

EXCAVATION OF THE ROMAN PORT CITY OF SA NITJA



Eco Museu de Cap de Cavalleria
Menorca, Spain
Session II - Season 2014

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The cities of Ciutadella, Mao, and Sanicha (ancient Sa Nitja) were founded as Roman ports.



The city of Ciutadella is the home of the Eco Museu Cavalleria.

The following is a field report of excavation at the Roman port city of Sa Nitja (modern Sanicha) on the island of Menorca. While the field school session spanned 21 days, this account addresses the first portion, which took place on the city site.

Menorca, easternmost of the Balearic Islands, has been witness to the ebb and flow of Mediterranean political powers from the pre-historic Talayotic peoples to the Carthaginians, Romans, and Vandals. These and other groups used the small isles off the coast of eastern Spain as a waypoint along the route from Iberia to the prosperous cities of the Mediterranean. The earliest known inhabitants of Menorca left a rather impressive mark upon the land in the form huge earth and stone towers.¹ The exact date of the civilization's fall is unclear, however,

it is safe to assume that their descendants would one day come into contact with the relative newcomers along the northern coast of the island. The small bay along the western side of Cap de Cavalleria (Fig. 1) was a welcome respite for sailors battling the harsh northern winds. Coupled with the fact that it was the only deep rocky-bottomed harbor on the north coast made it indispensable. Revenue from passing trade vessels and domestic herding aided in the growth of the site from small Roman garrison to a city several hectares in size.



Figure 1.
Cap de Cavalleria, Menorca.
Proposed city boundary of Sa Nitja in red.
Image from Google maps.

The ongoing excavation by the Eco Museu de Cap de Cavalleria has thus far reached stratigraphy dating from the 3rd century CE, and reveals a striking diverse account of life at Sa Nitja. This report will outline the work carried out in Building 10 during the second session of the 2014 dig season. In order to contextualize these finds, a short history of the site will precede an analysis of the artifacts. Of the 20+

items, specific pieces have been chosen to illustrate the cultural significance of the total finds, and build upon an overall understanding of the larger site.

The Talayotic culture, which dominated the Balearic Islands during the 3rd and 2nd millennia BCE, left impressive reminders of their power even in an age when the peoples of mainland Europe were chasing game across the continent. The most prominent among the categories of construction is the rough-hewn rock “towers” or hills. These structures stand at impressive heights (appx. 20m) even after countless years of erosion. Excavation of these sites yielded a rudimentary understanding of the structures which functioned as lookouts. The construction technique involved stacking loose stones without a binding agent such as mortar, has been utilized since that time. In most instances the Talayots are accompanied by other rough-hewn structures.

1. It these constructions which give the civilization their name, Talayotic

The settlement of Terrellafuda is an excellent example. (Fig. 2) Standing a few meters from the towers, a monolithic solar calendar illustrates the intimate relation of ritual and daily life.² The appearance of similar structures on Majorca (the largest of the Balearic Islands) as well as Corsica and Sardinia suggests an interconnected nature of the prehistoric Mediterranean long before the economic and military expansion of the Greek and Latin peoples. It was not until the 3rd century BCE that the imperial ambitions of a Mediterranean “superpower” would set in motion the expansion of Roman territorial control, and the fundamental reshaping of the Iberian Peninsula.



The Phoenician colony of Carthage had grown to a considerable power from its founding in the 7th century BCE. In the late 3rd century the general Hamilcar Barca set out to expand Carthaginian territory from its modest holdings along the southern coast. (Fig. 3) The region included other Phoenician and Greek colonies, but these were largely independent city-states. The military action of Hannibal’s father represented the first concerted effort to control inland territories, which worried the Roman Senate.³

Figure 3.
Extent of Carthaginian Empire at the time of the Second Punic War.



At the conclusion of the first Punic War strict boundaries had been drawn up limiting Carthaginian expansion. The violation of these boundaries, as well as an attack upon the Roman-allied city of Sarguntum let to the outbreak of the second Punic War in 218 BCE.⁴ J.S.

Richardson proposed in his book *Hispaniae: Spain and the Development of Roman Imperialism* that the dispatch of Roman legions under consular direction was executed in order to deprive Carthage of a strategic asset rather than establishing a permanent presence.⁵ He goes as far as saying that Spain was not thought of as “a prize,” though settlement was underway before the end of the decade. Roman forces landed in Spain in 218 BCE under the command of Publius Scipio and his brother Gnaeus Scipio.

The conflict proved to be more taxing than initially thought. After the disastrous death of both men in the battle of Upper Baetis, the Roman presence and its mission to halt the Carthaginian advance was in peril. Additional dispatches of consular armies did little to turn the tide until Scipio Africanus was dispatched in 210 BCE.⁶

2. The settlement of Binisafullet mirrors Terrellafuda in the proximity of defensive and ritual/religious space.

3. Polybius 2.1.5-9.

4. Richardson (1986), 23. Richardson contends that the attack on Sarguntum had little effect on the Senate’s decisions to dispatch troops to Spain.

5. Ibid, 41.

6. Publius Cornelius Scipio Africanus was the son of Publius Scipio



Figure 2a (above left) Terrellafuda looking at the astrological stones beyond the curtain walls. **Figure 2b (above right)** Binisafullet astrological stones, reconstructed. **Figure 2c (below)** Tower (Talayot) at the site of Terrellafuda. Note the dry-stone masonry.



