean colonies in North Africa and at Malaga (De Rosa et al. 2015:310). A thymiaterion (incense burner), decorated with red and black bands both on the interior and exterior, dates to the first half of the 8th century BC. Parallels of this type can be found at Eastern sites like Tell Es-Safi and Akhziv (De Rosa et al. 2015:310).

Ambiente 23, also known as the "capanna dei ripostigli" (storage room or room of the hoard), is located nearest to the nuraghe out of all rooms in the current study (see Figure 4.1). It is a circular room with an entrance facing the nuraghe, to the southeast. The room features a small pit in which was deposited a handmade Nuragic vessel (38 cm. high and 21.2 cm. wide) containing 60 copper fragments (44.650 kg) (Oggiano 2000:238). The amphora is clearly of local production, although the body and position of the handles recalls Levantine traditions (Oggiano 2000:238). An Euboean fragment decorated with semicircles was found within the same cultural use layer, dating to the late 9th century BC. This is the oldest known Euboean fragment in the Western Mediterranean (Oggiano 2000:238). Also associated with the fragment were two pieces of Phoenician red slip. Another hoard of 31 copper ingots (43.775 kg) within an amphora 43.5 cm high and 40 cm. wide, of a form similar to the vessel in the earlier phase was deposited

within the layer immediately above (Oggiano 2000:239). This vessel is close in form to traditional Levantine types and was wheel-made, a technique uncommon in Nuragic ceramic production in the late 9th and early 8th centuries BC. Nevertheless, it was locally produced, as the material is local in origin.

The courtyard (*piazzetta*, 30 in Figure 4.1) is located northeast of both *ambiente* 23 and the nuraghe. Access to the area is permitted through multiple openings, which lead to *ambiente* 47 and 51. The stratigraphic layers of the courtyard correspond much later in time than *ambiente* 23, indicating its initial construction in later phases of the life of the village. It is marked by the presence of a slab floor layer, which is dated prior to the mid-8th century BC on the basis of several Nuragic vessels as well as Phoenician plain ware (Oggiano 2000:243). During the second half of the 8th century BC, the floor was repaved with new stone slabs. This stratigraphic layer also exhibited a great variety of ceramics: along with Nuragic vessels, including a drinking set, an Euboean *skyphos* featuring chevrons and a bird, a Samaria Ware cup, Phoenician red slip, a Phoenician oil bottle, an inscribed cup (featuring an inscription of three symbols), and vessel fragments of Spanish and Eastern European origin (Oggiano 2000:243-244). Also found in the vicinity were an Egyptian scarab and a clay seal. The final phase of the courtyard is dated to the 7th century BC, corresponding to the abandonment of the village.

De Rosa et al. (2012) conducted a study of a sample of 46 locally produced ceramic fragments excavated between 1982 and 1997 through archaeometric analysis. The samples were chosen on the basis of archaeological significance, function, material, and surface composition and range from the Middle and Late Bronze Age to the Early Iron Age (De Rosa et al. 2012:314, Figure 4.2). Types include pans, cups, jars, bowls, and askoi. A number of differences are

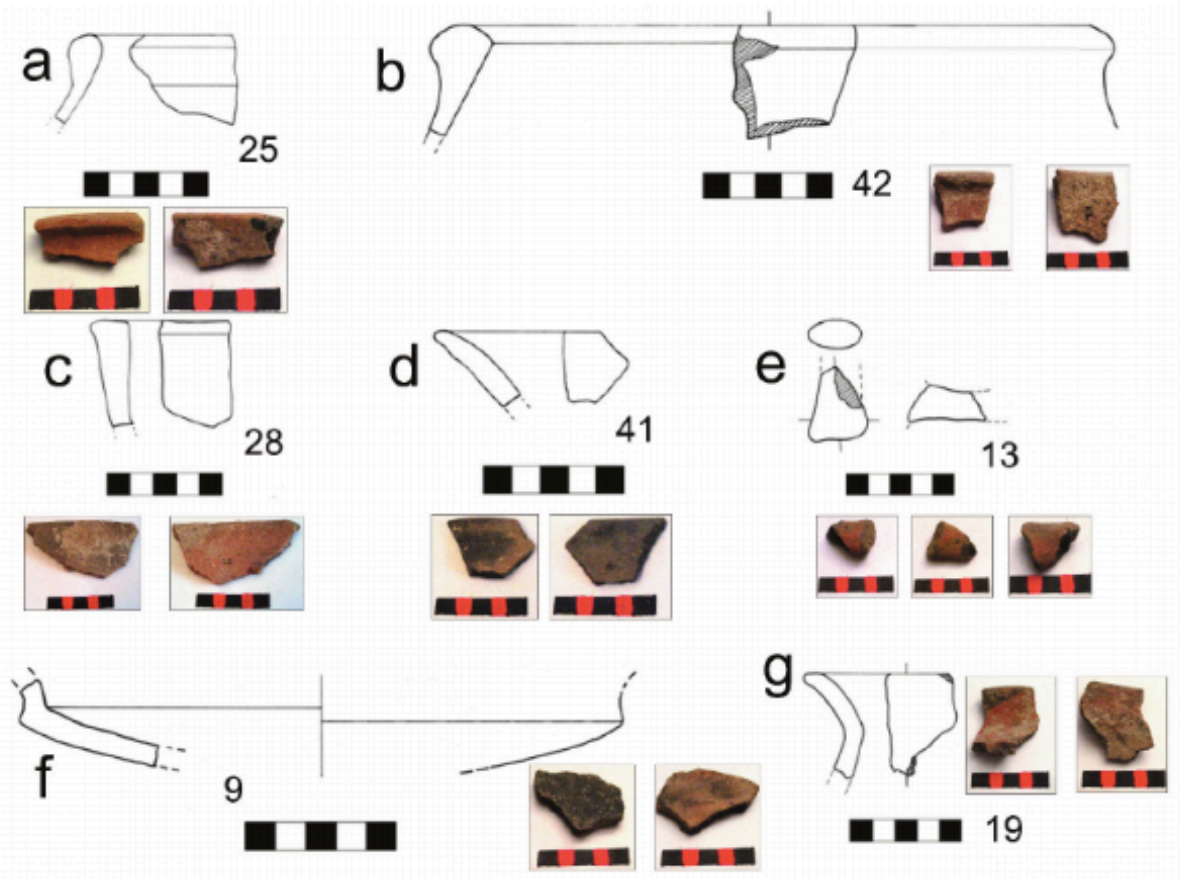
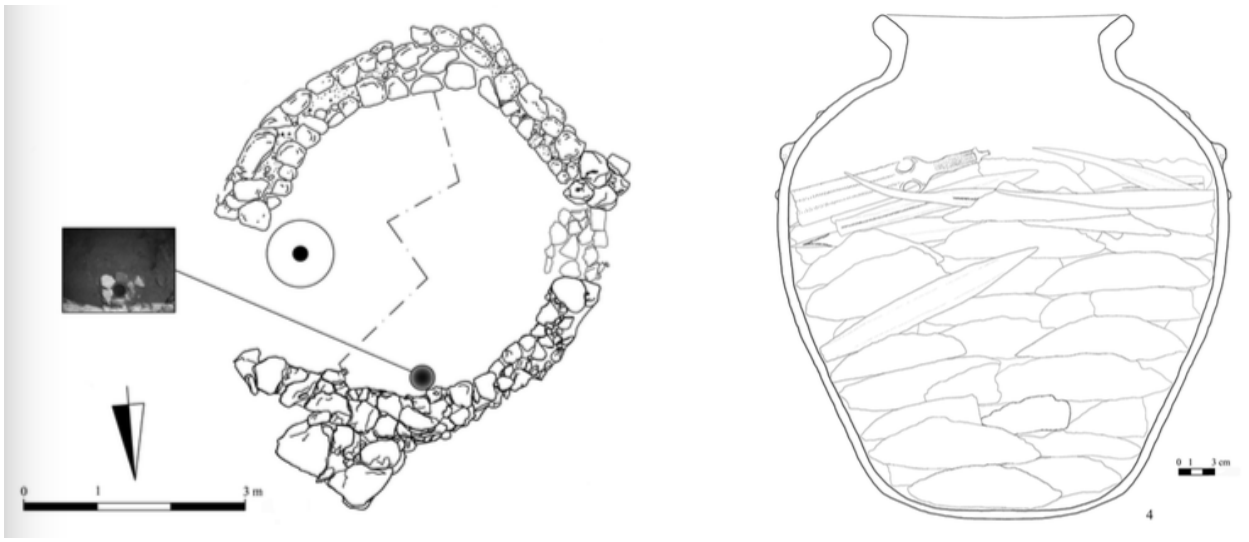


Figure 4.2. Examples of samples studied by De Rosa et al. (2012): a, b, and c are Middle and Late Bronze Age; d, e, f, and g are Early Iron Age (Source: De Rosa et al. 2012:318, fig. 2)

apparent between Middle – Late Bronze Age ceramics and Early Iron Age ceramics. The Middle to Late Bronze Age pieces were commonly smoothed then polished, were porous, contained grain fragments, and had high concentrations of calcite in the temper. The Early Iron Age fragments differed significantly from the earlier forms – the most common techniques included burnishing and patinating, less temper was used, the degree of porosity was lower, and volcanic material was added to the clay. The volcanic material was consistently added in the same quantities and fragment sizes. Many of these were given a red patina on the surface, while the matrix was black in color, recalling Phoenician red slip forms.



a. **b.**

Figure 4.3. a. Plan of *ambiente* 24 showing location of hoard (Source: Depalmas et al. 2011:235, fig. 1). b. Reconstruction of vessel showing position of metal fragments (Source: Depalmas et al 2011:236, fig. 2)

Ambiente 24, located northwest of the nuraghe, is adjacent to the southern part of the central courtyard, although the entrance is not accessible from there. During the excavations of 2010, a hoard was discovered buried in pits in the floor of the circular room (Depalmas et al. 2011:231, Figure 4.3). The 42 bronze and copper fragments, weighing in at 41.239 kg, were contained within a medium sized *dolium*, a large vessel used for storage and transport (Depalmas et al. 2011:231). A flared rim, convex base, and three decorative handles characterize the *dolium*. There are not many comparisons in Nuragic ceramics, however the specific handle is common in Early Iron Age Nuragic pottery. The specific forms of metal within the vase include a Monte Sa idda type bronze sword (main comparisons in Southern Spain), eight bronze axes of the Nuragic type, 14 circular copper ingots, and 19 other copper ingots and fragments (Depalmas et al. 2011:231). The fragments were all placed in the vase in a particular way: the ingots were placed

on the bottom while the axes were on top, most likely in order to prevent damage. The hoard was buried around the mid-8th century BC (Depalmas et al. 2011:231).

