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# Officing

#### INDICE / TABLE OF CONTENTS

#### Papers

Serena Maria Cecchini, Ricordo di Maria Giulia Amadasi	7
AARON J. BRODY, Coastal Objects from Persian Period Tell en-Nașbeh in Judah: Phoenician Interconnectivity with the Achaemenid Province of Yehud	11
JESSICA L. NITSCHKE, The Ambiguity of Dress in Phoenician Art: A Case Study from Sidonian Coin Imagery	25
Andrea Squitieri, In the Shadow of Empires: The Circulation of Calcite Vessels between Egypt and the Levant during the 1st Millennium BCE	51
Anna Cannavò, The Other Phoenicians of Cyprus. A Survey of Phoenician Presence in Cyprus outside Its  Main Attestation Sites (Kition, Idalion, Tamassos, Lapithos)	71
Marion Bolder-Boos, Trading Post VS. Settler Colony: Some Reflections on Concepts of the Phoenician Expansion in the Mediterranean	95
Maria Giulia Amadasi†, Enrico Dirminti, Tatiana Pedrazzi, From the Eastern Mediterranean to the Ogliastra. A Phoenician Amphora from S'Arcu 'e is Forros (Villagrande Strisaili, Nuoro)	117
Massimo Botto, Carthaginian Policy in the West-Central Mediterranean between the Late 7th and 6th Century BCE	131
IMED BEN JERBANIA, A Sector of Iron Metallurgy in Utica from the Last Quarter of the 9th and the Beginnign of the 8th Century BC	153
Progetti / Projects	
FEDERICA SPAGNOLI, The Punic-Roman Sanctuary of Ras il-Wardija at Gozo (MALTA): Architecture, Rituals, and Mediterranean Connections of a Maritime Cult-Place dedicated to Astarte	187
Note e discussioni / Notes and discussions	
JEREMY HAYNE, A Pilgrim Flask from Nuraghe S'Urachi (San Vero Milis-OR) in Its Sardinian Context	213
Schede e recensioni / Book reviews	
N. Laneri, From Ritual to God in the Ancient Near East. Tracing the Origins of Religion, 2024. Cambridge:  Cambridge University Press, xiv + 251 pp., figures in text (PAOLO XELLA)	235



## A PILGRIM FLASK FROM NURAGHE S'URACHI (SAN VERO MILIS-OR) IN ITS SARDINIAN CONTEXT

JEREMY HAYNE\*

Abstract: The discovery of several fragments of a pilgrim flask from nuraghe S'Urachi (San Vero Milis, Sardinia) opens the discussion to the evidence of such artefacts in Sardinia in the early first millennium BCE. After presenting the flask, the article discusses their form, origin and location on the island and their use between the local Sardinian communities of the Iron Age and the foreign Phoenician settlers. Despite having Near Eastern antecedents, these are one of the few pottery types to have been adapted by local Sardinian craftsmen enabling them, albeit in limited numbers, to be both part of the late Nuragic ceramic panorama and that of the incoming Phoenician culture.

Keywords: Iron Age Sardinia; Pilgrim Flask; Near East; Phoenicians; Connectivity.

#### 1. Introduction

During excavations outside the walls of nuraghe S'Urachi, about 1km west of the town of San Vero Milis, (Oristano), several pieces of a pilgrim flask were discovered. This artefact, generally considered to have Near Eastern origins, has in the past been found on various Nuragic sites across the island as well as in Sardinian Phoenician contexts. In the light of connections and interactions between the local inhabitants and foreign settlers in the Iron Age, a period of Sardinian history often overlooked in the literature, the discovery of such pieces remains a very interesting piece of evidence connecting the various communities living on the island in the early first millennium BCE. Starting with a discussion of the origins, chronology and function of these vessels this article examines their presence and use on the island, shedding light on the interactions that were taking place at that time, both at S'Urachi and elsewhere on Sardinia.

Excavations at S'Urachi have been ongoing since 2013 under the direction of Peter van Dommelen (Brown University) and Alfonso Stiglitz (San Vero Milis). The excavation comprises 4 zones (D, E, F, H) and Iron Age material has been found in all four areas (Fig. 1). The pilgrim flask was discovered in zone D, an area to the south of the nuraghe between tower 1 and tower 7. The context was that of a cobbled pavement (SU15D096) a primary deposit and thereby untouched, defined between the *muro isodomo* – so-called as it was made of a more regular stonework than the nuraghe antemural itself – and tower no. 1. The wall,

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<sup>1</sup> The S'Urachi Project, with Ministerial concession, is a collaborative undertaking supported by the municipality of San Vero Milis and the Joukowsky Institute for Archaeology and the Ancient World of Brown University (Providence, RI). Set up in 2013 by Peter van Dommelen and Alfonso Stiglitz (whom I warmly thank for their permission to study the material described here), the project is carried out in close collaboration with the Archaeological Service of the Provinces of Cagliari and Oristano, in the person of Maura Vargiu. Additional funding comes from the Loeb Foundation (Harvard University) and the Institute at Brown for the Environment and Society (Brown University). https://sites.brown.edu/surachi/. None of this research would have been possible without the collaboration of friends and colleagues; especially Andrea Roppa and Emanuele Madrigali.

<sup>2</sup> Roppa et al. 2020; https://bpb-us-w2.wpmucdn.com/sites.brown.edu/dist/1/512/files/2023/12/SVM2015\_fieldreport-public.pdf.

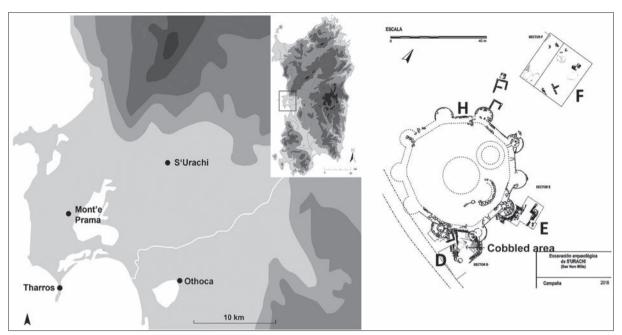


Fig. 1. Map of S'Urachi and context (adapted from Roppa 2020: 636).

itself, is generally considered to be of Iron Age date and the pavement given an *ante quem* of the 7th century BCE.<sup>3</sup> This closed layer was covered by fills 111, 112, and 113.

SU15D096 and associated contexts contained a variety of material of different origins which is still being studied. This includes a pair of well-preserved Phoenician tripod-bowls, dated to the late 7th century BCE,<sup>4</sup> Phoenician hemispherical bowls, plates and lids, the base of a Greek amphora and a Corinthian and an Etrusco-Corinthian aryballos, the latter dated to the late 7th-mid 6th centuries BCE. From the same area a small selection of Nuragic material was found that is generally dated to the Late Bronze and Iron Ages but its stratigraphic association with the Phoenician material may allow us to qualify the chronology. This material includes a large fragment of a handle which probably belongs to a Nuragic askoid jug and several wall and handle fragments of a large "X handled" storage container or *ziro* of typical Nuragic production (see Tab. 2).

#### 2. Description and Origins

#### 2.1. The S'Urachi Pilgrim Flask

The piece in question from S'Urachi, (Fig. 2) is made up of three fragments from a larger (missing) object. It includes the neck and part of the shoulder of what is identifiable as a pilgrim flask. The preserved part is 8 cm high and 7 cm wide and made in a local (1A) fabric.<sup>5</sup> The vessel has a shiny, highly burnished outside surface in a dark reddish-brown colour. It is slightly flattened and along the narrower sides, starting from the shoulder, are the beginning of two parallel grooves which likely continued around the vessel. This is the

<sup>3</sup> van Dommelen et al. 2020, p. 1630.

