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Before the Iron Age

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Before the Iron Age

The oldest settlements in the hinterland of the Sibaritide (Calabria, Italy)

Proefschrift

ter verkrijging van de graad van doctor aan de
 Rijksuniversiteit Groningen
 op gezag van de
 rector magnificus prof. dr. E. Sterken
 en volgens besluit van het College voor Promoties.

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Francesca Ippolito

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 te Foggia, Italië

Promotores

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To Marco

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Summary

Riassunto

Samenvatting

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Introduction

Recently carried out and still ongoing landscape archaeological projects in Southern Italy, in areas such as the Murge Plateau,¹ in Apulia, and the Sibaritide upland,² in Calabria, offer concrete examples of the contribution intensive survey and topographical investigations can make to further our knowledge of the role of internal areas in the reconstruction of Bronze Age landscapes.³ The current study will reconstruct the Bronze Age settlement dynamics in that part of the Northern Sibaritide that coincides with the inland Raganello basin. The research is part of the Raganello Archaeological Project (RAP) of the Groningen Institute of Archaeology (GIA) and presents the first results of the chrono-typological analysis of the pottery.⁴ The study area centres on that part of the Raganello river valley that is between the higher Pollino Mountains and the plain of Sybaris where it flows into the Ionian Sea (Fig. 1). Settlement data from the Northern Ionian coast of Calabria will be integrated with the settlement data obtained from the RAP study area in order to examine the settlement dynamics of the Sibaritide on a region wide scale. This offers the possibility to study the relations between multiple landscape types characterizing the wider study area, rather than only the relations between coastal and internal areas.⁵

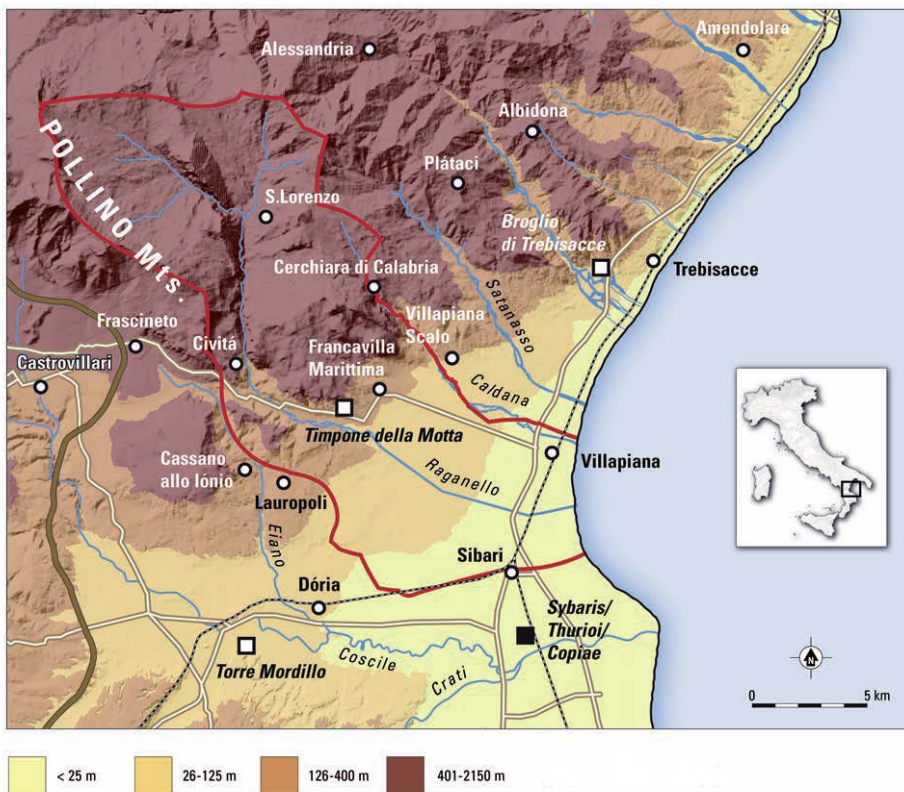


Fig. 1. The Sibaritide. The area of inquiry of the Raganello Archaeological Project is outlined in red (after Attema *et al.*, 2010).

¹ Burgers, Recchia 2009.

² Attema *et al.* 2010.

³ See also the V.A.L.L.O. project (Valorizzazione Archeologica di un Lago non Lago Onnicomprensivo) on Middle Bronze Age highland sites in Southern Campania, overseen by the University of Roma 3 (Prof. Guidi) and University of Roma 1 (Prof. Cazzella), and started in 2012 (Guidi *et al.* forthcoming).

⁴ For the role of the pottery study in reconstructing settlement processes see Mater, Annis 2002, Mac Donald 1995, Horejs *et al.* 2010 and this thesis, Section 2. *Methodological notes: pottery*, pp. 21-24. The study includes, at a lesser extent, analysis of lithic, metal and bone finds.

⁵ Recchia 2010, pp. 311-313.

The Sibaritide is a large alluvial plain originating from the Coscile-Crati river system extending inland until reaching the massifs that outline its perimeter: the Pollino to the North, the Sila to the South, and the Catena Costiera to the West, its final phase of emersion occurring in the Middle Pliocene. The river and marine sediments derived from the erosion of the ridges, sea level oscillations and tectonic movements during the Quaternary glaciations determined the formation of marine terraces that extend for more than 20 km from the inland towards the coast, progressively declining in altitude⁶. The marine terraces that have altitudes between 80 and 200 m above sea level (asl), even reaching 500 m asl at places, are followed by a hilly strip that reaches altitudes of 400-500 m asl, followed in turn by the mountain ranges. From them, a series of torrential water courses originate, including the Raganello river, which crosses the territories of Terranova del Pollino, San Lorenzo Bellizzi, Frascineto, Francavilla Marittima, Civita, Cerchiara di Calabria, Castrovillari and Cassano allo Jonio.

The RAP officially started in 2000 as part of a larger interdisciplinary project done in collaboration with the Free University of Amsterdam and has been continued in subsequent years by the Groningen Institute of Archaeology (henceforth GIA) at the University of Groningen up to this day.⁷ During this 15-year period new projects were started under the umbrella of the RAP, bringing to light new field data, but these data will be published elsewhere.⁸ The present study focuses above all on the protohistoric pottery data collected at sites investigated in the initial stages of the RAP and that excavated during the investigations by the GIA at the central settlement of Timpone della Motta at Francavilla Marittima.⁹ The protohistoric sites this thesis deals with were all detected within the administrative borders of San Lorenzo Bellizzi, Francavilla Marittima, Civita, Cerchiara di Calabria and partly Frascineto and Cassano allo Jonio and, apart from the long known settlement of Timpone della Motta, derive mostly from the Raganello Archaeological Project's (RAP) field walking surveys and the speleological explorations by the "Gruppo Speleologico Sparviere".¹⁰

Following this introductory chapter are four chapters, the contents of which I briefly introduce below. In chapter 2, the results of the study of the pottery derived from systematic surveys carried out in the Raganello valley since 1990 are presented; paragraphs 2.2.3-5 focus on new insights provided by the analysis of the Bronze Age materials from the hill of Timpone della Motta di Francavilla, excavated by the GIA between 1990 and 2008. Chapter 3 deals with the acquisition and analysis of relevant cave sites materials from the Sant'Angelo cave system at Cassano allo Jonio and other hinterland sites recently discovered. In chapter 4, an in-depth discussion of the numerous Bronze Age sites detected, will be integrated with all pottery of available stratigraphic and radiocarbon data to create a chrono-typological framework starting from the scheme in Tab. 1.¹¹ This data will be evaluated in light of current knowledge and thinking regarding the proto-history of the Sibaritide. In the final chapter, I will attempt to define an overall view of the examined district and to place it into the wider settlement pattern of the Sibaritide from a landscape archaeological perspective. The chronological and functional analysis of the sites in the Raganello inland valley implied the search of parallels for the pottery of the Bronze Age sites in the valley and foothills of our study area. The resulting data show the long term connectivity of the RAP area with sites and regional networks within the wider peninsula from the Middle Bronze Age to the Final Bronze Age. All the sites mentioned in this thesis are shown in Fig. 99.

⁶ Peroni, Trucco 1994, pp. 785-786.

⁷ The RPC project (1997-2000), see van Leusen, Attema 2003, pp. 397-416 and Attema *et al.* 2010.

⁸ In 2005, P.M. van Leusen started the Hidden Landscapes Project (HLP), on the effects of the anthropogenic and natural processes, mostly erosive, on the archaeological landscape in the Raganello valley (Feiken *et al.* 2011). In 2011, P.M van Leusen started the Rural Life in Protohistoric Italy Project (RLP), which concentrated on the detection, evaluation and classification of small protohistoric pottery scatters through a combination of intensive artefact survey, geophysical prospecting and test pitting (van Leusen 2012, Van Leusen 2013, Van Leusen 2015, de Neef, forthcoming).

⁹ Kleibrink 2006, Attema *et al.* 2010, Attema 2012.

¹⁰ This speleological group is based in Alessandria del Carretto (CS) and directed by A. Larocca.

¹¹ The table is based on Pacciarelli 2001, Fig. 38, p. 68, Cazzella 2010, p. 31, Pacciarelli 2011, Tab. 1. The Recent and Final Bronze Ages in Italy correspond to two separate phases of the Late Bronze Age.

	Aegean Area	Calabria	Central and Northern Puglia	South Puglia	Campania
2150/2000-1700/1650 b.C.	Middle Helladic	Early Bronze Age (EBA) ¹²	Protoapennine Period (EBA+MBA1)	Protapennine/ Cavallino (EAB+MBA)	Palma Campania
1700-1650 b.C.		Middle Bronze Age1 (MBA1)			Protoapennine period (MBA1)
1650-1550 b.C.	Late Helladic I-IIA		Middle Bronze Age2 (MBA2)	Early Apennine (MBA2)	
1550-1500 b.C.		Late Helladic IIB			Middle Bronze Age3 (MBA3)
1500-1425 b.C.	Late Helladic IIIA		Recent ¹³ Bronze Age1 (RBA1)	Early Subapennine (RBA1)	
1425-1400 b.C.		Late Helladic IIIB			Recent Bronze Age 2 (RBA2)
1425-1300 b.C.	Late Helladic IIIC		Final Bronze Age 1 (FBA1)	Protogeometric period (FBA)	
1300-1200 b.C.		Late Helladic IIIC + Protogeometric Period			Final Bronze Age 2 (FBA2)
1200-1150 b.C.					
1150-1100 b.C.					
1100-925 b.C.					

Tab.1. The chrono-cultural phases of the Bronze Age in Calabria, Puglia, Campania and the Aegean Area.

¹² According to the chronology proposed in Pacciarelli 2011, Tab. 1, the EBA (2150-1650 b.C) is preceded by a transitional phase from the Late Eneolithic to the Early Bronze Age, lasting from 2350 to 2150 b.C.

¹³ See note 11.

1. Research history

In order to introduce the proto-history of the Sibaritide, an overview of the archaeological evidence reported in the literature will be briefly discussed. The bibliographic survey concentrates on the chronological analysis based on the proto-historic cultural *facies*¹⁴ (Tab.1b) identified in known contexts of the examined area. The literature indicates an intense occupation of the Sibaritide from the Middle Bronze until the Iron Age, but a low frequentation during the previous periods. The purpose is then to provide additional, complementary data to reconstruct the less known phases in order to “colmare le lacune di questa serie cronologica e culturale, restituendo alla Calabria quel ruolo di ponte tra le culture mediterranee che già nel Neolitico appare rivestire.”¹⁵ For this study, both the archaeological record of the stratigraphically examined sites and the findings obtained through systematic and unsystematic surface research, including sporadic finds, have been considered. Because of the scarce evidence in the Sibaritide for the period from the Neo-Eneolithic to the Early Bronze Age,¹⁶ besides the stratigraphic sequences of sites in north-eastern Calabria, also those of the Grotta della Madonna di Praia a Mare (henceforth Madonna Cave) in north-western Calabria was used as a reference to reconstruct the different chrono-cultural phases in the prehistory of Southern Italy.¹⁷

1.2 Neolithic evidence

In order to introduce the settlement development during the Neolithic period in North-eastern Calabria, I will first briefly discuss the settlement evidence based on the available literature. Settlement during the Neolithic period in North-eastern Calabria was unknown until the discovery of the site of Favella in 1954 by Brown¹⁸ and the publication of the archaeological record of the Grotta di Sant’Angelo III at Cassano Jonio (henceforth S. Angelo III).¹⁹ In 1962 and 1964 Santo Tinè investigated the village of Favella, where twelve other campaigns of excavations and geo-physical surveys were carried out more recently, between 1990 to 1998 and 2001 to 2002.²⁰ Neolithic phases are also recorded in the Grotta Pavolella at Cassano, with investigations starting in 1979.²¹ In the 1990s, new excavations yielding evidence for Neolithic frequentation were begun in the Grotta San Michele di Saracena.²² Therefore, the Neolithic settlement sequence is known thanks to the comparison of the aforementioned sites as well as the North-western site of the cave Madonna di Praia a Mare.²³ Below I will discuss the reconstruction of the Neolithic sequence more fully based on the pottery typology. Sporadic pieces of evidence attributed to the Neolithic in general are mentioned in Di Vasto, 1995; they come from Castrovillari (S. Maria del Castello), Frascineto (Grotta del Pozzo), Morano Calabro (S.

¹⁴ I refer to *facies* as an archaeological concept denoting the objective grouping of material cultural characteristics frequently and regularly found in association within a given territory (for the concept of *facies* see Pacciarelli 2012, pp. 217-220). A *facies* is a descriptive category that groups classes of artefacts with similar features. Often materials will, however, not show all of the characteristic features, but maybe only a few. In those cases I use, instead of *facies*, the word *aspect*. Materials characterized by a certain aspect potentially belong to a *facies* that is constituted by several aspects, among which are the one(s) observed.

¹⁵ Tinè V. 2004, p. 140 (“to fill the gaps of the Calabrian chronological and cultural sequence, revealing the region’s role of bridgehead it that it fulfilled among Mediterranean cultures already in the Neolithic”). The relevance of the economic role played by the region Calabria in the Neolithic period, for the obsidian trade from Sicily northwards, is also highlighted in Tinè V., Vanzetti 2014, p. 41. S. Tinè (Tinè S. 1983) carried out a study aimed to acquire data on obsidian routes from the Aeolian Islands towards the North of Apulia. Based on those analyses it was attested that the samples from Calabria came from Lipari. Also the nine obsidian artifacts from Favella clearly come from Lipari (Tinè V. 2009). S. Tinè excludes the presence of obsidian from Lipari in Calabria during the Early Neolithic. However, from the Middle Neolithic, obsidian from Lipari did reach the Lao Valley (S. Domenica Talao and Grotta del Romito) and the Sibaritide (Grotte di Cassano), and from there was brought to Apulia (Tinè S. 1987). In the Final Neolithic, obsidian was brought from Lipari via Belverde, Tarsia and Roggiano Gravina to the Sibaritide (Tinè V. 2000).

¹⁶ For a recent definition of the Eneolithic (or Copper Age) and its cultural and chronological phases see Passariello *et al.* 2010 and Talamo *et al.* 2011; see also Pacciarelli 2011, Tab. 1.

¹⁷ “In fact, the stratigraphy of the Santuario della Madonna Cave was one of the key contexts traditionally used, since the 1960s/70s, for the reconstruction of the different chrono-cultural phases of southern Italian prehistory” (Skeates, Whitehouse 1994; Pessina, Tinè 2008), in Calcagnile *et al.* 2010.

¹⁸ De Franciscis 1956; Tinè S. 1962; Tinè S. *et al.* 2003, Tinè V. 2009.

¹⁹ Tinè S. 1964.

²⁰ Tinè V. 2009.

²¹ Carancini, Guerzoni 1987.

²² Tinè V., Natali 2004.

²³ Tinè V. 2000; Tinè V. 2002; Pessina, Tinè 2008.

Nicola-Gada, Mass. Tamburi and Grotta di Donna Marsilia-Sassone).²⁴ A Neolithic site has recently been detected at Valle Carlodraga, North of Broglio di Trebisacce.²⁵

The first phases of the Early Neolithic are attested at Favella and in the Grotta di S. Michele di Saracena (henceforth S. Michele di Saracena). The record of S. Michele di Saracena provides information concerning a long period between the Early Neolithic (*ceramiche prestantinelliane*) and the Eneolithic. However, while the pottery from Favella resembles the imprinted pottery from South-eastern Italy, the pottery from S. Michele di Saracena is also related to the pottery from Southern Calabria and Sicily. Early Neolithic pottery was also found at Castiglione di Roggiano Gravina,²⁶ Torre Mordillo (Spezzano Albanese),²⁷ Santa Maria del Castello and the Santo Iorio caves in the territory of Castrovillari²⁸. It is worth mentioning that the stratigraphy of the Madonna Cave includes a limited amount of Early Neolithic pottery, namely two sherds with imprinted decoration and one sherd with incised decoration in the style of Stentinello.²⁹

The record of the Madonna Cave with its Red Stripes pottery of the earliest Neolithic level (second half of the 6th millennium BC³⁰) attests to the first phases of the Middle Neolithic. Painted pottery was also found in the Grotta Pavolella and at Monte San Marco di Cassano Jonio.³¹ The facies³² of Serra d'Alto is not well attested in the cave of S. Angelo III and at Broglio di Trebisacce.³³ Regarding the second site, a bowl fragment with a perforated lug similar to the Neolithic panpipes shaped handle was found. Due to the lack of parallels, the archaeologists cautiously dated this fragment to the first phase of the site.³⁴ Some Middle Neolithic sherds were found out of context at Torre Mordillo.³⁵

The phase of the oldest imprinted pottery at Favella is followed by the Recent Neolithic facies of Serra d'Alto-Capanna Gravela and Diana.³⁶ The second phase of the Recent Neolithic and the Final Neolithic, characterized by the Diana and Diana-Bellavista styles, have also been found at Favella, S. Michele, the caves of Pavolella and S. Angelo III, at Ceraso near Acri,³⁷ and at the Santo Iorio caves near Castrovillari.³⁸ The Diana style is also attested in the Madonna cave, as well as the Final Neolithic facies of Spatarella (end of 5th to beginning of 6th millennium BC³⁹).

In summary, the Early Neolithic with archaic impressed pottery of Favella della Corte is absent in the caves, with the exception of sporadic evidence from Grotte di Santo Iorio at Castrovillari. Generally, at cave sites we can find painted pottery from the Middle Neolithic onwards; however, it is absent in the excavated site of Favella. It is appropriate to emphasize that no Neolithic open air site was found in the RAP area until the RAP surveys revealed evidence of impressed pottery at a site near San Lorenzo Bellizzi, Timpa Sant'Angelo, which I will discuss in section 2.1.1. Besides Early Neolithic pottery, the style of Diana is also attested at Favella, but it only infrequently occurs in most of the cave sites. From the Late Neolithic to the Middle Bronze Age 2 (MBA2), with the only exception of the excavated site of Acri-Colle Dogna, settlement frequentation in open air sites of the Sibaritide is very poorly attested in the archaeological evidence. Indeed, the same situation,

²⁴ D. Topa (Topa, 1927) suggested investigating the area between Morano Calabro and Mormanno because of the evidence of several Neolithic finds.

²⁵ Vanzetti 2013, pp. 14-15.

²⁶ Tinè V. 2000.

²⁷ Arancio *et al.* 1995, p. 228. Also in Mollo 2012, p. 72.

²⁸ I noted Early Neolithic imprinted pottery and pottery in the Diana style in the Museum of Castrovillari.

²⁹ Bernabò Brea *et al.* 2000, p. 36.

³⁰ Calcagnile *et al.* 2010.

³¹ Di Vasto 1995.

³² See Footnote 12.

³³ Peroni, Vanzetti 2005.

³⁴ Peroni, Trucco 1994, p. 84.

³⁵ Footnote 27.

³⁶ Tinè V. 2009.

³⁷ Nicoletti 2004. Pottery in the Diana style were found at Serra Cagliano, in Southern Sibaritide (Guerzoni *et al.* 2011).

³⁸ Footnote 31.

³⁹ Calcagnile *et al.* 2010.

with archaeological evidence coming mostly from caves, lasted for all of the Eneolithic period until the Early Bronze Age (EBA).

BC (ca)	Period	Facies	Aspect
6300-5700	Early Neolithic	Imprinted (archaic)	
		Pre-Stentinello	
		Guadone	
		Stentinello I	
		Lagnano – Masseria La Quercia	
		Imprinted (late)	
5700-5500	Early/Middle Neolithic	Imprinted	
		Incised	
		White stripes paint	
		Red stripes paint – Passo di Corvo	
		Trichromic	
		Cassano Jonio	
5500-5200	Middle Neolithic	Stentinello II	
		Serra d'Alto I	
5200-4600	Middle/Recent (Late) Neolithic	Stentinello II	
		Serra d'Alto I	
4600-4300	Recent (Late) Neolithic	Serra d'Alto II	Capanna Gravela
		Diana	
4300-3650	Final Neolithic	Diana, Bellavista	
		Spatarella	
3650-3300	Early Eneolithic (Copper Age)	Piano Conte	Taurasi
		Piano Conte	
3300-2800	Middle Eneolithic	Gaudo 1	Passo Murato
		Gaudo 2	Gallo Colarizzi
2800-2350	Late Eneolithic	Laterza, Piano Quartara	
		Laterza, Piano Quartara, Bell beaker/Campaniforme	
2350-2150	LE/trans EBA	Laterza, Ćetina, Cellino San Marco	Cariati Corazzo, Zungri
2150-1650	EBA+MBA1	Palma Campania, Protoapennine, Cessaniti-Capo Piccolo, Capo Graziano 1, Cavallino, (Dinara)	RTV
1650-1500	MBA1	Protoapennine, Cavallino	RTV
1500-1400	MBA2	Protoapennine, Punta le Terrare	RTV
1400-1300	MBA3	Apennine, Thapsos, Punta le Terrare	
1300-1150	RBA (LBA)	Subapennine (RBA 1/2)	
1150-925	FBA (LBA)	Subapennine, protovillanovian, (Protogeometric)	

Tab. 1b. Facies/aspects from the Neolithic to the Late Bronze Age mentioned in the text (Table based on Pacciarelli 2001, Fig. 38; Cazzella 2010; Pessina, Tinè 2008, Fig. 1; Pacciarelli 2011, Tab. 1; Tinè 1983, Tav. 126; Della Casa 1995, Fig. 8).

1.3 From the Eneolithic to the Early Bronze Age (fig.2)

The available literature on Eneolithic and Early Bronze Age sites in the Sibaritide is described here in chronological sequence. The sites considered are all known in literature to belong to the Eneolithic *facies* of Piano Conte. The materials found at these sites belong to subsequent cultural phases and last until the end of the Early Bronze Age, as attested by typological aspects relative to the *facies* of Cessaniti-Capo Piccolo and Palma Campania.

Early Eneolithic finds attributed to the *facies* of Piano Conte were found in the following sites:

1. *S. Michele di Saracena* cave,⁴⁰
2. *Pavolella* cave,⁴¹
3. *S. Angelo III* cave,⁴²
4. *Madonna* Cave⁴³ (second half of the IV – first half of the III mill. B.C.).⁴⁴

⁴⁰ Tinè V., Natali 2004; Tinè V., Natali 2007, pp. 46-61; Salerno, Vanzetti 2004, pp. 208-210.

⁴¹ Carancini, Guerzoni 1987, pp. 783-792; Guerzoni 2004, pp. 235-249.

⁴² Tinè S. 1962, pp. 42-47; Tinè S. 1964 (third layer).

In addition, a few out of context finds from Acri-Colle Dogna attest to the *facies* of Piano Conte.⁴⁵ Pottery evidence from the Middle Eneolithic was found at Acri-Colle Dogna⁴⁶ and attributed to the Gaudo culture (more specifically Late Gaudo and Early Laterza cultures). The contexts as a whole, however seem to be related to Late Eneolithic ones. There is thus convincing evidence for the presence of a Late Eneolithic phase in Northern Calabria. Moreover, Gaudo and Laterza pottery was found at Dipignano.⁴⁷ There is, however, no further information to clarify if the mentioned Gaudo material culture refers to a late stage of this aspect that could be coeval to Laterza aspects. What we can observe is that in Northern Calabria no pottery assignable to the South Calabrian aspects of Passo Murato and Gallo-Colarizzi has been found that corresponds either to the Gaudo 1 or the Gaudo 2 phase. As we will see, the RAP investigations have provided new and relevant data about the Middle and Late Eneolithic periods, potentially filling in this gap (section 4.1-2).

Some authors have made interesting claims about the transition between the Eneolithic and the Early Bronze Age, e.g. the continuation in Southern Italy of substantially Eneolithic cultural aspects after the beginning of the Early Bronze Age.⁴⁸ Recently, Pacciarelli defined a transitional phase, a Late Eneolithic-transition to the Early Bronze Age, including late typological aspects of Laterza, and Cariati-Corazzo and Zungri phases.⁴⁹ Based on these cultural aspects, the shift from the Eneolithic to the Early Bronze Age can be said to be present at several sites in Northern Calabria:

1. Grotta di S. Michele di Saracena: ceramics in the styles of Cellino S. Marco,⁵⁰ Zungri-Corazzo and Laterza.⁵¹
2. Rosa Russa: a few fragments from this site have parallels from tombs 3 and 4 from Laterza and in a sample from layer 7 in the sanctuary at Santa Maria di Leuca.⁵²
3. Serra Cagliano: two fragments were generally attributed to the *facies* of Laterza.⁵³
4. Madonna Cave: typical Laterza culture pottery.
5. S. Maria del Castello di Castrovillari.⁵⁴
6. A decorated fragment of a jug dating to the beginning of the Early Bronze Age, found at Muricelle (Luzzi).⁵⁵
7. Grotta Pavolella (Cassano Jonio): pottery dating to the beginning of the bell-beaker (*campaniforme*) period.⁵⁶
8. Roggiano Gravina: bell-beaker (*campaniforme*) grave goods.⁵⁷
9. Acri-Colle Dogna: this site was already frequented during the Eneolithic and is characterized by Early Bronze Age (late phase) materials relating to both the *facies* of Cessaniti-Capo Piccolo and the *facies* of Palma Campania.⁵⁸
10. The caves of Sant'Angelo III⁵⁹ and II:⁶⁰ evidence dating to the end of the Early Bronze Age.

⁴³ Cardini 1970, p. 43; Tinè S. 1987, p. 57.

⁴⁴ Calcagnile *et al.* 2010, pp. 408-414.

⁴⁵ Castagna, Schiappelli 2004, pp. 299-300.

⁴⁶ Castagna, Schiappelli 2004, pp. 295-307.

⁴⁷ Cocchi Genick 2007, p. 445 ff, referred to a Laterza cave site; for Dipignano and Saracena, besides the *facies* of Laterza, in Salerno, Vanzetti 2004, pp. 219-220 also the *facies* of Gaudo is mentioned. Gaudo pottery was found at Serra Cagliano (Guerzoni *et al.* 2011).

⁴⁸ Cremonesi, Vigliardi 1989.

⁴⁹ Pacciarelli 2011, Tab. 1. This phase also includes Late Cetina aspects.

⁵⁰ Salerno, Vanzetti 2004, p. 222.

⁵¹ Tinè V., Natali 2004, pp. 699-701, Saggio alpha, strati 2 e 4.

⁵² Bergonzi *et al.* 1982, p. 168 e segg.; Peroni, Trucco 1994, pp. 776-778.

⁵³ Peroni, Trucco 1994, tav. 164.15,16, p. 773.

⁵⁴ Peroni, Trucco 1994, pp. 670-682, tav. 125.11.

⁵⁵ Vanzetti, Righini 2002, pp. 157-162; Salerno, Vanzetti 2004, p. 217; see also Colelli 2012, p. 96.

⁵⁶ Guerzoni 2004, pp. 247-248. Bell-beaker pottery was also found at Serra Cagliano 1, Terranova, Fondo Cassetti, Tarsia, Superiore 1; at Serra Cagliano 1, Fondo Cassetti, Superiore 1, Bronze Age pottery was found (Guerzoni *et al.* 2011).

⁵⁷ Cocchi Genick 2004b, pp. 309-320; Tinè S. 1987, pp. 57-58; see also De Franciscis 1956, p. 213.

⁵⁸ Footnote 45 and Levi *et al.* 1999, pp. 46-51.

⁵⁹ Tinè S. 1964, pp. 51-54.

Regarding the sporadic evidence, a few Eneolithic axes were found at Longobucco and Spezzano della Sila.⁶¹ A stone axe from Longobucco was also mentioned by Topa.⁶² Further information on Eneolithic sporadic finds comes from Loc. Fauciglia⁶³ and the cave of Santo Jorio near Castrovillari,⁶⁴ and from the cave of Sirena, near Dipignano.⁶⁵ Moreover, Eneolithic finds come from Roggiano Gravina and the Cave of Donna Marsilia.⁶⁶

Early Bronze Age sporadic finds come again from Roggiano Gravina and from the Cave of Donna Marsilia.⁶⁷ Some authors mention the site of Torrione near Torre Mordillo for further Early Bronze Age finds.⁶⁸ The interpretation of the Eneolithic to Early Bronze Age evidence is presented in sections 4.2 and 4.3.