Bronzetti

The *bronzetti* are bronze representations of humans, animals, boats, and models of nuraghi. Their sizes range from 2 to 40 cm in height, with an average of 7 cm (Webster 1996:198). They are typically considered elite items used as votive offerings, largely deriving from sanctuaries and sacred wells, but also from nuraghi (Webster 1996:198). Their association with an elite group is due to their limited distribution and material composition. The number of figurines total nearly 1,000, although approximately half lack any sound provenience (Webster 1996:198). The Phoenicians may have introduced the bronze figurines to Sardinia in the Late Bronze Age (10th century BC) throughout the period of contact that occurred prior to colonization (Stary 1991; Webster 1996:198). Eastern Mediterranean bronze figurines primarily take the form of cult images, especially representations of gods with horned helmets (Gonzalez 2012:100). The most common of these in the Levant is that of the 'storm god' (Gonzalez 2012:102). According to Gonzalez (2012:100), Cyprus and the Levant are the only two regions that are comparable to Sardinia "for both the general use of bronze sculpture as a means of representation, and the quantity of figurines." Two *bronzetti* from Sardinia derive from Cyprus, the Cristina di Paulilatino and Galtelli figurines, and the Flumenelongu figurine is believed to have originated from the Syrian-Palestinian area (Webster 1996:310). Knowledge of these figurines and their production technique spread throughout Sardinia, as attested by the wide distribution of the figurines themselves as well as evidence of metal workshops.

Production

The local production of *bronzetti* is considered to have begun around 800 BC (Barreca 1986:131). This date is significant, as it is contemporaneous with the establishment of the first Phoenician settlements, occurring after about 200 years of sporadic Phoenician contact. Prior to the production of *bronzetti*, the primary metallurgical activities involved the production of bronze blades, awls, daggers, and double axes (Lo Schiavo 1986). Some prominent metallurgical workshops during the Late Bronze Age and Early Iron Age include those at Nuraghe Santa Barbara, Sant'Anastasia, Su Nuraxi, and Nuraghe Lugherras, as shown in Figure 4.4 (Webster 1996:154).

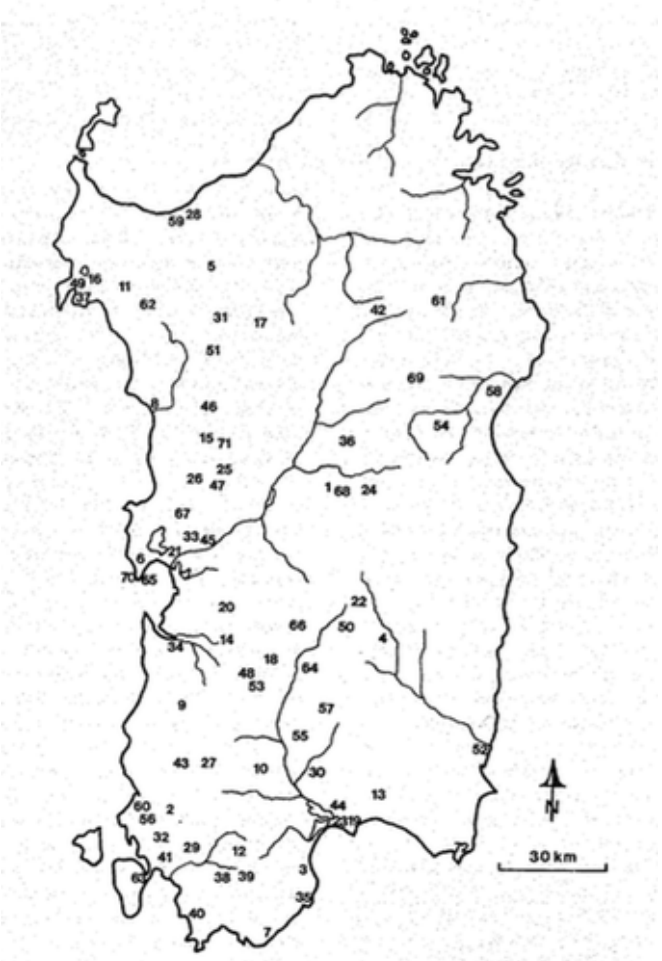


Figure 4.4. Map of Sardinia showing Nuragic sites, including Santa Barbara (45), Sant'Anastasia (48), Su Nuraxi (66), and Lugherras (26) (Source: Webster 1996:154, fig. 61)

Nuraghe Santa Barbara (Bauladu) provides the best-documented evidence of a Nuragic metal workshop (Gallin and Tykot 1993). Situated in the coastal plain of western Sardinia, it boasts a complex nuraghe featuring four towers. A significant amount of evidence exists for the presence of a metal workshop, including slag, a lead ingot, lead scrap, more than 200 copper artifacts, terra cotta crucibles, and hundreds of fragments of clay molds and cores (Gallin and Tykot 1993:335-6). The largest concentration of copper artifacts and mold fragments lies in the southwest corner of the courtyard adjacent to the meeting-hut and the nuraghe (Gallin and Tykot 1993:342). The clay mold and core fragments provide evidence for the production of *bronzetti* at the site, because they are indicative of the casting of bronze objects through the lost-wax technique.

Three other sites also provide strong evidence for metal workshops. The village at Nuraghe Lugherras, located north of Santa Barbara, contains a furnace, slag, and iron and copper ingots. South of Santa Barbara in the west-central plains are the Nuragic settlements at Sant'Anastasia and Su Nuraxi (Barumini). The only other site on Sardinia to produce clay mold fragments is Sant'Anastasia, which also contains more than a dozen oxhide ingots and 15 lead ingots (Webster 1996:171; Gallin and Tykot 1993:339). Su Nuraxi is also described as a metallurgical production center due to the copper oxhide ingots, three *bronzetti*, and other iron and bronze artifacts found at the site (Webster 1996:163-4).

It has been suggested that the Nuragic people obtained bronze primarily through trade. The Middle Bronze Age is identified as both the time of the introduction of copper oxhide ingots to Sardinia and the construction of the nuraghi (Giardino 1992:305). Metal sources from Cyprus, a major center for the production of copper in the Bronze Age, were likely exploited and the materials traded with the Sardinians. Giardino (1992) notes that there had been considerable

Cypriot influence on Nuragic foundry tools as well. Figure 4.5 below shows the distribution of oxhide ingots, hoards, and copper mines in Sardinia. Ingot distribution favors the eastern coast of the island, reflecting contact with the Italian mainland and the East. However, the wide distribution of ingots also suggests local fabrication, as the find spots are scattered throughout the island and are not concentrated at port areas (Balmuth 1992:689). The densest collection of ore deposits is located in the southwest, the Iglesiente-Sulcis region, corresponding to the distribution of Phoenician settlements primarily along the southwest coast.

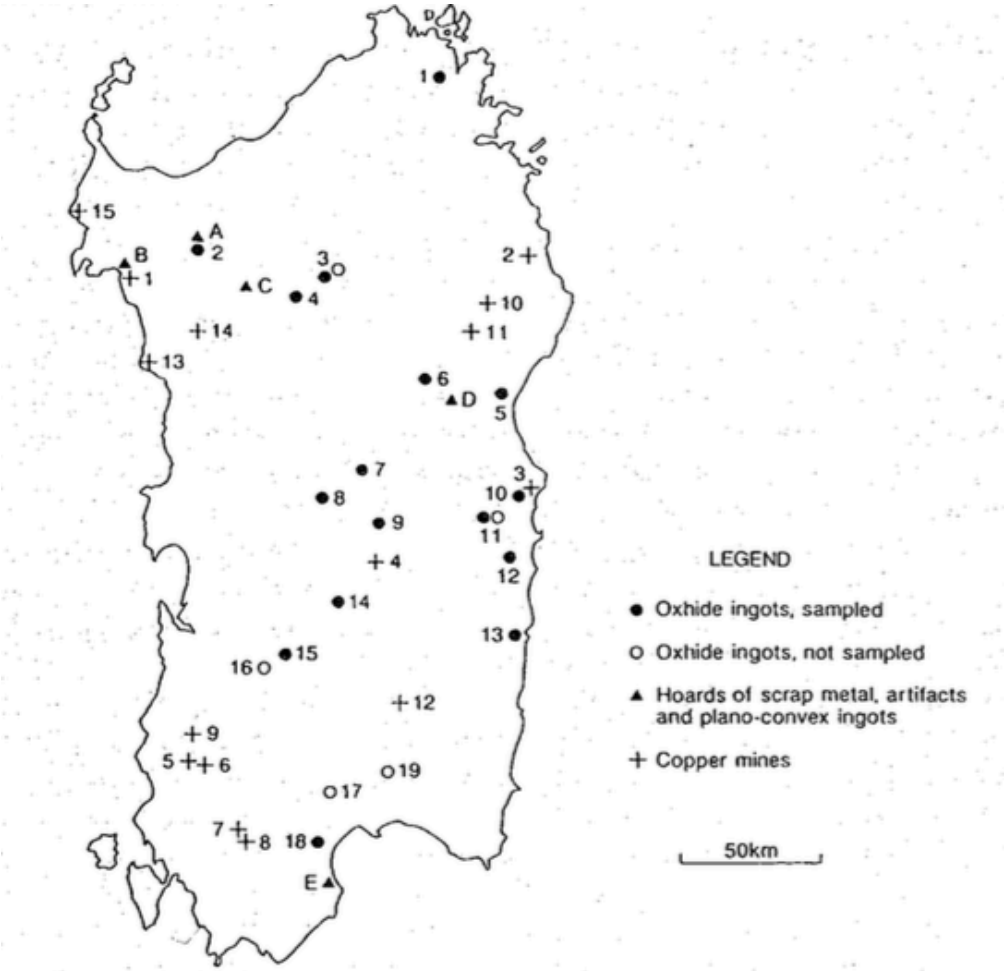


Figure 4.5. Map of Sardinia showing find spots of oxhide ingots, hoards of metal artifacts, and copper mines (Source: Stos-Gale and Gale 1992:320, fig. 1)