<sup>4</sup> Stiglitz et al. 2015, p. 201.

<sup>5</sup> Cfr. for S'Urachi, Soifer – Madrigali – van Dommelen forthcoming.

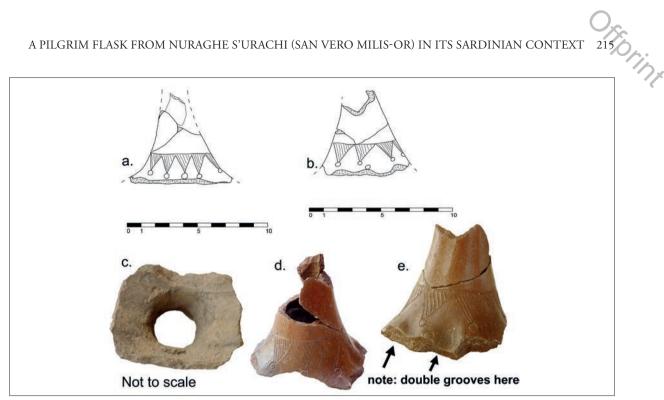


Fig. 2. S'Urachi pilgrim flask (Photo J. Hayne; Drawings by J. Hayne and G. Campisi).

characteristic shape of Type 1 pilgrim flasks (see below) which most often includes a depression or furrow around the diameter of the flask where a piece of rope was originally looped and from which the vessel could be suspended. The example from S'Urachi is unusual for having two - rather than one - parallel depressions. Our vessel was probably handmade - it is difficult to tell from the small fragment - but part of the manufacturing technique can be clearly seen from inside (Fig. 2c): the neck and body were made separately and once both were dry enough to be self-supporting, possibly at the "leather hard stage", the neck would have been inserted into the shoulder. The vessel is decorated around the base of the neck and above the shoulder. 11 pendant triangles hang from an incised line that encircles the neck. These were apparently made by a sharp instrument, probably a sharpened piece of wood or reed. Each triangle is decorated internally with a series of between 5-7 incised diagonal lines and finished beneath with a small circle. It is likely that the flask was decorated with a further series of decorations as there appears a small circle on the start of the shoulder below the pendant triangles (Fig. 2b and 2e). As far as manufacturing techniques are concerned, pilgrim flasks were originally often made by creating the two sides of the flask, like two plates, separately on a slow or fast wheel and then joining them together. Although other techniques are recognised (use of moulds or made individually on the wheel),6 given the asymmetrical shape common in pilgrim flasks, this seems the most likely way.<sup>7</sup> The method dates back at least to the Bronze Age and was used to create lentoid flasks in the Levant and Egypt. It was definitely used in the Phoenician Iron Age world for producing flasks and globular jugs.8 It was also a technique recognised in Pani Loriga,9 to make mushroom-lipped jugs, perhaps with local adaptations.

Venturi 1996, pp. 149-150.

<sup>7</sup> From personal experience it is also easy to make these using the coil technique, without the use of a wheel at all.

Anderson 1990, pp. 46-7. 8

Roppa 2019, pp. 60-61.

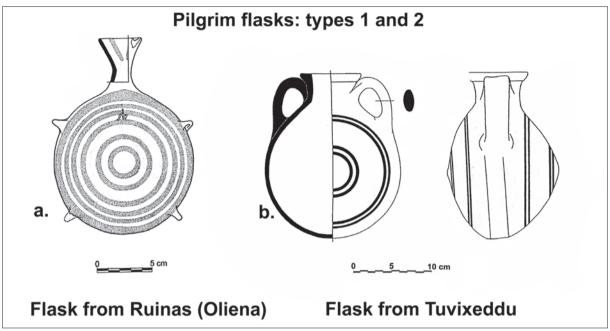


Fig. 3. Pilgrim flasks Type 1 and Type 2 (Bartoloni 2005: 37, fig. 2.7 and 42, fig. 2.13).

#### 2.2. Pilgrim Flasks

There are two main forms of pilgrim flask, which, for convenience I call Type 1 and Type 2. Type 1 is the form most commonly found on Sardinia. The original is defined by an asymmetrical shape – one side being more rounded than the other – with two or four lugs, placed below the shoulder and near the base and pierced by either one or two holes, which allow for the attachment of a carrying cord (Fig. 3a). There is a single or double groove around the perimeter where the leather, or rope/cord (at least in the original form) was threaded. The mouth can be funnel or circular shaped. Type 2, is more common in the Near East and Egypt where it dates back to the second millennium but is rarely found on Sardinia. It has a similar rounded shape to Type 1 but lacks the asymmetrical form and instead of four lugs it was carried using two looped handles placed between the neck and shoulder (Fig. 3b). This latter type does not concern us here, it seems to have been introduced to Sardinia via Carthage<sup>10</sup> and is only found in later Sardinian contexts; published examples are all dated to the Punic or Roman republican period, for example the five containers from the Tuvixeddu necropolis, itself dated between the late 6th-3rd centuries BCE (see Tab. 1).<sup>11</sup>

Both types of pilgrim flask belong to a category of ceramic vessels that has its antecedents in the Bronze Age Near East. Although both forms have been found there Type 1 is much rarer than Type 2, found in more limited locations and fewer numbers. For example, Chapman gives 38 examples of Type 2 flasks in her survey of Phoenician Iron Age pottery but only 1 example of Type 1 flasks. <sup>12</sup> Type 1 is also missing from Egypt. It seems to have originated in the Palestine area of the Near East, where it is found in very limited numbers on sites at various locations between Tyre in the north and Gaza in the south, especially along the

<sup>10</sup> Bartoloni 1996, p. 108.

<sup>11</sup> Bartoloni 2016, pp. 10-11, 26-27.

<sup>12</sup> Chapman 1972, p. 93.

Jezreel valley (cfr. Megiddo, Samaria, Tell Qiri, Tell en-Nasbeh, Tell Gemmeh, Lachish as well as Tyre, Joya and Hazor)<sup>13</sup> in both large and (from Akhziv<sup>14</sup>) miniature forms. In the Near East the shape is easily recognisable, not just from its perimeter grooves but also from a typical spiral design often incised into the body of the flask. Not all examples have the more typical four lugs,<sup>15</sup> some have just two upper ones<sup>16</sup> and others appear with no lugs at all,<sup>17</sup> although they all clearly belong to the same typological group. They are generally dated between the 10th and 7th centuries BCE,<sup>18</sup> and at Tell en-Nasbeh, even as late as the 6th century BCE.<sup>19</sup> An outrider is the example from Tyre<sup>20</sup> which is dated to the 13th century BCE.<sup>21</sup>

Other similar examples of four-lugged pilgrim flasks have also been found on Cyprus, at Amathus, the Kouris valley, Larnaka and Nicosia. The Cypriot versions have the same spiral designs as many of the Near Eastern ones, suggesting that prototypes were imported from there during the 8th century BCE. The Larnaka flask (unfortunately missing) is said to be similar to one found at Tharros, which links it to Sardinia. In Italy, Type 1 examples, in both metal and pottery, have been found across the peninsula. The metal versions are mainly found in male tombs and are associated with consumption of a precious liquid during funerary festivals. There are also a few examples of Type 1 pilgrim flasks from Sicily. It may thus be that contact between east and central Mediterranean regions was via Phoenician merchants setting out from the Asian seaboard or via Cyprus but it is interesting to note that even though Type 2 flasks are more common in the Near East they do not appear in Sardinia and are found in very reduced numbers on mainland Italy. Neither do the typical spiral decorations appear on those in Italy. Selection and adaptation of the original form seem to be important for the communities in the west.