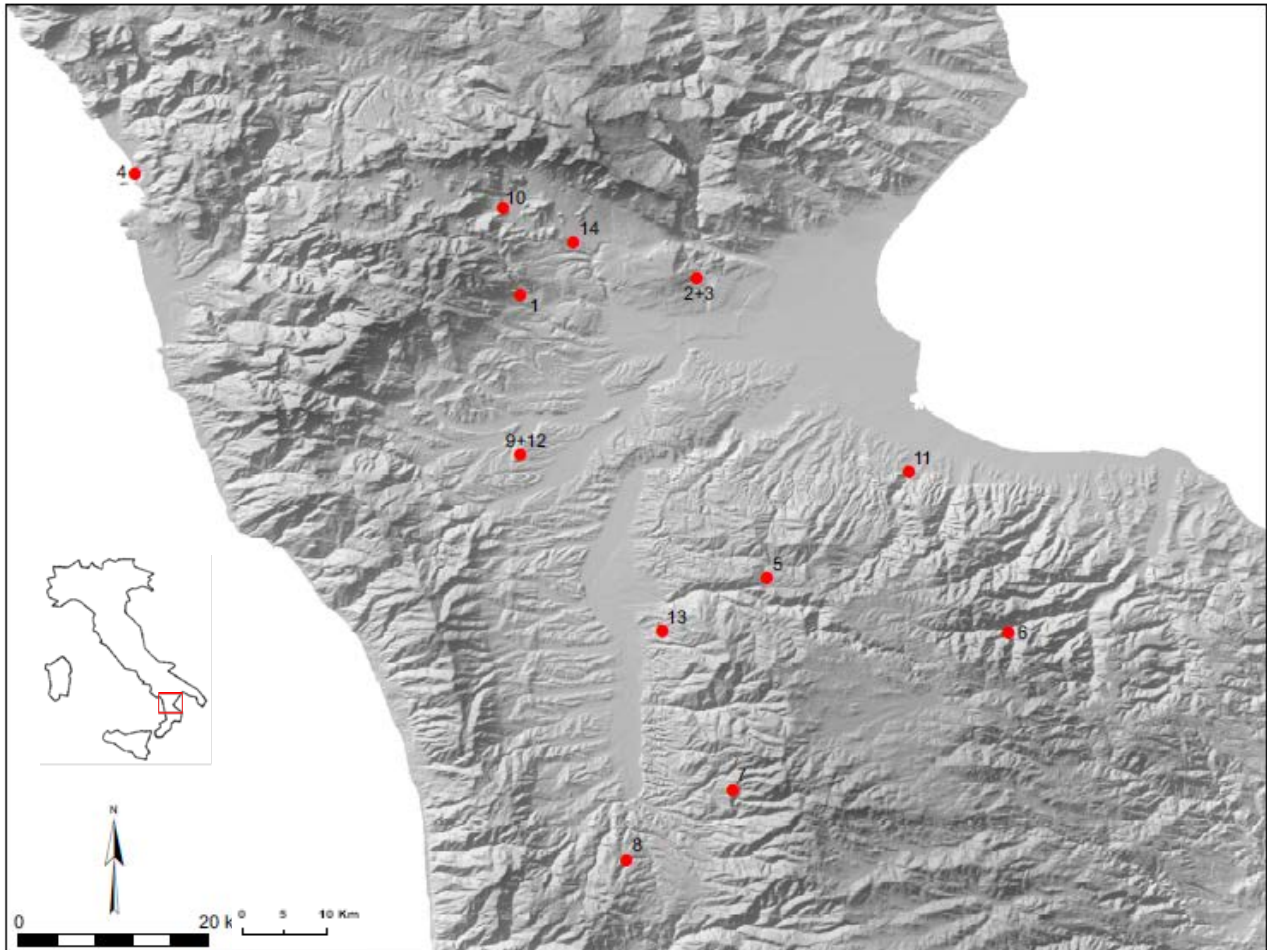


Fig. 2. Published Eneolithic and Early Bronze Age sites in the Sibaritide (1.1): 1. S. Michele di Saracena; 2. Grotta Pavolella; 3. Grotta di S. Angelo III; 4. Grotta della Madonna; 5. Acri-Colle Dogna; 6. Longobucco; 7. Spezzano della Sila; 8. Dipignano; 9. Roggiano Gravina; 10. Grotta di Donna Marsilia; 11. Rossa Russa; 12. Serra Cagliano; 13. Muricelle; 14. S. Maria del Castello di Castrovillari.

⁶⁰ Tinè S., 1962; Salerno, Vanzetti, 2004.

⁶¹ Type D in Salerno, Pessina 2004, pp. 767-770, fig. 2.

⁶² Topa 1927, p. 75.

⁶³ Roma, Lena 2003, p. 365.

⁶⁴ *Idem.*

⁶⁵ Di Vasto 1995, p. 43.

⁶⁶ Tinè S. 1962, pp. 38-47; Di Vasto 1995, pp. 39-42; Tinè S. 1987, p. 56, p. 59; Salerno, Vanzetti 2004, p. 212. *Catasto Grotte di Calabria* 2010, Cb 2010, 288.

⁶⁷ Tinè S. 1962; Di Vasto 1995; Tinè S. 1987; Salerno, Vanzetti 2004.

⁶⁸ Peroni, Trucco 1994, p. 834.

1.4 Ecological considerations⁶⁹

How can the scarcity of evidence for settlement in the Sibaritide from the Neolithic to the beginning of the Bronze Age be explained? According to Bellotti *et al.* 2009,⁷⁰ this is due to a hydrological change which took place starting from the Middle Neolithic onward. However, there is not yet substantial evidence in support of this hypothesis.⁷¹ Studies on the effects that environmental conditions had on the archaeological landscape were carried out from the 1960s onward in the Sybaris plain by means of archaeological and geological research, starting with the programme “Search for Sybaris” by a team of the University of Pennsylvania and the Lerici Foundation (Politecnico di Milano).⁷² The results, based on corings and geophysical investigations, revealed that continual alluviation had buried the plain with thick deposits. Between 3 and 6 meters depth, archaeological evidence was found dating from the Archaic to the Roman periods. Investigations carried out by De Rossi *et al.* few years later, in 1969, show the absence of surface archaeological evidence. Augering by the GIA in 2001 confirmed those results for the Raganello river basin,⁷³ proving that sediments are very uniform in composition and in depositional environment.⁷⁴ During that field season, peat layers suitable for radiocarbon dating were collected. Samples were taken both in formerly marshy areas and on marine terraces; most of the samples dated to the Classical period, 2 samples to the Late Neolithic,⁷⁵ one to the Late Eneolithic⁷⁶ and one to the Middle Bronze Age I.⁷⁷ The samples yielding Neolithic dates showed that the Neolithic level is at around 6 meters below ground level at the spots indicated in fig. 3. These two samples, 01/8 and 01/19 (Fig. 3), were taken about 15 km from the coast, and they were the westernmost GIA corings. East of these corings, the sample 01/01 was taken. It resulted in a Late Eneolithic date at a depth of 7.60-7.70 m. Coring 01/18 was taken at circa 6 km from the coast, North of Favella. This coring yielded a Middle Bronze Age I date at a depth of 5 m (Fig. 3).

Further corings from the Archaeological Park of Sybaris, at Casabianca, were published by Cucci in 2005. Two of these corings dated to the end of the EBA at 10 m circa of depth. From a coring at Stombi a date to the Late Neolithic was obtained, at circa 5 m of depth. Bernasconi *et al.* (2010) found a level dating to the end of the EBA in a coring at a depth of 9 m in the archaeological area of Sybaris. Reconstructing the palaeolandscape on basis of their corings, they could demonstrate that between 2700 and 2000 BC the environment changed from a marine inner shelf to a perimarine coastal environment. From 2000 BC until present, fluviodeltaic conditions developed in connection with the eastward migration of the land-sea boundary, and this ultimately resulted in a terrestrial environment. GIA samples that yielded Neolithic dates confirm that in this coastal area Neolithic sites are often buried under a thick alluvial cover (3-4 m) and sit on marine deposits that are present at a depth of about 6 m below the current ground level. What we can deduce is that if there was a marine environment in the plain in the Neolithic period, until ca. 2700 BC,⁷⁸ Neolithic settlement will have been located in the coastal area immediately bordering the current plain and on the spurs of the marine terraces,⁷⁹ such as where the Neolithic village of Favella is situated. Indeed, Favella is located at 16 m a.s.l., on a terrace surrounded by alluvial sediment located less than 10 m a.s.l.⁸⁰

According to Bernasconi *et al.* 2010, from the Neolithic to the EBA, rapid deposition took place close to the shore, inducing an associated change in the biofacies. During this period the coastal plain would still have

⁶⁹ I thank geologist Prof. J. Sevink for his comments.

⁷⁰ Bellotti *et al.* 2009, pp. 61-72.

⁷¹ *Ibidem*, p. 67.

⁷² Rainey, Lerici 1967.

⁷³ In 2012, during a survey carried out in the framework of the Rural Life Project in RAP foothills zones, 113 lithics, among which obsidian (see footnote 13), were found (van Leusen 2015).

⁷⁴ Hand augerings were made up to a depth of 8.5 m.

⁷⁵ Cores 01-8 (5370±110 BP), 01-19a (5200±100 BP), Attema *et al.* 2010, Box 1.2, pp. 21-24.

⁷⁶ Core 01/01 (3940±150 BP), Roovers 2011, Tab. 2, p. 21.

⁷⁷ Core 01/18 (3220±80 BP), Roovers 2011, Tab. 2, p. 21.

⁷⁸ When the sea level was 20 meters lower than now (Bellotti *et al.* 2009, p. 64).

⁷⁹ Also in Southern Calabria, surveys carried out in the framework of the Bova Marina Archaeological Project, led to detect Neolithic sites “in areas of access to good agricultural land and good water sources; the latter may be why sites tend to be located at the margins of limestone, sandstone or schist formation.” Foxhall *et al.* 2007, p. 23.

⁸⁰ The shore line corresponded, presumably, to the current 25 meter contour line (Bellotti *et al.* 2009).

allowed settlement, though not in the lower, poorly drained and marshy part of the plain. This period corresponds more or less with the period of frequentation of the inland cavesites. Bellotti *et al.* claim that during this period, the sea level rose about -2/-3 m with respect to the contemporary landscape and that the Neolithic landscape of the lower parts of the coastal plain became buried beneath several meters of sediment. The transitional period lasted until the beginning of the MBA. Afterwards, the Sybaris plain acquired the sedimentological characteristics that it has to this day, despite intensive man-induced subsidence prevailing in the last century. Thus, a period of relative stability started from the end of the MBA1 onward. Since hydrological changes were characterizing the plain, itself a highly dynamic unstable system and therefore not suitable for farming and permanent settlement, a new settlement system on the hilltops surrounding the plain started to develop. But even if the plain was no longer directly exploited either for farming or for settlement, it will in the Bronze Age and Early Iron Age have remained the bridge between the inland foothills and uplands, and the sea, by way of the rivers Crati, Coscile and Raganello.⁸¹

1.5 From the Middle Bronze Age to the Early Iron Age

The Middle Bronze Age 1 of the Sibaritide still represents a problematic phase in the reconstruction of Bronze Age settlement patterns. As was also stated at the thirty-seventh IIPP Scientific Meeting on the prehistory and proto-history of Calabria, “the Middle Bronze Age of the Sibaritide is not systematically divided into phases”.⁸² Due to the difficulty of comparing the pottery dating to the beginning of the Middle Bronze Age from the settlements of Broglio di Trebisacce, Torre Mordillo and Cittavetere di Saracena⁸³ with the classic Proto-Apenninic facies of the South-East,⁸⁴ the available dated records for the Sibaritide only start in the MBA2. In addition, the Protoapenninic fragments detected in the “Saggio Alpha” in the Grotta di S. Michele di Saracena “miss a clear stratigraphic context”.⁸⁵ In Chapter 4, I will further discuss the observations made on the basis of the new data presented in this study that add valuable information on the problematic chronology concerning the final phase of the Early Bronze Age and the beginning of the Middle Bronze Age. Earlier, in an article in 2013, I already introduced the potential of material with weak stratigraphic contexts, in casu finds from the Cave of Sant’Angelo II (Cassano allo Jonio).⁸⁶ I emphasize that some of these finds represent the only evidence for the EBA2B-MBA1 in the study-area. Therefore, the data from the Cave of Sant’Angelo II constitute the first settlement evidence between the Early Bronze Age and the MBA2 in this region, and, importantly, provide data for formulating a new chronological sequence. In contrast with previous phases, the Sibaritide from the Middle Bronze Age 2 onwards is characterized in the literature by a phase of settlement development with a high number of sites that are distributed throughout the hilly strip surrounding the Plain. Since the end of the 1970s, starting with the research of Peroni,⁸⁷ various studies have been carried out in order to characterize these settlements. They fall into two types (larger, long-term sites, and small, mono-phase sites) that are defined based on spatial extent, duration and position relative to the potential for territorial exploitation. The more extended sites, with a surface larger than 6 hectares, are long-term sites located in naturally protected tablelands and on cultivable grounds. In contrast, the sites covering a surface smaller than 3 hectares are normally mono-phase sites that are located on not naturally protected high grounds.

⁸¹ In a recent contribution, Alessandro Vanzetti (Vanzetti 2013, pp. 11-33), points out the presence of Early Iron Age evidence, presumably funerary evidence, found by Quilici *et al.* 1968-69, along the coast on the Raganello River (Site 11 between Localities Mangialardo and Pozzeria). The presence of funerary contexts near the coast would therefore confirm suitability of the coastal area for inhabitation when the relatively environmental stable phase started from the MBA. Furthermore, the funerary character of this evidence would indicate a complex settlement system that from the hills involved the plain, in this case possibly for cultural and ritual aims rather than for farming or settlement development.

⁸² Bettelli *et al.* 2004, pp. 330-332.

⁸³ Bartoli, Di Renzoni 2004, pp. 349-359.

⁸⁴ Trucco, Vagnetti 2001, pp. 218-220.

⁸⁵ Tinè V., Natali 2004, pp. 693-702.

⁸⁶ Ippolito 2013.

⁸⁷ See Bettelli *et al.* 2004, Vanzetti 2013 and relative bibliography.

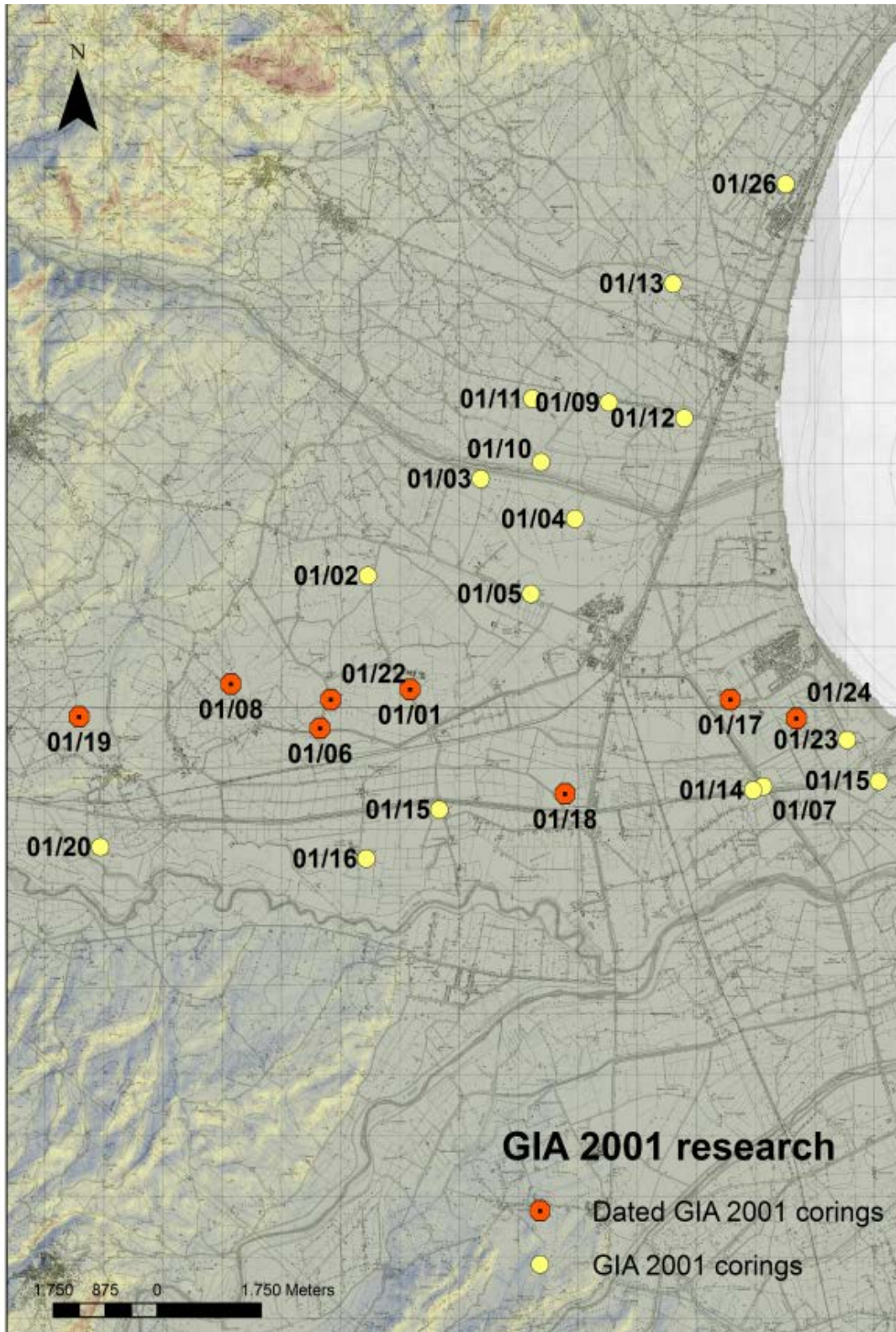


Fig. 3. GIA corings.

This seems to be the case for both the Middle and the Recent Bronze Ages. However in the latter period, a slight decrease in the number of sub-coastal sites oriented towards the more hilly internal area was reported. This could be an indication of the diversification in farming regimes and an enlargement of the areas exploited by pastoralism or agriculture towards the inland. There are 16 sites⁸⁸ that yielded materials of the Middle Bronze Age: Amendolara, Tarianne, Broglio, Villapiana, Torre Mordillo, Casale Rizzo, Strange di Rossano,⁸⁹ Timpone Lacco, Timpa del Castello, Timpone della Motta di Francavilla, Serra Cavallo d'Oro, Serra Cagliano, Rosa Russa, Castiglione Paludi, Castrovillari and Acri.⁹⁰ These are mainly located along the border between the hilly zone and the sub-coastal strip and, in the central part of the Sibaritide, between the hilly zone and the plain (fig. 1). Tarianne is the only site located near the coast. In the Recent Bronze Age, four new sites are founded (Timpone Motta di Cerchiara, Basili di Rossano, Timpone Lacco and Casale Jaccino) and four sites are abandoned (Tarianne, Castrovillari, Strange⁹¹ and Acri). In the Final Bronze Age, 7 of the 16 sites from the Recent Bronze Age are abandoned (Rosa Russa, Serra Cagliano, Strange,⁹² Timpone Lacco, Timpone Motta di Cerchiara, Villapiana, Casale Jaccino) while five new sites (Altomonte, Fonte Finocchio, Terranova di Sibari, M.te S. Nicola, Castrovillari) characterized by a minimal extent of 10 ha are founded.

The new sites indicate a settlement choice oriented towards the internal zones and as a consequence are at the expense of the sub-coastal areas. Therefore, in the Final Bronze Age, several minor sites disappear, the number of sites in the internal highlands increases, and at the same time there is a significant growth in size of the few centres that are strategically placed and generally oriented towards the plain. Peroni argued that these political and economic changes reflect the establishing of a hierarchic territorial organization that would develop further in the Iron Age.⁹³ The territorial situation of the Sibaritide was summarized in Levi *et al.* 1999, where about 10 sites yielding fragments from the Early Iron Age are mentioned (Cozzo Michellicchio,⁹⁴ La Prunetta, Pietra Castello di Cassano Ionio, Serra Testi, Rossano Varia S. Antonio, Serra Castello, Corigliano S. Croce, Castiglione Paludi, Bisignano, Piano di Bucita) and 3 not chronologically defined proto-historic sites.⁹⁵ In the following distribution map (Fig. 4), derived from the cited volume,⁹⁶ all of the known sites for the Sibaritide are reported. In total there are 40 sites dating from the Middle Bronze Age until the Early Iron Age.

⁸⁸ Peroni, Trucco 1994, p. 835.

⁸⁹ Actually the chronology of the sites of Strange, Fonte Facano and Praticello di Rossano, is now doubtful, as recently referred by Vanzetti (Vanzetti 2013, p. 15).

⁹⁰ In the case of Acri, see Levi *et al.* 1999, pp. 37-40.

⁹¹ Peroni, Trucco 1994, pp. 835-845.

⁹² Note 89.

⁹³ Note 88.

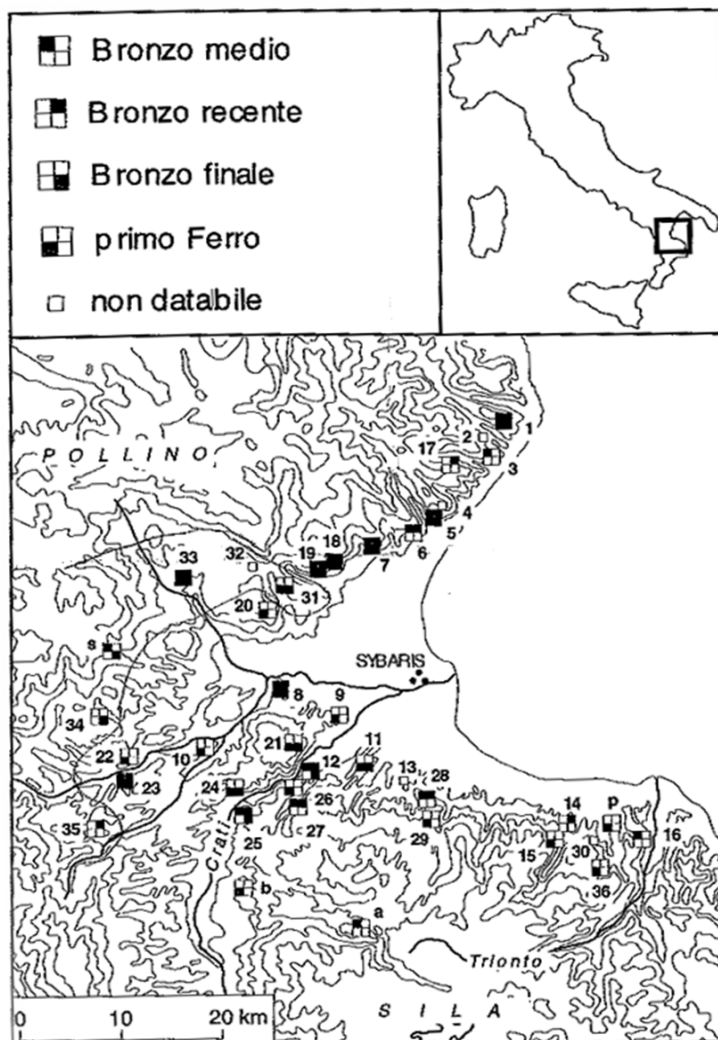
⁹⁴ According to Vanzetti (Vanzetti 2013, p. 15), this site is probably not pre-protolithic.

⁹⁵ Timpone Golla, Monte Spirito Santo, and Valle Carlodraga, which is a Late Neolithic site (Note 23).

⁹⁶ Levi *et al.* 1999, Fig. 9, p. 38.

Fig. 4. The Sibaritide from the Middle Bronze Age to the Iron Age (Levi *et al.* 1999)⁹⁷:

1. Amendolara,
2. Timpone Golla,
3. Tarianne,
4. Valle Carlodraga,
5. Broglio,
6. Villapiana,
7. Timpone Motta di Cerchiara,
8. Torre Mordillo,
9. Cozzo Michelicchio,
10. La Prunetta,
11. Fonte Finocchio,
12. Casale Rizzo,
13. Fonte Facano,
14. Basili Rossano,
15. Rossano Varia S. Antonio,
16. Strange,
17. Timpone Lacco,
18. Timpa del Castello di Francavilla,
19. Timpone Motta di Francavilla,
20. Pietra Castello di Cassano allo Ionio,
21. Terranova di Sibari,
22. Serra Testi,
23. Castiglione di Roggiano Gravina,
24. Tarsia,
25. Serra Cavallo d'Oro,
26. Serra Castello,
27. Serra Cagliano,
28. Rosa Russa,
29. Corigliano S. Croce,
30. Praticello di Rossano,
31. Monte S. Nicola,
32. Monte Spirito Santo,
33. Castrovillari,
34. Altomonte,
35. Casale Jaccino,
36. Castiglione Paludi,
- a. Acri, b. Bisignano, p. Piano di Bucita, s. Saracena



Research aims

The brief Introduction to this thesis let emerge as follows:

1. Previous studies in Northeastern Calabria or Sibaritide, carried out for instance by the Sapienza University of Rome, found very little evidence for the Neolithic and the beginning of the Bronze Age. Thanks to the pottery study I am going to deal with in the following chapters, new insights into the typo-chronological articulation of the Neolithic to Eneolithic or Copper Age periods, based on the, admittedly, still limited but now expanded evidence found in the study area, can be provided.
2. The settlement dynamics as described by Renato Peroni excluded an important development of Middle Bronze Age sites in the upland Raganello basin.
 - First of all, we can point to settlement phases prior to the MBA2 from the Neolithic onwards.
 - Secondly, and also in contrast to previous research, the RAP data proves that a development of MBA sites took place in the inland areas and shows how these sites were abandoned in the LBA when settlements started to gravitate on the hilly strip surrounding the coastal plain.

⁹⁷ The sites of Strange, Fonte Facano, Praticello di Rossano, Cozzo Michelicchio have been further investigated in 2012 obtaining hypothetical chronologies and for the latter site, a dating to the Classical period (Vanzetti 2013, p. 15).

- The latter development is central in the process of nucleation as proposed by Renato Peroni⁹⁸ that would lead to the centralized Iron Age settlement pattern consisting of large settlements like Broglio di Trebisacce, Timpone della Motta at Francavilla Marittima and Torre Mordillo.
- Material culture at these central sites and their satellites bears clear cultural traits related to Aegean influence, but these were reworked to suit the new social organization. It is this complex pattern, between long term Bronze Age and Early Iron Age connectivity, specific high visible networks, such as the Aegean connection, and internal settlement dynamics, that we should research in tandem, in order to understand what happened in the period that preceded the historical Greek colonization.

The study of pottery data here presented is aimed at the characterization and dating of protohistoric archaeological settlements in the Raganello basin. In this thesis I will examine:

1. the potential of impasto pottery for our understanding of settlement dynamics in regional protohistoric landscapes and
 2. the connections people living in such landscape maintained with nearby and far-off via exchange networks.
- In Italian prehistory and protohistory 'impasto' indicates a product made of clay with natural and added medium to coarse inclusions. Impasto vessels are usually handmade, with smoothed or polished surfaces, sometimes with incised or impressed decoration, and fired at medium temperature. Impasto pottery shapes are often standardized, by and large typologically homogeneous and produced during a long period from the protohistory to the Archaic period. Indeed, limited reference assemblages from investigated sites and only few specific studies on impasto pottery are available. That makes its study difficult, even more in absence of stratigraphical contexts. Impasto sherds from surveys are therefore generally difficult to classify and only dedicated studies can provide reliable results. Moreover, survey materials, and especially brittle impasto, are usually worn and often poorly preserved and that can make the reconstruction of shapes approximative.

In this vein, this study is aimed to provide high resolution chronological, functional and cultural information from the study of ceramics of the RAP sites. Data collected by surface surveys lead to the characterization of archaeological settlements through time. However, this archaeological technique is in general effective in the case of finewares, as our knowledge of fine wares has highly developed starting from the Seventies. Actually, fine wares represent a small portion of the total surface collection, as site assemblages are mostly made up of coarse wares, and moreover, fine wares do not occur in all periods. In the Italian Bronze Age, for instance, with the exception of Aegean or Aegean-type fine wares, actually not so common, the bulk of site assemblages is made up of a type of coarse ware called impasto, as notably differs from the coarse ware from classical periods. The surface sherds have been typologically dated identifying specific shapes or types of vessels. I described sherds and reconstructed shapes, impasto and surface, and I dated the sherds based on parallels (see Section 2. Methodology: pottery). For my thesis, I described, in this way, 670 sherds (see Catalogue and Plates). This kind of study is able to show that this class of pottery can surprisingly provide relevant information about chronology and characteristics of settlements that otherwise would be simply defined as protohistoric sites, therefore in use within a too wide period of around 1500 years, not allowing the diachronic and synchronic observations that instead I could make in order to explain the presence of these sherds on the fields and its meaning. Regarding the function of pottery, if we look at the reconstructed vessels in my dataset (Section 4.10), the pottery tells us that we are dealing with open air settlements where daily

⁹⁸ Peroni, Trucco 1994, pp. 835-845.

activities took place as well as the storing of foodstuffs, especially from the LBA onwards. Only pottery found in specific caves can be related to funerary or ritual practices.