Types and Styles

The known collection of *bronzetti* has been categorized as belonging to two schools: the Uta-Abini and the Mediterraneizzante (Lilliu 1966; Gonzalez 2012). The Uta-Abini group, also known as the 'old school' or 'geometric' style, is characterized by detailed representations with highly decorative elements and stiff postures (Gonzalez 2012:86). This group is characterized by anthropomorphic and zoomorphic representations, as well as boats and miniature nuraghi. According to Barreca (1986:131), these figurines are "the artistic production of a formally organized society emerging from the small monarchies around the coast and flatlands." Anthropomorphic representations include those of warriors, archers, wrestlers, chiefs, priests, and priestesses (Figure 4.6). The representation of warriors and archers with horned helmets is a

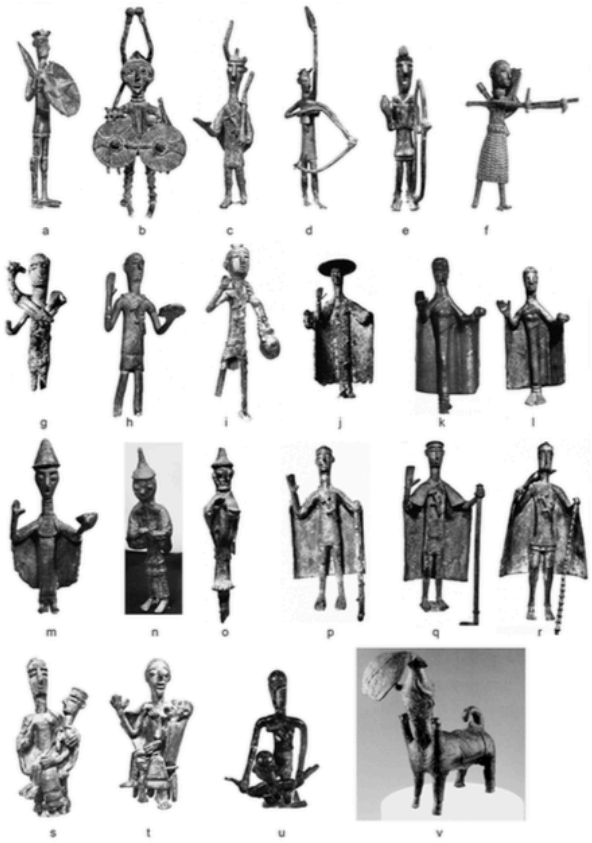


Figure 4.6. *Bronzetti* of the Uta-Abini style (Source: Gonzalez 2012:87, fig. 2)

common motif that is also present in many Near Eastern bronze figurines (Gonzalez 2012:86). A large number of *bronzetti* also feature a raised hand, representative of a benedictory pose, which is a motif commonly depicted in Near Eastern styles (Gonzalez 2012:86). An element that is unique to Nuragic bronzes is the depiction of the so-called 'gamma-hilted' dagger being held to the chest of many male figurines (Gonzalez 2012:89). These daggers have been found only on Sardinia, and full-size representations are often too small to be utilized as a weapon (Gonzalez 2012:90). Therefore, the object itself may be interpreted as serving a decorative, ritual, or symbolic purpose. Due to certain stylistic differences, scholars have grouped these figurines by the artist or workshop that produced them (Gonzalez 2012:90). The 'round-eye artist' is one of these groups, producing figurines featuring distinctive round eyes and other identifiable features (Gonzalez 2012:95).

The second type of *bronzetti*, the Mediterraneizzante, is known as the 'new school' and is characterized by a schematic style with few decorative elements (Gonzalez 2012:86). They feature only anthropomorphic and zoomorphic representations. According to Barreca (1986:131), these figurines reflect "the gusto of the shepherds who dwelled in the mountains of the interior." Representations include nude males, chiefs, warriors, musicians, bull-riders, and female figures (Figure 4.7). This style emerged during the time of Phoenician colonization, in the 9th century BC, and appears to completely replace the older Uta-Abini style (Gonzalez 2012:90).These figurines represent a major iconographic shift. They no longer feature the horned helmets that were so often present in the Uta-Abini style and in Phoenician figurines (Gonzalez 2012:90). In addition, they lack many iconographic features of the earlier style, including the gamma-hilted dagger, adopting a more schematic and simplistic style that is clearly Nuragic, as it is distinct from the styles of Levantine and Cypriot bronze figurines.

Figure 4.7. *Bronzetti* of the Mediterraneizzante style (Source: Gonzalez 2012:91, fig. 6)

Stary (1991) has investigated the arms and armor of the warrior and archer figurines, identifying regional styles. Body armor demonstrates these regional variations – breastplates or pectorals are mostly found in the middle zone, with heavier armor in the southwest. There is also considerable variation in helmet styles – horned helmets are mostly found in the central zones, caterpillar-helmets in the eastern region, and semicircular helmets in the south. Stary has interpreted these variations in style as evidence of unified regional tribes. This regional variation can be attributed to the natural barriers of the landscape, like mountain ranges and river-valleys (Stary 1991:124).

Monte Prama Statuary

The necropolis of Monte Prama is situated on the east side of a hill in the Sinis area of Cabras (Figure 4.8). The Sinis peninsula is north of the Gulf of Oristano and northwest of the Campidano plain (Depalmas and Melis 2010:183). In this region alone there are approximately 145 nuraghi (about one nuraghe per km^2) and 48 villages, of which two are notable for their complex nuraghi and outer wall – Tradori and S'Uraki (Tronchetti and van Dommelen 2005:198). Three well-sanctuaries and eight megalithic communal tombs are also in the area (Tronchetti and van Dommelen 2005:198).

The necropolis at Monte Prama consists of 33 pits measuring 60 to 70 cm in diameter and 70 to 80 cm deep, each one covered by a large sandstone slab (Figure 4.9; Tronchetti 1986:41; Tronchetti and van Dommelen 2005:153). The dead were placed in a seated position and lack any significant amount of grave goods – only a few fragments of bronze and an ivory scaraboid

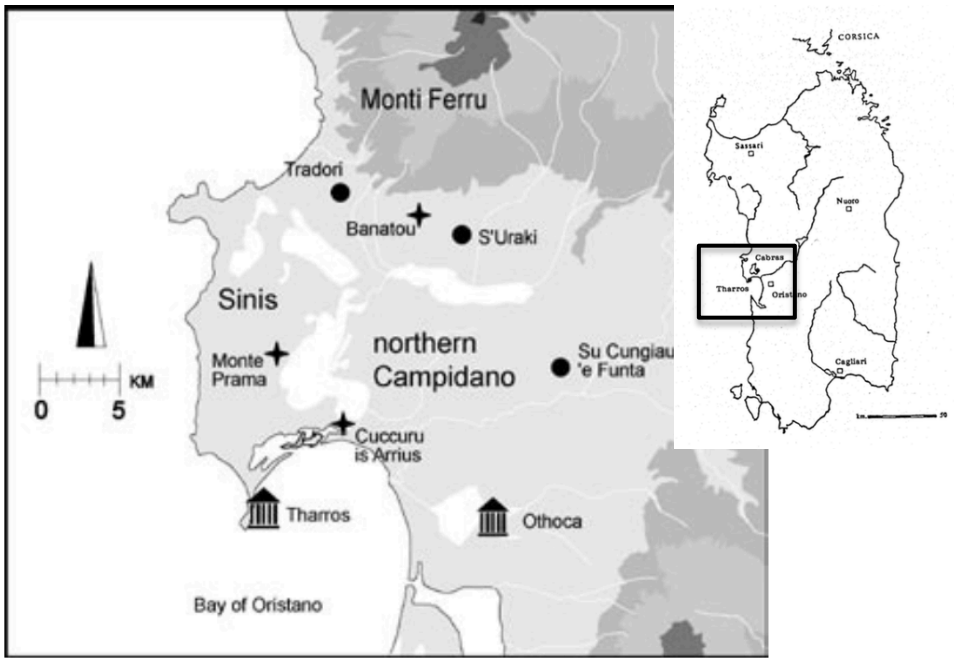


Figure 4.8. Map of the Sinis and northern Campidano areas showing locations of Tharros, Monte Prama, Tradori, and S'Uraki (Source: Tronchetti and van Dommelen 2005:199, fig. 11; Tronchetti 1986:40, fig. 4.1)

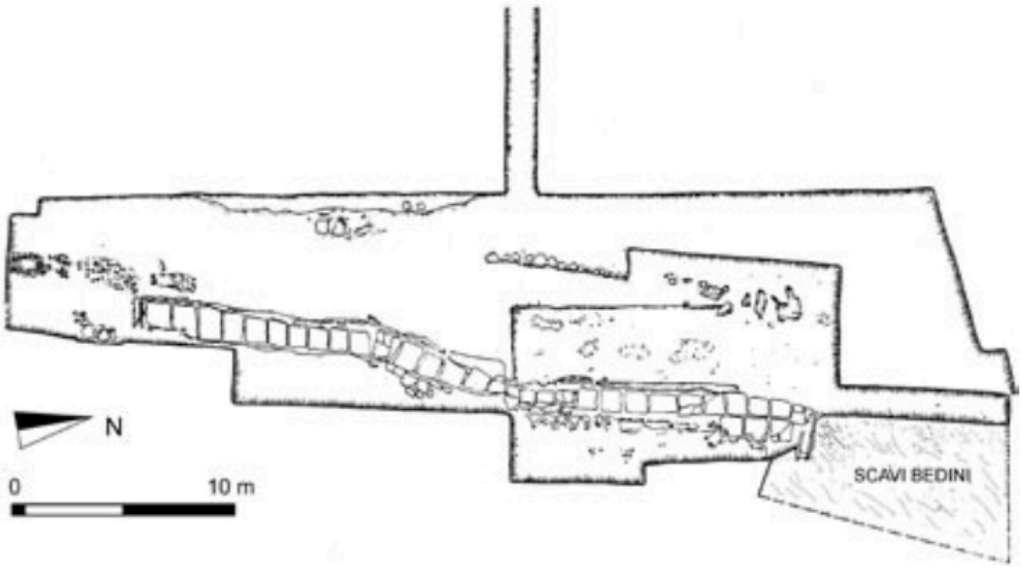


Figure 4.9. Plan of Monte Prama necropolis, showing the stone slabs covering the 33 burials (Source: Tronchetti and van Dommelen 2005:186, fig. 3)

seal were recovered (Webster 1996:180). Of the bodies sufficiently intact to permit analysis, 20 were identified as male and 7 female and they range in age from 14 to 50 years (Webster 1996:180). On top of the hill above the necropolis is a large complex nuraghe. Additional structures nearby include a small round hut (20 m southwest), a small rectangular hut (300 m northwest), and a larger hut (500 m south) (Tronchetti 1986:43).