A series of victories, including the capture of New Carthage brought local Iberian tribes over to Scipio's army. The assistance of these mercenary troops allowed the general to push his adversaries out of Spain. In a last ditch effort to bolster his brother's forces in Italy Hasdrubal Barca visited the Balearic Islands in order to recruit local mercenaries around 208 BCE. The Menorcan warriors were well known for their effectiveness as light artillery utilizing slings and lead bullets.⁷ By 205 BCE the war in the western theater had shifted across the Straits of Gibraltar, and left the Iberian Peninsula in the hands of the Romans. The victory, however, did not mean lasting peace. Ongoing tribal conflicts necessitated continued military presence, and the discovery of silver mines in the south only cemented their resolve to stay.

The ancient records of Menorcan history are largely silent after Hasdrubal's departure until the late 2nd century BCE. Historians note that pirates had been harrying Roman shipping as it traversed the eastern coast of Spain.⁸ The threat was substantial enough to warrant the dispatch of Roman troops in 121 BCE under Q.C. Metellus, son of the famous Q.C. Metellus Macdonicus. The first occupation of Menorca began in 123 BCE, and by 121 Metellus had subjugated the islands' population. During that campaign a permanent garrison camp was established at the estuary in the bay on the western side of the Cap de Cavalleria. The unusually calm waters in this small bay were ideally suited for ships seeking to escape the relentless northern winds. The fort remained the sole Roman site along the northern coast until the city of Sa Nitja was founded in 40 BCE. The nature of the city's earliest phases are still unknown, however, identification of contemporary pottery fragments at the fort suggest a sizeable populace of veterans and Menorcans.⁹ At the time of the city's founding the extent would have been much smaller than the maximum site area of 60,000 square meters postulated by site director Fernando Rodrigo.¹⁰ The quantity of amphora fragments and the diversity of their origins indicate that port served as an important waypoint along the Ibero-Italian shipping route throughout its existence. At its height, east-bound ships loaded with Spanish olive oil, grain, and silver were moored alongside those loaded with amphora of wine and luxury goods traveling west to the ports of New Carthage, Tarraco, and Sargentum. Fortune, like the northern winds, are mercurial, and Sa Nitja's prosperity did not last indefinitely.



The destabilization of the Roman Empire in the 3rd century CE in conjunction with the ascent of North African olive oil spelled trouble for the small port.¹¹ Local instability contributed to a reduction in population made evident by the abandonment of outlying structures during the late 3rd – 4th centuries. Evidence from the necropoleis indicates that another significant shift had occurred during this time: the establishment of Christianity. The faith had moved across the Iberian Peninsula through the movement of missionaries from the east, as well as the migration of Germanic tribes across the Pyrenees. The relative political autonomy of the Spanish provinces meant that early edicts aimed at persecuting the minority faith were not strictly enforced.¹² This is likely true for the relatively isolated island population as well. Conversely, local faiths coexisted alongside Christianity during its ascent.

7. During the excavation of the Roman fort at Sa Nitja in the 1990's countless bullets were recovered outside the walls indicating an established cannabae for mercenary troops.

8. M.G. Morgan breaks down the accounts of Strabo, Horus, and Orsius in order to define the circumstances which resulted in Metellus' invasion.

9. The importance of potter in dating and understanding commercial ties will be discussed later.

10. Ground surveys coupled with excavation of the necropoleis pertain solely to the time of greatest occupation. The location of the necropoleis would thus delineate the outer boundaries of the settlement at that time.

11. Robinson (1986), 279.

12. Robinson (1996), 280.

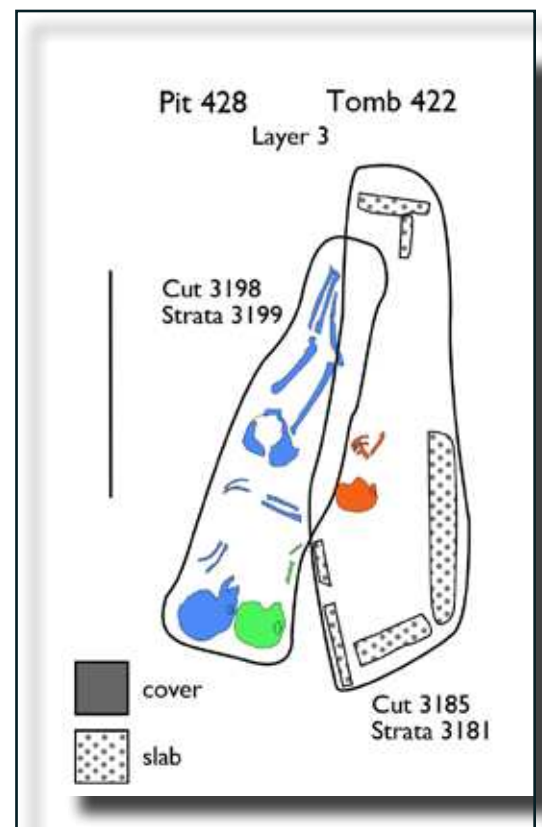
As Jas Elsner has stated, the slow transition from Late Roman paganism to Christianity as been erroneously replaced by a clean separation between pagan Rome and Christian Constantinople.¹³ The reality of the religious landscape is evident in a tomb excavated during the second session at Sa Nitja. The inhumation, located in necropolis 4, is laid out in accordance with other Christian burials of the 4th century.¹⁴ The key difference is the existence of a small earthenware vessel buried alongside the bodies. (Fig. 4) The size of the vessel is consistent with examples, which contained perfume or makeup. The inclusion of grave goods is highly irregular in Christian burials, and suggests that the deceased also belonged to a second faith.¹⁵ The aforementioned attributes of the cist graves continue to be employed until the last phases of occupation.