In Sardinia examples of the Type 1 pilgrim flask have been found at both indigenous and Phoenician sites. Examples from the latter are often decorated with red painted concentric circles, a common motif on some Near Eastern and Egyptian flasks although there not on the Type 1 flasks,<sup>29</sup> Local Sardinian forms are

<sup>13</sup> Respectively, Lamon – Shipton 1939; Loud 1948; Crowfoot – Crowfoot – Kenyon 1957; Ben-Tor – Portugali 1987; Wampler 1947; Petrie 1928; Tufnell 1953; Bikai 1978; Chapman 1972; Yadin *et al.* 1958.

<sup>14</sup> Cfr. Dayagi-Mendels 2002, p. 130, fig. 5.11.3.

<sup>15</sup> Four lugs = Megiddo I & II (Lamon – Shipton 1939, Pl. 36.2; Loud 1948, Pl. 91.9), Tell en-Nasbeh (Wampler 1947, Pl. 76. 1754), Samaria (Crowfoot – Crowfoot – Kenyon 1957, p. 100, fig. 1.6).

<sup>16</sup> Two lugs = Tell Gemmeh (Gerar) (Petrie 1928, Pl. LX, 87f), Megiddo I (Lamon – Shipton 1939, Pl. 36.1), Tell en-Nasbeh (Wampler 1947, pl. 76, 1755), Tell Qiri (Ben-Tor – Portugali 1987 p. 66, fig. 8.8).

<sup>17</sup> No lugs = Tell en-Nasbeh (Wampler 1947, Pl. 76, 1753), Lachish (Tufnell 1953, Pl. 91, 408).

<sup>18</sup> At Megiddo four and two lug versions found in strata IV (1000-800) and III (780-650). Chapman states the item from Joya is «clearly a Middle Iron Age type» (1972, p. 160).

<sup>19</sup> Wampler 1947, p. 50.

<sup>20</sup> Bikai 1978, Pl. XLII, n. 2.

<sup>21</sup> However, only a small drawing of a two lugged version exists, it is not discussed in the text.

<sup>22</sup> From Amathus a four lugged example of type 1 from tomb 222 and dated to the 8th century BCE (Karageorghis – Mertens – Rose 2000, p. 83, fig. 132; Karageorghis 1982, p. 120, fig. 1, T 222/73/2). From tomb 11, Ayia Napa, dated to the upper end of Cypro-Archaic period (ca. mid-6th century BCE) (Flourentizos 1991, p. 47-8, Pl. 36.31), Turabi Teke (Lanarka) one, now missing, four lugged version (Myres 1897, p. 157) cfr. also Marzoli 1989, p. 14.

<sup>23</sup> Karageorghis - Mertens - Rose 2000, p. 85.

<sup>24</sup> Barnett – Mendleson 1987, Pl. 11, no. 59.

<sup>25</sup> Maggiani 1999; Marzoli 1989; Albanese Procelli 2005; Iaia 2010.

<sup>26</sup> Albanese Procelli 2005, pp. 115-6; Iaia 2010, pp. 33-35.

<sup>27</sup> Albanese Procelli 2005.

<sup>28</sup> Lo Schiavo 2000, p. 208; Bartoloni 2005, pp. 38-40.

<sup>29</sup> See, for example, an Egyptian Type 2 pilgrim flask (UC66492) from the 19th Dynasty, at the Petrie museum. https://blogs.ucl. ac.uk/museums/2014/02/28/pottery-project-guest-blog-biography-of-an-egyptian-pilgrim-flask/.

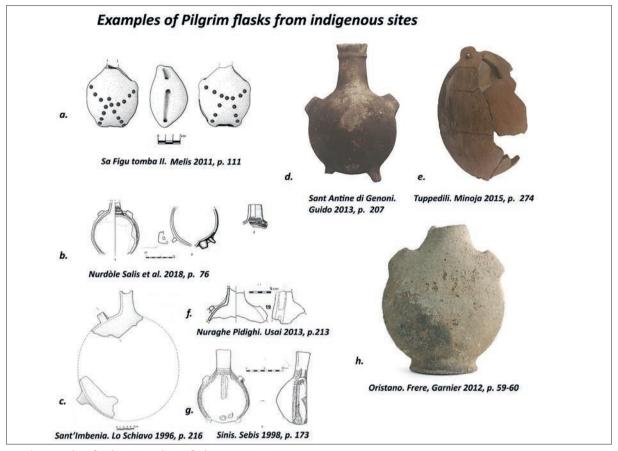


Fig. 4. Examples of indigenous pilgrim flasks.

different, having a variety of decorative elements and shapes (Fig. 4). Many also come from unidentified sites and not all conform exactly to the canonical shape of the Phoenician (or Near Eastern) pilgrim flask, but they are similar enough to be recognisably grouped as 'pilgrim flasks'. Several adaptations are found with ring bases (e.g., from Su Monte (34)<sup>30</sup> or Oristano (37)), which may be later imports. Numbers are limited; overall, 20 Type 1 flasks are locally made and come from Nuragic sites and 8 (or 9) Type 1 flasks come from Phoenician sites, although several of these are from unknown locations (see Tab. 1.). However, they are relatively rare at all sites, for example at nuraghe Pidighi (43),<sup>31</sup> only one exists among the large amount of pottery examined.

#### 2.3. Miniature Bronze Pilgrim Flasks

A case apart is that of the so-called miniature bronze pendants, in the form of four lugged pilgrim flasks, which form part of the series of miniature Nuragic bronzes found both on Sardinia and in Etruria.<sup>32</sup> They exist mostly as Type 1. Of the 16 known examples, six come from the sanctuary/well temples of Su Tempiesu

<sup>30</sup> Numbers in brackets after a Sardinian pilgrim flask refer to items in Tab. 1.

<sup>31</sup> Usai 2013.

<sup>32</sup> Lo Schiavo 2000; Lo Schiavo 2002; Milletti 2012, pp. 75-8.