- A classification of the sites based on the materials will lead to the identification of cultural phases, showing connections with other areas. The chronology of the pottery and the archaeological contexts in which parallels were found for the materials of the RAP surveys as presented in this study, allow observations on cultural connections within the Italian peninsula and in adjacent areas (Section 4.11). Indeed, the study of the material culture of Bronze Age sites in the inland valley of the Raganello demonstrates that, even if this inland valley at first sight seems hopelessly remote from the outer world, its material culture shows parallels with that found in distant parts of the Italian peninsula, but also that the nature of this connectivity shifted over time from one part of peninsular Italy to another, as regional networks waxed and waned, as Emma Blake in her recent book “ Social Networks and Regional Identity in Bronze Age Italy” has shown.⁹⁹

In her book, Emma Blake, using Social Network Analysis, has been able to discern the formation of regional networks in Italy on the peninsular scale during the Recent and Final Bronze Ages, and it is interesting to look at some of her hypotheses that have relevance for the study presented here. From her analyses, Blake concludes that networks in South Italy at the end of the Bronze Age appeared weak with respect to those of North and Central Italy and that they seem to have been exclusively based on Aegean-type pottery that, though circulating in substantial quantities along the coast, did not impact the material culture inland. Indeed, so far no Aegean type material has been found on our inland sites, and Aegean artefacts and influence on local pottery production is only known from the sites in the foothills overlooking the plain.¹⁰⁰ It is also here, in the foothills that in the Late Bronze and Early Iron Age centralization of settlement would take place, attracting the inhabitants of the mountainous inland valley of the Raganello that, as a consequence, gradually was abandoned. Blake’s observation that in South Italy no strong regional networks developed is based on the presence of Aegean goods, or exotica, along the coasts of Southern Italy. In reality this coastal network pattern is complementary to other networks represented by other archaeological materials like our impasto pottery. In this way, a more complex network pattern emerges, indicating the complexity of the actual protohistoric exchange networks. The detailed but arduous study of impasto pottery is helpful here.

In conclusion, in this thesis I will highlight two aspects of connectivity during the Bronze Age with respect to the study area. One concerned the peninsular connectivity that could be detected in the material culture from the Middle Bronze Age till the late Bronze Age. The other aspect concerned a particular demographic change in the study area during the Final Bronze Age that led to a centralized settlement pattern where connectivity with the outside world now was mediated for wider regions. As I will argue in the last chapter, between the FBA and the EIA, the archaeological evidence would indicate the formation of aristocratic societies and the establishing of connections with the Euboean world.¹⁰¹ It is therefore clear that an Euboean or Euboeanizing phase preceded the foundation of Greek Sybaris by a half century and this forms a new chapter in the long term history of interconnectivity within the Mediterranean that started as early as the end of the Early Bronze Age.

⁹⁹ Blake 2014.

¹⁰⁰ Vagnetti *et al.* 2009, p. 172.

¹⁰¹ Jacobsen *et al.* 2009.

1. Results of the Raganello Archaeological Project

Art means finding a method for change: like the man who first invented a bowl to hold water. This is how a civilization is born, through the desire for change. After the first time, making a bowl becomes academic.
P. Pascali (1935-1968)

The idea of the Raganello Archaeological Project was originally conceived by Prof. Peter Attema from the GIA and the Italian speleologist Antonio Larocca,¹ whose knowledge of the hinterland of the Sibaritide matched Attema's interest in reconstructing the archaeological landscape surrounding the site of Timpone della Motta, near Francavilla Marittima. Here, the GIA carried out archaeological excavations over a long period (1991-2010), revealing a complex long-term site that existed from the Bronze Age into the fifth century BC, featuring domestic and cultic structures.² In addition to reconstructing the settlement of Timpone della Motta, the GIA archaeologists wanted to investigate the regional context of this paradigmatic site that is located in a key area to our comprehension of the archaeology of Southern Italy. In 2006, Attema published an illuminating paper, in honour of the archaeologist Renato Peroni,³ in which he discussed the methodological differences between Italian and Northwest European approaches to landscape archaeology. The former do not usually formulate regional landscape projects with an explicit theoretical and methodological framework, and lay less emphasis on the interdisciplinary study of the physical landscape as a basis for the reconstruction of settlement dynamics. In the contribution, he also singled out the merits of certain post-processual approaches, in particular that of R. Bradley.⁴ At the same time, however, Attema discussed the lack of historical approaches in the landscape archaeological reconstructions made in the Anglo-Saxon tradition and the benefits provided by the profound anthropological and material cultural knowledge that Italian archaeologists possess. What Attema proposed was to combine Anglo-Saxon landscape archaeological approaches with Italian protohistorical methodology. The Raganello Archaeological Project (RAP) can be seen as the medium to develop this research strategy, at the same time showing clear Dutch characteristics (emphasis on geomorphology, soil study and palynology). The project, formally started in 2002, has been carried out through the years by Dutch, German, Danish and Italian researchers and is still on-going. As the project progresses, its results, in terms of methodology and collaborative approaches, have been already very successful.

This chapter describes the characteristics of those proto-historic sites found in the Raganello valley (Fig. 1) that could be chronologically defined by the author based on the pottery collected at those sites as part of the RAP. Before in-depth descriptions of the sites can be presented, the methodology underlying the fieldwork and pottery studies will be taken into account.

- Methodological notes: survey

Intensive and extensive surveys took place between 1991 and 2008 in the RAP area; the methodology used in these surveys will be discussed below. Intensive block surveys imply a subdivision into units of circa 50 by 50 m and a space of 10 m between the surveyors, and since 2002, the use of GPS. Intensive surveys have been done on the foothills of Francavilla, from Timpone della Motta-Macchiabate up to the Contrada Damale that is bounded by the river Caldana at Cerchiara. Extensive surveys and block surveys have been conducted in the territories of Civita and San Lorenzo Bellizzi.⁵ By 2010, about 13 square kms, about 4% of the study area was intensively surveyed. Intensive survey is possible in accessible areas, with a high percentage of worked (ploughed) and unenclosed land, like in the foothill zones. In the upland zone, land use tends to be much less intensive, because of steep outcrops of limestone rocks, vegetation coverage, and limited accessibility. As a consequence, in the latter zone, it was not always possible to carry out intensive surveys, but extensive and

¹ Member and founder of the Sparviere Speleological Group (GSS), see Chapter 1, footnote 10.

² Kleibrink 2006.

³ Attema 2006, pp. 522-527.

⁴ Bradley 2000.

⁵ See Feiken 2014, p. 50 (Appendix 3.2).

topographic surveys were conducted instead. Extensive survey has been done in the area of Monte Sellaro (Cerchiara),⁶ Civita, San Lorenzo and Frascineto. Topographic surveys have been done in the area between Timpone della Motta and Broglio di Trebisacce in 1994 by Haagsma⁷ and in the hinterland since the 1980s by the Sparviere Speleological Group. Even though the Speleological Group's investigations lacked precise archaeological survey methods, as well as technical tools such as GPS and survey teams which could cover wider areas around detected sites, the collaboration between speleologists and GIA archaeologists made it possible to bring together the documentation of various site visits done by both parties in the past. To that aim, GIA archaeologists returned to the SSG sites, in order to map them, and when it was possible, to survey the surrounding area by carrying out extensive surveys. When the SSG members found pottery concentrations, they collected the sherds in bags, and recorded all of the information concerning the finds locations. I returned to the sites together with Antonio Larocca to inspect the locations where the pottery came from. Afterwards, Martijn van Leusen inserted all this information in the forthcoming RAP catalogue.⁸ The SSG samples that were originally considered as unsystematic collections of surface material or grab samples, and therefore not suitable to produce a distribution map, have now been contextualized and precisely mapped. This became the starting point for reconstructing a network of sites spread over an upland territory difficult to investigate, considering also the difficulty of carrying out aerial survey in a rocky and vegetated landscape.⁹ Based on the detailed data provided by SSG and verified by GIA researchers, I consider the SSG potsherds I studied to form a sound basis for the analyses in this dissertation.

Field-walking surveys by the Groningen Institute of Archaeology in Calabria (Southern Italy) have since 2000 shown that protohistoric sites are mostly represented on the surface by worn and often poorly preserved pottery sherds that are difficult to date. As a consequence, understanding how surface artefact scatters can define chronology and function of sites became one of the goals of the RAP research.

- Methodological notes: pottery

*Anyone who would write on typology in archaeology
must either be presumptuous or have some
concrete new material to present.
R. Whallon 1972, p. 13.*

A preliminary catalogue of sites mapped in the Raganello river basin during the Timpone della Motta excavations (1995-1998), the RPC project (2000), and the RAP (2001-2008), was set up by Martijn van Leusen.¹⁰ It includes sites discovered by the Sparviere Speleological Group. In total, 238 sites have been mapped in the form of surface pottery scatters. Among them, there are 113 protohistoric sites, dated between

⁶ See Larocca 2015 and related bibliography.

⁷ Haagsma 1996.

⁸ Sites found by the SSG at San Lorenzo Bellizzi: Timpa Sant'Angelo (RAP site 121), Grotta del Banco di Ferro (RAP site 83), Grotta di Pietra Sant'Angelo IV (RAP site 119), Grotta di Zivilella (RAP site 227), Trizzone della Scala (RAP sites 128a-b), Mandroni di Maddalena (RAP site 130), Cudicino (RAP site 152), Palmanocera (RAP site 218), Grotta di Palmanocera (RAP site 126), Scala di Barile (RAP site 163); SSG sites at Civita: Pietra della Sentinella (RAP site 210), Grotta I Rubbert (RAP site 116b), Grotta 'Ngerie Superiore, Grotta 'Ngerie Inferiore (RAP sites 127 a-b), Timpa del Demanio, Banco Grande, Banco del Prete, Banco 'Ndappe (RAP sites 116 a-g), Madre Chiesa (RAP site 122); SSG found at Cerchiara: Grotta della Camastra (RAP site 132), Grande Caverna di Damale (RAP site 138), Balze di Cristo (RAP sites 136 a-c), Grotta 1-3 di Terra Masseta, Terra Masseta 1, 'Ngicchielle, Spallata di Balze di Cristo, Crinale di Terra Masseta-Valle della Vite; SSG found at Frascineto: Timpone delle Fave (RAP site 117); SSG sites found at Cassano allo Jonio: Grotta di Sant'Angelo IV (RAP site).

⁹ Alvisi 1969. For the detection of archeological features in the vegetated hinterland of the Sibaritide, Airborne Laser Scanning (ALS) should be taken into account (see for instance Doneus, Briese 2006 and Vletter 2015, pp. 33-34).

¹⁰ Van Leusen *et al.*, forthcoming. This catalogue is based on earlier work by RAP members, notably Attema, de Haas, Oome, Roncoroni and the author, supported by GIA draughtsmen, in particular Siebe Boersma. Thanks are also due to the late Paul van Ginneken, volunteer in many campaigns. In preparation of the catalogue two preliminary reports were prepared of which one appeared (Attema *et al.* 2000) and one was left unfinished. This was mainly due to the problems encountered with giving sound datings to the pottery collected. Material from these reports have been reworked in this thesis alongside many day reports by especially Attema, Delvigne, Larocca and van Leusen for the highland sites.

the Bronze Age and the Iron Age, and 83 of these are represented by non-diagnostic or undatable impasto¹¹ pottery. Of these sites, 30 could be dated with a high measure of confidence on the basis of diagnostic pottery. The reasons why only about one-tenth of the protohistoric sites in the study area could be dated with precision derives from the following factors. Firstly, post-depositional processes had profoundly affected the quality of the surface record.¹² Secondly, there is a lack of published investigations on protohistoric survey sites from Southern Italy. It appears that the number of datable sites may be increased only as a result of painstaking typological analysis of the material as undertaken in this thesis. In the end, then, trustworthy datings may be acquired for the greater part of the 83 sites represented by what initially were thought to be non-diagnostic or un-datable impasto sherds.

Pottery studies, particularly developed between 1970 and 1990, have much expanded the possibility of interpreting sites represented by poor pottery evidence.¹³ In this vein, this study has aimed to provide high resolution chronological, functional and cultural information from the study of ceramics of the RAP sites. The surface sherds found at the 30 sites that have been typologically dated were diagnostic in themselves or had characteristics allowing identification of specific shapes or types of vessels. This means that, even if the sherds were worn, it was possible to define their morphology, to which part of the vessel they belonged, which kind of surface treatment they had undergone, their colour, temper, and hardness, as well as their porosity, and break.¹⁴ To come back to the 83 sites represented by non-diagnostic or uncertain datable impasto pottery, it was a crucial question whether one should study all the sherds or just the fragments that looked promising on account of possibly diagnostic features, as for instance plastic decorations. If the latter approach is chosen, what happens to the many undecorated sherds? More in general, if from a survey site we have a certain amount of sherds, among which few diagnostic and many non-diagnostic pieces, the diagnostic ones will represent only one or more restricted phases of the site's lifespan, while the non-diagnostic sherds may in theory be more representative of a longer time range.

In the end, after dedicated study a certain quantity of non-diagnostic sherds will become diagnostic, and will provide more information than originally expected and furnish more elements to define the site where they were found. Therefore, I proposed to make a new selection of the evidence from sites that had not been dated or had been dated with uncertainty through a reassessment of diagnostic features of individual pottery sherds.

A classification of objects leads to subdivide an assemblage into homogeneous groups. These groups identify types. Ritchie and MacNeish defined a type as "a group of objects exhibiting interrelated similar features which have temporal and spatial significance".¹⁵ Although there is not a standard method to define a type, in this study the following factors have been taken into account:

- specific characteristics of the assemblage (physical composition of the clay and shapes)
- context of the assemblage and bias concerning provenance, preservation, sample reliability
- existing conventions applied to ceramic assemblages (*facies*/aspect,¹⁶ existing typologies),
- researcher skills

I proceeded by establishing categories and distinguish types through:

- Grouping "traditional" types (dishes, jars, cups...)

¹¹ In Italian prehistory and protohistory 'impasto' indicates a product made of clay, clasts and temper particles with medium to coarse texture. Clasts are inclusions naturally occurring in a clay body with a particle size up to 1/16 mm, which corresponds to the transition between sand and silt. Temper particles are inclusions deliberately added to the clay to diminish the plasticity. Impasto vessels are usually handmade, with smoothed or polished surfaces, sometimes with incised or impressed decoration, fired at medium temperature. The color varies from black to brown to red. It has a good thermal shock resistance, but a low resistance to mechanical shock. This definition is based on Norma UNI (Ente Italiano di Normazione), UNI 10739, 1998, Beni Culturali – Tecnologia ceramica – Termini e definizioni.

¹² "As many areas are not regularly ploughed, which would continually bring new materials to the surface, the surface ceramics tend to be small and eroded, and identifiable only by their fabric; chronological precision is therefore hampered, especially for prehistoric periods. This sparseness of surface finds probably reflects both a genuine sparseness of settlement in some periods and the destruction or masking ancient land surfaces through pervasive erosion and alluviation." Foxhall *et al.* 2007, p. 21.

¹³ Cambi 2011, pp. 212-213.

¹⁴ For method and terminology see Horejs *et al.* 2010, pp. 20-22.

¹⁵ Ritchie, MacNeish 1949, p. 98.

¹⁶ Footnote 14, Chapter 1.

- Grouping vessels based on measurements (high/diameter of the various parts of vessels and envelope method),¹⁷
- Grouping based on production techniques (handmade pottery, wheel turned pottery and other techniques).

The combination of this information led to group types based on similarity.

Similarity has been established starting from the whole assemblage, dividing it into smaller groups (therefore applying a *cluster analysis*), taking into account similar characteristics of vessels and at the same time distinguishing differences among them.

Whatever method chosen, the final result nonetheless implies a subjective interpretation. Indeed, before analysing a ceramic assemblage, the archaeologist has to figure out in his mind an overview of wide groups of assemblages. It has to be expected that an assemblage can include all possible ceramics from the Neolithic onwards. In order to do that, the archaeologist has to have a general knowledge of pottery classes through time. In other words, in order to distinguish a group it is necessary to have an idea of all groups. This pre-selection of identifying wide groups is fundamental to evaluate the development of the analysis. Isolating macro-groups based on chronological periods is not possible if the background of the archaeologist is limited. The knowledge of pottery derives from experience, by looking, touching and associating materials to physical contexts and historical periods. It means that before looking at a sherd it is worth knowing where it comes from and which chronological range it has. This is possible only after studying history, geography and material cultures regarding more geographical areas, as knowing everything of only one area will result in a bordered analysis.

The process of sherd selection was followed by the identification of wares, by drawing each sherd, finding similarities or parallels, and defining their chronology and function. Drawings are not only useful for documentation but they contain also information about measurements and dimensions. They allow reconstructions of the vases to which the sherds belong, and they are made according to convention in order to allow researchers to read the sherds in the same way. Moreover, they are fundamental in finding parallels. This information cannot be provided by pictures, which provide a general view of the sherd, but do not include analytical information. Parallels provide data about the chronology and diffusion of types on small and/or wide scale. It is possible to find strict typological parallels and then to define the chronology of the sherd, but it is also possible to find parallels for a single sherd belonging to different, but consecutive periods. In the latter case, we are referring to long-term shapes that are in use over periods. A more profound analysis implies a more restricted selection that in turn leads to isolate fewer parallels and thus lesser periods. Strict parallels show that analogous sherds were located and used in a certain place in a defined period of time. The parallels are published materials from excavations, i.e. from stratigraphic layers. The finds from stratigraphy constitute the reference collection used to define the survey pottery finds. Surface finds should not be used as a source of parallels, rather as reference for excavation finds. Surface finds can thus help to find the correspondent exemplar from the stratigraphic layer to which it belongs. In addition, tomb assemblages, preferably radiocarbon dated, also constitute a source of parallels.

Let us suppose to find a type of jar similar to another jar from the X-settlement in the Y-region. How we can establish this parallel? Because the two jars are similar in:

- Decoration,
- Profile and shape,
- Measurements,
- Clay composition,
- Manufacturing.

It is not necessary that the characteristics of the settlement for comparison are completely applicable to the context from which our sherd comes from, but this link allows us to hypothesize that the material culture can reflect a certain settlement use and not, for instance, a funerary use. Then we do the same considerations for the other sherds in our assemblage, and if all the sherds or the majority of them seem to have same

¹⁷ Orton 1987, pp. 33-35.

characteristics, we can be more confident that we are dealing with a certain type of settlement and not with a necropolis. Of course we know already what kind of pottery we can expect from tombs, but we also know that there are same types of vessels found both in tombs and dwellings. Indeed we cannot be sure about our considerations yet. Our hypothesis can be ultimately confirmed by knowing systematically excavated contexts.

A further way of classifying the pottery sherds is typology, meant as a structured representation of types considered as reference collection. Sometimes existing typologies do not suffice on account of the specific characteristic(s) of one's own material and this requires the extension or establishment of a new typological framework. In fact, on the one hand, referencing previously accepted typologies allows a better understanding and a better comparison with already published finds. On the other hand, a typological classification could aim at identifying functional types or it could be strictly confined to morphological characteristics. While functional types imply an understanding of ancient habits that rarely emerge from the analysis of survey material, purely morphological types may classify vessels in a way that is actually quite far removed from ancient reality.¹⁸ Moreover, survey materials, representing the surface evidence of what there is below the ground, out of stratigraphic contexts and only defined based on previous typologies, would not provide a very robust typology. For these reasons, I will avoid making typologies of survey materials. Instead, I will catalogue the diagnostic sherds, quantify and describe the non-diagnostic ones, and underline the presence of those exemplars that provide specific information regarding chronology, cultural contacts, function and additional data to existing typologies. For instance, if in a site 99 Bronze Age sherds and one Neolithic sherd are found, I would emphasize the presence of the latter one, as indicating further chronological development; among an assemblage of storage vessels, a fine impasto bowl would indicate a different function. Particular types, relating to specific parallels, rare or related to specific functions, will be emphasized. Assemblages from different sites will be compared. Rather than make a typology, I will form hypotheses in order to explain the presence of the sherds and all the implications it has. A classification of the sites based on the materials will lead to the identification of cultural phases, which will define the distribution of material cultures in different periods within the research area and other areas. In other words, the diagnostic finds will be used to contextualize the data we have, namely survey materials, in space and time. The diagnostic materials coming from the sites identified in the territory of the municipalities of San Lorenzo Bellizzi, Francavilla Marittima, Civita, Cerchiara di Calabria and Frascineto are diachronically analyzed based on available typological comparisons and they are accompanied by catalogues and tables.¹⁹ In the following sections, the sites are described based on clusters that refer to their administrative territory. Each will be introduced with a brief topographic description and relevant bibliographical references. The description of poly-phase sites is concluded with graphs summarizing the sites' chronological trend that was determined based on the typological analysis of the pottery.

2.1 RAP sites in the territory of San Lorenzo Bellizzi

*San Lorenzo Bellizzi*²⁰ (S. Lorenzo) is a small village in Northern Calabria located at an altitude of 830 m a.s.l.,²¹ and its territory²² covers an area of 39.03 km² (Fig. 5, indicated in white). Within the north-western sector of its territory, 23 proto-historical sites were found by the Raganello Archaeological Project (RAP) so far. All of the sites with diagnostic pottery date between the Middle and the Recent Bronze Age (MBA-RBA). As shown below, only a few sherds were assigned to the end of the Early Bronze Age (EBA) and a single Neolithic sherd was found at the site of Pietra Sant'Angelo. Regarding pottery from later periods, two Final

¹⁸ Horejs *et al.* 2010, p. 10.

¹⁹ Fragments in Plates in scale 1:2 if not differently specified. Tables of diagnostic finds will contain sherd label, number of Plate, sherd drawing (scale 1:4), relative chronology, parallel drawing (in scale, if not differently specified) with references. Catalogue numbers correspond to the sequential number in Tables and Plates.

²⁰ First mentions about archaeological finds at San Lorenzo Bellizzi in De Santis 1960, p. 52, p. 57 and note 1.

²¹ Coordinates 39° 53' 24,72" N, 16° 19' 51,96" E.

²² Altitude min 423 - max 1.652.

Bronze Age (FBA) fragments were found at Cudicino and one FBA sherd at Palmanocera. Contrary to the current settlement model in which the sites located in the mountain area are thought foremost to relate to Late Bronze Age (LBA) settlements,²³ these new ceramic data indicate that protohistorical sites located in the mountain area occurred earlier than the LBA. This means that the diagnostic sherds acquired by the RAP offer a new reading of the settlement dynamics in the Sibaritide in Northern Calabria. Protohistoric sites found so far in the territory of S. Lorenzo can be divided into three cluster-areas (Fig. 6). The first cluster, southeast of S. Lorenzo, consists of seven sites. Three of these sites are located along the main road leading to Cerchiara, at **Pietra Sant'Angelo**,²⁴ about 2 kilometers South of S. Lorenzo. Nearby these two sites, there are two more sites: **Grotta del Banco di Ferro**²⁵ and **Grotta di Pietra Sant'Angelo IV**.²⁶ In 1988,²⁷ members of the "Sparviere" Speleological Group (SSG) identified *impasto* sherds, although non-diagnostic, at the site of **Grotta di Zivilella**,²⁸ Northwest of Grotta di Pietra Sant'Angelo IV. In 2010, a Bronze Age site was found at **Masseria Francomano (1)**,²⁹ West of Timpa Sant'Angelo by GIA researcher Wieke de Neef. The second cluster is in the northernmost part of the Timpa di San Lorenzo, Northwest of S. Lorenzo. The cluster comprises two sites at **Trizzone della Scala**,³⁰ at 1440 m a.s.l. The third cluster-area is located West of S. Lorenzo. North of the exit of the Raganello gorge, the site of **Mandroni di Maddalena**³¹ is found; it is located on at least three terraces, covered by successive rock falls and colluviation from the adjacent slope of Timpa di San Lorenzo. In 2004,³² Antonio Larocca and a team of GIA researchers found a site at **Cudicino**,³³ located above Mandroni di Maddalena. Other protohistoric sites were found at **Palmanocera**,³⁴ **Grotta di Palmanocera**,³⁵ **Scala di Barile**,³⁶ **Masseria Armentano**,³⁷ **Fonte di Maddalena 1 and 5**,³⁸ **Fonte di Maddalena 2**,³⁹ **3**⁴⁰ and **4**,⁴¹ **Masseria Filardi**,⁴² **Masseria Francomano**.⁴³ In the following paragraphs, I will discuss the sites in which diagnostic pottery was found: in cluster 1, Pietra Sant'Angelo, Grotta del Banco di Ferro, and Grotta di Pietra S. Angelo IV; in cluster 2, the sites at Trizzone della Scala; in cluster 3, Mandroni di Maddalena and Cudicino.

²³ See Bettelli *et al.* 2004 and the relative bibliography.

²⁴ RAP site 121, RAP site 213 on slope just below 121, and 214 in valley below 121.

²⁵ RAP site 118. Catasto Grotte di Calabria Cb 2010, 42; CbCS42 in Catasto Speleologico della Calabria (Orofino 1965).

²⁶ RAP site 119. Cb 2010, 83; the first name of this cave was Grotta di Camilla (in Fig. 6 the latter is still used). See Angiò 1979.

²⁷ On July 22th.

²⁸ RAP site 227.

²⁹ RAP site 223, C.da S. Venere; GIA surveyors visited the site again on September 2nd, 2011.

³⁰ RAP site 128 a-b.

³¹ RAP site 130 a-b.

³² On October 15th.

³³ RAP site 152.

³⁴ RAP site 218 - Palmanocera versante Est. Few non diagnostic *impasto* sherds were found on 16-9-2009.

³⁵ RAP site 126, site found by Larocca in October 1998; 1 *impasto* fragment (GdP-98-1) datable to the FBA was found.

³⁶ RAP site 163.

³⁷ RAP site 167/49-29-30.

³⁸ RAP site 72-73. At Fonte di Maddalena 5, in addition to 5 *impasto* sherds, a fragment of a Late Bronze Age dolium was found.

³⁹ RAP site 173 a-f. The site was intensively surveyed on 24-10-2006 by a GIA team.

⁴⁰ RAP site 174.

⁴¹ RAP site 175.

⁴² RAP site 177.

⁴³ RAP site 212 found at Contrada Maddalena on 29-10-2008.

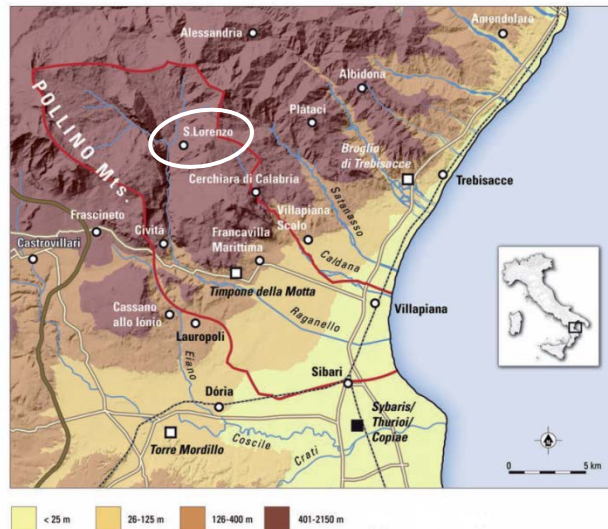


Fig. 5. The RAP study-area (outlined in red), in Northeastern Calabria, Italy (after Attema *et alii*, 2010).

2.1.1 Pietra Sant'Angelo (Sherds Plates XIV-XVII)

RAP researchers surveyed Pietra Sant'Angelo (Timpa Sant'Angelo in Fig. 6, right corner; Fig. 7) for the first time in 2005. According to Peter Attema's 2005 field report, proto-historical sherds had been reported by Antonio Larocca on a debris cone below the rock face of Pietra S. Angelo by the speleologists Lorenzo Larocca and Chiara Levato in 2005.⁴⁴

Attema also stated that archaeological materials, namely sherds, bone fragments and lithic tools (Pl. 17.a-d), were found both in man-made sections and on the surface of the debris cone and that part of the material should have come from the caves that are known to exist in the rock face, like the cave of Banco di Ferro and others. He also reported that many sherds were found on the lower plateau below and beside the debris cone. He concluded that an open settlement may have extended over various terraces leading into the valley.

⁴⁴ On Sunday 16 October.