At this time pit graves are dug haphazardly around the necropolis grounds, and on occasion encroaching on earlier funerary units. (Fig. 5) The excavation of city and necropoleis sites has yielded interesting conclusions as well as delightful contradictions. The evidence points to a prosperous port city, which began to wane in the late 3rd century and was all but abandoned during the period associated with the session's excavation stratigraphy.



Figure 4. (Left) Funerary vessel discovered in Tomb 417 in necropolis 4. 26/5/14. Claire Colwell and Clodagh Burns.

Figure 5. (Right) Funerary unit map - Tomb 422 and overlapping Pit 428. Talia Finkelstein, Melissa Diaz, and Sewasew Haileselassie. Illustration by Martin Horne.



The following is a description of the excavation practices employed by the Eco Museu Cap de Cavalleria Field School. These techniques, developed by Edward Harris, replaced the system developed by archeologist Mortimer Wheeler in the 1930's. Harris' grid system is designed for accurate mapping of a site along X and Y axes. Each of these square units is carefully dug, responding to changes in soil composition, artifacts, etc., which denote boundaries. The stratigraphic units correlate to different units of time or activity, whether constructive, use, or destructive.¹⁶

13. Elsner (2007), 18.

14. The characteristics include east-west orientation, cist construction, and repeated use by family members.

15. While precious and personal objects were buried with deceased Christians, utilitarian pieces are largely unknown.

16. For a further definition of the stratigraphic units (SU), see Appendix A.

By working within these contemporaneous boundaries, a comprehensive understanding of a site's occupation can be formed based on datable objects.

The city dig team was posted within the structure known as Building 10 in the south central portion of the excavated site. (Fig. 6) As dictated by the Harris matrix, the 15' x 30' area was divided into 1m x 1m squares.¹⁷ Each participant was assigned a block, though these were frequently rotated. The reason for this unorthodox action was the saturation of objects in one block known as "the treasure trove." This section revealed a dense collection of pottery fragments interspersed with numerous bronze objects, bones, and glass fragments. The desire to concentrate on this unit in order to root out additional significant finds was begrudgingly mitigated by the need to maintain synchronized stratigraphic units with the other portions of the immediate site.¹⁸ This proved especially important by the discovery of three distinct hearths for cooking and heat. The three ash deposits were designated as individual stratigraphic units, to be cross-referenced with the adjacent objects at a later time. The process also involved separate bagging and recording of objects, in addition to taking of soil samples for later analysis of mineral composition. The fact that fires were inconsistently placed outside of purpose-built enclosures will be discussed later. Re-use of structures is common in continuously occupied sites, and as a result, complicates the historical narrative. The complexity of the structure's history was made all the more puzzling by the collection of precious objects unearthed during the session.



Figure 6.
Excavation site of Building 10 in
Sa Nitja's southeast corner.
Significant finds are evident by
placement of plastic bags.
20/5/14.

What follows is a breakdown of the excavated materials in Building 10, both significant and otherwise.¹⁹ Despite the varied nature of the objects material, date of manufacture, and origin, adherence to Harris method means that the finds can be assigned a burial date of the 4th century CE.²⁰ At Sanisera (the modern name for Sa Nitja), archeological material is first divided into two categories: significant finds and non-significant finds. The division corresponds roughly to luxury, and non-luxury goods.

17. Please forgive the mixing of units of measure.

18. For an extensive list of significant finds from the "treasure trove," see Appendix B.

19. For the sake of organization, I have organized the material into three categories based upon composition.

20. This is precisely the purpose of the adherence to digging by stratigraphic unit.

The latter includes animal bones/teeth, shells, metal building materials, pottery sherds, and glass fragments. These are collected by stratigraphic unit, and inventoried en masse due to their sheer quantity. Despite the often-fragmentary state of the pottery, the sherds' composition and shape can provide clues to the vessel's contents and place of manufacture. Earthenware is divided into two categories: amphora and fineware. The more numerous, amphorae, come in a multitude of shapes depending on their intended contents, as well as creator's style.²¹ Typical contents included wine, olive oil, garum (a fermented fish sauce), and sesame oil, to name but a few. The quality and raw materials used for the pottery varied by region. The color of the clay and characteristics of the inclusions (small particulate) are often the clearest indicators of origin.²²

Spanish vessels produced in the territory of Tarraconenses, whose capital is Tarraco, have telltale white inclusions and are regarded as particularly fine. (Fig. 7) In some cases, design embellishments (Fig. 8) or production stamps make identification much easier. Even the most ornate examples of amphorae often found second lives due to their superior durability. These included water conduits, aggregate for concrete, or burial vessels.²³

Figure 7. Example of Tarraconenses amphora. Spike of a large amphora used for transporting wine found in the "treasure trove".
13.5.14. Claire Colwell.



Figure 8. "Twisted-cord Amphora Handle"
Unknown origin. 18.5.14. Melissa Diaz.

21. The first concerted effort to classify amphorae (a herculean effort) was undertaken by Heinrich Dressel; his system of classification bears his name.
22. For a full list of amphora types see Appendix C.
23. Claridge (2010), 403.

Fineware, on the other hand, was purpose made. This category is further divided into four subcategories: cookware, small vessels, tableware, and oil lamps. The latter two were often decorated with glaze or incised with minute patterning²⁴ (Fig. 9) As with any popular manufactured good, designs were replicated by industri-

ous artisans hoping to cash in on the latest trend. Figure 10 is a clear illustration of potters' practice of serial production.²⁵



Figure 9. T.S. Clara (African Red Slip Ware) Mid 2nd–7th century CE. 19.5.14. Sewasew Haileselassie.

Figure 10a. Oil Lamps with incised patterns and images. From the Vatican Museums.



Figure 10b. Oil Lamp with incised pattern. From the Vatican Museums.