(8, 9), <sup>33</sup> Nurdòle (10, 11) and Su Monte (16), <sup>34</sup> four are from unknown locations <sup>35</sup> and two from Villanovan tombs (2, 3). <sup>36</sup>

The dating of these objects is often given as Late Bronze Age, even as early as the 12th century BCE,<sup>37</sup> described as arriving on Sardinia via Cypriot merchants. However, Lo Schiavo<sup>38</sup> also dates those from sanctuaries to the Final Bronze Age/Early Iron Age whilst, through association with other material, Ialongo<sup>39</sup> puts them in the earliest phase of the Iron Age. This later date seems more convincing, given that two similar pendants are found in Iron Age Villanovan graves. The bronze miniature pilgrim flask with four lugs from Tomb 40 at S. Cerbone (2) (Populonia) has been dated to the end of the 9th/early 8th century BCE.<sup>40</sup> Another Type 2 example from Poggio alla Guardia, tomb 7 (3) (Vetulonia) has been dated to the second half of the 8th century BCE.<sup>41</sup> Cygielman suggested it is locally made (based on Egyptian antecedents) while due to its similarities to other miniature pilgrim flasks, Lo Schiavo places it as coming from Sardinia. However, although the Type 2 shape existed in the Bronze Age in the Near East,<sup>42</sup> in Sardinia this type is not found earlier than the Punic period (see above for the ceramic versions). This might suggest, as others have intimated, that knowledge of these flasks in Sardinia was from Etruria, rather than directly from the eastern Mediterranean. However, since we are discussing only one example from Etruria it is difficult to draw any solid conclusions overall. It should be said that, so far, no examples of Type 2 bronze flasks have been found on Sardinia.<sup>43</sup>

#### 3. Sardinia Chronology

As discussed above, there is no secure evidence for pilgrim flasks, either bronze or ceramic, in Bronze Age Sardinia. Indeed, looking more closely at the ceramic versions, no pilgrim flasks have been found at Bronze Age sites with foreign contact, such as Antigori on the south coast, or inland Arrubiu, (see Fig. 5 for a distribution of finds). Rather, the evidence for pilgrim flasks in Sardinia points to an Iron Age date. In this period contact with the east Mediterranean was more likely to have been through either Phoenician settlers on Sardinia's southwest coasts or via the Villanovan communities of mainland Italy as both areas have produced pilgrim flasks. In the literature (Tab. 1), the chronology for Type 1 ceramic Sardinian pilgrim flasks range between the 9th and 7th centuries BCE, dates which receive some confirmation from non-Sardinian contexts as well as other material evidence from the sites themselves.

Some of the ceramic Indigenous flasks are dated through their stylistic decorations of fishbone designs or *cerchielli* – the typical Iron Age double circle decoration. These designs are also found more usually on askoid jugs or piriform vases. The former, the fishbone pattern design group, includes three of the pilgrim

<sup>33</sup> Fadda - Lo Schiavo 1992.

<sup>34</sup> Minoja – Salis – Usai 2015, p. 437.

<sup>35</sup> Usai – Zucca 2011, pp. 337-338.

<sup>36</sup> Milletti 2012, pp. 75-79. Others are from Bòrore and Nughedu S. Nicolò and unknow locations (possibly tombs) in Etruria (Milletti 2012, pp. 75-79).

<sup>37</sup> Lo Schiavo 1996, p. 848; Salis – Fadda – Puddu 2018, p. 75.

<sup>38</sup> Lo Schiavo 2000, p. 209

<sup>39</sup> Ialongo 2010, pp. 171-172.

<sup>40</sup> Bartoloni 2002, p. 345.

<sup>41</sup> Cygielman 1990, p. 286, fig. 25/1; Cygielman – Pagnini 2002, p. 390.

<sup>42</sup> Cygielman suggests a similarity with the type 2 pilgrim flasks found on the Ulu Burun shipwreck, dated to the late 15th or early 14th century BCE (Bass 1986, pp. 284-285).

<sup>43</sup> A case has been made for one of the examples from Nurdòle (Milletti 2012: 79), but substantially it is quite different.

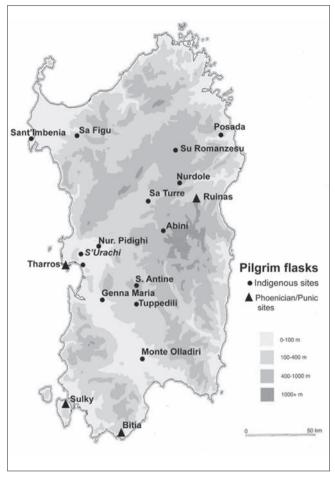


Fig. 5. Map of Sardinian sites with Pilgrim flasks mentioned in text (J. Hayne).

flasks from Nurdòle (45-48),44 a fragment from Abini (39)45 and one from the Sinis area (36).46 The latter, cerchielli designs, are found on the small pilgrim flask from the Sa Figu (44) Iron Age tomb<sup>47</sup> with a series of cerchielli impressions which diagonally cross the body of the flask on both sides. Another example, from Olladiri (35),48 has a similar series of cerchielli decorations that run diagonally. Three other, unpublished, decorated flasks come from Tuppedili (50-52),<sup>49</sup> a relatively unexplored Nuragic village near Villanovafranca, that continued to be occupied until the Roman period. One of these was decorated with impressed decorations running diagonally across the body of the flask. Other flasks are not decorated e.g., those from Genoni (40),<sup>50</sup> Posada (41)<sup>51</sup> and Sant'Imbenia (33).52 Although not found in secure contexts, those from Tuppedili and Olladiri, as well as those from Villanovaforru (38)<sup>53</sup> and Sant'Imbenia are dated generically to the Orientalizing period (late 8th-early 6th BCE) from the associated foreign material (Phoenician, Etruscan, Greek).54 These dates match examples of flasks from Sicily where they are dated to between the 8th and 7th centuries BCE,55 and those from Etruria, which are dated to the 8th century BCE.56

<sup>44</sup> Salis – Fadda – Puddu 2018; Fadda – Puddu – Salis 2020.

<sup>45</sup> Puddu 2014.

<sup>46</sup> Sebis 1998; Zucca 1998.

<sup>47</sup> Melis 2011, p. 112.

<sup>48</sup> Ugas 1985, p. 43, Pl. X.

<sup>49</sup> Type 1 with diagonal impressed decorations in the form of "drops" and X, the four vestigial handles surrounded by oblongs filled with white slip or paint. At the same site come two other fragments of pilgrim flasks, both type 1 and one painted with white wavy lines (Minoja 2015, pp. 272, 274, cat. nos. 95, 152, 161).

<sup>50</sup> Guido 2013.

<sup>51</sup> Sanciu 2010.

<sup>52</sup> Lo Schiavo 2000.

<sup>53</sup> Badas 1987.

<sup>54</sup> Lo Schiavo 2000.

<sup>55</sup> Albanese Procelli 2005, p. 116.

<sup>56</sup> Iaia 2010, p. 35.

At Phoenician sites, many flasks were found from settlements albeit without a secure context (Tharros (19, 20), *Sulky* (24), Bitia (22), an exception is one vessel from the necropolis at Bitia (23) found in tomb 23 and dated to the last quarter of the 7th century BCE.<sup>57</sup> Others are tentatively dated to the 7th and 6th centuries BCE.

#### 3.1. S'Urachi

The pilgrim flask from S'Urachi was found in a context containing material with a variety of origins (Nuragic, Phoenician and Greek). The mixed context is not surprising given the heterogeneous nature of the environment around the nuraghe itself. Looking more closely at the Indigenous material from the same context, a major piece of evidence is the remains of a Nuragic storage jar (*ziro*) (SU15D096060) comprising both handle and wall fragments. Despite the missing rim, the size of the X-shaped handle (ca. 9 cm high at its narrowest point, with a hole of ca. 3 cm) proves that the container was very large. This example can be compared to others from S'Urachi itself and elsewhere, e.g., Genna Maria (Villanovaforru).<sup>58</sup> This piece was flanked by another piece of Nuragic material, a section of a narrow handle, probably a reversed elbow handle from a large container or a jug (SU15D096117), and a very small piece of Nuragic fineware with zigzag patterns (SU15D096120) (see Tab. 2). These fragments are all generically dated to the Iron Age. More certain dates come from the foreign material found in the same stratigraphic unit.