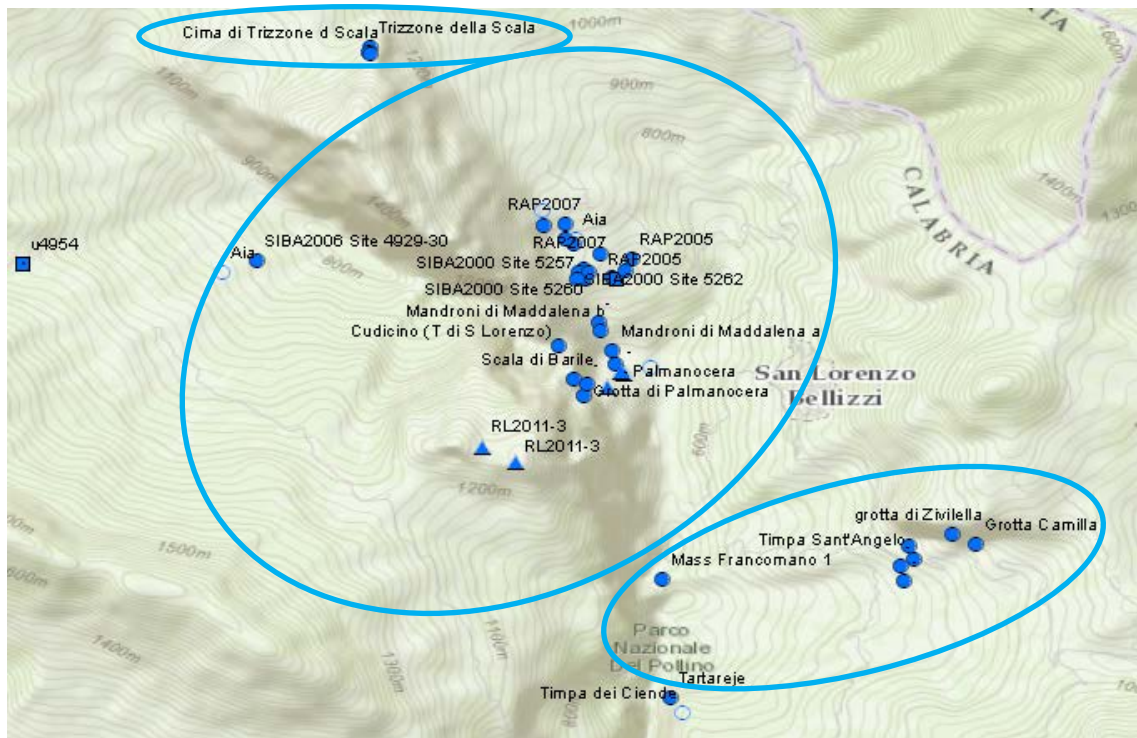


Fig. 6. Protohistoric sites in the territory of S. Lorenzo Bellizzi (GIA map-GIS).

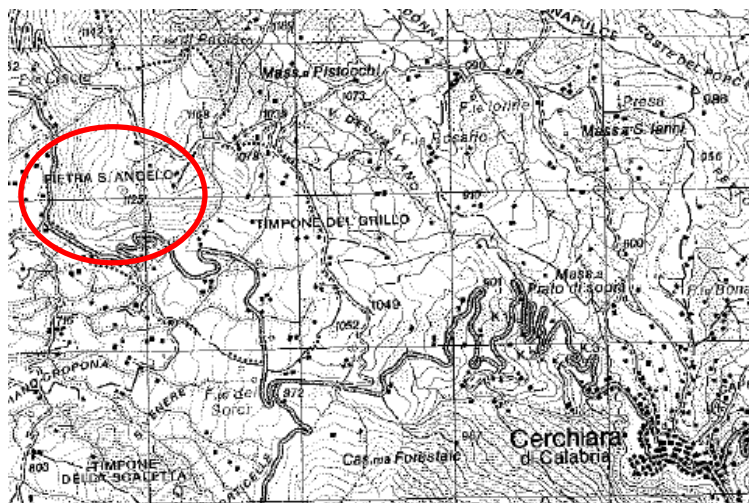


Fig. 7. Pietra S. Angelo, after Carta d'Italia 1:50000, F. IGM 535-Trebisacce.

The diagnostic pottery samples collected by Attema and Antonio Larocca in 2005⁴⁵ at Timpa S. Angelo, right of Grotta delle Volpi,⁴⁶ date between the end of the Early Bronze Age and the Recent Bronze Age (Tab. 2). In 2006,⁴⁷ Peter Attema, Sander Tiebackx, Tymon de Haas and Jan Delvigne⁴⁸ surveyed the site of S. Angelo⁴⁹ again. The 2006 diagnostic sherds, similar to the sherds collected in 2005, date between the end of

⁴⁵ On October 18-19.th

⁴⁶ Larocca 1986.

⁴⁷ On Thursday 12 October.

⁴⁸ In July 2014, Jan Delvigne passed away. I never met him but I take the opportunity to thank him for the geological and archaeological data he provided.

the Early Bronze Age and the end of the Recent Bronze Age (Tab. 3). It is interesting to note the presence of EBA2 and EBA2-MBA1 sherds, as these phases are poorly attested in the Sibaritide and not at all attested in its hinterland so far. Moreover, the EBA2-MBA1 sherds in Tab. 2 (sherds 147, 149) find parallels in cave sites, namely Grotta del Pino di Sassano⁵⁰ and Belverde di Cetona.⁵¹ Also a MBA1-2 bowl (Tab. 3.158) is comparable to a bowl from a cave.⁵² It is likely that at least some of the sherds found at Timpa S. Angelo were originally located inside of the cave called Grotta delle Volpi or in the partly collapsed caves in the rock face. Biggelaar. Later that year, Site 213, on a slope just below the main site Pietra Sant' Angelo 121, and site Pietra Sant' Angelo 214 in the valley below site 121 were recorded. In 2013, I visited the site with Martijn Van Leusen, Antonio Larocca, and the archaeologists Carmelo Colelli and Maria Veneziano, and later that season with Jan Sevink, geologist, and his assistant Michael den Haan, Martijn Van Leusen, Wieke De Neef, Kayt Armstrong and some GIA students (Fig. 8).

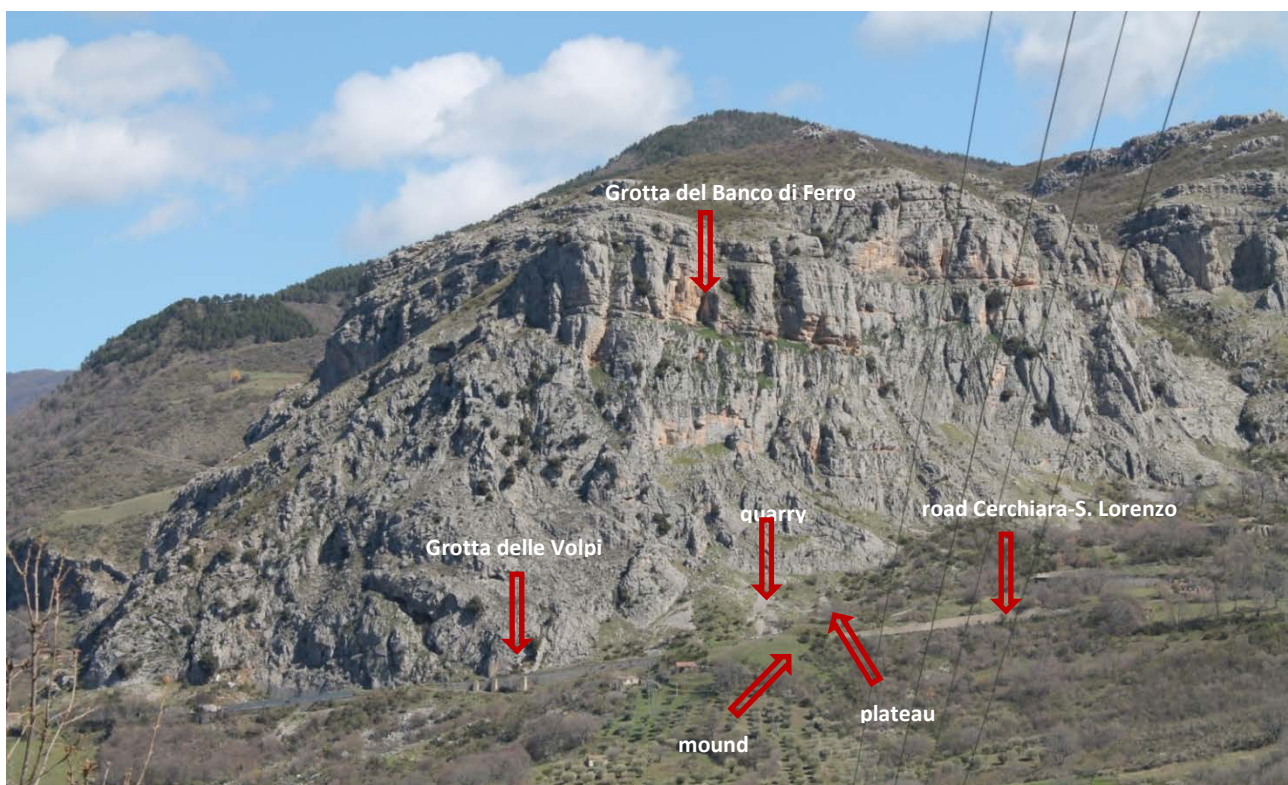


Fig. 8 Timpa Sant' Angelo, South-Western side (picture F. Ippolito 2013).

In 2008, I visited the site for an initial survey with Peter Attema, Martijn Van Leusen, and Don van Den In both field seasons, my goal was to describe the site and its surroundings, in order to localize the areas where the sherds came from that were collected in the previous campaigns. While studying the GIA documentation, I found that the geomorphology and soil of the area of Pietra Sant' Angelo had been described by Delvigne in 2006.⁵³ According to Delvigne, the debris cone, on which many pottery sherds were found, is at the base of a

⁴⁹ “Delvigne described geomorphology, Tiebackx, de Haas and Attema made a terrain model of the site using a Total Station operated by Tiebackx. Attema and de Haas collected pottery samples. Delvigne and Attema cleaned and sketched part of the exposure present in the cave and identified an archaeological layer with potsherds, charcoal specks and bone fragments. On Saturday 14 October Wieke de Neef and her survey team checked the exposure for bone fragments, collecting several bones from the exposure to be used for radiocarbon dating” (report Attema).




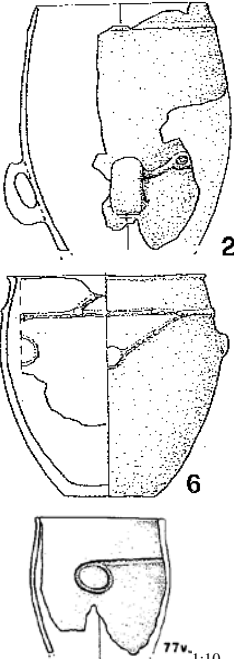


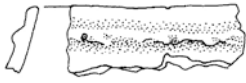
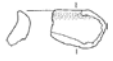

⁵⁰ Piperno, Pellegrini 2000-2001, Tav. F.3.

⁵¹ Cocchi Genick 2002, Fig. 20.77v.

⁵² Cocchi Genick 1995, Fig. 66, Tipo 209, Varr. A-b, (Serre di Pisticci, Grotta Bella).

⁵³ On October 14.

large limestone cliff, almost completely vertical and about 200 m high, which has several cracks and cavities that divert any collapsing stones directly on top of the debris cone. The cliff shows a fault contact between the *Formazione del Saraceno* made of compact limestone and the *Flysch del Frido* (flysch). The face of the cliff is then open to the South. The base of the debris cone is almost at the level of the road where the relatively steep limestone slope merges into the less steep and sloped flysch deposits.

Sherd	Drawing (1:4)	Date	Parallel
147 Pl. XIV		EBA2-MBA1	 1:8 Piperno, Pellegrini 2000-2001, Tav. F.3, Grotta del Pino di Sassano (SA), surface find
149 Pl. XIV		EBA2-MBA1	 2 6 77v-1:10 Cocchi Genick 1999a, Fig. 6.2.6 (Central Italy), BA2; Cocchi Genick 2002, Fig. 20.77v., BM1A (Grotta di Belverde di Cetona, Siena)
146 Pl. XIV		MBA2	 1:6 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Tav. 7.9, Sett. B Ovest, livello 3 A  Cinquelpalmi, Radina 1998, 5.027, Bari, S. Maria del Buon Consiglio, Capanna del Protoappenninico, D II Sud
178 Pl. XVI		RBA	 1:6 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Tav. 47.28, Sett. D. Ovest, liv. 2B

Tab. 2. Pottery from S. Angelo, right of Grotta delle Volpi, survey 2005.

Sherd	Drawing (1:4)	Date	Parallel
144	Pl. XIV 	EBA2	 Marino 2000, fig. 6.2, Saggio 4C, Taglio 4, Capo Piccolo (KR)
155	Pl. XV 	MBA2-3	 Trucco, Vagnetti 2001, Tipo 24, Torre Mordillo, Cassano allo Jonio (CS)
156	Pl. XV 	BM2-3	 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Forma 92A, ex. Tav. 23.15 dal Sett. E, liv. S
158	Pl. XV 	MBA1-2	 Cocchi Genick 1995, Fig. 66, Tipo 209, Varr. A-b, (Serre di Pisticci, Grotta Bella)
160	Pl. XV 	MBA3	 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Sett E, Strato 2
164	Pl. XV 	MBA3	 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Forma 78A
172	Pl. XVI 	MBA3	 Bernabò Brea, Cavalier, 1980, Tav. CCXIV fig. 5.7, Lipari, Acropoli, AH14 (see also Peroni 1994, p. 129).

Tab. 3. Pottery from S. Angelo, survey 2006.

Later in his report, Delvigne described a small quarry in the eastern side of the cone and he observed that instead of the eastern side of the cone continuing to the road, it rested on a near level plateau about 10 m above the level of the road.⁵⁴

⁵⁴ Delvigne provided also the description of the soil profile below the plateau above the quarry, about 4 m from the front of the debris cone:

“0-5 cm (layer 1) 10 YR 3/2 clayey grit in coarse gravel typical 2-10 cm, carbonate-rich, crumbly structure amidst plant roots,

It was difficult for both Delvigne and me to determine if and how far the plateau continued into the debris cone, but based on my reassessment of the position of the *in situ* pottery, I believe that the plateau continues, and as a consequence, the probability for *in situ* finds since the settlement continues further into the debris cone. In his report, Delvigne examined the composition of the debris cone, as the presence of shales and limestone rocks appears to be a strange combination.⁵⁵ He observed that the same rocks components were at Timpa del Castello (Francavilla Marittima) and at Maddalena site (S. Lorenzo) and concluded that:

“As hard limestone rock at these places is in fault contact with shale-containing rock, shales have acted as lubricant along the fault and will have been pressed into cracks in the limestone. After uplift and erosion, this shale becomes part of the debris at the foot of the steep slope”.

Another important feature of the site is a small mound opposite the debris cone at the southern side of the road (Fig. 9).



Fig. 9. Sant'Angelo site, view from the limestone cliff, North-East of the road Cerchiara-S. Lorenzo (picture F. Ippolito, 2013).

5-35 cm (layer 2) 10 YR 4/2 clayey sand in between gravel typical 2-5 cm, some larger, carbonate-rich

35-46 cm (layer 3) 10 YR 3/1 clayey grit, some gravel and stones, rather compact, carbonate-rich. Containing pottery sherds, charcoal specks, bone fragments,

46-90 cm (layer 4) 10 YR 3/2 sandy loam in between gravel typical 2-3 cm, carbonate-rich. Brown pocket 7.5 YR 4/4, mottles dark grey, clayey grit, carbonate-rich.”

⁵⁵“At first glance, the debris cone seems to be built up exclusively out of blocks and stones of light grey limestone. At closer inspection [...], unexpected components were found. [...] large block of marl was found, breaking easily into small, elongated pieces. [...] from the quarry floor a zone of 6 m wide and 3 m high of olive green and dark grey small, platy fragments of stone could be seen, just below the top of the back wall of the quarry. Probably these are shales. The origin of the two blocks must have been the steep cliff”.

Delvigne called into question whether the mound is in situ, and suggested that it may be a dump of topsoil removed from the quarry or removed for road building. In contrast to this interpretation, I believe that the mound constitutes the final section of the plateau where the debris cone ends, as the plateau is cut by the road. At the foot of the steep slope, west of the quarry, the nearly horizontal plateau makes up the remains of the edges at the foot of the cliff. The quarry damaged the archaeological site located at the base of the rock face, which is currently set directly on the road. The road that crosses the edges of the site shows, in addition to the section of the plateau about 10 m above the road level, low sections and reveals a thin deposit of soil at the West side of the quarry. I have deduced from these observations that this indicates that there is a suitable area for settlement in the area directly in front of the base of the rock face. In this sense, the settlement would have been exposed to the South and, therefore, wind-proof. In addition, no archaeological evidence has been found at the steep slope south of the road in front of the West side of the quarry.

Considering that the caves are set into the nearby rock-face, I can assume that they were part of a settlement area composed of open and cave sites, involving different, but connected use. The contemporary use of cave and open area is based on the pottery finds from both the cave and the open site along the road, since they have the same chronological range, namely from the very beginning of the Middle Bronze Age to the beginning of the Recent Bronze Age.⁵⁶ This implies that this area was settled for a relatively long period within the Bronze Age. There is, however, evidence indicating that previous settlement may have taken place in the area; in 2012, Antonio Larocca and Colelli found an *impasto* wall fragment decorated with notched impressions on the small plateau at the East of the quarry, dating to the Neolithic period (Plate XIII.371). This sherd represents a distinct example of Neolithic impressed pottery (late phase, from the second phase of the Early Neolithic until the Middle Neolithic, circa 5th millennium BC) and constitutes the only evidence attesting to a Neolithic frequentation in the RAP survey area thus-far. This find is significant as there is limited evidence for Neolithic settlements in the whole Sibaritide region, where Neolithic evidence is confirmed only at a few cave and open air sites.⁵⁷ Moreover, Early Neolithic impressed pottery has been found at only one cave site, namely Santo Iorio (Castrovillari). The sherd from Pietra S. Angelo comes from the Western area of the small plateau. The area was cleaned by Sevink in 2013, being interested in observing the profile of the plateau looking over the quarry. He cleaned a section of the upper surface corresponding to the area where the Neolithic sherd was found by Larocca and Colelli in 2012. While cleaning the profile, Sevink found a layer of dark brown soil covering a layer containing many small bone fragments, charcoal and *impasto* pottery sherds. While quickly analyzing these *impasto* sherds, I noted they were very small and all belonged to the same bowl.⁵⁸ The bowl is small, slightly beaker shaped, with a straight rim and without decoration. Its internal and external surfaces are burnished, coral red, and very thin. The shape, although I saw only the upper part, seemed to be a slightly deep cylindrical bowl with a diameter of circa 7 cm and closely resembles a similar bowl found, for instance, at a Middle Neolithic tomb from the Northern Apulian village of Masseria Candelaro.⁵⁹ Therefore, I believe that these ceramics may potentially reveal a Neolithic frequentation or settlement at this site. Moreover, the presence of this bowl together with the imprinted sherd found at the surface, could indicate the presence of a Middle Neolithic site, rather than an Early Neolithic one,

⁵⁶ Two sherds, 144 (Tab. 3) and 149 (Tab. 2), dating respectively to the EBA2 and to the EBA2-MBA1, indicate the possibility to detect an older Bronze Age phase of frequentation of the site. However, since the evidence is not quantitatively substantial and the dating is based on typological elements which, in the case of sherd 149, attest at shapes in use between the end of the EBA and the beginning of the MBA, I would propose to date the settlement to a period starting from the beginning of the MBA. Further research could provide more data about a eventual EBA phase of the site.

⁵⁷ Section 1.2.

⁵⁸ From 2014 until now, the storeroom of Casabianca at Sibari has not been accessible because of structural failures. Therefore, materials recently collected and stored at Casabianca could not be studied yet. Besides the sherds of the bowl I mentioned, a second fragment, also dating to the Middle Neolithic, was found in June 2014 by GIA researcher W. de Neef during a revisit of the Timpa Sant'Angelo section. I thank her for the picture of the sherd. Considering the fine fabric and the decoration, I can attribute the sherd to the *facies* of Serra d'Alto and therefore to the Middle Neolithic. These Neolithic sherds from Timpa Sant'Angelo will be further studied as soon as the storeroom of Casabianca is accessible.

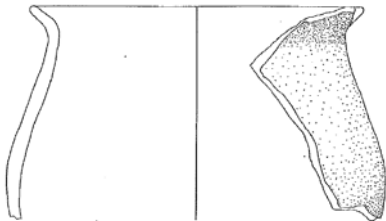

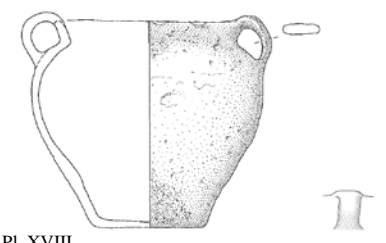
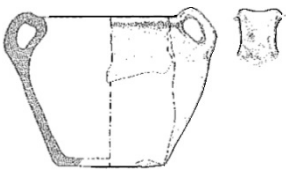
⁵⁹ Cassano, Manfredini 2004, Tav. VI.1.

and therefore the lasting of impressed pottery into a later context.⁶⁰ Investigations should be further pursued in future surveys.

2.1.2 Grotta del Banco di Ferro (Sherds Plate XVIII)

The SSG documented the first finds from the cave site of Grotta del Banco di Ferro in 1985.⁶¹ The cave of Banco di Ferro was already published in 1993 by G. Mieli⁶² and again in 1999 by Mieli and F. Trucco,⁶³ who date the frequentation of the cave between the EBA and the MBA3 (Figs. 10-11).

In 1998,⁶⁴ Antonio Larocca visited the site and collected 4 impasto sherds (among which 1 was diagnostic), and a complete pot (Tab. 4), all belonging to the MBA3. Though this pot was initially dated to the FBA-IA,⁶⁵ it was the only pot dated to this period. Therefore, it was necessary to re-evaluate this date based on the ceramics found in the same context. An identical pot to this exemplar was found, which was dated to the MBA3 (see parallel for sherd 194 in Tab. 4). Hence, I re-dated this pot to the MBA3 based on this typology.

Sherd	Drawing (1:4)	Date	Parallel
196	 Pl. XVIII	MBA3	 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Tipo 296, Fig. 39.1, Sett. D11, US 12/87
194	 Pl. XVIII	MBA3	 Cinquepalmi, Radina 1998, n. 8.054, Egnazia, Acropoli, Scavi 1965, Saggio A, parte inf., terreno del fondo della capanna 1, lato b, sett. Focolare c.

Tab. 4 Grotta del Banco di Ferro, finds collected in 1998.

I visited the cave together with Larocca, van Leusen, Colelli and Veneziano in 2013. The high and narrow entrance of the cave is located considerably high up into the rock face of Timpa Sant'Angelo, cutting into a light brown and black wall of limestone. The entrance is surrounded by thick vegetation. Because of the narrow opening, the interior of the cave receives little light. When entering the cave, the ground level is interrupted by a second level, rising about one meter higher than the ground level (indicated by the white arrow in Fig. 10), where there is a very narrow passage leading to an inner chamber within the cave. Sherds were found throughout the cave, and the complete MBA3 vase (Tab. 4.194) was found in a fracture in the wall within the inner chamber.

⁶⁰ See Saponara 2013, pp. 97-98.

⁶¹ The finds were brought to the Museum of Sibari.

⁶² Mieli 1993.

⁶³ Mieli, Trucco 1999.

⁶⁴ On September 9th

⁶⁵ Attema 2006, p. 526.

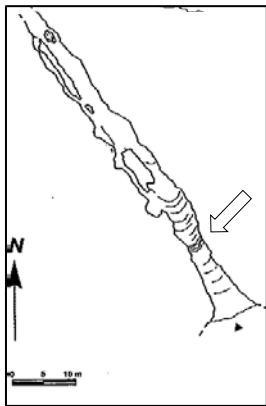


Fig. 10. Plan of the Cave Grotta del Banco di Ferro (after Mieli, Trucco 1999, Fig. 3, p. 228)

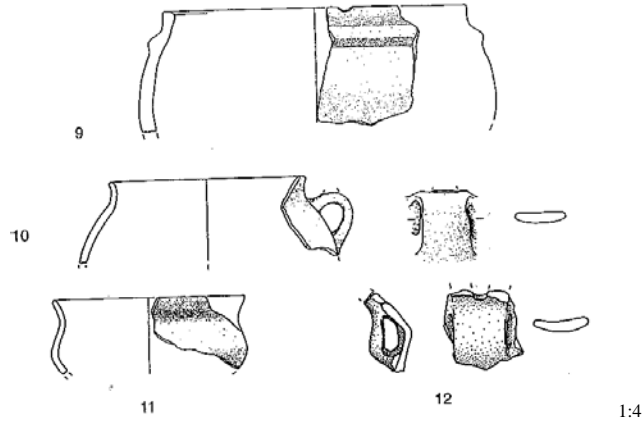

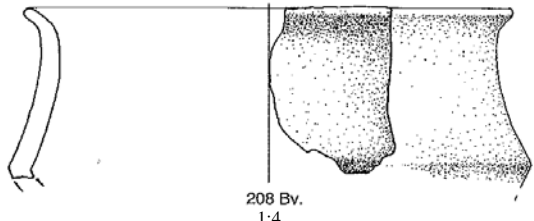
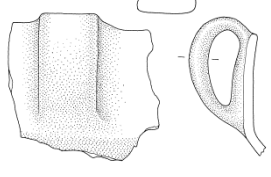
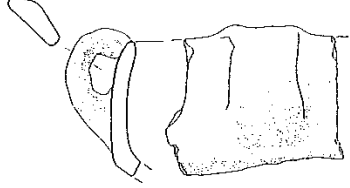


Fig. 11. Pottery from Grotta del Banco di Ferro (after Mieli, Trucco 1999, Fig. 7, p. 232)

2.1.3 Grotta di Pietra S. Angelo IV (Sherds Plate XXI)

This site was identified in the 1970's by members of the SSG in a small cave on the Eastern slope of Timpa Sant'Angelo, at 880 m a.s.l., along the road Cerchiara-San Lorenzo and Northwest of Grotta del Banco di Ferro. In 1998,⁶⁶ Antonio Larocca visited the cave and collected two sherds, one of them dated to the MBA2 (Tab. 5.191), while the other was non-diagnostic. In 2013, I visited the site with Larocca and de Neef. Sherd 191b was found, dating also to the MBA2, according to a similar specimen from Torre Mordillo (Tab. 5.191b). The cave dominates a cultivated area located beneath the road and is exposed to the South. The entrance of the cave is located in a limestone rock face not far from the road and circa 10 m from the road level. The floor of the cave is flat and sandy and it is not very deep (circa 20 m); its vault is triangular-shaped. Grotta di Pietra S. Angelo IV shows a similar chronology of frequentation as Grotta del Banco di Ferro.

Sherd	Drawing (1:4)	Date	Parallel
191		MBA2	 Cocchi Genick 1995, Tipo 208 Bv., Grotta dell'Infernetto, Ischia di Castro (VT)
191b		MBA2	 Trucco, Vagnetti 2001, Torre Mordillo, Spezzano A. (CS), Fig. 66.7, Type 55, Sett. D12, US 243

Tab. 5. Grotta di Pietra Sant'Angelo IV, S. Lorenzo Bellizzi.

⁶⁶ On September 9th

2.1.4 Trizzone della Scala (Sherds Plates XX-XXI)

In 2001,⁶⁷ Antonio Larocca identified a scatter of protohistoric sherds at the site of Trizzone della Scala (Colle della Conca). This site is located on a rocky spur at the edge of the northern ridge of the Timpa di San Lorenzo, at 1440 m asl. Below the top of this spur, there is a small plateau slightly sloping westwards, until the edge of a terrace.

In 2001,⁶⁸ Antonio Larocca, Patricia Roncoroni and Peter Attema visited the site and collected two MBA sherds (Tab. 7.231,232), in addition to other 24 non-diagnostic sherds, one daub fragment, and one retouched flake of flint.

Martijn Van Leusen, Tymon de Haas, Jorn Seubers, Antonio Larocca, Peter Attema, and Patricia Roncoroni⁶⁹ returned to survey the site in 2004⁷⁰ and collected four non-diagnostic sherds (TdS-04-1.2.3.4) and 64 small, worn and rounded impasto fragments from the top above the plateau southwards. The survey team sampled 5 small test pits, 4 on the small plateau below the rocky spur and 1 on top of the spur, where, under a thick vegetation, is a small concave area of soil (Fig. 12). The sequence in test pits T1-T5 shows the presence of archaeological finds as follows (Tab. 6).

Sample	0-15 cm	15-30 cm	30-50 cm
T1 35x100x50 cm	Humus Very small and rounded non diagnostic impasto fragments	Humic earth; soil samples, charcoal sample. Very small and rounded non diagnostic impasto fragments and one MBA sherd (234 in Tab. 6)	Yellow clay, vertical cracks
T2 100x80x60 cm	Very small and rounded non diagnostic impasto fragments and one MBA sherd (235)	Very small and rounded non diagnostic impasto fragments and one MBA sherd (236)	-
T3 100x35x15 cm	A few very small and rounded non diagnostic impasto fragments. T3 is about 50 cm higher than T1.	Yellow clay starts at 25 cm depth	-
T4 100x35 cm	Limestone cobbles. Very small and rounded non diagnostic impasto fragments and one MBA sherd (237)	A few very small and rounded non diagnostic impasto fragments and one MBA sherd (238)	-
T5 50x60x40 cm	Limestone cobble, black earth	-	Very small and rounded non diagnostic impasto fragments and one MBA sherd (241)

Tab. 6. Trizzone della Scala, T-samples: sequences and finds.

The MBA sherds found in the Test pits in Tab. 6 are described in Tab. 7. Based on the diagnostic sherds, Trizzone della Scala is a MBA site. The pottery, and moreover the daub fragments found both on the surface and in the test pits until a depth of 30 cm, indicate the presence of a settlement area. In 2013, during a survey I carried out with Larocca and van Leusen, we found, in addition to a few MBA impasto sherds, several daub fragments with twig impressions, related to habitation structures. Soil samples were collected. In contrast to the rocky area where the site is located, the upper soil layer in the flat area beneath the rocky spur, is very dark and humic until a depth of 30 cm, followed by a very deep layer of yellow and soft clay. The slightly sloping area would not be suitable for settlement use, but erosion processes could have disturbed the Bronze Age morphology of the area.

⁶⁷ On June 17th.

⁶⁸ On July 1st.