These fine examples share Christian iconographic elements, specifically the central cross, with pieces found on Menorca. Oil lamps such as these underscore the role of the Iberian trade network in supplying the olive oil, which served as fuel, food, and cosmetics ingredient.²⁶

24. The glazes on fineware were aesthetic, while glazes on amphorae were applied for waterproofing.

25. These fine examples are among the Vatican's collection of earthenware materials.

26. Robinson (1996), 277.

In fact, the Roman landmark of Mount Testaccio is comprised of amphorae sherds, most of which are from Spanish olive oil.²⁷ The size of the hill attests to the Roman reliance upon the substance, and its dependence upon its provinces.²⁸ As the Roman Empire became more ungainly, it relied more and more on foreign imports of basic necessities, as well as precious metals such as gold, tin, lead and bronze.



Bronze, though now regarded by historians as rare, was in fact more common in the classical world. The material's luster, tensile strength, and mutability made it a popular medium. The last attribute, though, has contributed to the present dearth of bronze artifacts.²⁹ The discovery of a bronze makeup applicator reflects the practice in the city of Sa Nitja. (Fig. 11) The embellishment along the shaft could be purely ornamental, however site director Fernando Rodrigo suggested the binding scrollwork is an indicator of its past life as a door key.

**Figure 11. Bronze Makeup Applicator.
10.5cm. 16.5.14. Martin Horne.**



The archeological team's discovery of a small-scale bronze foundry in an adjacent building supports the recycling theory. Other bronze objects found in Building 10 during the session could also have come from the city's production site.³⁰ These include a fishing net needle (Fig. 12), a fragment of a hairpin, and a small ring. (Fig. 13) These last two represent the material wealth of the city's occupants, but also obfuscate the current identification of the building as a monastery. Why would monks own personal effects such as a makeup applicator and hairpin? The existence of the final category of bronze artifact is easier to explain within the context of the monk's domain: coins.



**Figure 12.
Bronze Fishing Net Needle.
12cm long. Unknown Date.
12.5.14. Melissa Diaz.**

**Figure 13. Bronze Ring.
14mm. Unknown Date.
18.5.14. Sewasew
Haileselassie.**



27. Claridge (2010), 402.

28. Ibid. Mt. Testaccio presently covers an area of 20,000 m², and is likely reduced from its former size.

29. Mattusch (forthcoming), 89. The recycling of bronze statues has been accepted as by modern historians as a common practice; no doubt utilitarian objects were similarly treated.

30. In order to be more certain of the association between Sa Nitja's foundry and the site's bronze artifacts, a comparison of metallurgical composition will be necessary.



The variety of coins found at stratigraphy corresponding to the 4th and 5th centuries CE of Building 10 speaks to the continued cosmopolitan nature of the Mediterranean and the city of Sa Nitja. The first, and by far finest, example unearthed during the session is a follis struck during the reign of Licinius between 321–324 CE. (Figs. 14, 15) Lucky for numismatists the dry climate of Menorca is remarkably forgiving to bronze. Even so, this coin's condition is remarkable.



Figure 14. Iovi Conservatori Follis of Licinius (Obverse)
Dated to 321-324 CE.
17.5.14. Martin Horne



Figure 15. Iovi Conservatori Follis of Licinius (Reverse)
Dated to 321-324 CE.
17.5.14. Martin Horne

The front face (obverse) displays the emperor's profile with his characteristic flat forehead, prominent widow's peak, slight beard, and drooping jawline. Atop Licinius' head rests a crown with radiating spires, a nod to his divine station. His barely noticeable cuirass reflects the emperor's message of military readiness in the face of Constantine I's rising power in the west.³¹ The inscription skating the circumference of the coin reads IMP[erator] C[ae]sar VAL[er]ens LICIN LICINIUS P[ro]f[er]at[us] F[elix] AVG[ustus]. Fleshed out, it means Emperor Caesar Valens Licinius the dutiful and fortunate Augustus. Licinius is trumpeting his credentials as leader of the military and Roman pantheon, assuming the mantle as true champion of Roman ideals.³²

The reverse (Fig. 15) also carries clues to the coin's origin. The inscription reads IOVI CONSERVATORI, or protected by Jupiter. This short epithet lends this series its name. Other 4th century emperors had used this title, but it was only after Gallarius' death in 311 CE that mints began including the invocation.³³ The figures on the reverse also identify the follis as belonging to the narrow timeframe of 321-324 CE. The figure of Jupiter is nude, and holds a sphere with winged victory in his right hand, while his left holds a long scepter.

31. By the 320's Constantine had consolidated his power in the west, including the capture of Rome.

32. At this point Constantine's increased attention to the Christian church had rankled the more conservative members of the Roman elite. Licinius is portrayed as a bastion against this destabilizing force.

33. Gallarius had been Augustus of the Eastern Empire, and nominated Licinius to the title of Western Augustus.

In front of the god sits an eagle with laurel wreath in its beak, indicating peace and prosperity. A barbarian captive sits behind Jupiter breaking the boundary of the inscription. Figure 16 shows a *follis* minted elsewhere, which shares many of the same characteristics, including the Roman numeral XIII, referring to the *officina*, or office of the city's mint. This brings us to the final puzzle, the point of origin. The answer lies on the bottom of the coin; SMNA. The first two letters, S for *sacra* and M for *moneta* appear on Roman coinage as SM, or simply S. NA, also seen as N refers to the city of Nicomedia, a principle city in the eastern portion of the empire.³⁴



Figure 16. *Follis* of Licinius minted in Antioch. Note the similarity of the figural elements.