The date of the last burial is unknown, although it is believed that the statues were erected in the 8th century BC (Gonzalez 2012:96). The statues were discovered in the form of more than 2,000 sculptural fragments of sandstone in a heap above the pit graves (Tronchetti 1986). The distribution and condition of the fragments suggests a deliberate destruction of the statues, which has been attributed to the 4th century BC based on a large Punic amphora deposited at the bottom of the pile of fragments (Tronchetti and van Dommelen 2005:188). Upon their reconstruction, three types of statuary emerged: life-sized male figures, models of nuraghi, and standing stones.

Types and Styles

The life-sized representations of male figures consist of three types: boxers (*pugilatore*), archers (*arciere*), and warriors (*guerriero*) (Figure 4.10). A few are even greater than life-size, with the largest measuring 2.5 m in height (Tronchetti and van Dommelen 2005:188). The boxers make up the largest category, consisting of 16 statues (Usai 2011:25). These statues have a large curved shield raised over the head with the left hand. They depict bare-chested males wearing loincloths and a smooth cap over the head. The archers make up the second largest group of human representations, with either five or six statues belonging to the group (Usai 2011:26). These statues hold a bow in the left hand, the right hand raised with the palm facing up, and are dressed in a short tunic and a helmet with curved horns (Tronchetti and van Dommelen 2005:190; Usai 2011:26-27). The warriors make up the smallest group, about two or three, and were originally thought to belong to the archer group (Usai 2011:30). The distinction between the two is in clothing – the warrior wears armor while the archer does not. In addition,

a b c

Figure 4.10. Monte Prama statues of boxers (a), archer (b), and warrior (c) (Source: Gonzalez 2012:89, fig. 5)

the warriors hold a shield in front with the left hand and wear helmet similar to the archers. Characteristic of all of the statues are the schematic faces, featuring eyes made of larger and smaller circles, heavily set eyebrows, and a straight nose (Tronchetti and van Dommelen 2005:191).

The 20 models of nuraghi found at Monte Prama are of both the complex quadrilobate type (central tower with four smaller surrounding towers) and the single tower type (Figure 4.11; Leonelli 2011:33; Blake 1997:153). These range in height from 13 to 70 cm, with at least eight categorized as the complex type (Tronchetti and van Dommelen 2005:188). The standing stones, or 'baetyls,' make up the smallest category of sculpture (Tronchetti and van Dommelen 2005:188). These standing stones have a conical shape, with several rectangular holes around the sides, which are thought to represent eyes (Figure 4.12). Only one baetyl remains intact, although there may have been as many as seven at the site (Tronchetti and van Dommelen 2005:188).

Figure 4.11. Model of nuraghe from Monte Prama (Source: Leonelli 2011:31)

Figure 4.12. Standing stone 'baetyl' from Monte Prama (Source: Tronchetti and van Dommelen 2005:189, fig. 6)

Specialized Architecture

It is well known that by 800 BC, the construction of the nuraghi, which had occurred over five centuries, had ceased (Holloway 2001:1). This period also witnessed the enlargement of Nuragic villages surrounding the nuraghe, and the addition of certain architectural features, like defensive walls and cisterns (Webster 1996). The 'meeting-huts,' so-called due to the postulation of their utilization as a place of gathering, are considered an Early Iron Age development and are characteristic of sites featuring complex nuraghi (Blake 1997). This meeting-hut is a circular room, often larger than all of the domestic circular huts, and is located next to the nuraghe. The entrance to the hut is sometimes limited to within the nuraghe itself. This limited access supports the argument for their association with authoritative figures.

All of the meeting-huts share specific characteristics: a low bench circling the interior wall, a central basin or pedestal, and a miniature model of a nuraghi (Blake 1997:152). The models of the nuraghe are similar to those recovered at Monte Prama, and are either sitting atop the central basin or are near to it. The great majority of these models feature a single tower, with a handful being categorized as complex (Blake 1997:153). Some examples of sites with meeting huts include Santa Barbara (Bauladu) and Sant'Anastasia (Sardara), with Su Nuraxi (Barumini) and Palmavera (Alghero) providing the best-documented examples (Webster 1996; Blake 1997).

The Nuragic settlement at Su Nuraxi in Barumini sits in the Marmilla uplands, and features a four-towered complex nuraghe and approximately 60 huts (Figure 4.13; Webster 1996:119). The meeting-hut is the largest of all circular huts, with a diameter of 9.7 m (Webster 1996:119). It has the typical features of a meeting-hut – an interior bench, central basin, and stone model of a nuraghe. It was constructed in the third building phase of the site, when the

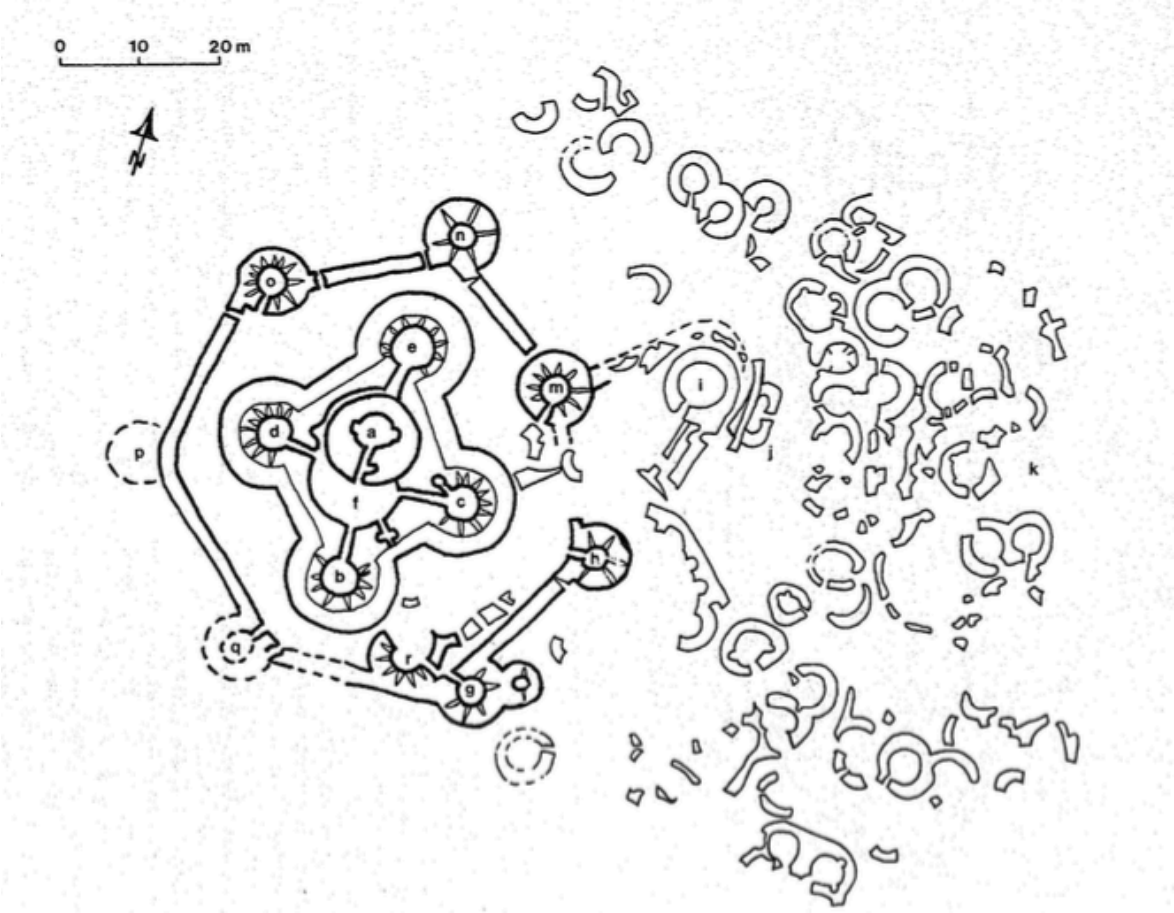


Figure 4.13. Plan of Su Nuraxi (Barumini) showing the complex nuraghe, the village to the east, and the meeting-hut (i) (Source: Webster 1996:120, fig. 45)

nuraghe underwent major renovations following an earthquake, which occurred in the Late Bronze to Early Iron Age (Webster 1996:119). At the end of this phase, the nuraghe was composed of twelve towers surrounding tholos chambers (Webster 1996:121). The wall enclosing the central tower may be interpreted as a barrier between the elite who were residing there and the commoners. The circular huts that make up the surrounding village appear to be grouped together and separated by courtyards (Webster 1996:121).