⁶⁹ Roncoroni recorded that the visibility was low.

⁷⁰ On October 10 and 14.

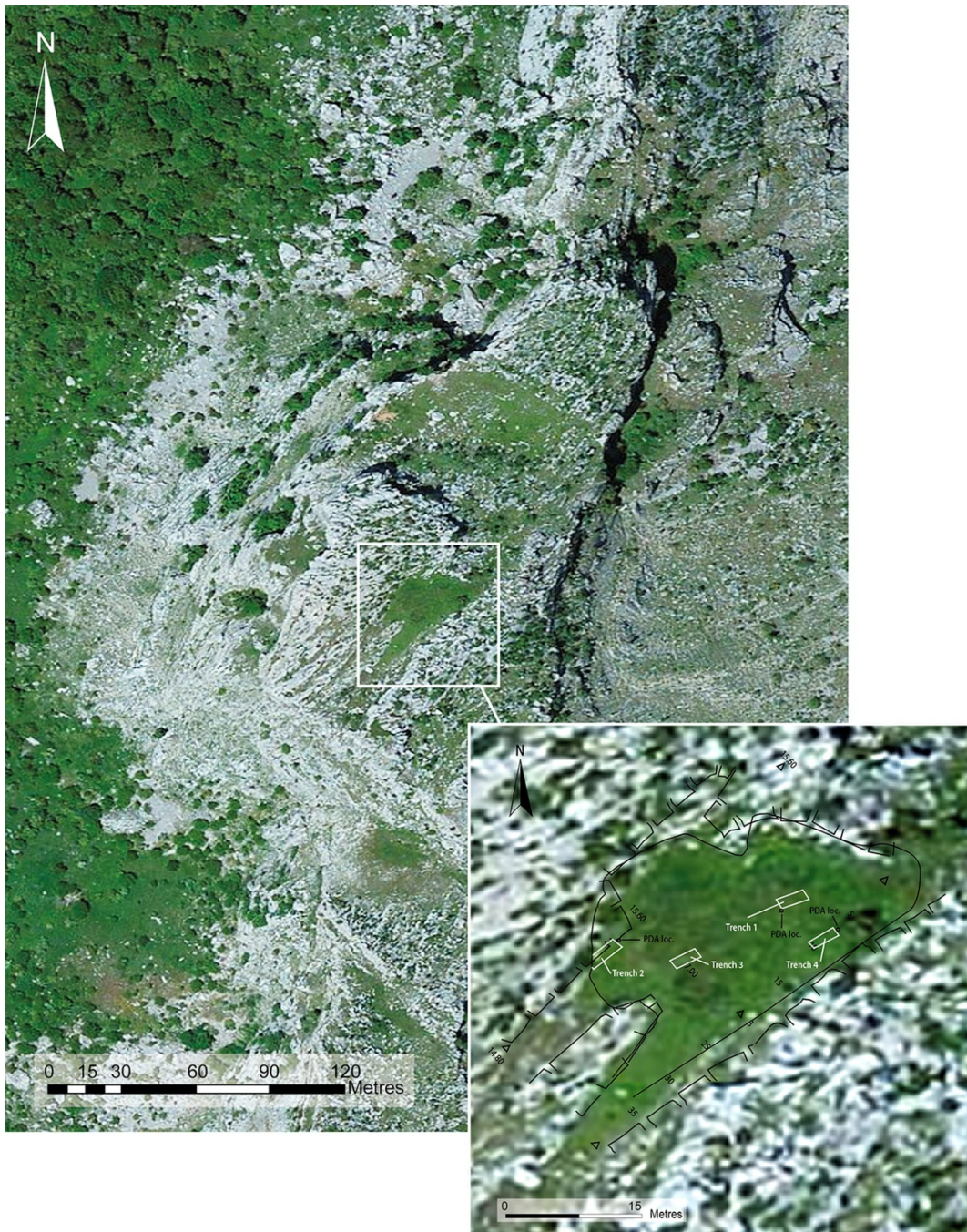









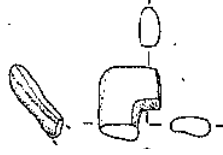
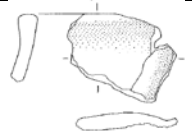


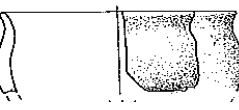




Fig. 12. Trizzone della Scala, Test pits T1-4, after Field Report GIA Siba 2003-5 D, RAP 2003-5, p. 34.⁷¹

The presence of pottery between a depth of 15 and 30 cm could be due to the accumulation of material from the south towards the slope located in the north of the site. In fact, many sherds were found along the slope at the end of the terrace. However, there are a few factors we need to take into consideration, which do not agree with the hypothesis of natural processes of accumulation of material on the flat plateau. When analyzing the

⁷¹ Thanks to W. Vletter, S. Boersma, and K. Armstrong for information about measurements.

non-diagnostic material, a fair quantity of very small rounded, worn *impasto grumi* was found. Usually, this type of evidence is linked to clay structures heat-treated with a sudden increase in temperature.

Sherd	Drawing (1:4)	Date	Parallel
231 Pl. XX		MBA2	 1:6 Peroni, Trucco 1994 I, Broglio di Trebisacce, Tav. 1.20, forma 40 a, Sett. B Ovest, livello 4a
232 Pl. XX		MBA3	 1:4 Cocchi Genick 1995, Tipo 543, Vivara, P.ta d'Alaca, str. Alpha, fondo
234 Pl. XX		MBA2	 1:6 Trucco, Vagnetti 2001, forma 331 A, Torre Mordillo, Cassano allo Jonio (CS)
235 Pl. XX		MBA2	 1:4 Peroni, Trucco 1994, Tav. 26.12, Forma 83, acropolis, sporadic find
236 Pl. XX		MBA3	 1:3 Peroni, Trucco 1994, Torre Mordillo, Tav. 146,9, Forma 106 da Broglio di Trebisacce, Sett. B Ovest, livello 3B, Taglio I, riq. Q
237 Pl. XX		MBA3	 1:10 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), forma 327, sett. D11-12, US 145
238 Pl. XX		MBA3	 1:6 Cocchi Genick 1995, Tipo 111, Petrella Tifernina
241 Pl. XXI		MBA3	 1:6 Peroni, Trucco 1994, tav. 3, 28, Forma 100, Broglio di Trebisacce (CS), sett. B ovest, livello 3B, taglio III

Tab. 7. Trizzone della Scala, finds from Test pits 1-5.

Consequently, the many, very small and reddish black fragments of daub found at Trizzone della Scala could be due to a catastrophic fire that led to the collapse of structures. Since the lack of stratigraphic investigations, I cannot confirm if the *grumi* were *in situ*. The alternative could be that the hut or huts were built directly on the rock located above the flat plateau, which is a very common way of building in the Bronze Age. We may hypothesize that a settlement consisting of daub huts was located on the top of the site, as a lot of medium-big daub fragments (not collected), have been found all around the top of the spur and along its western slope.

2.1.5 Mandroni di Maddalena (Plates XIX-XX)

The site of Mandroni di Maddalena⁷² is located along the Raganello River, at the base of the north-eastern slope of the Timpa di San Lorenzo. The site can be accessed by a footpath, originally a mule track, which continues over the Raganello River toward the Palmanocera hill. *Impasto* pottery was found on three terraces covered by rock fall and colluviation from the slope. These terraces, currently covered in rocks and vegetation, are very difficult to investigate, but the exposed terrace edge on the Raganello constitutes a wide flat area suitable for a settlement site. It is called Mandroni di Maddalena because of traces of dry stone enclosures, in the Lucanian dialect *mandroni*, which means “sheds for animals”. Several Bronze Age *impasto* sherds, although non-diagnostic, were found for the first time by Antonio Larocca in 1998 on the terrace overlooking the Raganello and between the river and the slope of Timpa di San Lorenzo. RAP researchers carried out four surveys in 2003, 2004, 2005, and 2006. The 2003 survey⁷³ led to the discovery of a Bronze Age settlement on the lower terraces near the entrance of the canyon of the Raganello.⁷⁴ In the preliminary report on the 2013 field campaign, van Leusen⁷⁵ described a circular structure, perhaps a domestic context, or “hut”, immediately adjacent to the exit of the upper gorge of the Raganello on the lower terrace and reported its coordinates.⁷⁶ In his 2003 field report, Attema provided information about the chronology of a section of the site, dating the site between the MBA and the FBA (between 1690-1000 BC). Among the sherds collected in 2003, I selected the following diagnostic sherds, which were worn but in a relatively good condition and with a burnish preserved. They originate from the Survey Units listed in Tab. 8.⁷⁷ The sherds in Table 8 confirm a date between the MBA and the RBA.

In 2005,⁷⁸ more pottery, contemporary with these periods, was collected from two more sections (sections 2 and 3), on the northern slope. The survey team wanted to assess the thickness of the black organic soil layer that is characteristic of the topsoil of the settlement terrace. Both Profile 2 and Profile 3 showed a thin layer of topsoil above a thick layer of black humic soil about ca. 50 cm deep with bone fragments, several sherds and charcoal specks. All of the sherds were non-diagnostic, with the exception of one sherd from Profile 3, shown in Tab. 9.

In 2007,⁷⁹ Antonio Larocca collected several *impasto* sherds along the mule track to the site of Mandroni di Maddalena.⁸⁰ Road construction works had disturbed the archaeological site. Among the sherds found in the removed soil, not rounded and not worn, I selected the diagnostic sherds listed in Tab. 10.

Radiocarbon dates and typological chronology confirm dating of the site to a period between the MBA and the LBA. Based on the pottery analysis, the last period of frequentation would be the end of the RBA. It is also

⁷² RAP site 130 a.

⁷³ The 2003 survey was done by Larocca, Attema, Van Leusen, Roncoroni and GIA students.

⁷⁴ In her field report, Roncoroni wrote that the visibility was low. She also wrote that “*the site is located on the foot of the eastern wall of the Timpa di S. Lorenzo, before Pietra di Rotaplano. The finds from the west site on the foot of the Timpa are very worn. The finds from the east side on the plateau are quite less worn. There had been a village. Carbon dating and bones date to the Middle Bronze Age*”.

⁷⁵ van Leusen 2013, p. 1.

⁷⁶ Site T130, 5423301 hut location, Van Leusen *et al.* forthcoming

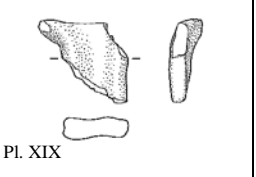
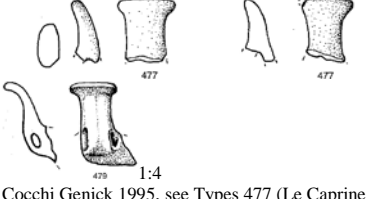
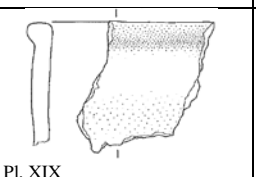
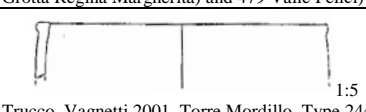


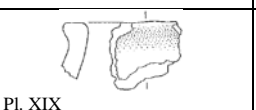
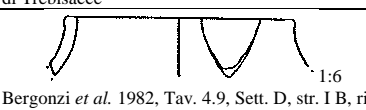
⁷⁷ Survey Units on and near the site of Mandroni di Maddalena comprised units 101-113 and units 4400-4442.

⁷⁸ On October 17.th

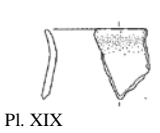

⁷⁹ On April 30.th

⁸⁰ In October 2008, a GIA team collected finds from the same area disturbed by bulldozers. Those finds are not part of my study material.

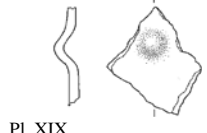

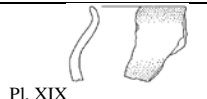
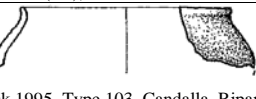
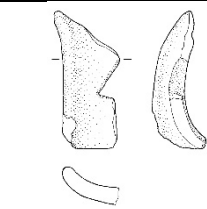
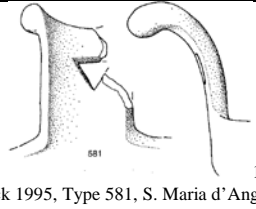
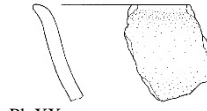
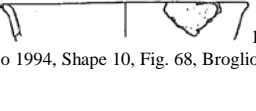
true that the majority of the sherds, due to them being very small, worn and rounded, and also non-diagnostic, constitutes a large bias in dating the material as a whole.

Unit	Sherd	Drawing (1:4)	Date	Parallel
4409	224	 Pl. XIX	MBA1-2	 Cocchi Genick 1995, see Types 477 (Le Caprine, Grotta Regina Margherita) and 479 Valle Felici)
4411	216	 Pl. XIX	RBA1-2 (?)	 Trucco, Vagnetti 2001, Torre Mordillo, Type 244 A, sett. D12, US 42
4412	210	 Pl. XIX	RBA1 (?)	 Peroni, Trucco 1994, Shape 3 B, Fig. 68, Broglio di Trebisacce
4440	212	 Pl. XIX	RBA1 (?)	 Bergonzi <i>et al.</i> 1982, Tav. 4.9, Sett. D, str. I B, riq. L, Broglio di Trebisacce

Tab. 8 Mandroni di Maddalena, diagnostic finds from the Survey Units.

Profile	Sherd	Drawing (1:4)	Date	Parallel (1:6)
3	205	 Pl. XIX	MBA1-2	 Cocchi Genick 1995, Type 183, Grotta del Fico, Foggia, U. 3

Tab. 9 Mandroni di Maddalena, diagnostic sherd from Profile 3.

Sherd	Drawing (1:4)	Date	Parallel (w.s)
199	 Pl. XIX	MBA2	 1:6 Trucco, Vagnetti 2001, Fig. 66.18, Torre Mordillo, Cassano allo Jonio (CS), US 245
206	 Pl. XIX	MBA2	 1:10 Cocchi Genick 1995, Type 103, Candalla, Riparo Grande
200	 Pl. XIX	MBA3	 1:4 Cocchi Genick 1995, Type 581, S. Maria d' Anglona, str. Preistorico
221	 Pl. XX	RBA2	 1:10 Peroni, Trucco 1994, Shape 10, Fig. 68, Broglio di Trebisacce (CS)

Tab. 10 Mandroni di Maddalena, diagnostic pottery collected in 2007.

However, in order to contextualize the finds, an additional factor has to be considered. Both the section profiles and the area between the small plateau and the path to access the site revealed the presence of *in situ* finds. The two latter locations are the only exposed areas, as the rest of the site area is covered by huge masses of rock debris, from the top to the foot of the huge dip slope. This leads us to the question: what is the origin of the rock mass and debris cone and, most of all, when where they deposited? It is likely that the mass of rock was formed by huge rock-slides as, above the rock mass, there is an enormous gap of thousands of cubic meters in the dip slope face of the mountain that must be accounted for. In 2006,⁸¹ Delvigne observed the particular character of the rock mass, concluding that it can be explained by outcrops of thin-bedded shales found at two places, one underlying the limestone rock mass and one to the side of the rock mass against the large limestone dip slope. He observed that both exposures appeared to be *in situ*. Since shale and weathered shale may have acted as sliding surface, stimulating rock flow at the foot of the dip slope, when rock flow stops, an irregular surface of stones is found. It is possible that fine material washing downslope is partly trapped, forming some terrace-like surface behind large rocks. A critical observation made by Delvigne, which contributes to answer my question about the collapse of the rock mass, is that no obvious gap is present in the large dip slope face above the mass of rocks indicating catastrophic rock slides. Consequently, based on the pottery finds and the radiocarbon dates, did the rock mass collapse in the LBA? According to Delvigne, the geological processes that indicate that quite some time has lapsed since the rock slide occurred are the incision of the Raganello River below the foot of the rock mass and the development of debris cones at its top. Moreover, Delvigne added that:

“The clay component of the soil material may be explained by the washing or falling down of weathered shale; it either originates from the residue of limestone dissolution, from wind-blown dust or from weathered shale that may have been left behind in cracks in the limestone rock. The dark color of the top soil is caused by high content of humic material. Little soil erosion, no plough, a shady environment and a high soil pH contribute to this situation.”

As both Profile 2 and Profile 3 showed, a black humic soil until a depth of circa 50 cm with bone fragments, charcoal and MBA-RBA2 sherds sits below a thin layer of topsoil. As a consequence, I believe that a substantial rock slide occurred before the Bronze Age settlement and that after this period no other rocks

⁸¹ On October 10.th

movements affected the site area at least until the LBA. The MBA-RBA settlement was located on the lower terraces on the river, extending eastwards, as the sherds collected in 2007 along the path prove. Although the toponym of the area, which indicates its recent pastoral use, may imply an older and similar use of the site area, the type of pottery found here does not agree with this assumption. In fact, we are not dealing with storage vessels of an *impasto* fabric with coarse texture and coarse surface, but with burnished or well-burnished surfaces of very thin walls belonging to small often decorated shapes, as most of the handles prove. Similar pottery has been found at most of the MBA RAP sites located towards the plain. As a consequence, I could infer that in this period these sites were part of a homogeneous cultural area the social and economic organization of which involved a wide territory characterized by a network of small settlements.

2.1.6 Cudicino (Sherds Plate XVIII)

Cudicino is a problematic archaeological area that the RAP team investigated, on the Timpa di S. Lorenzo, above Mandroni di Maddalena. It is a not homogeneous area with sparse protohistoric artefacts at the surface located on the limestone dip slope of the Timpa di San Lorenzo, where many ridges and cracks contain protohistoric pottery probably rolled down from the top or from the cracks themselves. It is possible that the quite small cracks were used as burial locations and this could explain the different chronology of the sherds. In 2004,⁸² Antonio Larocca and a GIA team surveyed the area and collected 20 sherds from 11 small flat ridges (Grab sample 1-11,⁸³ Tab. 11). Diagnostic sherds come from grab samples 1, 2, and 7 (Tab. 12).


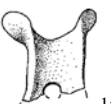


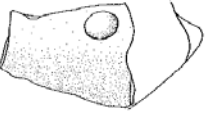
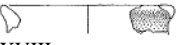
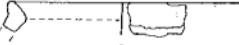
The limited information provided by the diagnostic sherds indicates two Bronze Age periods of frequentation, namely the MBA3 and the FBA. The MBA3 is confirmed at all the sites in the area of S. Lorenzo. The FBA is only represented in Cudicino grab samples 2 and 7. The possibility that these finds relate to tombs rather than to settlements would indicate a frequentation of the area concerning specific functions, in this case a sepulchral use, at the end of the Bronze Age. This hypothesis does not exclude the possibility to detect coeval settlements in the area (only one FBA sherd was found in a nearby cave at Palmanocera by Larocca, see section 2.1 and Tab. 56), even if the results of the RAP do not include FBA settlements in the Western and Southern parts of the territory of S. Lorenzo thusfar investigated.

GS 1	22 very small, round and worn impasto fragments, 4 sherds
GS 2	3 impasto sherds
GS3	13 very small, round and worn impasto fragments, 5 sherds
GS4	17 very small, round and worn impasto fragments, 2 sherds
GS5	31 very small, round and worn impasto fragments, 1 sherd
GS6	23 very small, round and worn impasto fragments, 2 sherds
GS7	17 very small, round and worn impasto fragments, 4 sherds
GS8	16 very small, round and worn coarse ware fragments,
GS10	16 very small, round and worn impasto fragments
GS11	1 very small, round and worn impasto fragment, 3 impasto sherds, 1 fragment of a Medieval handle.

Tab. 11 Cudicino. Grab samples.

⁸² On October 15.th

⁸³ Grab sample 9 is missing (1 Bronze Age axe-handle).

Grab sample	Sherd	Drawing (1:4)	Date	Parallel
1	227	 Pl. XVIII	MBA3	 1:4 Cocchi Genick 1995, Tipo 565, Scoglio del Tonno
2	228	 Pl. XVIII	FBA ?	  13 1:4 Peroni, Trucco 1994 I, Broglio di Trebisacce (CS), Tav. 110, 13, Sett. D. Nord, livello S
7	229	 Pl. XVIII	FBA1 ?	 8 1:4 Peroni, Trucco 1994 I, Broglio di Trebisacce (CS), Tav. 102, 8, forma 49 a, Sett. D Nord, strato 3

Tab. 12 Cudicino, diagnostic pottery.

However, if FBA settlements will be detected in the neighbouring areas, it will be possible to estimate the extension of their buffer area. Apparently, based on the sites found at Timpa Sant'Angelo, Maddalena, and Trizzone della Scala, FBA settlements are absent within a geodesic diameter of circa 10 km, a diameter tangential to the first and the latter sites areas. Further research would likely detect FBA sites beyond this area that is to say beyond a geodesic distance of circa 5 km from Cudicino. Considering the neighbour territory of Cerchiara, Southeast of S. Lorenzo, where only one site, Terra Masseta, attests at a frequentation in the FBA, it is also possible to say that Southeast of Cudicino toward Terra Masseta, within a geodesic distance of 8 km, there are no FBA sites. Consequently, FBA sites could be Northeast or West of Cudicino. The territory of Alessandria del Carretto (Fig. 1, North of San Lorenzo), where the SSG is based, is located Northeast of the territory of S. Lorenzo. The speleologists of the SSG never reported protohistorical finds from this territory.⁸⁴ Assuming that Protohistoric sites are not so evident in this area, the possibilities of finding FBA sites would be restricted to the West of Cudicino-Maddalena, beyond the canyon of the Raganello, where the River reaches the foothill of the Sibaritide. In fact, the RAP research carried out in that area, located around the town of Civita (Fig. 5, Southwest of San Lorenzo), resulted in locating several Late Bronze Age settlements, which will be discussed in the upcoming Chapter 2.3.

2.1.7 Overview of San Lorenzo sites

RAP research in the area of S. Lorenzo led to the discovery of a settlement pattern composed of MBA-RBA sites, with a few indications for potential Neo-Eneolithic and Early Bronze Age settlement phases. Such new evidence of Neolithic through RBA period ceramics constitutes the basis for a new reading of the Pre- and Proto-historical landscape in the Sibaritide region. Indeed, the hinterland sites near S. Lorenzo, being the furthest inland sites investigated thus far⁸⁵, add to the reconstruction of the settlement pattern in this region as

⁸⁴ Archaic and Roman sites were found in the territory of Alessandria del Carretto by Quilici and Gigli (Quilici, Quilici Gigli 2001, Sites 659-662, pp. 73-96).

⁸⁵ Actually, in order to map the valley of the Sinni River, in Basilicata, Quilici and Gigli surveyed the area between Basilicata and Calabria, Northwest of S. Lorenzo (Quilici, Quilici Gigli 2001, pp. 97-132). They found Bronze Age sites in the territory of Terranova del Pollino at Garavina (674), Grande Porta del Pollino (site 676), and westwards, in the territory of Viggianello, at Madonna del Pollino (site 677). Unfortunately, the Bronze Age chronology of these sites is not specified.

previous studies focused on sites concentrated around the hilly area near the plain.⁸⁶ Foothill sites East of S. Lorenzo, such as Broglio di Trebisacce and Amendolara, are long-term sites dated from the MBA to the EIA. These sites, which had been inhabited from the MBA through the RBA, were among a small number of sites that flourished during the FBA, as opposed to other smaller sites that were located in less strategic positions that disappeared before the FBA. The lack of diagnostic ceramic evidence from the FBA in the territory of S. Lorenzo confirms that there is a shift in settlement pattern before this period. In fact, comparing the chronological data derived from the pottery in the surrounding territories, it is possible to assume that the development of *large* FBA sites took place in the areas towards the plain. In the meantime, it is possible to observe that some FBA hinterland sites are located where the Raganello River reaches the plain, as the RAP sites near Civita demonstrate. A further factor I considered concerned the reasons why the S. Lorenzo sites ceased to be inhabited at the end of the RBA. Based on the pottery analysis, the hinterland sites near S. Lorenzo reveal that settlements currently dated to the MBA-RBA were more likely to be originally inhabited before the MBA, developed and grew in population and size during the MBA, and then were deserted at the end of the RBA. Considering the geological background of some of the S. Lorenzo sites, it seems that they were not deserted because of changes in the surrounding environment, but for reasons related to the reorganization in social structure. According to Marco Pacciarelli,⁸⁷ between the MBA and the RBA, several social and economic factors led to a change in the settlement organization. Among these, there was a substantial development of craft and trade as well as agricultural intensification, a process of social stratification, a growing importance of a warrior class, and a tendency to expand settlements and their territories. The effects of these factors upon these social groups at first, in the MBA-RBA, were gradual, but then accelerated and led to a radical change in social organization between the FBA and the EIA. Based on his research on the Promontory of Tropea, in South Calabria, Pacciarelli demonstrated that the MBA settlement pattern, in which a few big sites controlled smaller sites in a territory about 10 sq. km, was replaced in the RBA by a settlement pattern organized in wider territories, spanning hundreds of square kilometres. In other words, by the LBA, small territorial communities had become wide territorial districts. Sites such as Timpa Sant'Angelo and Maddalena in the territory of S. Lorenzo would fit within the MBA settlement pattern illustrated by Pacciarelli. Moreover, I believe it is possible that such a network of MBA sites covering about 10 sq. km would imply that all the sites in the territory of S. Lorenzo were part of one settlement system. This settlement system would help explain the homogeneous chronology and ceramics from the San Lorenzo sites. During the MBA-RBA, from the foothill until the mountain area, the Sibaritide became covered by a settlement network, which could exchange goods from the coastal area to the hinterland and vice versa. At the end of the RBA, specifically RBA2 in reference to the ceramic evidence, the social and economic changes mentioned by Pacciarelli also took place in this region. The S. Lorenzo sites show that the hinterland of the Sibaritide was not involved in this process and that in the LBA it became a peripheral area of the Sibaritide. I believe that the hinterland continued to be economically considered as a source of raw materials, but ceased to exist as a settlement area from what we can infer based on the current archaeological evidence.

2.2 RAP sites in the territory of Francavilla Marittima

The archaeological record of Francavilla Marittima⁸⁸ (Figs. 13-15) reflects the general picture that arises from archaeological research at the larger sites in the foothills of the Sibaritide, as found in the stratigraphy of Broglio di Trebisacce and Torre Mordillo.⁸⁹ This would confirm current ideas on settlement evolution that would have started in the MBA2 (see chapter 1.5). Moreover it likewise holds but extremely faint attestations from before the MBA2, limited to some Neo-Eneolithic finds acquired in the course of the RAP surveys at Macchiabate,⁹⁰ Pietra Catania and Grotta del Caprio.⁹¹

⁸⁶ Peroni 1994, Levi *et al.* 1999.

⁸⁷ Pacciarelli 2010, pp. 371-416.

⁸⁸ 39° 49' 1" N, 16° 23' 44" E; 273 m above sea level. For the first studies in Francavilla, see De Santis 1960, pp. 43-46, 52-53, 55-57.

⁸⁹ Peroni, Trucco 1994; Trucco, Vagnetti 2001.

⁹⁰ North of Macchiabate. Macchiabate and Pietra Catania are mentioned in regard of the Necropoli of the Iron Age of Macchiabate in Peroni, Trucco 1994, p. 669.

- RAP sites near Francavilla Marittima dating before the Middle Bronze Age 2

Nine sites⁹² dating before the MBA2 were found by the RAP surveys in 2002. North of Macchiabate, two MBA1-3 sites⁹³ were found, attesting, though weakly, to a frequentation of the area from the first phase of the MBA. At Pietra Catania, Southwest of Francavilla, three sites presumably dating to the Early Bronze Age⁹⁴ were found, and lithic tools were collected at three other sites;⁹⁵ at this location, in addition to a flint burin, three obsidian tools were found which date to the Neolithic period, as suggested by similar specimens.⁹⁶ Two other sites near Francavilla attest to a weak frequentation of the area before the MBA2: they are Timpa del Castello,⁹⁷ and Timpone della Motta,⁹⁸ two long term sites which will be discussed below. In summary, twelve sites in the RAP sector coinciding with the territory of Francavilla Marittima provided evidence dating from the Neolithic to the MBA2:

- **Neolithic** finds were found at four sites from one of which comes one Final Neolithic-Eneolithic find
- At the only cave site so far investigated (Grotta del Caprio), **Eneolithic** pottery was found while scarce Eneolithic evidence is attested at one open air site only
- At four sites **Early Bronze Age** pottery was collected
- Pottery dating to the **beginning of the Middle Bronze Age** (MBA1) was found at four sites
- Two sites are **Middle Bronze Age** sites, dating from the MBA1 until the MBA3
- Of twelve sites, one is a **cave site** and eleven are **open air sites**
- Only two sites are **long term sites**, dating from the EBA/MBA1 until the end of the Early Iron Age or the Iron Age
- Eight sites are **mono-phase sites** including the cave site of Grotta del Caprio (2.2.1). They are the same time the oldest ones.