The ability to place the mint and the coin's date of production further emphasizes the extent of the Mediterranean trade routes; the journey from Turkey to Menorca is no small trek. In the case of this one bronze coin, it becomes immeasurably important to the stratigraphic dating of the site.³⁵

Unfortunately, not all coins have been so exquisitely preserved. Exposure to water and air results in oxidation or rust. The results can be as benign as colorful patination or as harsh as blistering and disfigurement of the coins face. Such is the case with figure 17. This small, possibly Roman, example retains traces of an upright element at left, though it will take considerable research to identify the remaining details. The identification of Vandal coins among the artifacts in Building 10 is of little surprise to the city dig coordinator Cristina Bravo. The port city had a renaissance during the 5th century CE when the Germanic tribe controlled the western Mediterranean.



Figure 17. Roman or Vandal Coin. Unknown Date. 17.5.14. Martin Horne.



Figure 18. Vandal Coin. Unknown Date. 18.5.14. Clodagh Burns.

The capture and subsequent adoption of Carthage as the Vandal capital reinvigorated the shipping routes along the southern and eastern coasts of Spain. As a result, Sa Nitja's population grew considerably as evident by the growth of necropoleis, copious contemporary pottery sherds from North Africa, and Vandal coins. (Fig. 18)

34. I am very proud to have deduced the correct location of the mint. The location had been thought to be Narbonensis, southern Gaul.

35. The mint date creates a backstop of 321 CE for the stratigraphic layer in Building 10.

Periods of prosperity were accompanied by increased consumption of local herd animals, goats and sheep. The bones, like bronze artifacts, were reused for utilitarian and decorative purposes. Figures 19 and 20 demonstrate the material's versatility.³⁶



Figure 19. (Above) Carved-bone Hairpin. Likely sheep or goat bone. Unknown date. 8 cm. 13.5.14. Claire Colwell.



Figure 20. (Right) Carved-bone Stylus. These writing implements were used to inscribe wax or clay tablets. 9cm. 18.5.14. Claire Colwell.

Other fauna remains, such as seashells were also used for personal adornment. The long lasting popularity of these natural media reflects a local identity which extended from pre-history to the site's abandonment in the 6th century CE. It falls to the archaeologists of the Eco Museu to organize and catalog the huge amount of material in order to identify these cultural markers. These 20 objects represent just a small sample of the archaeological materials lying in wait, however they will contribute to the larger narrative of the Roman city.



There is little doubt that the coastal trade routes played an integral part in Sa Nitja's growth. From its humble origins as a Roman fortress *cannabae* to its importance as a Vandal port, the city's relationship with the Mediterranean is evident in the artifacts left behind.³⁷ Looking at the catalog of objects from this snapshot in time, one is struck by the seemingly ordinary selection. The possession of a luxury good such as a ring or ornately carved button speaks to a level of cultural development, sophistication, and communal stability. In this case though, it is necessary to look at the context of the collection. While it is understandable that an individual might own luxury goods, the appearance of niche utilitarian object such as a fishing net needle among the collection seems incongruent. A fisherman would have need of such a tool, but why would he or she possess such a profusion of ornate accessories? In essence it is the odd combination of objects which points

36. According to the city dig coordinator, Cristina, such objects were popular throughout the site's occupation, and thus provide scant observable clues to their age.

37. The term *cannabae* refers to a ramshackle arrangement of living quarters outside of a military camp.

to abnormal circumstances surrounding their assemblage. The makeup applicator shows clear signs of having been damaged in antiquity.³⁸ What use would it have been to a person in this state? The amassing of the semi-valuable and utilitarian pieces might be better explained by the following set of circumstances. The port city is in decline. The majority of Sa Nitja's population has moved inland to the island's fertile interior or left of aboard the few remaining ships. With dwindling resources, and only a handful of fellow inhabitants the collector cannot rely on traditional trade networks for foodstuffs, tools, and equipment. The few valuables he or she has collected are kept or hidden by the wall for bartering when the opportunity presents itself. When times become quite difficult, the *collector* resorts to recycling and reuse of any available material. The discovery of a large amphora fragment in the southwest corner of Building 10 supports this hypothesis of desperate self-reliance. The piece in question (Fig. 21) is part of a much larger vessel covered in shells of local oysters, indicating that it was pulled from the sea nearby bottom. The green engobe on the amphora's exterior proves it was imported from North Africa at an earlier, more prosperous period.

Reuse of such a typically copious earthenware vessel further emphasizes the notion of a desperate environment. The final indicator of such a scenario is the use of multiple makeshift hearths throughout the building.(Fig. 22)³⁹ At the time of the building's construction the inhabitants most certainly possessed the technological ability to add an enclosure for this specific purpose. Why would they not simply construct even a crude fireplace? Perhaps the large stones littering the floor of the southernmost room (part of an upper wall) can explain the transient nature of the collector's fires and habitation. The building's apparent state of disrepair mirrors that of the city at the end of occupation; its infrastructure and community broken beyond repair. These remaining individuals clung to the remains making do with whatever modest materials and goods were available. In some cases even these precious few were left behind.



The artifacts and materials left behind by the *collector* in Building 10 will prove to be more valuable as time passes, and clues continue to accumulate. In order to facilitate the work of future researchers the coordinator's field reports will accompany the cleaned, organized, and tagged pieces to the archaeological museum in Mahon.⁴⁰



Figure 21. North African Amphora Fragment with affixed sea shells.

The marine life attests to the piece's retrieval from the sea floor, and reuse.

**10cm x 25cm. 20.5.14.
Sewasew Haileselassie.**

38. The existence of oxidation along the damaged edges of the object rule out damage by the excavator.

39. The hearths were located in an unused doorway on the western side of the building, along the eastern wall 1 meter south of the other two hearths, which were against the central wall.