Palmavera is a Nuragic site located near Alghero, situated 2 km from the coast (Figure 4.14; Webster 1996:122). The nuraghe is complex, consisting of a single tower surrounded by

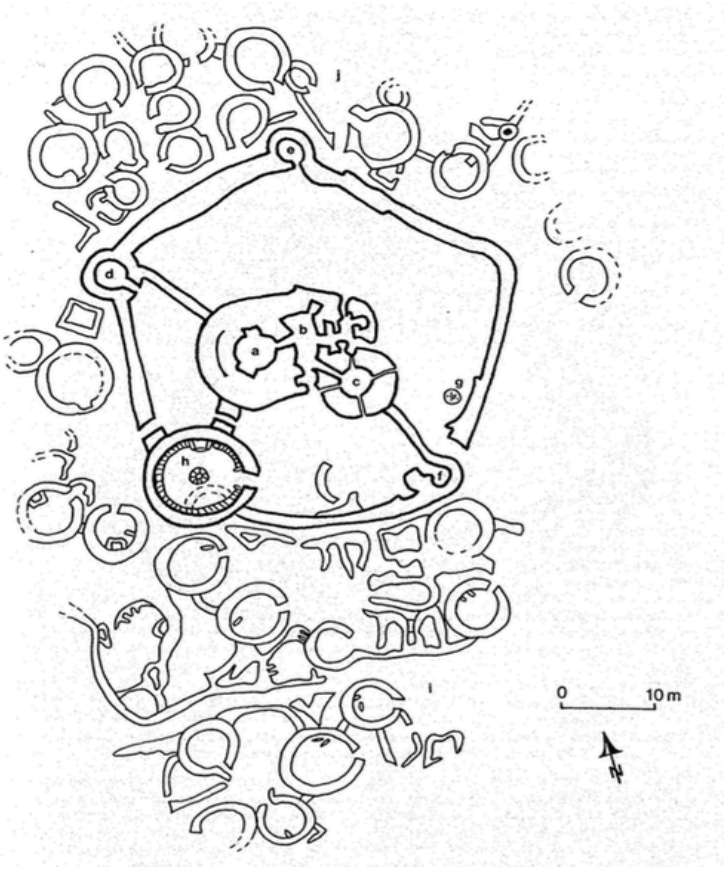


Figure 4.14. Plan of Palmavera (Alghero) showing the complex nuraghe, surrounding village, and meeting-hut (h) (Source: Webster 1996:123, fig. 47)

three additional towers. The total number of circular huts in the village is estimated to be between 150 and 200. Within the walls of the Nuragic complex is a silo, used for grain storage (Webster 1996:122). The remains of deer, cattle, sheep, swine, hares, and mollusks were also located within this nuraghe (Webster 1996:122). The meeting-hut is located partly within the walls of the nuraghe, with the entrance only allowing access from inside the walls. A 'throne' and container possibly meant for holding ritual items in the northeast of the hut indicate the use of this area for ritual activities (Webster 1996:122). In the center of the room is an elevated basin with a model nuraghe situated on top. The site is certainly one of the larger Nuragic settlements, although it is not as large as Su Nuraxi.

Summary

The evidence described above from various sites on Sardinia includes what I regard as examples of material items providing evidence for Nuragic-Phoenician interaction. In the following chapter, the description of ceramics from the Nuragic site of Sant'Imbenia will serve to illustrate one example of bulk goods production during contact with the Phoenicians. I have discussed the location of metallurgical activities across the island and within the Nuragic villages themselves, and I have described the stylistic attributes of the *bronzetti*. The discussion of the Monte Prama statuary identified the geographic location of the site as well as the types of statues represented in the collection. Finally, the description of Nuragic architectural developments focused on the introduction of the meeting-hut at Early Iron Age sites. The following chapter presents a full analysis of the data within the framework of the theoretical model.

CHAPTER FIVE
Analysis

In this chapter I analyze the data laid out in the previous section and place it within a theoretical framework. I have situated the Nuragic population as the periphery, with the Phoenicians being semiperipheral to the Assyrian core. This study focuses on the cultural interaction between the Nuragic population and the Phoenicians that occurs during the time of colonization, at the start of the Iron Age, approximately 800 BC. The establishment of Phoenician colonies along the Sardinian coast greatly enhanced the process of incorporating the Nuragic population into this Mediterranean world-system. The Late Bronze Age marked the period of sporadic contact with the Phoenicians through trade, during which time Sardinia would have been considered an *external arena* or *contact periphery*. As defined in a previous chapter, these refer to peripheral areas in a world-system where contact is limited and incorporation is weak. Colonization by the Phoenicians formally established Sardinia as a *marginal periphery*, or one in which the strength of incorporation is moderate. According to Chase-Dunn and Hall's (1997:63) model, the logical result would be the transformation of the *marginal periphery* into a *full-blown* or *dependent periphery*, with the level of incorporation being at its strongest. The example of Sardinia does not follow this logical pattern, at least during the period of Phoenician colonization, as the following analysis demonstrates.

Returning to the discussion of the Late Classic Naco Valley world-system as laid out in Chapter Two, I believe it is possible to classify the data in the same way as Urban and Schortman (1999). They defined their data as encompassing allocative and authoritative resources, which were utilized strategically by peripheral elites. Analogously, I situate ceramics as encompassing an allocative resource, and *bronzetti*, Monte Prama statuary, and specialized architecture as defining authoritative resources in this study. In this chapter I discuss evidence

relating to the ability to classify these material resources into the two respective categories. What follows is an analysis of these resources (ceramics, *bronzetti*, Monte Prama statuary, and specialized architecture) based on the evidence provided in the previous chapter. I then conclude with a model of periphery-semiperiphery interaction.

Ceramics

As previously defined, allocative resources are those that comprise material features of the environment or other finished goods (Urban and Schortman 1999). Ceramics may be regarded as allocative resources because they are goods that are produced in bulk and are distributed widely across sites and within settlements, as they are not solely concentrated within nuraghe (Webster 1996). The ceramics excavated from Sant'Imbenia serve as a primary indicator of native relations with the Phoenicians and as a key to understanding village life. The analysis of both local and imported ceramics reveals by what means they served as an allocative resource at the disposal of the local Nuragic population. Perhaps one of the most apparent aspects of the Sant'Imbenia ceramics are the technological changes in ceramic production witnessed especially between the Late Bronze Age and Early Iron Age, the same time the Nuragic population was in contact with the Phoenician colonizers. The studies by De Rosa et al. (2012; 2015) especially reveal these changes. A few of the alterations that occur relate to the physical components of the material. The introduction of crushed volcanic rock in constant quantities and sizes in the Early Iron Age resulted in vessels that were highly durable and could withstand high baking temperatures, actions indicative of the increased knowledge of the potters. A difference that is clear upon visual inspection of vessel fragments is the change from the porous surface and interior of the Late Bronze Age ceramics to the non-porous, partially vitrified surfaces in the Early Iron Age. This indicates that the potters were able to raise the firing

temperature above 900°C and to maintain that temperature long enough to cause the vitrification of the surface, revealing a great proficiency in kiln management (De Rosa et al. 2015:312). The decrease in the use of temper overall in the Early Iron Age occurs, although the amount of temper becomes higher in cooking ceramics than in serving ones, since cooking vessels must withstand high thermal shocks. Treatment of the surface changes as well, with smoothing and polishing common in the Late Bronze Age, and burnishing and patinating popular in the Early Iron Age. The latter are often finished with a red slip, indicating an imitation of Phoenician red-slip ware. The local potters are clearly borrowing ideas of ceramic production and style, although they are choosing to produce their own rather than turning to a complete reliance on imports. All of these changes together reflect deliberate technological choices. Potters were certainly trying to improve the functional and technological aspects of their ceramics. Local potters at Sant'Imbenia, now having access to foreign imports through trade with the Phoenicians, saw the opportunity to improve vessel production and durability through the exchange of ideas and knowledge with those outsiders.

Further indicative of an exchange of ideas and testification to the wealth of the village are the three metal hoards. In all cases, the copper and bronze fragments were contained within a locally produced vessel, as evidenced by the use of local material and clear Nuragic vessel styles. Nevertheless, all three vessels were reported to reflect some aspects of Levantine tradition. This blending of styles is clearly a deliberate choice made by the potter, who evidently saw advantageous aspects of Phoenician vessels and adapted their own traditional Nuragic vessel to include aspects of both traditions. The vessels containing the hoards in both the storage hut (*ambiente* 23) and the courtyard had contexts in association with various foreign imports, including an Euboean *skyphos* and Phoenician red-slip products. Due to this association, it can be

assumed that the Nuragic population at Sant'Imbenia was involved in exchange with the Phoenicians. Therefore, they would have easily obtained a foreign vessel within which the hoards of metal could have been deposited. I argue the decision to contain and bury the metal objects within a locally produced Nuragic vessel indicates that the Nuragic population continued to place priority on their own resources and traditions. They placed prominence on their own traditions rather than completely relying on foreign imports that are normally regarded with high prestige by the native population, as evidenced by the concentration of foreign items within or near to the nuraghe. It is also significant that the hoards were placed in locations nearest to the nuraghe. This suggests that an authoritative presence in the village was able to regulate ownership and placement of these metal resources.

Overall the ceramic collection from Sant'Imbenia indicates that it was an important center for trade in Sardinia in the Early Iron Age. The wealth of the site is evident from the multitude of imported vessels and the three hoards discovered thus far. Although the Phoenicians had a clear influence on local ceramic production, evidenced by the imitations of Phoenician red-slip and Near Eastern stylistic elements on the locally-produced vessels containing the hoards, these influences were nearly all related to improving production technology and ceramic functionality and durability. The evidence does not indicate that local production favored foreign stylistic motifs or ceramic forms, but rather it continued to emphasize traditional vessel types and decorations. It is clear that the Nuragic population utilized contact with the foreigners for their own benefit, borrowing ideas of ceramic manufacture to improve the quality of their own locally produced pottery. In addition, they continued to obtain imported vessels, which they did not necessarily consider more prestigious than their own pottery (as evidenced by the hoards). The association of the hoards with the nuraghe indicates that an authoritative or elite presence at the

village influenced the actions of the population. Concentrating wealth closer to the nuraghe also reminds the outsider of the considerable power of the Nuragic elite, who may be the residents of the nuraghe. Importantly, by limiting importation of ceramics, Phoenician domination of a bulk goods exchange network was prohibited. Sant'Imbenia serves as only one example of Nuragic-Phoenician interaction, although it provides a glimpse of the interactions and experiences of a Nuragic village as the population witnesses the arrival and settling of foreigners on the island that had for centuries belonged only to them.