- Full Middle Bronze Age (MBA2-3) RAP sites

In 2008, on the top and on the southern flanks of the hill of Timpone del Castello⁹⁹ (Fig. 13), RAP researchers found a MBA3 site. MBA3 and probably MBA2 pottery¹⁰⁰ was found *North of Macchiabate*, at Site 51.¹⁰¹ Other sites in which MBA 2-3 pottery was found are Timpa del Castello, Timpone della Motta¹⁰² (Fig. 14), and Carnevale.¹⁰³ Including MBA1-3 sites 27 and 54 (North of Macchiabate), MBA2-3 pottery has been found at 7 sites. All of these sites are located on hills and on their slopes. Timpone del Castello, the most inland site, in a dominant position on the Raganello, did not last beyond the MBA. The sites found North of Macchiabate

⁹¹ Site RAP 125 [RAP 30855] in van Leusen *et al.*, forthcoming. Cave site discovered in 1990 by members of the Sparviere Speleological Group; since 2007 it has been investigated by the Centro Regionale di Speleologia "Enzo dei Medici" (Larocca F. 2015, p. 442). Catasto Grotte Calabria Cb 2010, 293.

⁹² I do not know the exact location of one of the sites found at Pietra Catania in 2002, the only information on which is *Pietra Catania - South of Emma*. An obsidian flake and two lithic tools were found at this location (jasper denticulated 408101, see Middle Neolithic parallel in Tinè S. 1983, 141.846, flint blade 450501, dating to the final Neolithic-Eneolithic, based on parallels in Tinè S. 1983, Tav. 141.840, Mallory 1984-1987, p. 260, Ross Holloway 1973, Pl. XXIII).

⁹³ Site 54 [RAP 31143] (Siba 2002 site 4080) and site 47 [RAP 31136], dated to the MBA1-3 in van Leusen *et al.*, forthcoming.

⁹⁴ Sites 52 (EBA pottery?), 58 (EBA pottery?), 59 (EBA pottery?) in van Leusen *et al.*, forthcoming.

⁹⁵ Sites 53, 56, 57 in van Leusen *et al.*, forthcoming.

⁹⁶ Burin 411502(a) from site 57, see Cassano, Manfredini 2004, Tav. 7.8.11 (Late Middle Neolithic); blade 411502(b) from site 57, see Livadie 1986, Fig.7 (Final Neolithic); denticulated 407901 from site 53, see Mallory 1984-1987, Fig. 36.20 (Middle Neolithic); scraper 409902 from site 56, see Tinè S. 1983, Tav. 141.836 (Middle Neolithic). Thanks to Marcel Niekus for helping me to analyze these lithic tools.

⁹⁷ Late Eneolithic sherd 261 (Tab. 13), EBA2 sherds 246 (Tab. 13) and 249 (Tab. 17), MBA1 sherd 250 (Tab. 13).

⁹⁸ MBA1 sherd 113.

⁹⁹ RAP site 209, van Leusen *et al.* forthcoming.

¹⁰⁰ In the preliminary RAP catalogue (van Leusen *et al.* forthcoming), site 51 dates to the MBA1-2 on the basis of a sherd similar to a find from the site of Grotta Cardini - Upper Layers (Bernabò Brea *et al.* 1989). Since the Upper Layers in the sequence of the cave date to the MBA3, I propose to date Site 51 to the last MBA phase; the other diagnostic sherds here found are comparable with MBA shapes in use from the MBA1-3.

¹⁰¹ RAP site 51, [RAP 31140] (Siba 2002 site 4056) in van Leusen *et al.* forthcoming.

¹⁰² RAP site 161 in van Leusen *et al.* forthcoming.

¹⁰³ RAP site 161a in van Leusen *et al.* forthcoming.

are set on the spurs of a hilly zone slightly sloping towards the Sibari plain. The other sites, Timpa del Castello¹⁰⁴, Timpone della Motta¹⁰⁵, Carnevale¹⁰⁶, and Rovitti¹⁰⁷ are located near cultivable land. These sites will be discussed in the following section.

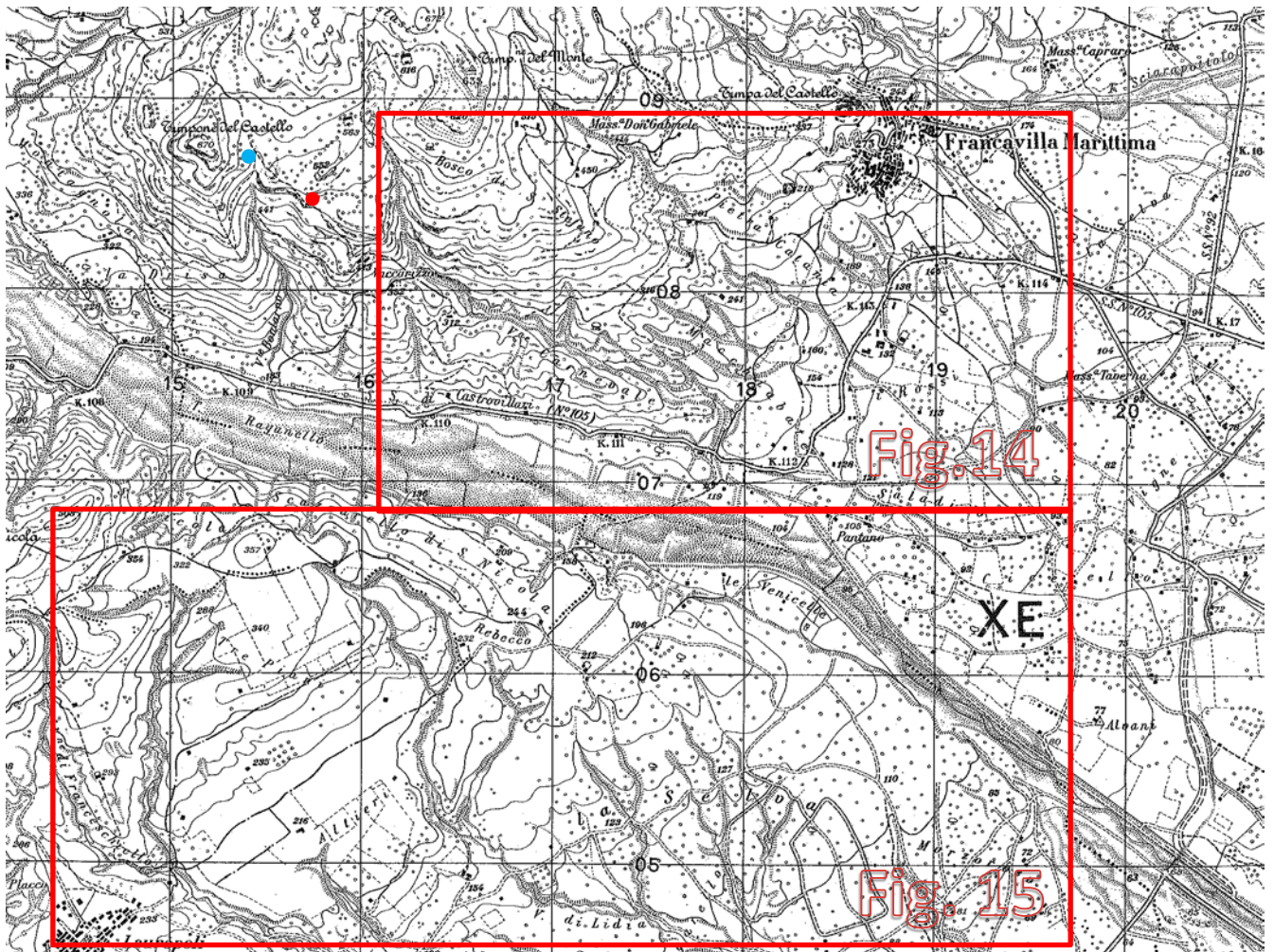


Fig. 13. The territory between Francavilla Marittima and Laupoli, after IGM F. 221 II N.E., revision 1958; red spot: site of Grotta del Caprio, blue spot: site of Timpone del Castello.

¹⁰⁴ Rap site 137 in van Leusen *et al.*, forthcoming.
¹⁰⁵ RAP site 161 in van Leusen *et al.* forthcoming.
¹⁰⁶ RAP site 161a in van Leusen *et al.* forthcoming.
¹⁰⁷ RAP site 161e in van Leusen *et al.* forthcoming.

- Late Bronze Age and Early Iron Age sites in the territory of Francavilla Marittima

The only RBA evidence in the territory of Francavilla Marittima was found at Timpa del Castello, Timpone della Motta and Carnevale. In addition to these sites, another site, Rovitti, provided evidence dating to the Late Bronze Age. During the GIA excavations¹⁰⁸ in 2009-2010 on the southern side of the hill Timpone della Motta (Area Rovitti), two structures could be dated between the 8th and the 7th centuries BC while the remains of a third structure of the 6th century BC were found. In the west side of the excavated area, a pit containing materials from the 8th-7th centuries was detected. However, it also contained RBA sherds and a low number of FBA sherds. It seems that the Late BA on the Timpone della Motta (and along its northern and southern sides) has been a period of change and that for some reason the inhabitants of the hill, whose presence is now deducible but not tangible, opted for a different way of settling the site than in the Iron Age. Even if the building activities from the IA onwards make the comprehension of the way the site was settled very difficult, further research aimed to understand exclusively the Bronze Age of the hill would surely answer many of the questions that this study poses.

Sites that provided evidence dating back to the FBA are located at Macchiabate¹⁰⁹ and Portieri.¹¹⁰ Pottery dating between the Final Bronze Age and the Early Iron Age was found, besides at Timpa del Castello, at Pietra Catania;¹¹¹ EIA sherds were found at Macchiabate,¹¹² Pietra Catania,¹¹³ Timpa del Castello and Timpone della Motta. Non diagnostic impasto pottery was found at 16 locations (Macchiabate,¹¹⁴ Timpone della Motta- South of Plateau I,¹¹⁵ Pietra Catania,¹¹⁶ at a site located West of Timpa del Castello,¹¹⁷ at a site named km 111-Timpone della Motta,¹¹⁸ and at Pietra Catania¹¹⁹).

In summary:

- RBA evidence comes from four sites,
- FBA pottery was found at 9 sites,
- Final Bronze Age-Early Iron Age pottery was found at 2 sites
- EIA sherds were found at 6 sites.

All these sites are located in the foothills of the Sibaritide, in a slightly flat area as is evident in the case of the sites located at Portieri, Macchiabate and Pietra Catania. One could infer that at the end of the Protohistory, settlement locations in the foothills are preferred above those in the hinterland, as shown by the lack of LBA-EIA sites in the latter area.

2.2.1 Grotta del Caprio

Eneolithic finds were found at the cave site of **Grotta del Caprio** (Fig. 13), West of Francavilla. The site was identified by the “Sparviere” Speleological Group (SSG) in 1990. The entrance of the cave is located at the foot of a limestone rock face that dominates a small valley, once crossed by a small seasonal tributary of the Raganello. Its altitude is 450 m a.s.l., and it is located at about 10 m from a water source. Inside the cavity, two wall fragments (Plate XIII.303-304) decorated with parallel horizontal grooves and subcutaneous handles, were found. They date to the Middle Eneolithic¹²⁰ (circa 2900-2650 BC). A third wall fragment (not in

¹⁰⁸ The excavation campaigns have been directed by J. Jacobsen (Colelli, Jacobsen 2013, Colelli 2012, p. 38).

¹⁰⁹ RAP site 202 in van Leusen *et al.* forthcoming.

¹¹⁰ RAP sites 112, 113, 114, 219 in van Leusen *et al.* forthcoming.

¹¹¹ RAP site 82 in van Leusen *et al.* forthcoming.

¹¹² RAP sites 204a-c in van Leusen *et al.* forthcoming.

¹¹³ RAP site 55 in van Leusen *et al.* forthcoming.

¹¹⁴ RAP sites 203, 205 in van Leusen *et al.* forthcoming.

¹¹⁵ RAP site 7 in van Leusen *et al.* forthcoming.

¹¹⁶ RAP sites 60, 61, 62, 75, 76, 77, 83 in van Leusen *et al.* forthcoming.

¹¹⁷ RAP site 85 in van Leusen *et al.* forthcoming.

¹¹⁸ RAP site 161b in van Leusen *et al.* forthcoming.

¹¹⁹ RAP site 208 in van Leusen *et al.* forthcoming.

¹²⁰ See parallels in Cardini 1970, fig. 9; Bernabò Brea, Cavalier, 1960, I, Tav. XXII, 1,3; Bernabò Brea, Cavalier, 1980, Tav. CVI, 1 (Lipari); Nicoletti 1991, fig. 9.19 (Corazzo-Casa Soverito, Isola di Capo Rizzuto); Taliano Grasso 2005, fig. 5a (Cariati-Terravecchia).

catalogue) with a scaled decoration above a broad band handle can be attributed to an advanced phase of the Eneolithic.¹²¹

2.2.2 Timpa del Castello (Sherds Plates XXII-XXV).

In the 1980s¹²² the site of Timpa del Castello¹²³ at the Northwestern edge of the town of Francavilla Marittima, was object of a series of investigations attesting to an uninterrupted frequentation of the site for the whole Bronze Age until the Early Iron Age. The site is located on a steep outcrop of cracked limestone between the plain on the East and the last spurs of the inland hills on the West. It is located in a strategic position, economically advantageous. In a 2004 report,¹²⁴ Attema informs that in 1995 twelve survey transects were carried out on the slopes northwest of the Timpa del Castello by Maaskant Kleibrink and her team and that material dating between the Bronze Age and recent times was collected. Attema revisited the site in 2003 and 2004 and collected new sherds, various large fragments of burnished ware in a good condition and a large piece of daub with imprinting of twigs, from an artificial section that was created during the construction of a path leading up to a panoramic viewpoint on the top of the hill. Attema observed that the condition of the pottery and bone fragments and the location in which they were found, beneath a steep rock face that may have functioned as an abri, made it plausible that the finds are in situ. The typological analysis I carried out on the diagnostic pottery collected in 2003¹²⁵ provided the chronological periods of frequentation of the site as shown in Fig. 16.

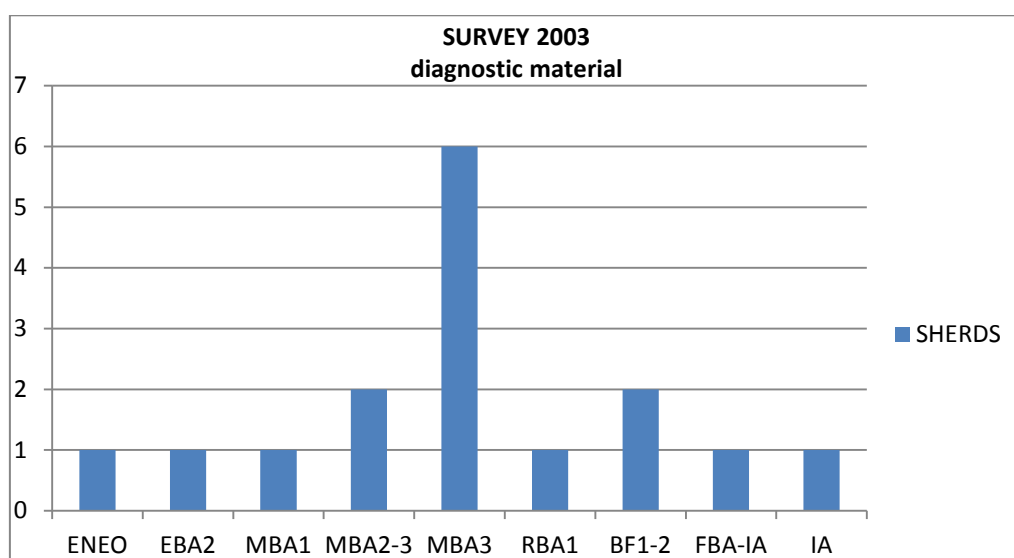


Fig. 16 Timpa del Castello, Francavilla M.ma., Survey 2003: typochronology.

Pottery found at Timpa del Castello in 2003 attests to the use of the site from the Late Eneolithic until the IA, with two gaps constituted by the beginning of the EBA and the end of the Recent Bronze Age (RBA2). Evidence antedating the MBA2-3 is poor, even if a few sherds indicate the possibility to detect previous frequentation of the area through intensification of research. The material indicates cultural relations with Campanian sites. It is clear that the settlement starts in the MBA2-3 with a further development in the MBA3. A decline of the evidence can be observed from the RBA onwards, even if the site was in use during the whole

¹²¹ Bernabò Brea *et al.* 1989, fig. 22.d (for the decoration made above the handle); Albore Livadie 1990, tav. 28.227328 (for the shape); Tav. 27.227206 e Tav. 29.227326 (for the rusticated decoration above the handle). Besides Eneolithic pottery, F. Larocca reports that also Bronze Age pottery was found (Larocca F. 2015, p. 445).

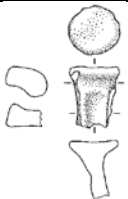
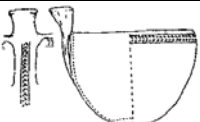

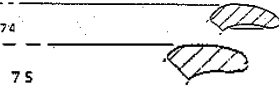

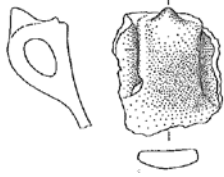
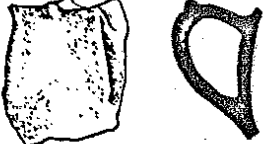

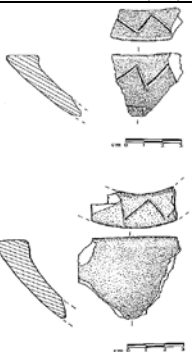
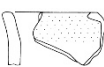

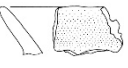

¹²² Bergonzi *et al.* 1982, pp. 155-157, Peroni, Trucco 1994, pp. 661-662, Haagsma 1996, p. 50, de Haas 2001, pp. 8, 15-16.

¹²³ See also Peroni, Trucco 1994, p. 663 with bibliographic reference to earlier publications.


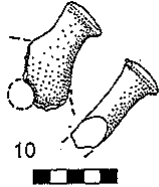

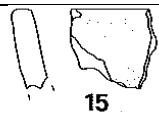

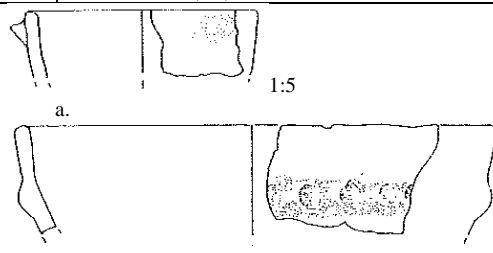
¹²⁴ GIA internal report "Highland survey site list".

¹²⁵ Sherds 246 (Tab. 13), 250 (Tab. 13), 253 (Tab. 13), 254 (Pl. XXII), 255 (Pl. XXII), 256 (Pl. XXIII), 261 (Tab. 13), 269 (Tab. 13), 271 (Pl. XXIII), 272 (Tab. 13), 273 (Tab. 14), 280 (Tab. 14), 286 (Pl. XXIV), 292 (Tab. 14), 293 (Tab. 14), 268 (Pl. XXIII).

FBA, until the beginning of the Iron Age. For the later period, besides parallels with Calabrian sites, it has been possible to establish analogies with repertoires from Central Apulia (Tab. 13-14).

Sherd	Drawing (1:4)	Date	Parallels
261	 Pl. XXII	LE	 Bailo Modesti <i>et al.</i> 1999 I, Fig. 7. Forme vascolari di tipo Laterza in Campania, p. 215 (w.s.)
246	 Pl. XXII	EBA2	 1:3 Talamo 1992, Pratola Serra, Tav. XLI, 74-75, tipo 1 A/B  1:10 Livadie <i>et al.</i> 1996, Tipo 1B, Fig. 4, facies di Palma Campania
250	 Pl. XXII	MBA1	 1:3 Lukesh 1977, fig. 21,9, Tufariello, Buccino (SA)
253	 Pl. XXII	MBA2-3	 For the dec: Cinquepalmi, Radina 1998, Monopoli Centro Storico, Livello inferiore, 7.028 (a), 7.036 (b)
269	 Pl. XXIII	MBA3	 1:6 Peroni, Trucco 1994 I, Tav. 16, 3, forma 87, Broglio di Trebisacce (CS), Sett. E, strato 2
272	 Pl. XXIII	MBA3	 1:4 Peroni, Trucco 1994, I, Tav. 10, 13, Broglio di Trebisacce (CS), sett. D Est, buca nei riqq. Z-Z' sotto il liv. 2D'

Tab. 13 Timpa del Castello. Survey 2003. Diagnostic finds (1/2).

Sherd	Drawing (1:4)	Date	Parallel
280	 Pl. XXIV	RBA1	 Pacciarelli, Varricchio 2004, fig. 9,10, Olivadi (Tropea, VV), pp. 374-377
292	 Pl. XXV	FBA?	 Peroni, Trucco 1994, I, Tav. 103,15, forma 38 b; Broglio di Trebisacce (CS), Sett. D Nord, strato 2
293	 Pl. XXV	FBA-IA?	 a. Colelli 2012, b3 var. 2 (con bugna) da Timpone della Motta di Francavilla M.ma (CS), FE; b. Trucco, Vagnetti 2001, fig. 75.10, Tipo 60A (con decorazione plastica) da Torre Mordillo, Cassano allo Jonio (CS), Sett. E8-9, US 2/2, BF1

Tab. 14 Timpa del Castello. Survey 2003. Diagnostic finds (2/2).

In 2005, the section profile located at the western side of the limestone outcrop of Timpa del Castello¹²⁶ was examined by Peter Attema, Jan Delvigne, Rik Feiken and Edmé Sleijpen. They cleaned the profile at 8 points (1, 2, 3, 5, 7, 11, 13 and 15 m), finding pottery and bone fragments at points 3, 5, and 11. In order to describe the section, Feiken and Delvigne divided it in a northern part, from 0 to 13 m, and a southern part, from 13 to 15 m, based on the upper layer (Fig. 17). At the Northern part, 6 layers were identified:

- layer 1a, that is a humic layer showing a younger phase of sedimentation on top of an older surface;
- the older surface layer 2a and 2b;
- layer 3, less dark than 2b, in which there was Bronze Age pottery, charcoal, bones, some pieces of daub with imprints of twigs, and a few limestone fragments;
- layer 4, formed before or during the Bronze Age; it contained big limestone fragments and continues beneath layers 2 a, 2b and 3, until it reaches
- layer 5, made of schist rock.

¹²⁶ According to Attema, "this part of the profile would more or less coincide with the location described by Buffa et al. and Gandolfo," respectively in Bergonzi et al. 1982, pp. 155-157, and in Peroni, Trucco 1994, pp. 661-662.

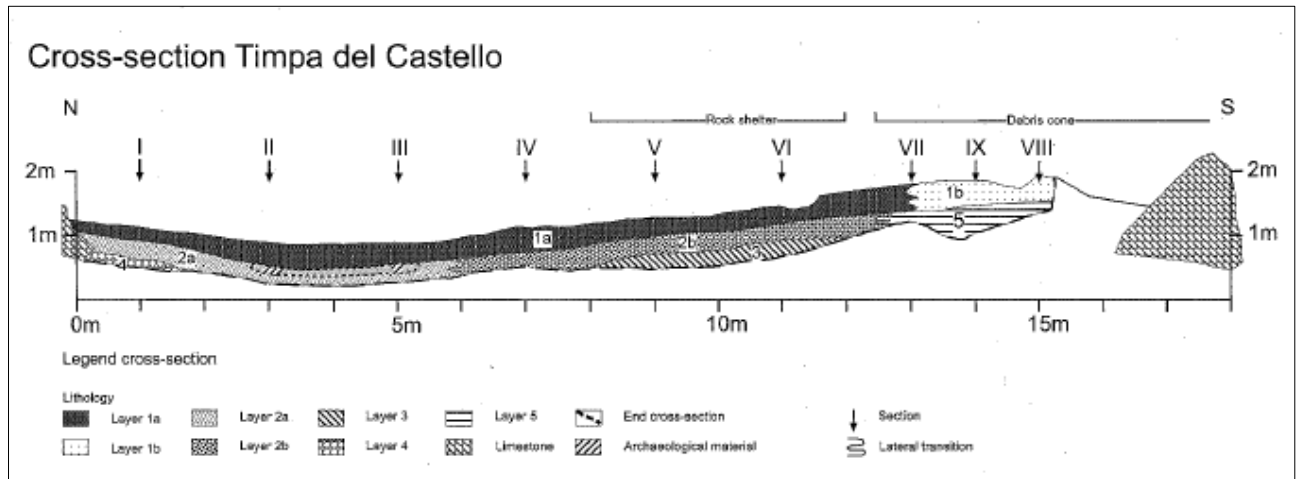


Fig. 17. Timpa del Castello. Section.

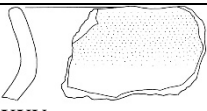
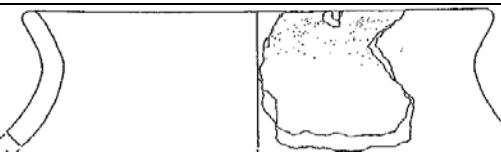
The southern end of the section shows a younger phase of sedimentation (layer 1b) on top of an older surface. Here, this older surface, layer 5, develops in weathered schist rock.¹²⁷ Diagnostic sherds from the Northern part of the section, point 3, Layer 2a, date between the MBA2 and the RBA2 (Tab. 15):

Sherd	Drawing (1:4)	Date	Parallel
295	 Pl. XXV	MBA2	 Cocchi Genick 1995, Tipo 79B, Broglio di Trebisacce 1:3
296	 Pl. XXV	MBA3	 Peroni, Trucco 1994, Tav. 19,20, Broglio di Trebisacce (CS), sett. E, liv. S 1:5
297	 Pl. XXV	MBA3	 Cocchi Genick 1995, Tipo 560, Marangone 1:4
299	 Pl. XXV	RBA2 (?)	 Trucco, Vagnetti 2001, Fig. 77.5 (olla), Sett. E8-9, US 203 1:3

Tab. 15 Timpa del Castello. Section. Diagnostic sherds (1/2).

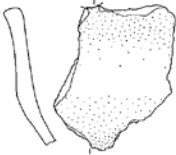


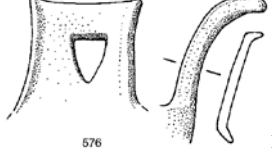


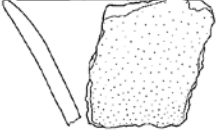
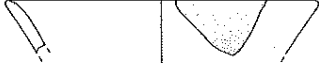
¹²⁷ "The different lithology fits into this geologically fractured zone. Tectonic movements along faults near the contact between hard – limestone- rock and soft – schist – rock will have in the geological past created the conditions whereby a slightly overhanging rock could develop next to a small and local debris cone" (Delvigne, Feiken, report 2005).

From point 11 (11 m), Layer 3, comes the sherd as shown in Tab. 16.

Sherd	Drawing (1:4)	Date	Parallel
298	 Pl. XXV	RBA1 (?)	 1:5 Trucco, Vagnetti 2001, Fig. 59.24, Torre Mordillo, Cassano allo Jonio (CS), Sett. D11-12, US 130

Tab. 16 Timpa del Castello. Section. Diagnostic sherds (2/2).

Sherds collected in 2005 belong to the better attested periods at Timpa del Castello, i.e. the MBA2-3 as shown by pottery collected in 2003 (Tab. 13-14). The lack of RBA2 sherds among the 2003 pottery, is not confirmed by the pottery collected in 2005. In 2007 four diagnostic sherds¹²⁸ were collected at the site by the archaeologist Jan Jacobsen, including one EBA sherd (Fig. 18, Tab. 17).

Sherd	Drawing (1:4)	Date	Parallel
249	 Pl. XXII	EBA2	 1:4 Albore Livadie 1999, fig. 17B1, p. 230, San Paolo Belsito, Montesano (NA), Ricognizioni di Superficie
259	 Pl. XXIII	MBA2 -3	 576 1:4 Cocchi Genick 1995, Tipo 576, Fig. 181
287	 Pl. XXV	FBA1- 2 (?)	 1:3 Peroni, Trucco 1994, I, forma 50 a, tav. 88,13, Broglio di Trebisacce, sett. B Ovest, liv. H
289	 Pl. XXV	FBA2 (?)	 1:3 Peroni, Trucco 1994, I, tav. 115,2 (esempio in figulina), Broglio di Trebisacce, sett. B. Ovest, liv. S3

Tab. 17 Timpa del Castello. Survey 2007. Diagnostic sherds.

¹²⁸ Sherds 249, 259, 287, and 289 (Tab. 17).

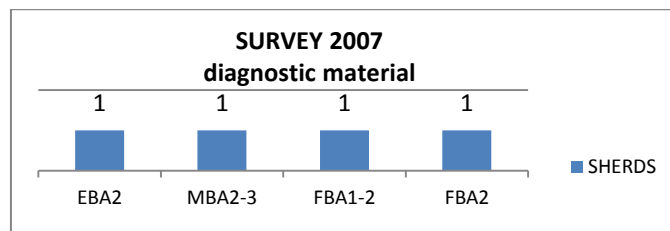


Fig. 18. Timpa del Catello, Survey 2007, chronotypology.

Combining all the data, I obtained the following chronological trend of frequentation of the site (Fig. 19).