40. A portion of each day's work included the washing, tagging, indexing, and reconstruction of fauna remains, pottery sherds, and significant finds. In most cases the materials belonged to the previous session.

Here they will wait until further funding affords the opportunity to reconstruct and display them. Despite the relatively small portion of the city that has been explored, finds such as these have yielded valuable clues to the inhabitants' corporeal and spiritual lives. There is little doubt that the stratigraphic layers corresponding to more prosperous periods in the city's history will bear more bountiful fruit, and allow for a more thorough understanding of human life in this small seaside town.

I would like to thank the faculty of the Eco Museu de Cap de Cavalleria: Site Director Fernando Rodrigo, City Site Coordinator Cristina Bravo, and Necropolis Site Coordinator Carmen Olivares for a truly eye-opening experience. Their thorough understanding and passionate espousal of archaeology awoke within me a desire to gain a deeper understanding of my own area of study. I would also like to thank my fellow dig session members: Sewasew Haileselassie, Clodagh Burns, Claire Colwell, Melissa Diaz, Julian Pirie, Joe Smith, Talia Finkelstein, Tommie Ricker, Blake Patel, and Katie Clevenger for helping an old dog to learn some new tricks.

Memories I will always treasure.



Additional Figures



Figure 22a. Central Ash Deposit. Note the extent of the collection, which progresses from left to right.



Figure 22c. Hearth south of Central Ash Deposit. Less extensive use than other examples.



Figures 23a & b. Theodosius I AE2 coin. Minted in Rome 379-383 CE.

a. (Obverse) Portrait of emperor with inscription: THEODO-SV PF AVG

b. (Reverse) Emperor holding a winged victory while raising turret-helmeted woman.

Inscription: REPARATIO-REIPVB. Below SMRT.

17.5.14. Clodagh Burns.



Figure 24. Comparable AE2 coin from the Roman Mint.



Figure 26. Roman or Vandal Coin. Unknown Date. Bronze. 17.4.14. Martin Horne.



Figure 25. Roman Coin Fragment. Unknown date. Bronze. 17.5.14. Martin Horne.



Figure 27. Vandal Coin. Unknown Date. Bronze. 18.5.14. Melissa Diaz.



Figure 28. Carved-bone Button. Unknown Date. Found during session 1 of 2014 Season in Building 10.



Figure 29. Glass Earring Fragment ? Unknown Date. 26.5.14. Martin Horne

Field Journal of Martin Horne

May 12, 2014

City Dig Site – Building 10

Toured the exposed city sections on the northeast section of the site. The excavated buildings are standard construction with double layer of stones bound together with mortar. These structures date from the late Roman Imperial period to the Vandal occupation of the site.

Christina gave us a basic tutorial on excavation processes. Interestingly, they do not sift materials, as had been mentioned in the Hester text. We will be working in 1.5x1.5m squares utilizing trowels, a brush, and a pickaxe. The bulk of finds are likely to be pot sherds and faunal remains. Some glass shards were uncovered today, and appear very thin.

May 13, 2014

City Dig Site – Building 10

Continued digging in the same block; nothing of consequence. The wall structure continues down along its expected trajectory. Claire uncovered a beautiful carved-bone hairpin completely intact! The dating of such a find is difficult, according to Christina, due to the medium's popularity throughout the Roman occupation.

May 15 2014

The winds continue to blow out of the north. High speeds have kept the dive crew from exploring the bay for a 3rd day. Carmen and Cristina took us on a tour of Talayotic sites around the island. We also visited the museum in Mahon where the finds from Sanisera are stored.

May 16, 2014

City Dig Site – Building 10

Rotated to the spot in which Claire was digging. Found a fantastic bronze coin (IV.B.1.a.i) up against the western wall. The clarity of the inscription and head are impressive. The non-encrusted portion clearly states "IMP," thus Roman Imperial. With some cleaning, it should be mostly legible. Shortly thereafter I found a bronze makeup applicator (spatula). According to Fernando, it was recast from a bronze key.

May 17, 2014

City Dig Site – Building 10

Continued digging in the "treasure trove." Another fruitful day. I unearthed two whole coins, and one fragment. The second whole and partial were located to the south of the "trove." All three were all heavily encrusted, and may not be legible even after cleaning. Clodagh rotated to the trove after the lunch break, and unearthed a large coin (IV.B.1.a.ii) possibly from the reign of Valens. In the new square I also found some fragments of thin green glass that belong to the same shallow, bowl-like vessel, which had shown up in the trove. The volume of faunal bones and teeth grows at a staggering rate. Shells and pottery sherds abound.

May 18, 2014

City Dig Site – Building 10

Once again we rotated dig squares; now working on the bay side (southeast) of the building next to

the central ash deposit. The bulk of the work is excavating around all or wall, which I believe to be mostly debris. No noticeable amount of pottery sherds. Sewasew found a small bronze ring, likely belonging to a child (IV.B.3.iii). It is far too small to belong to an adult. Clodagh found a small coin, which was purposefully pierced in the middle (IV.B.1.b.1.two). The puncture allowed it to be strung on a bracelet for safekeeping. Claire Stylus?

May 19, 2014

City Dig Site – Building 10

The central ash deposit continues to expand along the northeast side of the pillar/wall at the center of the southern end of the building. It has slackened in the original find spot, which suggests it could have begun on the eastern side of the pillar/wall, and moved gradually to the spot at the southern end of the structure. Melissa is working atop the trove. After the rains it allowed for easier work unearthing large fragments of pottery, including an ornate spiral patterned amphora handle. She also found a bronze fishing net needle (IV.B.3.i.two).