Concerning the foreign material,<sup>59</sup> a hemispherical bowl (coppa a calotta) (SU15D096123) with painted brown bands around the rim and body can be compared to examples from the adjacent site of Su Padrigheddu and nearby Tharros (see Tab. 2)<sup>60</sup> and dated to the second half of the 7th century BCE. Another important find from the area is a tripod-bowl (coppa-tripode) (Fig. 6) (SU15D096142). This is covered externally and on the rim with a layer of white slip, of which only traces now remain, a decoration which can also be found on examples from tomb 18 via del Manganelli (Ceveteri) as well as from Othoca.<sup>61</sup> It was decorated with internal concentric circles. Examples of such bowls can be found across Sardinia, e.g., at Othoca, Tharros, Nora, Nuraghe Sirai and Sulky, as well as on the Italian Peninsula.<sup>62</sup> They are considered Phoenician imports or locally made imitations. The unusually slender, curved and rounded feet of the S'Urachi example set it apart from most other examples found in Sardinia and allow a comparison with an 8th/7th century BCE item from Sulky<sup>63</sup> and more distantly with the example from Cerveteri (above). The latter was likely a local imitation of a Phoenician original<sup>64</sup> and unique in the panorama of the Near East and Phoenician West. It is tentatively dated to the late 7th century BCE. 65 Although examples of tripod bowls in Sardinia can be dated to the 8th century BCE, the most important period for their use and production is the 7th. 66 In their original Near Eastern context they were part of a drinking set which included a strainer and carenated cup<sup>67</sup> and it is likely that they had a similar function in the West too. The decorated surface suggests their

<sup>57</sup> Bartoloni 1996, pp. 59, 107-109. Cfr. a second example from the same necropolis mentioned in passing by Bartoloni (2017, p. 328).

<sup>58</sup> Cfr. Campus – Leonelli 2000, p. 604, tav 359.4; tav 408.

<sup>59</sup> A special thanks to Emanuele Madrigali and Massimo Botto for their assistance in this area.

<sup>60</sup> Guirguis 2004, p. 82, fig. 5; Roppa – Hayne – Madrigali 2013; Secci 2000, p. 183, fig. 3; Madrigali et al. 2019.

<sup>61</sup> Zucca 1997, pp. 93-94.

<sup>62</sup> Botto 2000b; 2009, pp. 166-171; 2022.

<sup>63</sup> Bartoloni 2012, pp. 1851-1852, fig. 6.

<sup>64</sup> Botto 2000b, p. 71, fig. 1.3; Bellelli – Botto 2018, pp. 314-317.

<sup>65</sup> Botto 2000b, p. 71.

<sup>66</sup> Botto 2009, p. 167.

<sup>67</sup> Botto 2000a, p. 69.



Fig. 6. Tripod bowl from S'Urachi (Photo of J. Hayne).

use was not an everyday occurrence but rather one that was linked to ritual or otherwise specific occasions<sup>68</sup> which could have been for grinding spices and aromatic herbs to add to wine during important ceremonies. Other uses, and given their discovery in Etruscan funerary contexts, could have been for grinding spices for embalming or cosmetic purposes.<sup>69</sup> In the context of S'Urachi, weight is given to the former argument by the lack of a funerary context and the presence of a T.2.1.1.2. amphora (see Tab. 2), often found in association with tripod-bowls.<sup>70</sup> This interesting piece can be matched with the pilgrim flask, possible askoid jug (SU15D096117) hemispherical bowl and dipper from the same context to potentially form a refined and sophisticated table service used for preparing and containing precious beverages.

The association, at many Nuragic sites, of askoid jugs, carenated bowls and at some sites (e.g., Sant'Anastasia) bronze cauldrons, suggest that, at least in the Late Bronze and Early Iron Age, ceremonies involving special liquids also took place among the Nuragic communities. Examples of this can be found, for example, at La Prisgiona (Arzechena) where a number of carenated bowls and jugs were found in association with a dipper and a large decorated container in the Meeting Hut, where the performance of libation rites likely took place,<sup>71</sup> while at the Serra Niedda (Sorso) sanctuary<sup>72</sup> the predominant vessels found in and around the sacred well were askoid jugs and carenated bowls. Other examples come from the sacred wells of Sant'Anastasia (Sardara), and Santu Antine (Genoni)<sup>73</sup> where several decorated askoid jugs were also found in the wells themselves, in the latter case alongside a pilgrim flask. In a funerary context, the Iron Age tomb VI at Santu Predu (Alghero)<sup>74</sup> contained cooking pans, a carenated bowl and askoid jug, which may point to consumption of precious liquids or food as a funerary rite. These performances may be exemplified by the well-known bronze figurine from Monte Sirai of a figure pouring liquid from an askoid jug into a bowl.<sup>75</sup> As

<sup>68</sup> Botto 2000b, pp. 68-69.

<sup>69</sup> Vives-Ferrándiz 2004, p. 16.

<sup>70</sup> Vives-Ferrándiz 2005, p. 164.

<sup>71</sup> Antona – Marina Corro – Puggioni 2010, pp. 68-69; Contu 2017.

<sup>72</sup> Rovina 2002, p. 5.

<sup>73</sup> Guido 2013.

<sup>74</sup> Moravetti 2012.

<sup>75</sup> The dating of this is confused but could date back as far as the 8th century BCE in a period similar to that at S'Urachi when, with the construction of the Astarte temple, the pre-existing Nuraghe was reused. (Bernardini – Botto 2015, p. 324)

for their contents, whilst some evidence exists that some of the askoid jugs contained wine<sup>76</sup> the close relationship of askoid jugs to sacred wells also suggests that water was the primary content of such vessels, universally acknowledged as having ritual or religious functions. With the arrival of Phoenician communities, the contents may have been changed or expanded to include more specifically wine as a precious commodity.

Other material, still being studied, from the same context (see Tab. 2) is also mostly dated to a similar period (late 7th and early 6th centuries BCE).<sup>77</sup> The Nuragic material and pilgrim flask also fit comfortably into a period of around the late 7th century BCE.

#### 4. Connectivity and Contact

Ceramic pilgrim flasks have a niche place in the Sardinian Phoenician typology. Their interest lies in the fact that they are one of the few types of ceramic vessels to be used by both the Nuragic culture and that of the Phoenician settlers, shining a light on the interactions that were taking place on the island in the early Iron Age. 78 Despite their origins in the Near East and the Phoenician homeland, these vessels seem to have been more readily taken up by the local Sardinian society than by Sardinian-Phoenician communities. Their function, as closed and easily portable containers may have recommended them to the indigenous Sardinians, whose repertoire did not include these unusual portable vessels. The question of how such expertise arrived on the island is much-debated and raises interesting questions about the connectivity and mobility of such items. It is noticeable that, of the 20 locally produced pilgrim flasks, many are associated with sites which have produced foreign material, or where there was close contact with foreign traders and settlers. Analysis is hindered by a general lack of good publications, but several sites should be mentioned. Concerning settlements, it has already been mentioned that the example from S'Urachi was found in association with Phoenician and Greek material from an area of the site that contained mixed ceramics. Another major example of these interactions comes from Sant'Imbenia, a well-known indigenous settlement on the northwest coast of Sardinia which during the 9th to 7th centuries BCE hosted Phoenician traders.<sup>79</sup> On the opposite side of the island, emergency excavations at the modern town of Posada brought to light a variety of Phoenician and Nuragic material,80 including an undecorated pilgrim flask, suggesting a similar situation to Sant'Imbenia. Tuppedili,81 is also a large habitation site of long duration with Nuragic, Phoenician and Roman material. Sa Turre (49)82 (Ottana) (two pilgrim flask fragments) is a little-known site which has produced Phoenician and Indigenous material from surface collections, and was possibly in contact with coastal Phoenician sites to the east (Posada?) and/or the west (S'Urachi or Tharros/ Bosa?). Nuragic sanctuaries also contain examples of pilgrim flasks; Nurdòle,<sup>83</sup> a Nuragic village and later sanctuary has a substantial amount of foreign (Phoenician, Etruscan) material alongside the Indigenous material. The nearby sanctuary of Abini<sup>84</sup> (Teti) has also produced foreign material. These sites were active during the Iron Age, perhaps as late as the 6th century BCE, 85 and all have evidence of foreign contact.