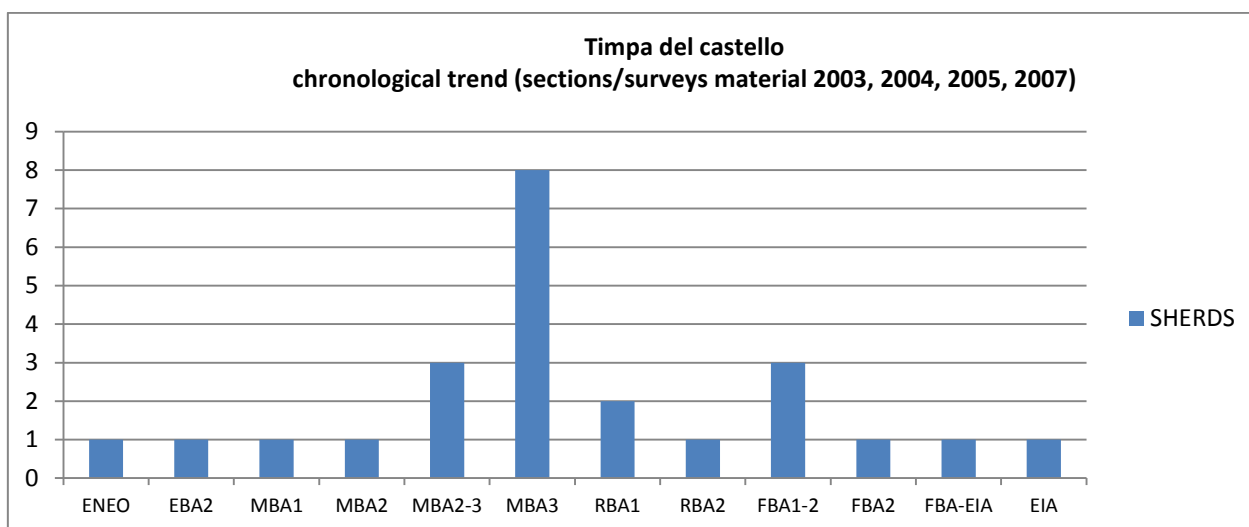


Fig. 19. Timpa del Castello. Chronotypology.

The only remaining gap concerns the beginning of the EBA. Since this period constitutes a problematic phase in the EBA of Southern Italy in general, herein I propose to leave aside this phase for two main reasons. Firstly, survey materials, even if from a section profile, imply many bias factors which penalize conclusions. Secondly, the recognition of settlement during the beginning of the EBA remains a difficult theoretical archaeological debate that requires further excavations and more radiocarbon dates. I will revisit this topic in Chapter 4.3. Based on the current evidence, I infer that the settlement at Timpa del Castello was used from the MBA2-3 until the end of the Bronze Age-Early Iron Age. This settlement already existed before the MBA2 as is clear from the faint archaeological traces pertaining to the period ENEO-MBA1.

2.2.3 Timpone della Motta

The protohistoric settlement framework that can be reconstructed for the territory of Francavilla M.ma depends mostly on the documentation coming from the excavations at the site of Timpone della Motta, a paradigmatic site for the archaeology of the Sibaritide. Research at the site has focussed mostly on the Iron Age and Archaic phases of the site so far and less so on the phases preceding these. The research carried out from 1963 to 1967¹²⁹ by P. Zancani Montuoro and M.W. Stoop on the Timpone della Motta led to the discovery of a cult place;¹³⁰ its earliest phase, dating back to the VIII cent. B.C., could be attributed to a

¹²⁹ Delplace 1969, pp. 524-525.

¹³⁰ In the whole sanctuary area five buildings were identified with different constructive phases that followed one another till the VI century, some cabins and several discharges of materials found nearby the structures (Kleibrink 2006).

previous indigenous settlement, preceding the Greek sanctuary.¹³¹ For these older phases, the aspects relative to the Apenninic¹³² and to the Early Iron Age¹³³ have been detected, but not yet defined. I would like to reassess these periods. The hill “Timpone della Motta”, southwest of Francavilla Marittima, is formed of several terraces or plateaux. Southeast of the Acropolis (the highest terrace), Plateau I is located,¹³⁴ which contains Bronze Age remains buried under horizons dated to the Archaic and Iron Ages. Bronze Age remains from Plateau I and the Acropolis have been published by Attema *et al.* 2000 and Kleibrink 2006, though not in their entirety. The finds acquired from the 1990s onwards by the Groningen Institute for Archaeology (GIA) during the excavations on the Timpone della Motta were stored in the Laboratorio di Restauro in the Parco del Cavallo of Sibari. In May 2011, an équipe of the GIA transferred these materials to Casabianca, to a new storeroom of the Soprintendenza della Calabria. On that occasion, an inventory of the materials took place and, for each crate, the following procedure applied:

1. Recording of the information written on the crates, on the bags and on the tickets
2. Recording of the quantity of bags found in each crate
3. In the absence of bags and tickets, recording of the information provided by the sherds
4. Preliminary classification of the materials
5. Numbering of crates and shelves on which the crates have been located in the Casabianca storeroom.

The information provided by the crates, the bags, the tickets and the sherds concern the area of provenance of the materials (Plateaux-Acropoli) and their stratigraphic contexts.¹³⁵ During the inventory activities, I selected the crates containing impasto sherds,¹³⁶ regardless of the contexts, and excluding the crates with materials already studied by C. Colelli (crates marked by the initials CC) or already published (Kleibrink 2006, Attema *et al.* 2000), in order to

1. complete the analysis of the impasto sherds from Timpone della Motta
2. better understand the character of the BA frequentation of the site
3. define the BA chronology of the site to explain
 - a. the gap between the BA and IA which characterizes the site,
 - b. the meaning of sporadic LBA evidence found in several areas of the site.

In October 2011 and May 2012, I examined all crates, looking in detail at unpublished impasto sherds and selecting rims, handles, decorated walls and occasionally base fragments.¹³⁷ Un-diagnostic wall fragments, often very small and badly preserved, have not been considered. The selected materials come from three areas of the excavation:

1. Plateau I, Zone Casa Aperta (SE area, Fig. 21)
2. Plateau I, Zone Casa al Muro Grande (SW area, Fig. 21)
3. Acropolis¹³⁸ (Fig. 20).

¹³¹ The excavation research in the site continued in the eighties with S. Luppino and D. Mertens and, with the research started by a Mission of the University of Groningen, directed by M. Kleibrink and later by P. Attema.

¹³² Kleibrink 2006.

¹³³ The analysis of the Bronze Age impasto pottery coming from Timpone della Motta was carried out by the author; for the Iron Age impasto pottery see Colelli 2012.

¹³⁴ RAP site 161c in van Leusen *et al.* forthcoming.

¹³⁵ All of this information has been transferred to a GIA database.

¹³⁶ Crates containing impasto (first selection) - (TOT 154): 29, 44, 45, 46, 122, 138, 147, 170, 171, 184, 185, 186, 187, 220, 231, 253, 255, 278, 364, 492, 495 (daub), 496, 497, 498, 499, 500, 505, 583, 595, 597, 599, 600, 601, 602, 604, 606, 608, 654, 655, 657, 658, 659, 660, 661, 662, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 685, 686, 687, 693, 695, 697, 700, 704, 716, 721, 722, 726, 727, 728, 729, 730, 731, 732, 734, 742, 748, 753, 774, 766, 783, 786, 788, 791, 794, 796, 799, 800, 803, 804, 805, 811, 818, 822, 827, 862, 863, 867, 895, 899, 909, 918, 920, 609, 610, 611, 612, 613, 614, 615, 616, 617, 619, 621, 622, 623, 624, 625, 626, 628, 629, 632, 633, 634, 636, 637, 638, 639, 640, 641, 642, 643, 644, 648, 649, 650, 653, 921 (daub), 922, 923, 925, 926, 934, 944, 946, 971, 983, 990, 993, 994, 995, 996, 997, and 998.

¹³⁷ In November 2013 and March 2014, the author also examined 114 further crates containing impasto materials acquired during GIA excavations carried out in 2008-2010 and directed by P. Attema and J. Jacobsen.

¹³⁸ RAP site 161d in van Leusen *et al.* forthcoming.

- Plateau I, Zone Casa Aperta (SE area, Fig. 21, Sherds Plates V-IX)

In 1994 Attema and Delvigne excavated 3 trenches in this area (Attema *et al.* 2000). The trenches exposed 4 layers, which revealed that the southeast part of the Plateau was cut off by a LBA-EIA feature, called “Fossa”. This feature had been noted in test-pits IC, ID, IE, near to Trench I (Fig. 22). These pits revealed a long dwelling built on a Pebble Foundation, dating to the BA.

Pit ID, east of pit IC, contains

- the back-filling of the Fossa, dating to the Colonial period and labeled Geometric Dump,
- postholes belonging to a BA dwelling,
- traces of leveling for the laying out of foundation walls, in and over the Fossa, to the south of a 6th century house.

In Pit IB, on the top of the Bronze Age layers, a dwelling with small postholes was found to the north, labeled the Cabin (a LBA-EIA structure formed by postholes). Because of its association with LBA potsherds, it was attributed to the LBA. Pit IC, west of trench I, contained building debris datable to the 6th century BC and, in the NE corner, a *dolio cordonato* lying on top of a trench filled with pebbles, bones and pottery (Pebble Foundation). At the northern end another pit, Pit IA, was excavated, which, like pits B and C, contained wall remains from a 6th century BC house (Casa Aperta). Its foundations are severely damaged by the plough, and a trench dug for a drainage pipe from the museum building had further disturbed the area. To summarize, underneath in situ layers dating from the Colonial period (6th century BC), the southeastern section of the lower part of Plateau I contains the heavily eroded and leveled remains of a late BA dwelling. The BA remains were recognized as a pebble foundation with postholes, cut into a red, burnt occupation layer. The construction activities of the 6th century BC had left hardly any of these remains surviving¹³⁹.

The sherds from Plateau I, Zone Casa Aperta (SE area) analyzed in this report are presented in Figs. 18-21.

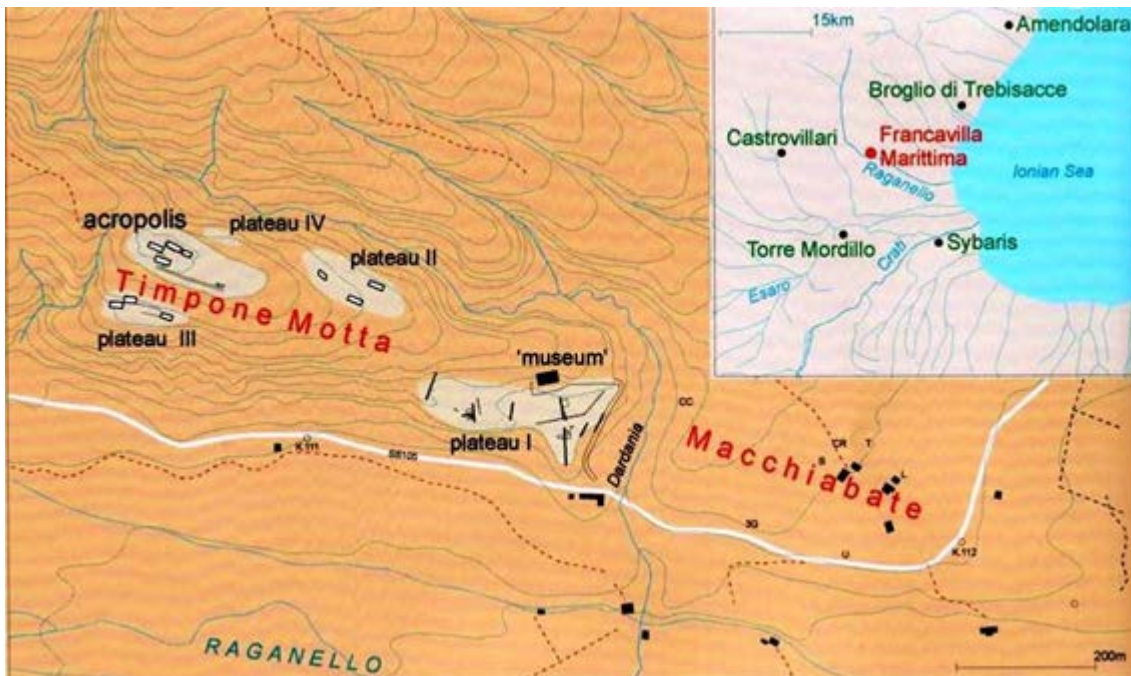


Fig. 20. Map of the Timpone della Motta, after Kleibrink 2006, Fig. 3.

¹³⁹ Also in Vanzetti *et al.* 2014, p. 48.

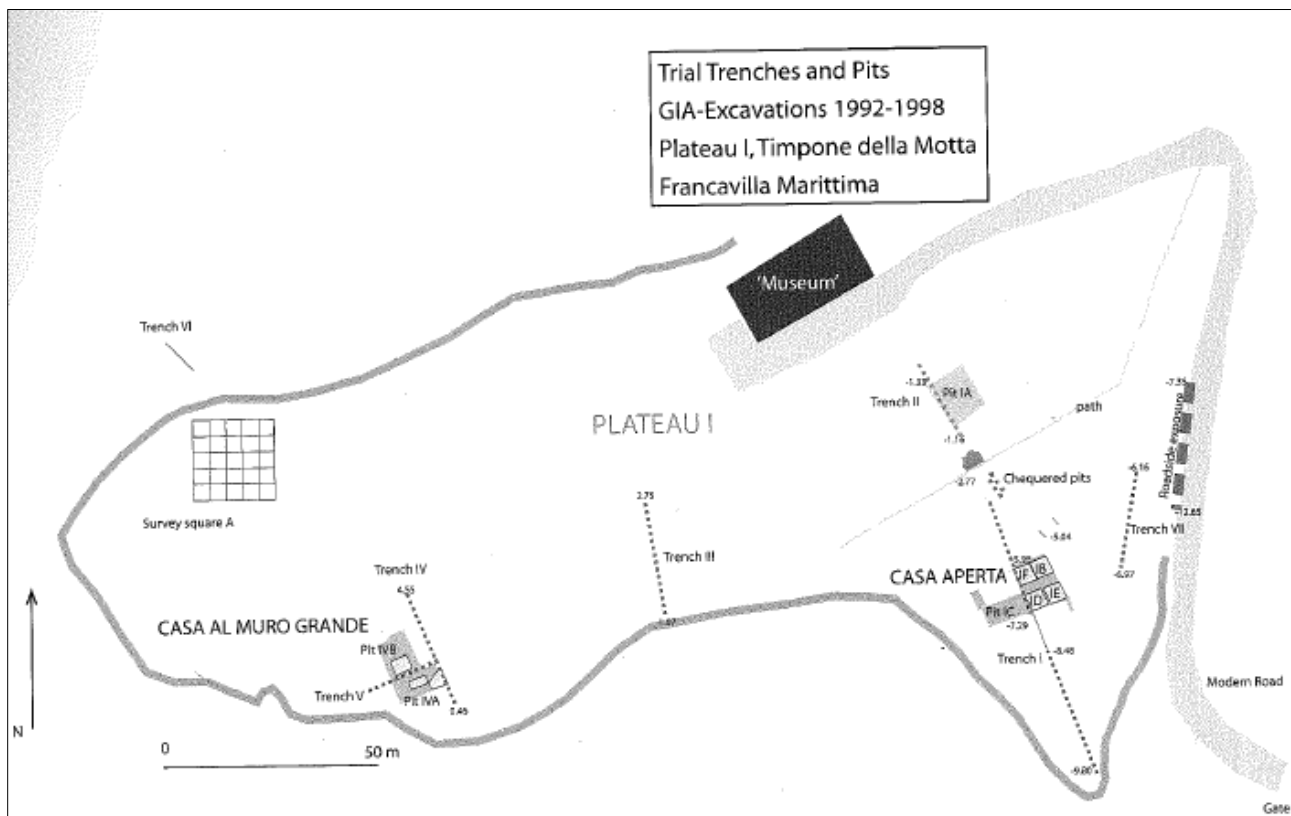


Fig. 21. Plateau I, after Kleibrink 2006, Fig. 9.

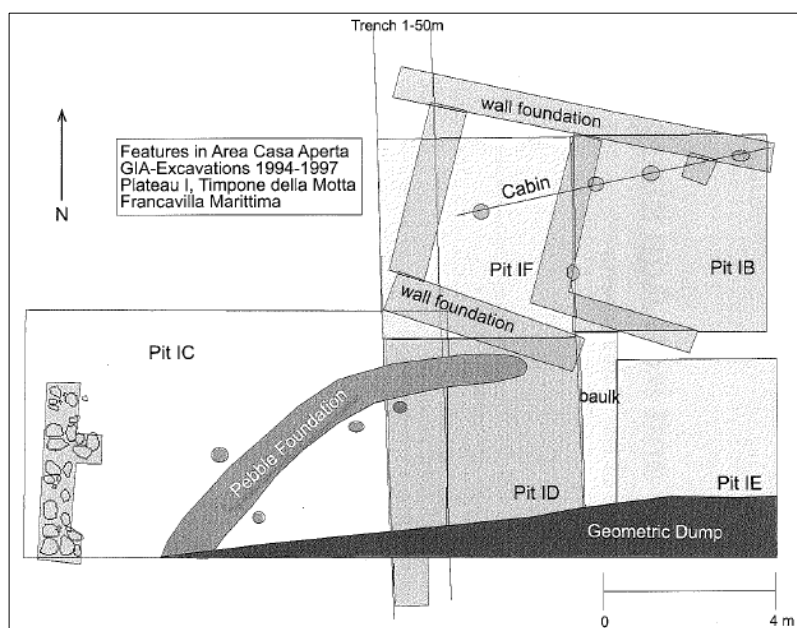
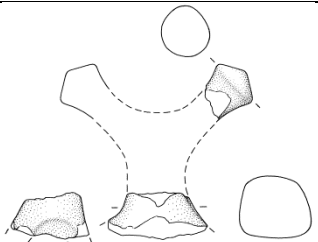


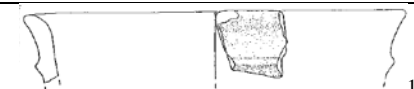
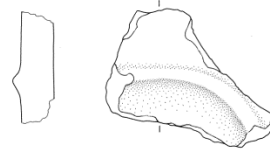
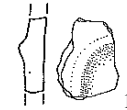


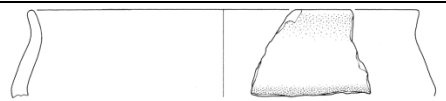



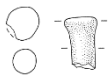
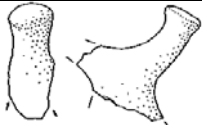



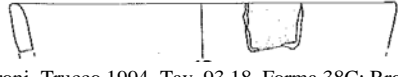
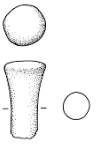
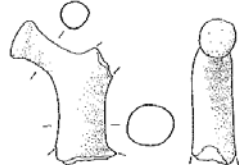
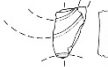

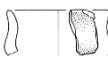

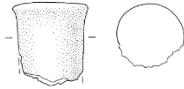
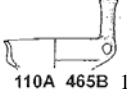
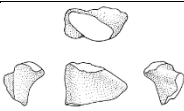
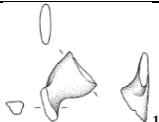
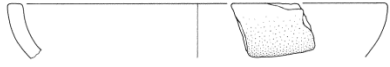
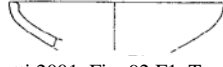
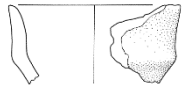

Fig. 22 Plateau I, Pits in Zona Casa Aperta, after Kleibrink 2006, Fig. 13.

Sherd	Drawing (1:4)	Date	Parallel
28-29 Pl. V		RBA1	 1:4 Peroni, Trucco 1994, Tav. 37.10, Forma 46; Broglio di Trebisacce (CS); Sett. D Est, livello 1 Est; Tipo B20, 1C in Damiani 2010, Tav. 125.4 (da Broglio di Trebisacce, Sett. D Est, livello 1 Est)
45 Pl. VIII		LFBA-EIA	 1:4 Trucco, Vagnetti 2001, Fig. 71.6, Tipo 240B, FBA2, Torre Mordillo, Cassano allo Jonio (CS), Settori E8-9, US 2
47 Pl. VI		MBA2	 1:3 Filippi, Pacciarelli 1991, Fig. 2A.9, Le Cese (Calvi dell'Umbria, TR)
48 Pl. VI		MBA3-RBA	 1:3 Pannuti 1969, Fig. 28.2, strato 3, tagli 1-2; Grotta a Male (AQ)
50 Pl. VIII		MBA3	 1:6 Cocchi Genick 1995, Tipo 182, Fig. 55, Pian Sultano, Panarea (Capo Milazzese, Capanna IV)

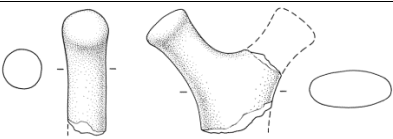

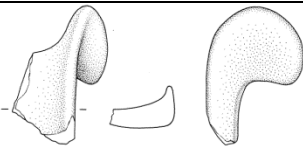
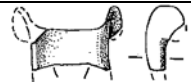
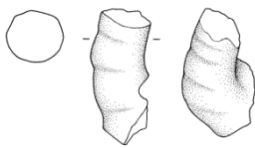

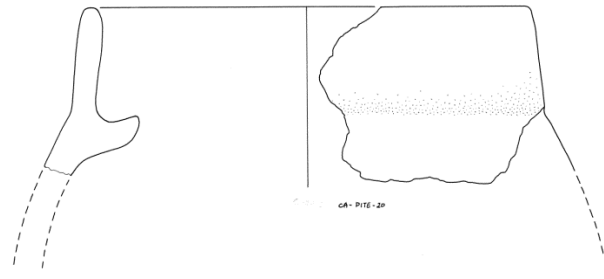
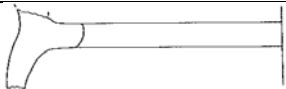


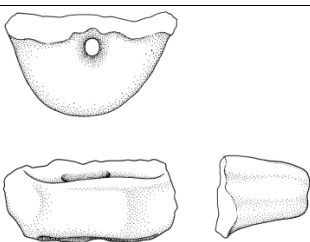
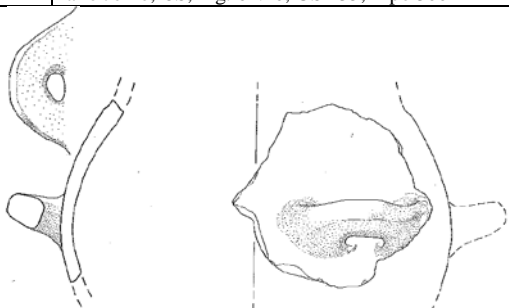
Tab. 18 Plateau I, Zona Casa Aperta (SE area), diagnostic sherds (1/3).

Crate	Fragment	Area	Context	Bibliography	Date
170 (see 704)	CA24-2B	Casa Aperta	Pit IA	Kleibrink 2006, p. 43	-
	51. CA24-1				RBA1
	CA24-2				MBA-RBA
	CAPE3-3 a1		Pit E	Kleibrink 2006, Fig. 20 (6th century levelling)	-
	48. CAPE3-1				MBA3
	47. CAPE3-3				MBA2
	CAPE3-2				MBA2
	50. CAE22 (CAE22-1)		Geometric Dump	Kleibrink 2006, Fig. 20	MBA3
	126. CAD306.16		D307 (D308, D316=Pebble Foundation)		EIA
	131. CAPE/CAPITE 20		A S di E14 (BA deposits)	Kleibrink 2006, p. 61	RBA1
	CAD306.34				FBA1
	CAD306.35				
	CAD306.06				Check
(see 606)	CA15-170		Pit IE, Pebble Foundation	Kleibrink 2006, p. 60	Check
122	TMPL1-PID217-1		D217 (6 th century house fill)	Kleibrink 2006, p. 51	EIA
	45. TMPL1-PID217-3				FBA2
721	28. TMZCAPF8-1A	Casa Aperta	PitF (similar to PitB)	Kleibrink 2006, p. 62	RBA1
	29. TMZCAPF8-1B				RBA1
	TMZCAPF8-2				-
730	TMPE-1-4A+4B	Plateau I	Pit IE1=topsoil	Kleibrink 2006, p. 60	RBA2
	79. TMPE-1-2				MBA3
	80. TMPE-1-1				RBA2
	TMPE-1-3				-
704 (see 170)	CA24-4B	Plateau I	PIT A, contexts 15, 24, 25	Kleibrink 2006, 43	-
	104. CA24-1B				-
	CA24-5B				RBA1
	CA24-9-96-1B				RBA1
	CA24-6B				-
	CA24-3B				-
	CA25-1B				-
	CA25-3B				(RBA)
	106. CA25-2B				MBA3
606 (see 704)	67. CA15-1B	Casa Aperta, Pebble Foundation	Pit IE context 15	Kleibrink 2006, p. 60, fig. 20	RBA1
	CA15-56				RBA2
	CA15-4B				-
	CA15-2B				-
	CA15-3B				-
	CA15-6B				-
612	CAE-10-601	Casa Aperta	PIT E-10	Kleibrink 2006, p. 60, MBA/LBA silty deposits 2	(FBA)
	57. CAE-10-985				RBA
	58. CAE-10-815				FBA
	CAE-10-763				-
	CAE-10-464				-
	CAE-10-920				(FBA-IA)
	CAE-10-502				-
	CAE-10-430				-
944	123. TM91PL1-B4-1	Plateau I	B4	Kleibrink 2006, p. 57, 6 th century house fill	MBA3
611	TMZCAPE-1	Casa Aperta	Trench 1, PitE-4,11	Kleibrink 2006, p. 60 (11= Geometric Dump)	(RBA)
	TMZCAPE-2				(FBA)
171	TM94PL1-PB287-1		Trench 1, pit IB		-
	110. TMPL1-PBT1-1		Trench 1, pit IB		FBA1
	111. TMPL1-PBT1-2		Trench 1, pit IB		RBA1
	TM94PL1-PC-1		Trench 1, pit IC		(FBA)
	TM94PL1-PC-2		Trench 1, pit IC		(FBA1)
	109. TM94PL1-PC-3		Trench 1, pit IC		EIA1B
364	CAE14B1-8	CA, pit E (BA deposits)	Context E14	Kleibrink 2006, p. 61	RBA2-FBA1
	CAE14A1-11				-
727	P1ZCA727-1				-
	139. P1ZCA727-2				RBA1
	140. P1ZCA727-3				EIA

Tab. 19. Sherds from Plateau I, Zone Casa Aperta, (SE area).

Sherd	Drawing (1:4)	Date	Parallel
51 Pl. VI		LRBA1	 1:5 Damiani 2010, Tav. 128.10, Tipo B28.4.B da Pieve Torina, Scavi 1919, Museo Nazionale di Ancona
57 Pl. VII		RBA	 1:6 Peroni, Trucco 1994, Tav. 36.12, Forma 2; Broglio di Trebisacce (CS), Sett. E Est, livello 1 Est
58 Pl. VII		FBA	 1:5 Peroni, Trucco 1994, Tav. 93.18, Forma 38C; Broglio di Trebisacce (CS), Sett. B ovest, livelli S3+H, BF
67 Pl. VI		RBA1	 1:4 Damiani 2010, Tav. 122. A 4, B14 tipo 3, da Torre Mordillo (Cassano allo Jonio, CS), Trucco, Vagnetti 2001, D12, CIII US 14, Foggia 445B
79 Pl. VII		MBA3	 1:4 Pannuti 1969, Fig. 13.4, Grotta a Male (AQ), str. 4
80 Pl. VII		RBA2	 1:4 Damiani 2010, Tav. 45.A.8, Fam. 24.62, Tipo 3, var. C; Casale Nuovo (B.go Sabotino, LT), Scavi 1985-87, Area Ovest, Us 112
104 Pl. V		RBA1	 110A 465B 1:5 Trucco, Vagnetti 2001, Sopraelevazione cilindro-retta, Tipo 465B, Torre Mordillo, US 148
106 Pl. V		MBA3	 1:2 Ippolito c.s., n. cat. 9-Carnevale-Francavilla M.ma, CV7b-Layer 6-4960/11
109 Pl. VIII		EIA1B	 1:5 Trucco, Vagnetti 2001, Fig. 92.F1, Torre Mordillo
110 Pl. VII		FBA1	 23 1:3 Peroni, Trucco 1994, Forma 19, Broglio di Trebisacce (CS), Tav. 102.23, Sett. D Nord, st. 2

Tab. 20 Plateau I, Zona Casa Aperta (SE area), diagnostic sherds (2/3)

Sherd	Drawing (1:4)	Date	Parallel
111 Pl. VII		RBA1	 1:4 Trucco, Vagnetti 2001, Fig. 36.17, Tipo 443A; Torre Mordillo, Cassano allo Jonio (CS), settori DE11-12, US 11/87
123 Pl. VIII		MBA3	 1:2 Cocchi Genick 1995, type 581, Praia a Mare, Grotta della Madonna, Liv. C
126 Pl. VII		EIA	 1:4 Filippi, Pacciarelli 1991, Fig. 27.68, Tipo 4, Campo del Pozzo, Nazzano, RM
131 Pl. VI	 CA-PIE-2P	RBA1	 1:4 Peroni, Trucco 1994, Broglio di Trebisacce, Forma 91, Tav. 33.33, Sett. BW, str. H, riq. R
139 Pl. V		RBA1	 1:4 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio, CS, Fig. 64.10, US 235, Tipo 300
140 Pl. IX		EIA	 1:5 Filippi, Pacciarelli 1991, Fig. 24.44, Ansa tipo 2B, Campo del Pozzo (Nazzano, RM)

Tab. 21 Plateau I, Zona Casa Aperta (SE area), diagnostic sherds (3/3).