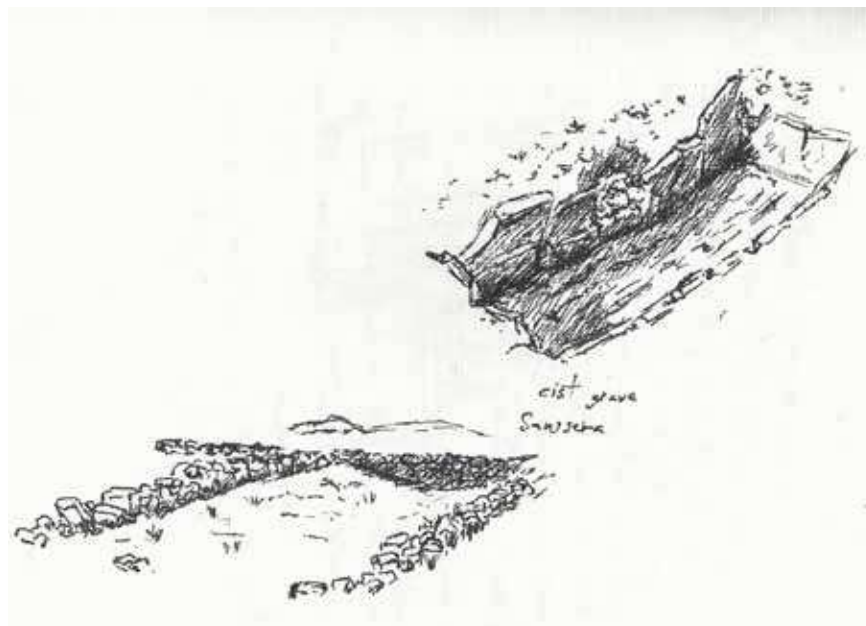
May 20, 2014

City Dig Site – Building 10

Last day in the city. No one worked in the trove. Sewasew found a 10x25cm fragment of amphora in the southeastern most square, which interestingly had mussel shells attached. Per Cristina's explanation it appears that this "recycling" corresponds to other activity in the period of the site at the end of habitation. The vessel was likely dragged up from the bay, and reused. Claire found a fragment of another carved bone hair pin.

In the lab portion we were allowed to clean the coins we had collected during the week. My coin (IV.B.1.a.i) was in fact beautifully preserved under the encrusted dirt. It is clearly Licinius, and was minted in Narbonne.

*Later study revealed the coin to have come from much farther afield, Nicomedia, to be specific.



May 23, 2014

Necropolis Dig Site – Tomb 427

The city dig crew (Claire, Sewasew, Clodagh, Melissa, and myself) has joined the necropolis team in

the city's burial grounds west of the city. I have been tasked with removing the top 10cm from atop a suspected tomb. In addition to removing the soil with a pickaxe, I have learned about the basic construction of the cist, or slab burial technique employed by the late inhabitants of the site. The pits are lined with slabs of sandstone and/or limestone varying in size from 10cm x 15cm to 20cm x 30 cm. The pits themselves are typically .5m wide and anywhere from 1.5m–2m in length.

As I was digging the lower right side of the grave (northwest) I came across a fibula, which crossed above/over the slab. This could be a result of looting.

May 24, 2014

Necropolis Dig Site – Pavement

The work on Tomb 422 by Sewasew, Talia, and Melissa is progressing well. They removed some of the leg bones, and in the process discovered an overlapping burial. Claire and Clodagh (Tomb 417) found two more skulls just beneath the earlier one. Blake and Tommie recovered a clavicle, but the remainder of this funerary unit appears to be jumbled and dis-articulated.

I opened a new trench south of the necropolis proper, which Carmen had suspected to be a cist grave, but appears to be open ground bordered by a typical two-ply wall construction.

May 25, 2014

Eco Museu Lab

Inclement weather has forced us indoors for the day. My skills with Adobe Photoshop and Illustrators have come in handy. Carmen tasked me with creating stratigraphic cross-section drawings. The excavation is divided into four layers: 1) topsoil intact with slab or other surface indications visible, 2) Exposed slab perimeter visible, no bones uncovered, 3) Funerary units (bodies) are exposed and fully visible, 4) All human remains removed, bedrock visible beneath. This division allows for accurate mapping of body position. The typical practice for such cist burials involved sweeping the former inhabitants' bones to the edges of the grave (though the earlier heads were left in situ) before placing the newly deceased into the grave. Understandably, this makes identifying individual family members' remains rather difficult.

May 26, 2014

Necropolis Dig Site – Pavement

I have found pavement beneath the swath of open ground I had been trying to link between the two supposed structures. According to Carmen the area is likely the enclosed area of a building. Its proximity to the necropolis brings up some interesting questions about the structure's use, as well as the perimeter of the city proper. There is a visible shift in stratigraphic units at the 7cm depth. The new material is sandier and includes a mix of white particulate, and some very small fragments of pottery. Significant find #5, a mysterious glass fragment IV.C.4. Possibly a bead, though the hole does not extend throughout. The rounded end does have a slight break pattern better observed through touch. In Tomb 417 Claire and Clodagh have found a small vessel, possibly for perfume or wine. The inclusion of a grave good (meant to be used in the afterlife) is odd, as the inhabitants of the site are believed to be Christian. Carmen postulates that the practice could indicate that the inhabitant could have belonged to multiple faiths. Reading Robinson's Romans in Spain, it was made clear that in the 4th century CE faiths could operate side-by-side. The attitude of the Christian clergy, however, was staunchly against such dualities.

The work of mapping Tombs 422 (my uncovering) and 427 (Talia's) continues.