Bronzetti

As established in the previous chapter, the *bronzetti* were introduced to Sardinia by the Phoenicians. Cypriot and Levantine figurines primarily represent deities, most typically gods with horned helmets. A comparative analysis of Near Eastern and Nuragic figurines reveals how the Nuragic elite selectively employ certain features in their design while rejecting others. I see this as a direct example of their use by the Nuragic population as authoritative resources in response to influence from the semiperiphery. An important point to make relates to the association of metallurgical activities with elites. Evidence of bronze production – copper ingots, mold fragments, slag – is closely associated with the nuraghe and the meeting-hut, two architectural constructions argued to be under the authority of elite figures. Additionally, the bronze figurines are not typically found in other domestic contexts, but rather within the nuraghi, and at sacred wells and sanctuaries. Since these figurines are not characteristic of the village huts surrounding the nuraghe, their distribution and access must have been controlled by an authoritative presence at each location. Therefore, *bronzetti* can be considered as authoritative resources due to their controlled distribution and use in ritual contexts.

The introduction of the gamma-hilted dagger in some *bronzetti* of the Uta-Abini style is a significant alteration to the traditional Phoenician bronzes that were originally introduced to the island. Since these daggers are unique to Sardinia, their representation in the bronze figurines marks a clear intention to establish a Nuragic identity. With the image of the dagger displayed prominently on the chest, it is very clearly an action that is meant to distinguish Phoenician bronzes from Nuragic bronzes. In addition, since the full-size representations of the daggers are too small to be utilized as weapons, they must have had some highly symbolic meaning to those regulating their production.

A second alteration to the traditional bronze figurines is observed in the Mediterraneizzante style. These no longer feature the horned helmets that were so often ubiquitous in the Uta-Abini style and in Phoenician figurines (Gonzalez 2012:90). The Nuragic people reject the otherwise traditional Phoenician style of the horned gods. In addition, they lack many of the iconographic features of the early type, including the gamma-hilted dagger, adopting a more schematic and simplistic style that is clearly Nuragic. The detailed stylistic elements of the earlier style even varied by region – as seen in the discussion of the arms and armor of the warrior figurines in the previous chapter. The reduction to a simpler style devoid of these specific elements signifies the display of a more unified, rather than regional, Nuragic identity. Without these regional differences, the Nuragic population presented a more unified culture through these bronze figurines.

Gonzalez (2012) argues that the Nuragic *bronzetti* represent deities, like the Phoenician figurines, and are not representative of social rank. However, I believe they are highly schematic and idealized representations of Nuragic authority figures. This can be seen in the representation of those categorized as ‘chiefs’ – male figures holding a staff, with an arm raised, and wearing a

cloak. Of particular importance is the fact that these figures bear a gamma-hilted dagger and are much larger on average than the others (Gonzalez 2012:89). The relative largeness of these figurines in comparison to the others is a reflection of their elevated status. If the other figurines, like the horned warriors so reminiscent of the Near Eastern 'storm god,' are intended to represent deities, then they would not be accorded a lower status than the 'chief' figurines. In addition, the association with the dagger gives them a Nuragic identity, as well as the cloak and staff.

Therefore, I interpret these figurines as representations of Nuragic authority figures or elites. The association of these figurines with the Nuragic culture reflects a strategy to remain on the fringe of Phoenician demands – they have not tailored the figurines to appeal more to the Phoenicians, but have made them their own. By changing the type of figurine represented from the Phoenician deity to a Nuragic elite, they are producing a prestige good that is their own, which functions to establish and transmit native identity and restrict Phoenician access to the *bronzetti*. The regulation of Phoenician involvement in the production, utilization, and trade of *bronzetti* resulted in their exclusion from a Nuragic prestige goods network. Involvement in such an exchange would have increased the potential for Nuragic incorporation as a dependent periphery because it would have placed the population into a reliance on Phoenician demands and economy.

Monte Prama Statuary

Interpretation of the evidence from Monte Prama reveals the significance of the site, as it has the only examples of life-sized statuary from Nuragic Sardinia (Tronchetti and van Dommelen 2005:191). Considering the size and number of these statues, their production and display would have required the existence of an organized authority. It has been proposed that the burials and associated statues belong to a single family, given the presence of both male and

female remains and the wide age range (Tronchetti and van Dommelen 2005:202). The deliberate destruction of the statues in the 4th century BC testifies to their importance as a symbol of power. They were a significant presence in the landscape, transmitting Nuragic ideology and standing as a reminder of the power of the local population. The destruction of these statues may have served as a deliberate attempt to undermine the power of those who commissioned their construction. Given that the purpose of the Monte Prama statuary was to transmit Nuragic ideology, it can be understood as an authoritative resource at the disposal of a local Nuragic group.

The location of the necropolis is a major factor that makes this site important in understanding Nuragic-Phoenician interaction. Located in the Sinis area of the northern Campidano, the site is situated nearly halfway between the Phoenician settlement of Tharros and other Nuragic villages, Tradori and S'Uraki in particular. In order for the Phoenicians at Tharros to access the resources of the interior and trade with other settlements, they would have been confronted by the Monte Prama population and their statues. The single scaraboid seal provides the only evidence of trade with the Phoenicians in the case of Monte Prama. Due to the proximity of Monte Prama to the villages of Tradori and S'Uraki, the individuals buried at the necropolis could have resided at one of these villages. The display of these statues would have been a symbolic display of power not only to the Phoenicians at Tharros, but also to the smaller villages in the region. Monte Prama may have emerged as a paramount village in this case, coming to dominate trade and communication between the surrounding Nuragic population and the Phoenicians.

The similarities of the statues to the *bronzetti* are significant, given the fact that the bronze figurines can be interpreted as symbols of wealth and power. The several forms of the

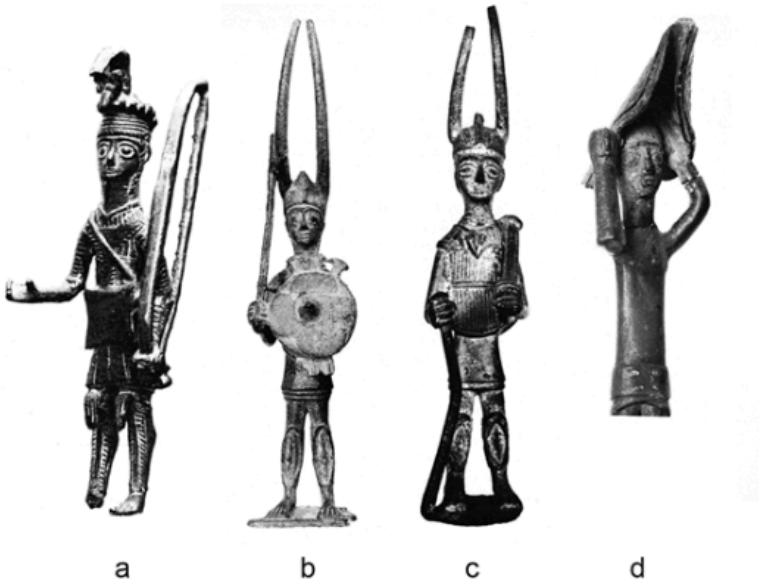


Figure 5.1. *Bronzetti* attributed to the 'round-eye artist' of the Uta-Abini style (Source: Gonzalez 2012:88, fig. 4)

Monte Prama statues – boxers, archers, and warriors – are some of the most common types of *bronzetti*. The similarity is particularly apparent in comparing the statues to the figurines made by the 'round-eye artist' (Figure 5.1). Most striking are the similar circular eyes of the bronze figurines. Other similarities are seen in the style of clothing, forward facing stance, helmets, shields, and bows. It can be assumed that the helmets of the Monte Prama statues would likely have featured horns and that some of the figures would have held shields or bows.

The presence of 20 sculptures of nuraghi at Monte Prama is also significant. The nuraghe, the most defining architectural characteristic of the Nuragic age, became a symbol of Nuragic identity. By the Late Bronze Age, the function of the nuraghe had changed from a defensive structure to a residence for the elite. Therefore, not only is the nuraghe a symbol of the Nuragic people themselves, but specifically of the elite. The inclusion of these models of nuraghi among the statues of Nuragic warriors makes this connection. The display of these statues is a deliberate attempt by the Nuragic elite to mark their claims on the territory and to remind the Nuragic

population of their distinct identity in response to the colonization of the land by the Phoenicians. The presence of foreigners on the island resulted in a need for the Nuragic population to distinguish themselves as a people. Similarities within their own culture were emphasized more as the differences with foreigners were made known. The Monte Prama statues are a symbol of the Nuragic population and visually represent their collective identity. This visual unification served as a dominant ideological statement against the appropriation of Nuragic territory by the Phoenicians.

Specialized Architecture

Webster (1996) suggests that the nuraghe, no longer used primarily as a defensive structure, became the residence of an aristocratic family, separating the elite from the rest of the villagers who occupied the huts encircling the nuraghe. The evidence for such a claim is based largely on limited access to the nuraghe, as well as a significant presence of material wealth (i.e. imported vessels, *bronzetti*). Other elite activities are suggested by the emergence of 'meeting-huts' and their association with the symbol of the nuraghe, which is the primary piece of architectural evidence described in this section. Similar to the *bronzetti*, the addition of the meeting-hut became an island-wide development. The meeting-hut may be associated with an authoritative Nuragic elite, as it is routinely located adjacent to the nuraghe and consists of limited access, sometimes only from within the nuraghe itself. As such, the meeting-hut serves as an example of an authoritative resource due to its association with an authoritative Nuragic group.