<sup>76</sup> Sanges 2010, p. 17.

A call out should be made to the Corinthian aryballos found in the same context. Similar finds were found from the last quarter of the 7th century from Douïmès, at Carthage (Botto 2009, p. 167).

<sup>78</sup> Others are the so-called Sant'Imbenia amphorae (cfr. Oggiano 2000; Botto 2011)

<sup>79</sup> Bernardini 2008; Oggiano 2000.

<sup>80</sup> Sanciu 2010.

<sup>81</sup> Minoja 2015.

<sup>82</sup> Tore - Corda 1990.

<sup>83</sup> Fadda 1991; Madau 1997; Madau 2002; Salis – Fadda – Puddu 2018.

<sup>84</sup> Puddu 2013, 2014.

<sup>85</sup> Hayne 2017.

224 Jeremy Hayne

Despite the scarce documentation it is noticeable that pilgrim flasks seem to be found in either habitation sites where there was foreign contact or in sanctuary sites or those with sacred well complexes. The latter include Santu Antine (Genoni) and Su Pidighi (Solarussa). Not only does this give weight to their Iron Age origins on Sardinia, arriving directly with Phoenician settlers and traders but also that they were used as containers of important liquids including water and complemented the function of the askoid jugs, possibly in ritual performances. However, their possible origins via Etruria should not be discounted either. Although discussion of the pilgrim flasks from Mainland Italy are outside the scope of this article we should remember the miniature bronze forms found in Villanovan Etruscan tombs and at the sanctuary at Nurdòle. There are also many examples of larger beaten bronze pilgrim flasks from the Italian Peninsula.

#### 5. Contents

The cerchielli or fishbone decorations discussed above are common on certain types of late Nuragic pottery and were introduced into the Nuragic repertoire during Iron Age.<sup>88</sup> This clear preference for decorating pottery is a key aspect of Late Nuragic style whereby certain types of pottery are often heavily patterned (see for example, material from Genna Maria (Villanovaforru) room 12, or the well at Sant'Anastasia. 89 The chevrons, circles, lines as well as human forms are all elements that signal a novel approach to the material and its display. That these designs are limited to certain types of pottery seems to underline their prestige or importance, whether for the vessel itself or its contents. For example, they are often found on askoid jugs, piriform vases and carenated bowls, which together probably formed a set to contain and consume liquids. Analyses carried out on the contents of askoid jugs<sup>90</sup> remain inconclusive since there is evidence of a variety of components from pitch, milk products, beeswax, olive oil which could be the result of a mixed ingredient beverage (possibly an alcoholic grog) or even perfumed oils. However, it is not unreasonable to assume that these were used for specific ceremonies amongst the community itself, when hosting guests or performing other rituals in the large sanctuaries (e.g., Santa Vittoria). This concept is especially pertinent if we remember that both the askoid and pilgrim flask were recent additions to the Nuragic ceramic repertoire. The former only appeared in the Final Bronze Age with the more decorated versions arriving in the Iron Age. 91 The decoration may thus have something to do with function, and possibly related to Sardinia's increasing exposure to foreigners in the Iron Age as this change took place just as Sardinia was increasing its contact with foreign communities in the 9th century BCE.

The S'Urachi pilgrim flask differs from other examples found on the island because of its unusual decorations which do not include double *cerchielli* or fishbone designs but rather pendant triangles and circles, decorations which align it more with askoid jugs. Examples of such jugs from Su Monte, <sup>92</sup> Su Cungiau 'e Funta (Oristano), <sup>93</sup> Monte Cao and even Vetulonia <sup>94</sup> all have similar motifs of incised pendant triangles

<sup>86</sup> It should be noted that the spiral design on some miniature pilgrim flasks, most noticeably the one from Bororè, seems to match the original spiral design found on the Near Eastern and Cypriot pottery examples, (compare Lo Schiavo 2000: fig. 1.1 and Karageorghis – Mertens – Rose 2000, pp. 82, 132).

<sup>87</sup> Marzoli 1989.

<sup>88</sup> Ugas 2009, pp. 170-173.

<sup>89</sup> Ugas 2009, pp. 170-171.

<sup>90</sup> Garnier 2015; Frère – Garnier – Dodinet 2016.

<sup>91</sup> Campus – Leonelli 2000, pp. 392-400.

<sup>92</sup> Bacco 1992.

<sup>93</sup> Sebis 1994.

<sup>94</sup> Ialongo 2017.

around their necks. Similar designs might reflect similar functions. Both jugs and flasks are closed forms which were probably used to contain a precious liquid. In their original Egyptian or Levantine existence this could have been a variety of substances from water (as in the similarly shaped "New Year" flasks from Pharaonic Egypt) to perfumed oils, 95 honey or wine. In the Sardinian versions this is often assumed to be wine, a product that the Sardinians had been experimenting with since the Late Bronze Age. 97 Yet, this could also be some other precious liquid since wine would probably have been stored in larger containers, such as the Sant'Imbenia amphorae or, what are known as, "necked jars" Vasi a collo. It may be that the types of containers, be they askoid jugs or pilgrim flasks, imbued the liquid contents with a particular meaning. An analysis of the contents of two Nuragic pilgrim flasks (36, 37) from Oristano<sup>98</sup> showed that food products in the form of milk, unrefined honey or wine were their likely contents.<sup>99</sup> The narrow neck and portable characteristic of this vessel would have complemented the askoid jug form which, with its handle, was less adapted to being moved around. Considering its potential for portability, it is interesting to note that such pilgrim flasks do not appear in Sardinian contexts overseas, i.e. in Iberia or north Africa<sup>100</sup> both areas where Iron Age Sardinian pottery (including askoid jugs) have been found. This may give weight to the suggestion that pilgrim flasks were a later addition to the Nuragic pottery repertoire (8th century BCE or later rather than 9th century) or underline the idea that pilgrim flasks had a different function from the jugs or that they were used for specifically Sardinian functions, which did not occur in foreign contexts.

#### 6. S'Urachi

Whether or not we can know the contents of the pilgrim flask from S'Urachi, it is clear that its unusual patterning and highly burnished surface provide evidence of highly accomplished craftsmen working at the site. S'Urachi was likely an important node in contacts between the coastal regions and the internal Indigenous communities and was a site that was developed and expanded by Phoenician settlers from the 8th century BCE onwards who interacted with the existing local communities, at least in the early phase of the settlement until the 7th century BCE. Evidence from elsewhere at the site underlines the skill of the Nuragic craftsmen as can be seen in the sophisticated decorations on two carenated bowls from an early 7th century deposit in area E<sup>101</sup> (Fig. 7). These comprise incised decorations filled with a white substance to highlight their design. These techniques are also featured on the "Orientalizing" pottery from Olladiri and Tuppedili, <sup>102</sup> as well as on the aforementioned tripod bowl and may have been an Iron Age innovation. All of this points not only to a similar date for these different sites but also underscores the contacts and interactions that were taking place, not only between the local communities but also with the recent Phoenician arrivals, which on this level at least, proved fruitful. Further indirect evidence of interactions and entanglements can be related to the probable use of these containers. The advent of pouring vessels in the form of askoid jugs, alongside the highly decorated carenated bowls, suggests that in the Late Bronze and Early Iron Ages

<sup>95</sup> Frère – Garnier – Dodinet 2016, pp. 59-60.