May 27, 2014

Necropolis Dig Site – Pavement

The pavement extends a short distance southeast and east of the large “pillar.” To the northwest of the pillar I uncovered a large (.5m x .5m) stone, which is uncommonly well carved. The area between the “pillar” and initial dig area seems more likely to be an unpaved street than the interior of a building. Digging a 4cm deeper uncovered what appears to be a definite termination of the paving. The scattered nature of the first set of stones (believed to be part of a cist grave, and then a wall), in addition to no visible sub-structure has lead Carmen to the conclusion that it was tumble, not a wall. I finished squaring the trench (3.5m x 1.8m), and will not be able to expand it further; Fernando (now in Naples) wants to investigate it further before continuing.

The paved areas south of the “pillar” is definitely squared, and seems to be part of a larger structure, though Carmen still believes it may have funerary significance.

May 28, 2014

Necropolis Dig Site – Tomb 429

Last day at the dig site. In addition to clearing brush, I dug out the perimeter of another tomb (429) on the eastern slope of the necropolis, beside tomb 417. A post-antique wall was constructed by shepherds over the lower end of the tombs, and presents some problems. The task of uncovering 429 has been hampered by the large amount of modern refuse dumped atop it.

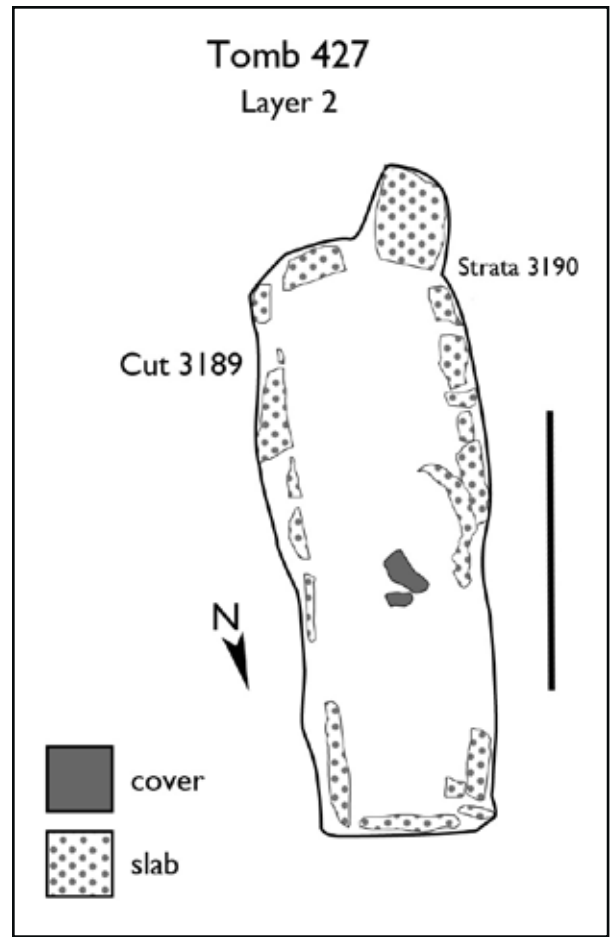
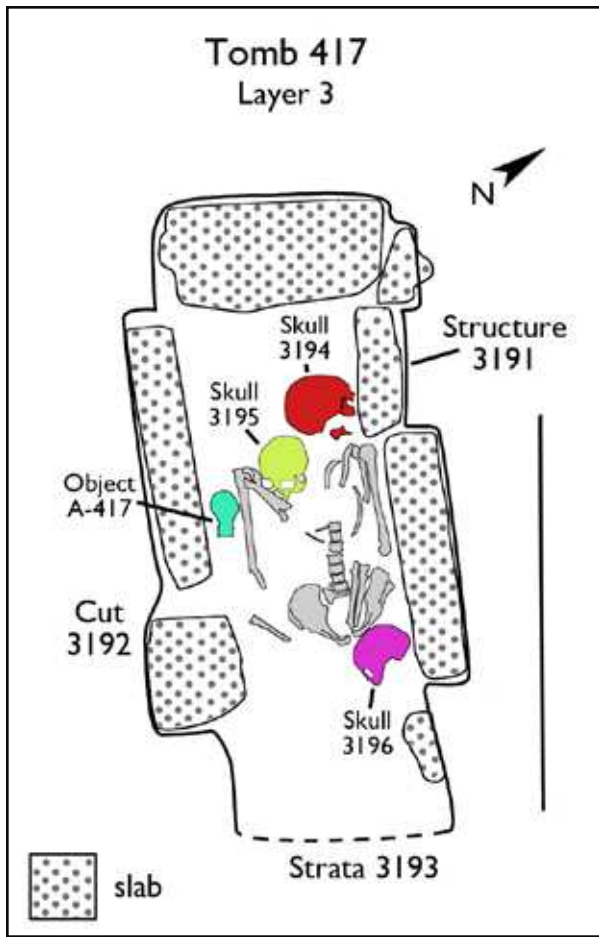
Carmen maintains here opinion on the tomb-like arrangement of the pavement, but Cristina believes it to be structural. The large slab even appears odd within the environment of 4th century construction. Its refined cuts and smoothness does not match contemporaneous construction around the site. Perhaps it could be a civic structure.

May 29, 2014

Eco Museu Lab

The last day of lab, and our last work day here at Sanisera. It is a bittersweet thought. The work is hard, but when we are able to contextualize the finds, it becomes so rewarding! I completed the illustrations of the four primary tombs excavated by our team. Learning the various modes of documenting the necropolis dig site will prove useful in my later work.





Samples of tomb schematics I created during the lab portions of the necropolis dig.

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