The settlements of Su Nuraxi (Barumini) and Palmavera (Alghero) are examples of sites featuring a complex nuraghe, a large village, and a meeting-hut. The meeting-hut at Palmavera shows that its use is restricted, as the only entrance is located within the complex of the nuraghe

itself. The development of these structures in the Early Iron Age reflects a need for an organized meeting of the authoritative group. This could be interpreted as a need that emerged out of increased contact with foreigners due to the colonization of the island by the Phoenicians. It is a place where the village authority might have met to discuss important matters, make decisions on behalf of the village, and display their wealth and power.

The presence of the nuraghe models in the meeting-huts is especially significant. Their location – displayed prominently on an elevated basin in the center of the hut – testifies to their function as a dominant symbol. As seen with the nuraghe models at Monte Prama, they served as a symbol of the power and identity of the Nuragic people. Due to the restricted access to the meeting-hut, it can be assumed that a select group would have been able to see these models. Therefore, it is not only a symbol of the Nuragic people as a whole, but also of the authoritative individuals themselves. Webster (1996:190) suggests that the models would have served to help this group legitimize their position by referring to the tradition of the Nuragic culture. Blake (1997:161) expands on this, arguing that the preferred representation of a single-tower nuraghe serves to hearken back to the past, when at the start of the Nuragic age the nuraghe were all single-tower constructions. This might explain why the models at Su Nuraxi and Palmavera are both single-tower representations, despite the fact that the actual nuraghe at the sites are multi-towered. This reveals that in these cases the display of the model nuraghe is meant to remind the viewers of their Nuragic identity and their place as successors to the earlier population. The meeting-hut serves as evidence of the unification and cooperation of an elite or authority group within the Nuragic villages due to its limited access and association with the nuraghe. This architectural development arose at a time of Phoenician colonization and the need to solidify Nuragic interests and security. Having a group in control would limit the potential for Phoenician

command over the villages, as the existence of such a group permitted a more regulated interaction and negotiation with the foreigners.

Theoretical Application

Considering the analysis of these resources, I have constructed a model that I believe best characterizes the interaction between the Nuragic population and the Phoenicians. The model I apply adopts aspects from the studies of Chase-Dunn and Hall (1997), Kardulias (2007), and Urban and Schortman (1999), and is summarized below in Figure 5.2. The establishment of Phoenician colonies began the process of the incorporation of Sardinia into a world-system in which the Phoenicians made up the semiperiphery. Chase-Dunn and Hall's (1997) concept of a continuum of incorporation aids in understanding the incorporation of Sardinia into this larger world-system. Although this concept was originally formulated to understand core-periphery relationships, I utilize it to understand a periphery-semiperiphery relationship. Prior to Phoenician arrival, Sardinia would have been considered an *external arena* or *contact periphery*. These terms characterize regions in which contact has been slight. The Nuragic people were

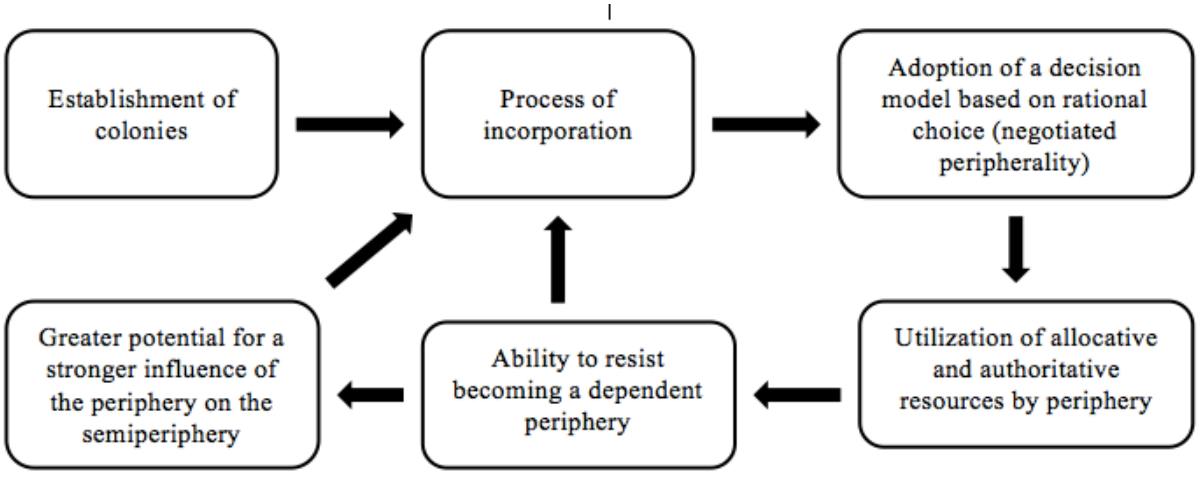


Figure 5.2. Model of periphery-semiperiphery interaction.

involved in a trade network that encompassed the entire Mediterranean, but they were only in contact with other peripheral groups (populations on the Italian mainland, Cyprus, and small Greek islands). Direct contact with a semiperiphery – the Phoenicians – intensified Sardinia's incorporation, promoting the region to a *marginal periphery*.

One of the defining features of negotiated peripherality is the existence of a population that adheres to a unified identity. As such, I argue Nuragic Sardinia constitutes just such a group, which can be characterized as a cohesive unit. I further argue that this group actively resisted incorporation. Inherent in this position is the identification of the population as comprising a cohesive identity. Intrinsic to that is the theorizing on the term identity and how I employ it in this study. Archaeological evidence indicates the population of Sardinia in the Late Bronze Age consisted of nucleated settlements, each under the control of its own chief or family group. The question remains as to how the population identified themselves as what scholars would consider a unified population in terms of identity, whether or not that population consciously acknowledged their participation in such a unity. In order to understand the process of identity formation, I adopt the concept of "dynamic nominalism," a term coined by Ian Hacking (1986). According to dynamic nominalism, "a kind of person came into being as the kind itself was being invented" (Hacking 1986:165). The essential idea is that once a category of identity is invented, people will sort themselves into it, adjusting their behavior to adapt to it, and contrive new ways of being. It is dynamic because the categorical frameworks of self-categorization change over time. In a way, its basic tenet is deterministic, because categorization defines the spaces of possibility. Once people sort themselves into a particular identity, there are limits on how they can behave. Put another way, dynamic nominalism is the assertion that identity structures behavior, and vice versa.

The concept of dynamic nominalism is appropriate for archaeological reconstructions of identity because the interpretation of the past is dependent upon material culture. By the proposed model, analogous material culture can be assumed to represent the embodiment of a common identity when it is distributed widely and when it reflects a group's ideology (via rituals or symbols). Emma Blake (1999) applies the concept of negotiated peripherality to a study of Nuragic identity through the investigation of the spatial relationship between nuraghi and Giants' Tombs. Both of these distinctly Sardinian constructions are distributed throughout the island. She challenges previous studies on the emergence of the Nuragic culture that attribute its rise to the start of the construction of nuraghi. Her work supports evidence suggesting that the Giants' Tomb was the hallmark of the culture. The association of tombs with nuraghi created a distinctly Nuragic sense of place, which provided a setting for social action. Their linkage further suggests the representation of a unified set of ideologies, integrating the seat of elite power with ritual behavior related to the dead.

Although Sardinia supported a population with similar material culture during the Mesolithic and Neolithic, an identity unique to Sardinia had not yet formed. The distribution of cardial ware pottery in the Mesolithic and stone 'goddess' figurines in the Neolithic are only a reflection of a Western Mediterranean identity, not one that is specifically Sardinian. The first evidence of a unique population is the Late Neolithic Ozieri culture. This culture is characterized by the emergence of a distinctive ceramic assemblage with new forms and decorative features. Also characteristic of the Ozieri are the *domus de janas* tombs. Nevertheless, while similar material culture may reflect the presence of a unique culture, it does not signify a unified identity. According to Blake (1999:40), the primary ingredients for group identity include "a set

of shared practices, the intra-group familiarity of mutual contacts, and a sense of other places and peoples against which to define one's group."

Evidence for a common set of practices derives from pilgrimage sites, or places of communal gathering. There is evidence of this at the Ozieri site of Monte d'Accoddi. The construction of the altar would have required cooperation by the regional population and control by an elite group. Access to this ritual site for the regional population signifies the existence of a shared ideology, and at most a regional identity. Returning to the notion of dynamic nominalism, the central idea behind identity formation is that behavior determines structure, and vice versa. If the key to understanding identity formation is behavior, similar material culture alone cannot signify a common identity. The example of Monte d'Accoddi as a pilgrimage site reflects the emergence of a regional identity during the Late Neolithic and Early Bronze Age, serving as a propeller for the proliferation of an island-wide ideology. Therefore, it follows that behavior, and specifically ideological behavior, is the primary indicator of a shared identity.

The development of a unique set of material culture in Bronze Age Sardinia – nuraghi, meeting-huts, *bronzetti*, decorated ceramics, cult sites – opened up possibilities for categorization. With a distinct set of practices and material culture, the Sardinian population could sort themselves into the 'Nuragic' category. The intentional positioning of the Giants' Tombs in relation to the nuraghi reflects an act of self-categorization through the creation of a Nuragic locale. The relationship between different forms of material culture, the ideological meanings of those forms, and the creation of a distinctly Nuragic sense of place facilitated the self-categorization of the Sardinian population into a common Nuragic identity.

Given this view, it is clear that by the arrival of the Phoenicians in the Iron Age, conditions for identity formation had been present for some time. It is the colonization itself that

provided the Nuragic culture with an opportunity to act upon their group identity and exercise negotiated peripherality. While these interactions challenged the actions and material components that made up the group identity, there is still the possibility that the Nuragic people were able to negotiate the strength of their involvement. Due to the ability of peripheral groups to serve as active players, they "often retained a distinct identity even as they selectively adopted certain outside features" (Kardulias 2007:76).

In order for the Nuragic population to negotiate their incorporation into the world-system, they needed to utilize material resources, just as the La Sierra elite of the Naco Valley had done in order to regulate their position and communications with Copan (Urban and Schortman 1999). Important symbols of the Late Classic Naco, such as ceramic figurines, sculpture, and special-purpose buildings, served as resources for the elites to establish their own identity, differentiating themselves from Copan, and to negotiate their position as periphery in the world-system where Copan served as a core. La Sierra elites did not reject all aspects of Copan culture, nor were they completely absorbed into the culture. As Urban and Schortman (1999) point out, they selectively chose aspects of the Copan belief system, such as similar termination rites, that they believed best suited their own interests.