<sup>96</sup> McGowen 1947, p. 83.

<sup>97</sup> Lovicu et al. 2011; Damasco et al. 2020.

<sup>98</sup> Frère – Garnier 2012; Frère – Garnier – Dodinet 2016, pp. 73-74.

<sup>99 «</sup>The two Nuragic pilgrim flasks from the Oristano museum revealed milk products in one (with the total absence of animal and vegetable fats) and pine pitch in the other» (Frère – Garnier – Dodinet 2016, pp. 73, 107).

<sup>100</sup> Gonzalez de Canales - Serrano - Llompart 2006; Ben Jerbania 2017.

<sup>101</sup> van Dommelen et al. 2018, p. 162, fig. 9.

<sup>102</sup> Cfr. Minoja – Salis – Usai 2015, pp. 426-427, cat. nos. 156, 157, 159. Similar designs and techniques have also been found at the Sa Sedda 'e sos Carros sanctuary (Oliena) cfr. Salis 2008.



Fig. 7. decorated Nuragic material from S'Urachi (Photo of J. Hayne).

Nuragic communities were developing particular rituals which likely included libations or drinking and as it has been said elsewhere «it was the presence of pre-existing drinking cultures... that facilitated the entanglements with the incoming material culture»<sup>103</sup> and their communities in the Iron Age. The close, spatial relationship, at S'Urachi, between the pilgrim flask and the tripod bowl the Phoenician hemispherical bowl, dipper and amphora (alongside more typical Nuragic material, such as the giant *ziro* and (possible) askoid jug suggests that in the late 7th century BCE performance of rituals involving liquids or consumption of special drinks on the cobbled courtyard under the shadow of the Nuragic tower were an important means to negotiate the different social codes of the recently arrived Phoenician and local Nuragic communities, both of which used particular liquids in important ritual ceremonies.<sup>104</sup>

#### 7. Conclusion

The pilgrim flask from S'Urachi is a recent addition to the catalogue of similar vessels found widely, albeit in limited numbers, across Sardinia. As with other examples from the island the original form (especially the decoration) was adapted to conform to a locally acceptable type. The painted concentric circles and spiral designs on the body which typify the Phoenician and Near Eastern originals were replaced with small circles and incised and impressed decorations which, besides making the object more 'familiar', may well have had arcane religious or other meanings for the local communities which allowed them to be assimilated into their repertoire. At the same time there was plenty of scope for individual craftsman to make their mark on these vessels. Functionally, they seem to complement the askoid jugs, as the evidence points to them containing a variety of liquid products, but their rarity might mean that this might have been a more specific content. Whatever the reason, they are a fascinating example of the integrations and appropriations that were taking place in Sardinia in the Early Iron Age period.

<sup>103</sup> Hayne 2016, p.122.

<sup>104</sup> Hayne 2016.

	A PILGRIM FLASK FROM NURAGHE S'URACHI (SAN VERO MILIS-OR) IN ITS SARDINIAN CONTEXT 227							
			Тур	asks in Sardinia e 2	Nuragic contenxts			
No.	Material	Location	Туре	no.	Description and Chronology	Reference		
1	bronze	"Bòrore"	Miniature pilgrim flask	1	Type 1; vestigial handles and indentation for cord. 4.8 cm high and 3.2 diam.	Lo Schiavo 2000; Lo Schiavo 1996 (noted as coming from Nurdole in Fadda 2006)		
2	bronze	Populonia (S. Cerbone) -tomb	Miniature pilgrim flask	1	Type 1. 9th and early 8th century BCE	Lo Schiavo 2000; Minto 1922, p. 20 fig. 10.7; Milletti 2012, p. 76 Lo Schiavo 2000; Minto 1922, p. 20 fig. 10.7; Milletti 2012, p. 76		
3	bronze	Vetulonia, Poggio La Guardia- tomb 7/1900	Miniature pilgrim flask	1	Type 2. Mid-8th century BCE	Lo Schiavo 2000; Cygielman – Pagnini 2002, p. 390; Cygielman 1990, p. 281- 286; Milletti 2012, p. 77		
4, 5	bronze	Vetulonia. Poggio al Bello. Le Cortine	Miniature pilgrim flask	2	Type 1	Milletti 2012, p. 77; Cygielman – Pagnini 2002, p. 390, tav I.h, i		
6	bronze	Vetulonia	Miniature pilgrim flask	1	Type 1; 4.2 cm high	Milletti 2012, p. 77		
7	bronze	Montaione	Miniature pilgrim flask	1	Type 1; 5.3 cm high	Milletti 2012, p. 78		
8, 9	bronze	Su Tempiesu (Orune) - sanctuary/ well temple	Miniature pilgrim flask	2	Type 1. LBA/EIA	Lo Schiavo 2000; Fadda – Lo Schiavo 1992		
10, 11	bronze	Nurdòle (Orani)	Miniature pilgrim flask	2	1. Type 1; 2. More pendant than flask. LBA/EIA	Lo Schiavo 2000; Fadda 1991		
12, 13, 14	bronze	unknown (Oristano) sequestered	Miniature pilgrim flask	3	Type 1. LBA/EIA	Usai – Zucca 2011, p. 337-8; Lo Schiavo <i>et al</i> 2012, p. 80		
15	bronze	Rotonda: Cuccuru Mudeju (Nughedu S. Nicolò)	Miniature pilgrim flask	1	Type 1. LBA/EIA	Lo Schiavo 2000		
16	bronze	Su Monte (Sorradile)	Miniature pilgrim flask	1	Type 1. unpublished. Minoja 2015, p. 437, p. 218			
17	pottery	Ruinas (Oliena)	Large pilgrim flask	1	Type 1; 40 cm high, decorated with concentric circles. Punic? 3rd century BCE  Lo Schiavo 2000; Fadda – Posi 20			
18	pottery	Ruinas (Oliena) (private collection)	Large pilgrim flask	1	Type 1; 24.5 cm high, decorated with concentric circles. Punic?  Lo Schiavo 2000			
19	pottery	Tharros	Large pilgrim flask	1	Type 1; 23.6 cm high, decorated with concentric circles. Punic? 7th century	Lo Schiavo 1991, p. 69, fig. 53 Guirguis 2004, p. 102-3; 2017, p. 381.		
20	pottery	Tharros	Large pilgrim flask	1	Type 1; decorated with concentric circles. 7th-6th centuries BCE	Barnett – Mendelson 1987, p. 54-8, plate 11. 59.		
20a	pottery	Tharros	Large pilgrim flask	1	Type 1; decorated with concentric circles.	Crespi 1896, p. 75, plate TE.8. Possibly same as no. 18		
21	pottery	Unknown	Large pilgrim flask	1	Type 1; 14 cm high x 11.7 diam., decorated with concentric circles. 7th century BCE	Guirguis 2017, p. 381		
22	pottery	Bitia	Large pilgrim flask	1	Type 1; with double vestigial handles; undecorated, lower handles rest on ground.	Guirguis 2017, p. 328		

23	pottory	Bitia	Larga pilorim flask	1	Type 1; decorated with	Bertalani 1996 p. 107 110
23	pottery	Ditta	Large pilgrim flask	1	concentric circles.	Bartoloni 1996, p. 107-110
					6th century BCE	
24	pottery	Sulky	Large pilgrim flask (local production)	1	Type 1.	Bartoloni 1996, p. 108 nota 155
25	pottery	Cantaru Ena (Florinas) (via Roma, tomb 9)	Large pilgrim flask	1	Type 2; with looped handles and decorated with concentric circles. Roman Republican period 2nd cen. BCE - 1 CE.	Maetzke 1964; Lo Schiavo 2000
26	pottery	Cantaru Ena (Florinas) (tomb 11)	Large pilgrim flask (possibly same as 27)	1	Type 2; with looped handles and decorated with concentric circles. Roman Republican period 2nd cen. BCE - 1 CE.	Manca di Mores 1997, p.148
27	pottery	Near Florinas	Large pilgrim flask	1	Type 2; with looped handles and concentric decorations, very similar to that from Canaru Ena. Roman Republican period	Del Vais 1996
28, 29, 30, 31, 32	pottery	Tuvixeddu (Cagliari)	Large pilgrim flask	5	Type 2; with looped handles and decorated with concentric circles. Not dated but Tuvixeddu chronology late 6-3rd cen. BCE.	Bartoloni 2000, p. 113-4, fig. 15, no. 72; Bartoloni 2005, p. 43, fig. 2.13; Bartoloni 2016, p. 26-27, 80, Figg. 521-525
33	pottery	Sant'Imbenia	Large pilgrim flask (local production)	1	Type 1; 30 cm diam. 9th-7th centuries BCE.	Lo Schiavo 2000
34	pottery	Su Monte (Sorradile)	4 lug pilgrim flask	1	Type 1(?) with 4 handles, ring base. Orientalizing	Lo Schiavo <i>et al</i> 2012, p. 76, fig. 12, p. 72
35	pottery	Monte Olladiri (Monastir)	Large pilgrim flask (local production)	1	Type 1; decorated with chevrons and <i>cerchielli</i> 720-670 BCE, mid Orientalizing (late 8th early 7th)	Lo Schiavo 2000; Ugas 2009; Ugas 1985
36	pottery	Sinis/Oristano (collezione Pischedda)	Large pilgrim flask (local production)	1	Type 1; 18.7 cm high, fishbone decoration. 7th century BCE	Zucca 1998; Sebis 1998 tav XXV1; Lo Schiavo <i>et a</i> l 2012, p. 79
37	pottery	Sinis/Oristano (Antiquarium Arborense)	'Pilgrim flask'	1	Type 1; 14 cm high, two vestigial handles on shoulder, ring base.	Guirguis 2017 p. 328; Lo Schiavo <i>et al</i> 2012, p. 80
38	pottery	Genna Maria (Villanovaforru)	Large pilgrim flask (local production)	1	Type 1; highly polished. IA	Badas 1987
39	pottery	Abini (Teti)	Large pilgrim flask (local production)	1	Type 1; with fishbone pattern. IA	Puddu 2014
40	pottery	S. Antine di Genoni	Large pilgrim flask (local production)	1	Type 1; 17 cm high. IA	Guido 2013
41	pottery	Posada	Large pilgrim flask (local production)	1	Type 1; 9.3 cm wide, 19 cm dia.	Sanciu 2010
42	pottery	Su Romanzesu (Bitti)	large pilgrim flask	1	Only neck (in shape of nuraghe). IA?	Fadda - Posi 2006, p. 30 fig. 32
43	pottery	Nur. Pidighi (Solarussa)	Large pilgrim flask (local production)	1	Type 1. IA	Usai 2013
44	pottery	Sa Figu – Tomb II (Ittiri)	Miniature flask	1	Type 1 with <i>cerchielli</i> decoration. Max height 8.5 cm (85 ml), possible connection with IA female burial.	Melis 2011
45, 46, 47, 48	pottery	Nurdòle (Oliena)	Large pilgrim flasks	4	Type 1; decorated with fishbone pattern (3rd example only the neck, 4th example with flat base). IA (dated from similar item in Oristano)	Fadda <i>et al</i> 2020; Salis <i>et al</i> 2018. Fadda 1991.

49	pottery	Sa Turre (Ottana)	2 fragments of pilgrim flask	1	fragments of flask, similar to that of Ruinas. 6th century BCE	Tore & Corda 1990
50, 51, 52	pottery	Tuppedili (Villanovafranca)	3 different flasks	3	Type 1 flasks, 1. smoothed and painted with wavy lines; 2. fragment painted with red slip; 3. with neck, decorated with 'drop' decoration and X impressions, with slip decorations around the handles filled with white paint. Orientalizing	Minoja 2015

Pilgrim flasks from Murru Mannu (Spanu - Zucca 2011, p. 28); Othoca Is Olionis & Neapolis (Lo Schiavo *et al.* 2012, p. 79) remain unseen and the type is not known.

Table 1. Pilgrim flasks from Sardinia and miniature bronze pilgrim flasks.

S'Urachi SU15D	096- foreign material				
Number	Description	Reference and chronology			
SU15D096131	lid (olla stamnoide?)	Possible lid from an "olla Stamnoide", dated to second half of 7th century-beginning of 6th BCE			
SU15D096123	Hemispherical bowl	cfr. Su Padrigheddu late 7th-6th century BCE (Madrigali <i>et al.</i> 2019, p. 114, fig. 12.5-6, note 58; Roppa <i>et al.</i> 2013, p. 128)			
SU15D096296	Phoenician amphora	Ramon 2.1.1.2. (B7): end of 7th-beginning of 6th century BCE (Bartoloni 1988, p. 94; Madrigali 2021)			
SU15D096142	Tripod bowl	In course of study: preliminary data and comparison with examples from <i>Sulky</i> (Bartoloni 2012) and Cerveteri places it in the late 7th century BCE (Botto 2000b, p. 71, fig. 1.3)			
SU15D096281	Olla Stamnoide lid	Comparison with example from Bitia dated to late 7th century BCE (Guirguis 2017, p. 383, sch. 144).			
SU15D096313	Dipper	In course of study			
SU15D096057	Greek amphora	In course of study			
SU15D096396	2 Arballoi; Corinthian and Etrusco-Corinthian	In course of study: Dated to the late 7th and mid-6th centuries BCE (Tronchetti pers.comm)			
S'Urachi SU15D	096- Nuragic material				
SU15D096060	X shaped handle	Handle and wall fragments from large Nuragic <i>ziro</i> (cfr. Campus – Leonelli 2000, p. 604, tav 359. 4; tav. 408. 8) (Iron Age)			
SU15D096120	Wall of tableware	Minute fragment of tableware with zig-zag decoration, possibly from an askoid jug or piriform vase (Iron Age)			
SU15D096117	Reversed elbow handle with dip at angle.	Thin ribbon handle. Handle is broken at angle. Similar to Campus – Leonelli 2000, pp. 630-635, 955 and 19. Part of many similar handles, some decorated and some not. Possibly from a bowl or even an askoid jug (despite lack of decoration) cfr. Campus – Leonelli 2000, p. 619, LBA/IA).			

Table 2. Material from context SU15D096.

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