In the same way as La Sierra, the Nuragic population negotiated their position as a periphery in relation to the Phoenician semiperiphery through the utilization of allocative and authoritative resources. The resources I have defined and analyzed in the present study can be considered as analogous to those utilized by the La Sierra elite. As such, I argue ceramics serve as one form of allocative resource at the disposal of the Nuragic population. As stated previously, allocative resources are those that denote control over materials and, in many cases, are distributed widely (Urban and Schortman 1999:126). I believe ceramics fall under this

category because their production is dependent upon procurement of local material and they are easily accessible. The analysis of the ceramics from Sant'Imbenia indicates that the population at this Nuragic village was involved in bulk goods exchange with the Phoenicians, evidenced by the presence of Greek and Phoenician imports, as well as locally produced imitations of Phoenician red-slip vessels. Nevertheless, despite having access to these foreign items, the local population continued to produce and emphasize their own ceramic styles. The hoards are most revealing, as the vessels within which the metal was deposited are of local origin with certain Levantine stylistic features. This combination of styles shows deliberate actions made by the local potters.

I have argued the *bronzetti*, Monte Prama statuary, and specialized architecture constitute authoritative resources. These resources, while they may also denote control over materials, emphasize control over actions, demonstrate possession of authority, and can be limited to a certain group within a population. The *bronzetti*, often hoarded within specific structures, such as the nuraghi, are resources limited in distribution within the population, being inaccessible to certain groups. The stylistic change in the *bronzetti* to a more simplistic style devoid of the traditional Near Eastern characteristics reflects the proliferation of a unified Nuragic identity and restriction of access to these bronze figurines to the Nuragic people themselves.

Monte Prama serves as an example of a regional Nuragic response to the Phoenicians, emerging as a paramount village, attempting to regulate interaction between Tharros and the surrounding Nuragic population. Similarly, La Sierra emerged as a paramount village in the Naco Valley, monopolizing control of trade between the other villages in the valley and Copan. The authoritative figures behind the establishment of the statues at Monte Prama had the ability to control the actions of the population – in physically installing them – in order to attempt at

controlling the actions of the Phoenicians. The Monte Prama statuary serves as an example of Nuragic response to a Phoenician colony in a particular region. The stylistic similarities between the statues and the *bronzetti* are intentional, meant to legitimize the power of the elites within the region and to present the Phoenicians with an ideologically unified population. In addition to representations of humans, Monte Prama includes miniature models of nuraghi, which serve as a symbol of the Nuragic elites themselves.

The architects behind the meeting-huts created architecture that was limited in terms of location within the settlement itself (adjacent to the nuraghe) and distribution across the island (only at larger villages with a complex nuraghe). These meeting-huts are located in close proximity to the nuraghe and perhaps served as a place for an organized meeting of an authoritative group. The presence of the nuraghe models in the center of the meeting-hut testifies to their function as dominant symbols of Nuragic identity. Ultimately, in my view, as a result of the utilization of allocative and authoritative resources, the Nuragic population exemplified their power over resources and legitimized the identity of the group. In this way, the Nuragic population resisted becoming a dependent periphery that would be completely subjected to Phoenician demands and influences. The Nuragic population actively rejected Phoenician monopolization of resources and exchange, limiting their ability to penetrate local economic and social structures. Sardinia remained a marginal periphery, leading to greater potential for a stronger influence of the Nuragic population on the Phoenician colonies.

CHAPTER SIX
Conclusion

The establishment of Nuragic chiefdoms in the Middle Bronze Age altered the Sardinian landscape significantly. The presence of over 7,000 nuraghi attests to the proliferation of an island-wide culture. Although construction of the nuraghi ceased in the Late Bronze Age, the towers remained a powerful symbol of Nuragic identity and were used by the native population to demonstrate their unity. In the first chapter, a review of literature presented an initial illustration of the cultural developments occurring in Sardinia during the Late Bronze Age, and the significant changes that the arrival of the Phoenicians brought about in the cultural landscape in the Early Iron Age. I investigated the motivations behind the Phoenician expansion in the Mediterranean and the zones of interaction between the Phoenician colonies in Sardinia and the Nuragic population.

Before a presentation of the data, I discussed the world-systems theoretical concepts that frame my argument. I initially gave a general overview of key concepts related to a world-systems framework. Following various studies, I considered concepts that would lend insight into my analysis of Nuragic-Phoenician interaction. These concepts include the 'continuum of incorporation' (Chase-Dunn and Hall 1997), negotiated peripherality (Kardulias 2007), and allocative and authoritative resources (Urban and Schortman 1999). With these models in mind, I choose data categories that I believe constitute a diverse set of evidence for identifying components of this world-system: ceramics, *bronzetti*, Monte Prama statuary, and architecture. The consideration of *bronzetti* and architecture is based largely on their island-wide distribution and development. While ceramics can be considered a widely distributed bulk good, in this study the Sant'Imbenia ceramics specifically serve as one example of a regional Nuragic-Phoenician encounter, along with the Monte Prama statuary.

The analysis of the ceramics from Sant'Imbenia indicates that the population at this Nuragic village was involved in bulk goods exchange with the Phoenicians, evidenced by the presence of Greek and Phoenician imports, as well as locally produced imitations of Phoenician red-slip vessels. Despite having access to these foreign items, the local population continued to produce and emphasize their own ceramic styles. They chose to adopt from the Phoenicians specific production techniques in order to improve functionality and durability of the ceramics, improving the quality of their own vessels. The hoards are most revealing, as the vessels within which the metal was deposited are of local origin with certain Levantine stylistic features. This combination of styles shows deliberate actions made by the local potters. Additionally, the stylistic change in the *bronzetti* to a more simplistic style devoid of the traditional Near Eastern characteristics reflects the proliferation of a unified Nuragic identity and restriction of access to these bronze figurines to the Nuragic people themselves.

I have also argued the Monte Prama statuary serves as an example of Nuragic response to a Phoenician colony in a particular region. Bearing this in mind, I view the stylistic similarities between the statues and the *bronzetti* as intentional, meant to legitimize the power of the elites within the region and to present the Phoenicians with an ideologically unified population. In addition to representations of humans, Monte Prama includes miniature models of nuraghi, which serve as a symbol of Nuragic identity and power. These models are also found in the meeting-huts, an architectural development characteristic of complex Nuragic settlements. These meeting-huts are located in close proximity to the nuraghe and served as a place for an organized meeting of the elite. I believe the presence of the nuraghe models in the center of the meeting-hut testifies to their function as dominant symbols of the Nuragic elite.

Having analyzed the data, I consider the evidence as grounded in world-systems concepts and create my own model of periphery-semiperiphery interaction. The establishment of Phoenician colonies resulted in the incorporation of Sardinia as a marginal periphery in a world-system, as established in a previous chapter. I draw on the work of Chase-Dunn and Hall (1997), Kardulias (2007), and Urban and Schortman (1999) to create a model of periphery-semiperiphery interaction as related to the study of Nuragic-Phoenician interaction. In this model, the Nuragic population negotiates its position in the world-system through the utilization of allocative and authoritative resources. I identify the former of these resources as ceramics, and the latter as *bronzetti*, Monte Prama statuary, and specialized architecture. Through the strategic utilization of both ceramics and *bronzetti*, the Nuragic population placed restrictions on Phoenician access to exchange. They were able to prevent Phoenician demands from infiltrating pre-existing local prestige and bulk goods exchange networks, which would have placed Nuragic economy under control by the semiperiphery. The Monte Prama statuary and the meeting-huts are both symbolic of a Nuragic identity and served to legitimize the power of the authoritative figures of the Nuragic villages. The visual unification of the culture via these resources permitted the passage of an ideological statement from the local population to the Phoenician colonies. It informed the foreigners that a powerful group of people inhabited the island and their control of the territory would not be appropriated. Ultimately, the utilization of these resources by the Nuragic population led to their ability to resist becoming a dependent periphery and from being fully incorporated in the world-system. The Nuragic population actively rejected Phoenician domination of local exchange and economy, resisting a dependency on Phoenician demands.

Any anthropological theory applied to archaeology has its strengths and weaknesses, and world-systems theory is certainly one of those. I have gained a new perspective on the Nuragic-

Phoenician interaction by examining the cultural encounter through a world-systems lens, as it has not yet been done in academic literature. Nevertheless, throughout my research I have discovered my own criticisms against this theory. Primary problems that often arise include being quick to form generalizations and finding oneself trying to fit the data into the model. Placing an entire population and cultural interaction into a specific model is problematic, especially when it is deterministic. My research has shown that such an encounter does not always in fact adhere to such a model (referring back to Chase-Dunn and Hall's (1997) 'continuum of incorporation'). This study demonstrates that this continuum is very fluid and does not necessarily characterize every interaction. The model I propose of the periphery-semiperiphery interaction is specific to that of the Nuragic-Phoenician encounter and does not necessarily characterize every such circumstance. An additional problem with world-systems theory is reducing the individual to a passive participant in a world of exchange. However, I believe the concept of negotiated peripherality seeks to correct this error. As Kardulias (2007) articulates, it regards the individual as having an active role in decision making and contributing to the overall actions of the population.

Further study of this Mediterranean world-system would strengthen the understanding of Nuragic-Phoenician interaction. The Nuragic village of Sant'Imbenia has not been fully excavated and the nuraghe itself has yet to be explored. Additional field seasons will add greatly to the current collection of data and may reveal additional hoards or other imported goods that could strengthen the already powerful indication of an intense Nuragic-Phoenician interaction. Further investigation of Phoenician colonies on Sardinia could reveal a great deal about relations with the Nuragic population. The investigation of Sant'Imbenia and Monte Prama provide only regional examples of Nuragic reaction to the Phoenician colonizers, capturing the experiences of

the local population of western Sardinia. Only with the examination of sites elsewhere throughout the island can a more distinctive picture of Nuragic-Phoenician interaction emerge.

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