In Pit IB, RBA1-FBA1 sherds have been found (unknown levels) together with one intrusive MBA3 sherd from the level corresponding to the 6th century house fill.

Some RBA and three MBA3 fragments are published in Attema *et al.* 2000 and Kleibrink 2006 from Pit IC (Pebble Foundation); it is now possible to add RBA2-EIA sherds and to assume that the Pebble Foundation

contains a few MBA3 sherds, several RBA-FBA sherds and one out of context EIA1B sherd. FBA and EIA sherds have been found on top of the Pebble Foundation.

The Geometric Dump in PIT ID contains intrusive FBA1-EIA, and the level corresponding to the 6th century house fill contains FBA2-EIA sherds.

The top soil and the 6th century leveling contexts in PIT IE include MBA3-RBA2 sherds.

RBA-FBA sherds are also found in the Geometric Dump.

The plausible contexts in PIT IE are:

Context 15 (RBA1-2 sherds), Context 10 (RBA-IA sherds), Context 14 (RBA2-FBA1 sherds).

Pit IF contains some RBA1 sherds in the 6th century house fill level.

Layer 4 in PIT IA (Trench II), contains RBA1 sherds, layer 5 contains one MBA3 sherd.

Sherd-code P1ZCA727 could correspond to Trench 7. In that case Trench 7 would contain RBA1-EIA sherds.

In summary, in Pits A, B, C and E fragments dating between the MBA3 and the EIA have been found, while in Pit D FBA-EIA sherds have been found.

It is possible to assume that

1. In the Zone Casa Aperta, FBA-EIA sherds are spread all over the excavated areas in a homogeneous way, though there is a low presence
2. Evidence for the MBA3 is sporadically attested in surface levels, in 6th century levels and in the Pebble Foundation
3. Consistent RBA evidence is attested in the S-E area of the Plateau I, as confirmed in Pit E
4. The Pebble Foundation appears to be a chronologically heterogeneous feature. The radiocarbon dates from the Pebble Foundation (layer 201: 3155±35BP, 3160±35BP, layer 213 2975±50BP) refer to the beginning of the MBA3 and the RBA, and since it contains also FBA sherds, this could signify a first disturbance of the deposit at the end of the BA. In general, a frequentation of the area in the MBA, just intercepted by the excavations on the Plateau I, seems to have been followed by a more consistent frequentation in the RBA-FBA, disturbed at the end of the FBA. As the layers with FBA-EIA sherds covering the Pebble Foundation attest, in the LBA changes took place in the settlement area. The presence of the Geometric Dump, most likely a dump containing FBA-EIA materials, would confirm the deposit formation in the course of this period. A second disturbance occurred in the 6th century, confirmed by the presence of BA sherds, including MBA3 sherds in the surface layers of Plateau I.

- Plateau I, Zone Casa al Muro Grande (SW area, Sherds Plate IX)

As the south-eastern section of the lower part of Plateau I (Fig. 21) contains remains of a late BA dwelling, a second pebble foundation was identified on the west side of Plateau I, in the zone of Casa al Muro Grande.¹⁴⁰

In this area Trenches IV and V were excavated. Next to Trench IV, Trench V was dug in an EW direction (Fig. 22b). It cut a feature with a fill of pebbles, impasto sherds dating to the Bronze Age,¹⁴¹ bones and tiny pieces of charcoal. Some 100 sherds were collected. The charcoal was dated to 3190±40 BP by a conventional dating method (Attema *et al.* 2000). Trench VI is hard to interpret. It yielded sherds dated to the 6th and 5th centuries BC, to the Iron Age and to the Bronze Age. It seems that the Bronze Age materials come from a V-shaped cut in the lowest level of the pit. In the East section the BA cut is disturbed by wall remains (6th/5th centuries BC?) and impasto sherds were found at a depth of 60-70 cm. There were no further excavations in the immediate area of Trench VI.

¹⁴⁰ Kleibrink 2006, p. 77, p. 109.

¹⁴¹ Dated to the Middle Bronze Age in Attema *et al.* 2000, p. 390.

Crate	Fragment	Area	Context	Bibliography	Date
811	32. TM95PL1T5-2	Casa al Muro Grande	Trench 5	Kleibrink 2006, p. 77	FBA1
	TM95PL1T5-1				-
171	TMPL1-T6PB-2		Trench 6		-
	115. TMPL1-T6PA-3		Trench 6		FBA2
	113. TMPL1-T6PB-1		Trench 6		RBA1
	TMPL1-T6PA-5		Trench 6		(FBA)
	TMPL1-T6PA-2		Trench 6		(FBA1)
	TMPL1-T6PA-1		Trench 6		MBA1
	112. TMPL1-T6PA-6		Trench 6		FBA
	TMPL1-T6PA-3		Trench 6		FBA1

Tab. 22. Sherds from Plateau I, Zone Casa al Muro Grande (SW area).

As seen in the area of the Casa Aperta, also the fragments from the area of the Casa al Muro Grande include few Middle Bronze Age (MBA3) ones.¹⁴² They occur together with some Recent Bronze Age sherds and a majority of FBA-EIA sherds. They come from Trench V, which is also the origin of a FBA1 sherd (Tab. 23.32). For Trench V a radiocarbon date of 3190±40 BP has been obtained. This does not support the dating of the majority of the finds which date to the LBA, but rather allows linking the lower layer of Trench V to the Pebble Foundation in the Zone Casa Aperta. A similar depositional process seems to have happened in the two extreme areas (East and West sides) of Plateau I. In the middle of the Plateau only one trench has been excavated (Trench III) from which only one Recent Bronze Age sherd was obtained, out of its stratigraphic context (Pl. VIII.120).

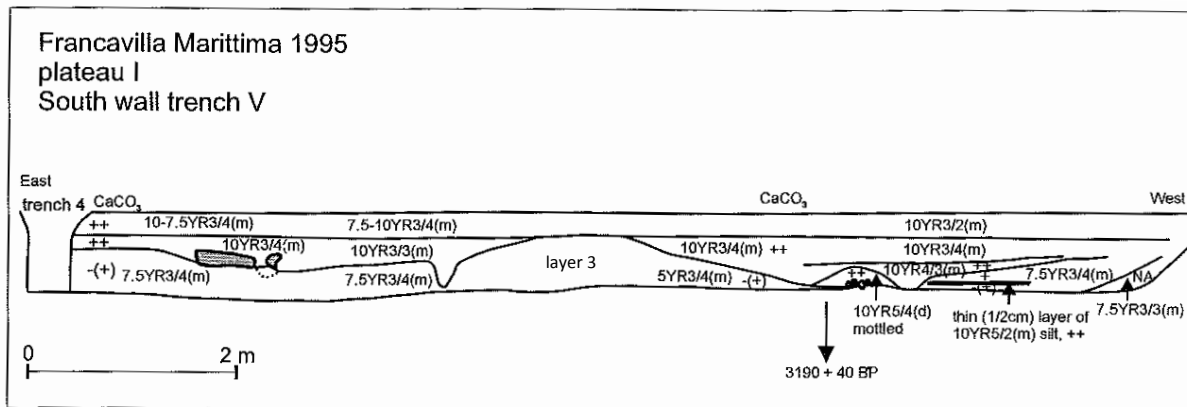
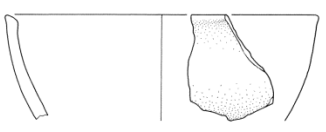

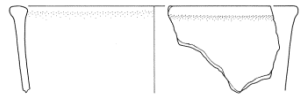
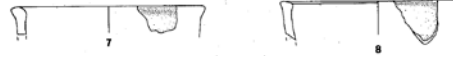
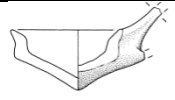
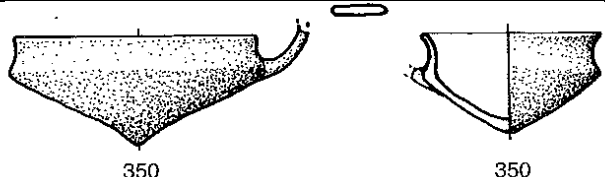
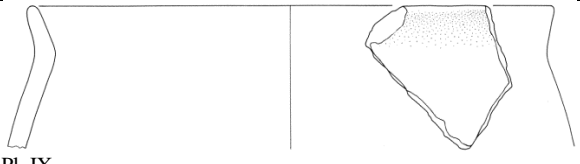
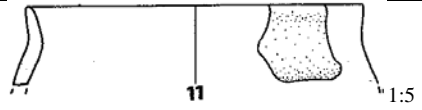


Fig. 22b. South Profile Trench V after Attema *et al.* 2000, Fig. 21, with radiocarbon date (MBA2).

¹⁴² Attema *et al.* 2000, fig. 26.

Sherd	Drawing (1:4)		Date	Parallel
32			FBA1	 <p>1:6 Trucco, Vagnetti 2001, fig. 43.9, Tipo 31; Torre Mordillo, Cassano allo Jonio (CS); US 20</p>
112			FBA	 <p>1:6 Bergonzi <i>et al.</i> 1982, Tav. 31.7-8, Broglio di Trebisacce (CS), Sett. B, ampliamento 80, strati H (forma 74A in Peroni, Trucco 1994)</p>
113		MBA1	 <p>350 350 1:6 Cocchi Genick 1995, Fig. 112, Tipo 350, (Cupola Beccarini, La Starza)</p>	
115			FBA2	 <p>1:5 Bergonzi <i>et al.</i> 1982, Tav. 3.11, Sett. B, Strati H3 scarpata; Broglio di Trebisacce (CS), Forma/shape 57b in Peroni, Trucco 1994</p>

Tab. 23 Plateau I, Casa al Muro Grande (SW area). Diagnostic sherds.

Acropolis (Fig. 23, Sherds Plates X-XII, LIV-LVI)

The material from the Acropolis (Tabs. 24-26), collected during the GIA excavations until 2004, seems to reflect the chronological and typological framework deduced from the Plateau I sherds. The sherds from levels 11 and 13 in Pit 2 are the only ones assignable to the MBA3. In fact, levels 11 and 13 are Archaic layers (6th-5th century BC) and at the lower layer in Pit 2, dated to the EIA,¹⁴³ no Bronze Age sherds have been found. The other diagnostic sherds mentioned in Tab. 24 are dated between the RBA and the EIA with the exception of a sherd belonging to the beginning of the MBA from the Area Pozzo. Based on the diagnostic fragments in Tab. 24 and on the stratigraphic sequences, plausible contexts, that is to say those that are compatible with the presence of BA and EIA impasto sherds, are excavation units AC3-37-44, AC-21, AC-25. In 2008 a GIA excavation campaign on the Acropolis in the areas to the South and East of the Area Chiesetta was carried out.¹⁴⁴ Here the impasto pottery found there is published for the first time. It dates to the LBA and the IA (Tabs. 27-35).

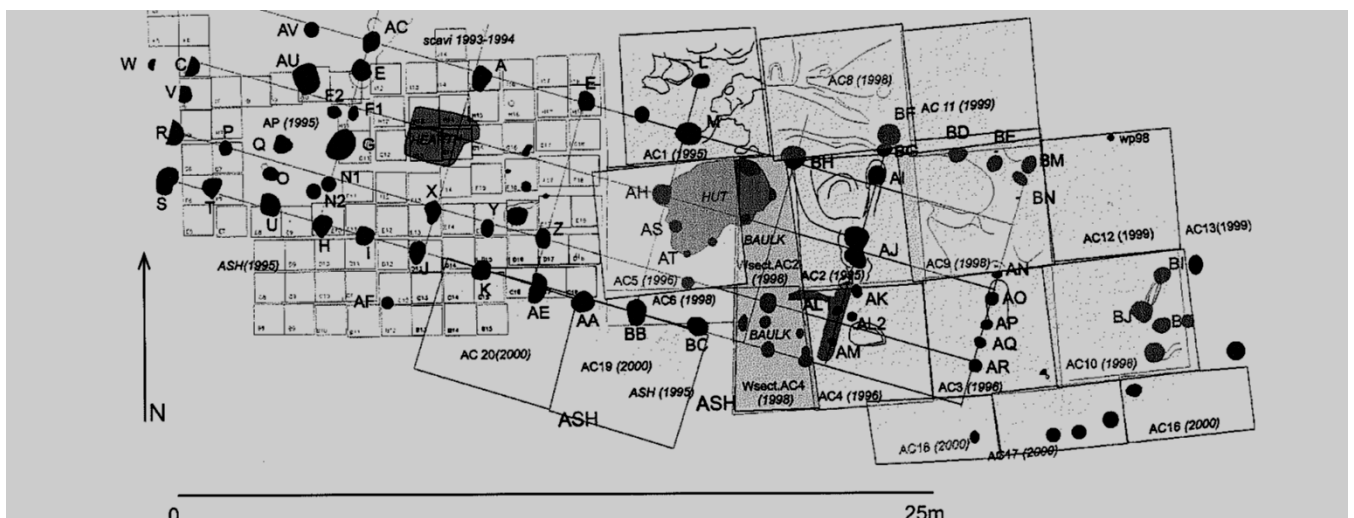


Fig. 23. Acropolis, Area Chiesetta, Building V, excavation pits, after Kleibrink 2006, Fig. 36.

¹⁴³ Kleibrink 2006, p. 124.

¹⁴⁴ The excavations were carried out by J. Jacobsen and G. Mittica (2008 GIA internal report, *Programma di ricerche archeologiche presso il sito di Francavilla Marittima (CS), Loc. Timpone della Motta*).

Crate	Fragment	Area	Context	Bibliography	Date
45	34. AC3-37-44	Acropoli	AC3-37; Colelli 2012, AC3.36 e 38 Vb, 780-730 a.C.	(Kleibrink 2006, 133, fig. 41)	RBA2
	35. AC4-6-9	Acropoli	AC4-6	Kleibrink, Fig. 43	RBA2
	AC10-115-13	Acropoli	AC10		FBA2
	AP	Area Pozzo	?		FBA
	AP-6	Area Pozzo	?		RBA
	AP-12	Area Pozzo	?		MBA
	AP-2051-1	Area Pozzo	?		FBA1
	AP-2051-2	Area Pozzo	?		FBA
	AP-2051-3	Area Pozzo	?		EIA1
	AP-2051-4	Area Pozzo	?		FBA
	AC-2056	Acropoli	?		FBA2
	44. AC-2038	Acropoli	?		EIA1A
994	94. AC21-B	Acropoli Squares AC16-27	Eastern Apse to Timber Long House (Vb building)	Kleibrink 2006, p. 137, p. 122 (VIII century BC)	FBA2
	93. AC21-A				EIA1B
	96. AC25-60				FBA2
625	91. AC3-13-1	Acropoli	PITAC3 Ashy layer mixed with brown soil	Kleibrink 2006, p. 133; Colelli: prima fase Ed. V, fine VIII	FBA2
	AC3-13-2				(EIA)
	AC3-13-3				(FBA2)
623	89. AC3-11-631	Acropoli	Pit AC3, ashy layer covering the entire pit	Kleibrink 2006, p. 133	EIA1A
	AC3-11-637				(FBA)
	AC3-11-627				(FBA2)
	AC3-11-17R				-
	AC3-11-688				(FBA2)
	AC3-11-16R				-
	AC3-11-643				-
	AC3-6-615				FBA2
604	64. AC14A5-10				EIA2
	65. AC14A5-3				-
	AC14A5-1				(EIA2)
660	AC660-1	Acropoli			FBA1
642	FMAC3-2-130996-SE-A	Acropoli, Building V	Context 2	Kleibrink 2006, p. 133	FBA1
	FMAC3-2-130996-SE-B				FBA1
686	AC5-15				-
184	AC2-11-18	Acropoli	Surface	Kleibrink 2006, Fig. 40, p. 126	MBA3
	AC2-11-50				MBA3
	135. AC2-11-95				MBA3
	136. AC6-13-421				MBA3
	AC6-13-500				MBA3

Tab. 24. Impasto sherds from the Acropolis.

Sherd	Drawing (1:4)	Date	Parallels
34	 Pl. X	RBA2-FBA1	 Trucco, Vagnetti 2001, Fig. 58.5, Tipo 258B, Torre Mordillo, US 124; for the dec., Cinquepalmi, Radina 1998, 9.038, T. S. Sabina (BR), Struttura 1
35	 Pl. X	RBA2	 Trucco, Vagnetti 2001, Fig. 40.15, Tipo 401, US 13, Torre Mordillo, Cassano allo Jonio
44	 Pl. X	EIA 1A	 For the shape see Pacciarelli 1999, Tav. 155.2, grey ware, Torre Galli, Tropea, tomb 231
64	 Pl. XI	EIA	 Colelli 2012, Tav. 38.127; Timpone della Motta, AC 16 A. 29
65	 Pl. XI	FBA1	 Bianco Peroni <i>et al.</i> 2010, Pianello di Genga-AN, scavi 1965, Tav. 66B.2, t. 83, fase 1A, also Tav. 49.2, t. 53, fase 1B. See also Filippi 1979, Fig. 1, p. 248, Rocca di Spoleto, surface find.
89	 Pl. XI	EIA 1A	 Pacciarelli 1999, Tav. 110.1, Torre Galli, Tropea, Tomba 161, scodella AC1B
91	 Pl. XI	LFBA	 Peroni, Trucco 1994, Tav. 88.15, Forma 54A; Broglio di Trebisacce, Sett. B Ovest, liv. H
93	 Pl. X	EIA1B	 Trucco, Vagnetti 2001, Tipo 214, Fig. 92B, see Peroni, Trucco 1994, Tav. 142.11
94	 Pl. X	LFBA	 Peroni, Trucco 1994, Broglio di T., Forma 26, Sett. B Ovest, liv. H Tav. 86.2, Tav. 86.8

Tab. 25 Timpone della Motta, Acropolis. Diagnostic sherds (1/2).

Sherd	Drawing (1:4)	Date	Parallels
96		LFBA	 Peroni, Trucco 1994, Forma 7, Broglio di T., Tav. 104.1, Sett. D Nord, buca nel riq. B sotto lo strato 1
135		MBA3	 Peroni, Trucco 1994, Forma 83, Tav. 26.9, Sporadico presso il Sett. E, Broglio di T. (CS)
136		MBA3	 Peroni, Trucco 1994, Tav. 3.13, Sett. B ovest, liv. 4A, Broglio di T., CS

Tab. 26 Timpone della Motta, Acropolis. Diagnostic sherds (2/2).

The southern sector of the Acropolis (Fig. 24) contained part of the stratigraphy belonging to the 7th century votive deposit referred to as Building Vd and the votive deposits relative to Buildings Vc and Vb.¹⁴⁵ Along this sector, a vertical stratigraphy (between 1 and 2.50 m) was preserved, which extended for 15 m E-W and 3.50 m N-S. This sector was severely damaged by illegal excavations and the best preserved area was placed in the west part of the sector. During the first phase of investigations, the archaeologists levelled the surface levels (Tab. 27). They found out that the Stratigraphical Units (SU) 1 and 2 were severely disturbed. Moreover, sectors of SU1 consisted of material accumulated during GIA excavations 1998-2004.

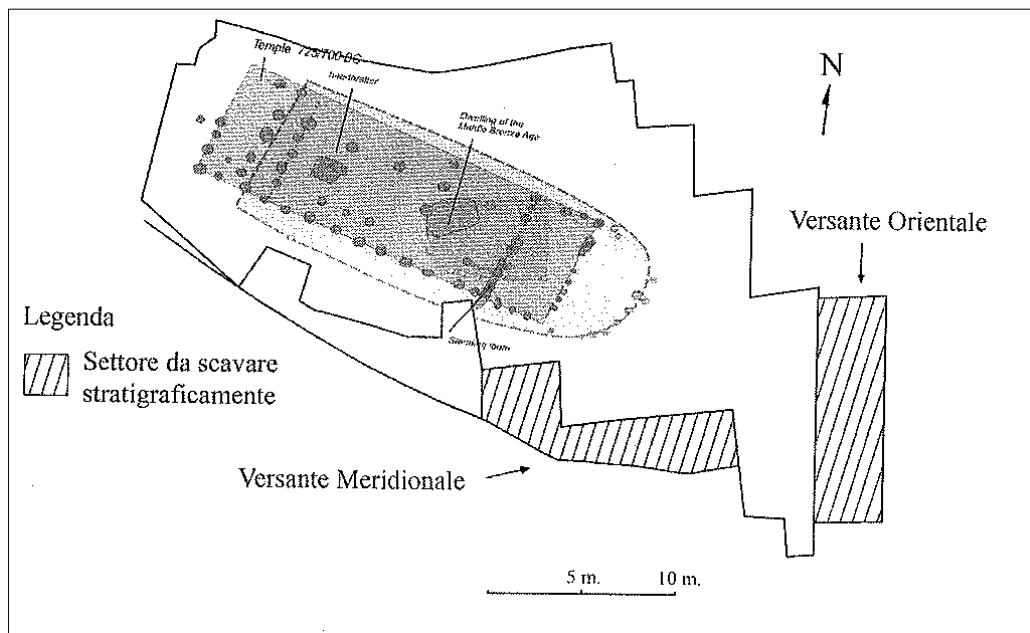
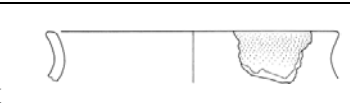
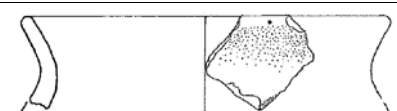
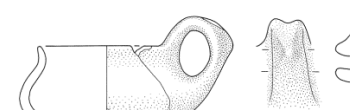
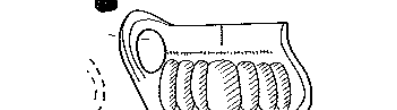



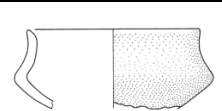


Fig. 24. Timpone della Motta, Francavilla Marittima, Area Chiesetta (after Jacobsen 2008, *Programma di ricerche archeologiche presso il sito di Francavilla Marittima (CS), Loc. Timpone della Motta*, GIA internal report).

¹⁴⁵ Building Vb dates to the beginning of the 8th century, Building Vc to 725/700 BC, Building Vd to 660/650 BC (Kleibrink *et al.*, 2004).

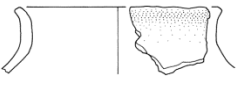
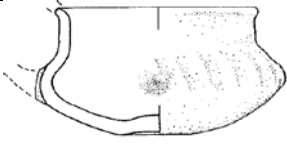
Sherd	Drawing (1:4)	Date	Parallel
599 Pl. LVI		EIA	 1:4 Similar to Cinquegrana 2013, 35.8, p. 107, Puntone Nuovo, Scarlino, GR
605 Pl. LVI		EIA 2	 4 1:4  1.7.24 1:4 De Natale 1992, Pontecagnano (SA), Necropoli di S. Antonio, Fig. 89.4, T 3275, PF2A Kleibrink 2006, Fig. 33.15.1.7.24, Timpone della Motta, Francavilla M.ma, Plateau I, Casa al Muro Grande, EIA2

Tab. 27. Diagnostic materials from levelling the Southern Sector area.

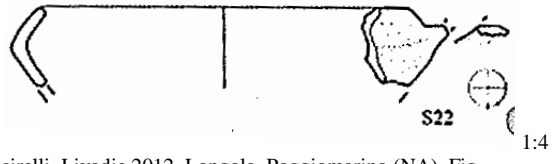
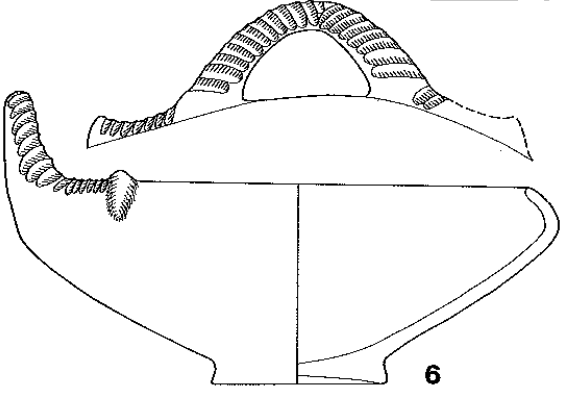
After levelling the area, a pit excavation of 15 m x 3.50 m was set. Below SU2, which mostly resulted as a 7th century BC SU, a very ashy layer (SU3) dating to the 8th century BC was identified. It contained bone fragments as well as matt-painted and impasto pottery. 101 Stratigraphical Units were defined based on the materials found, which led to date the area to a period between the VIII and the VI century BC. Impasto sherds were also found (see Tabs. 28-33).

Sherd	Drawing (1:4)	Date	Parallel
586 Pl. LIV		FBA	 Original w.s. after De Juliis 1979 Similar to De Juliis 1979, Fig. 5.c., p. 525, Vasi di impasto da Salapia (Manfredonia, FG)  1:3 Trucco, Vagnetti 2001, Torre Mordillo, Spezzano A. (CS), Fig. 73.12 (senza orlo), Sett. E8-9, US2, in grey ware (US2).

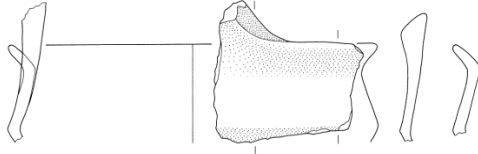
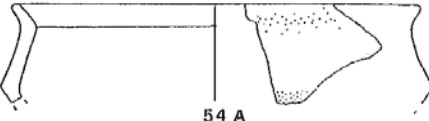
Tab. 28. Diagnostic material from SU1, Southern Sector.

Sherd	Drawing (1:4)	Date	Parallel
577 Pl. LIV		EIA1A	 1:4 Pacciarelli 1999, Torre Galli, Zambrone (VV), Tav. 105.B.2, tomba 154

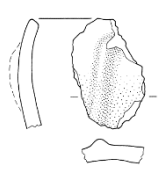
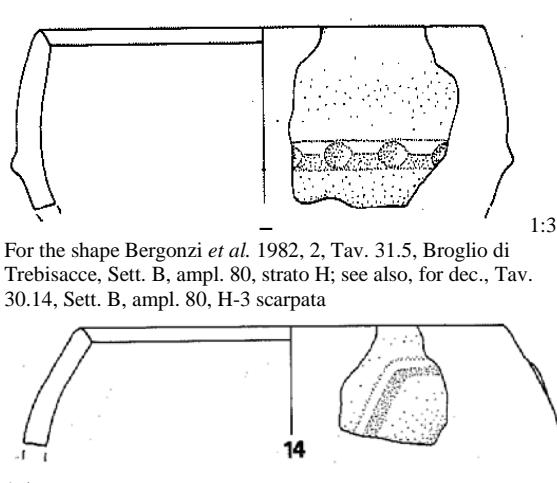
Tab. 29 Diagnostic material from SU2, Southern Sector.

Sherd	Date	Parallel
580 1:4 Pl. LIV	EIA2A-2B	 S22 1:4 Cicarelli, Livadie 2012, Longola, Poggiomarino (NA), Fig. 522.S22, MAF10-23, IFE2A-2B  6 1:4 Similar to De Natale 1992, Fig. 78.6, Pontecagnano, Salerno, T3211, Fase IIA


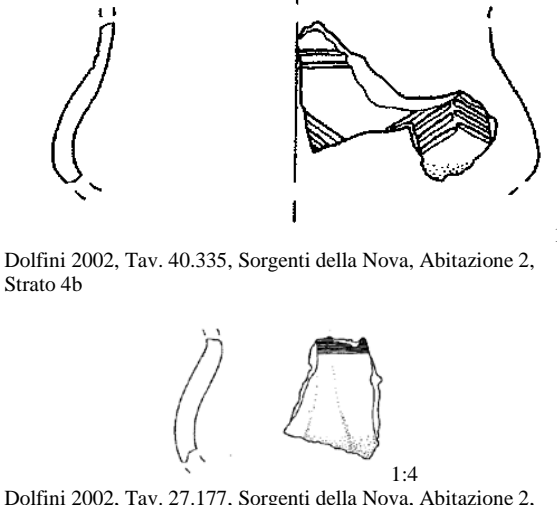
Tab. 30 Diagnostic material from SU2, Southern Sector.

Sherd	Drawing (1:4)	Date	Parallel
596 Pl. LIV		FBA1	 54 A 1:4 Similar to Bettelli <i>et al.</i> 1998, in Peroni, Vanzetti, Broglio di Trebisacce, Tav. 8.54A, Sett. D Nord, livello S

Tab. 31 Diagnostic material from SU12, Southern Sector.

Sherd	Drawing (1:4)	Date	Parallel
576 Pl. LIV		FBA3	 <p>1:3</p> <p>For the shape Bergonzi <i>et al.</i> 1982, 2, Tav. 31.5, Broglio di Trebisacce, Sett. B, ampl. 80, strato H; see also, for dec., Tav. 30.14, Sett. B, ampl. 80, H-3 scarpata</p> <p>14</p> <p>1:4</p>

Tab. 32 Diagnostic material from SU14, Southern Sector.



Sherd	Drawing (1:4)	Date	Parallel
594 Pl. LIV		FBA3	 <p>1:2</p> <p>Dolfini 2002, Tav. 40.335, Sorgenti della Nova, Abitazione 2, Strato 4b</p> <p>1:4</p> <p>Dolfini 2002, Tav. 27.177, Sorgenti della Nova, Abitazione 2, strato 4A</p>

Tab. 33 Diagnostic material from SU40, Southern Sector.


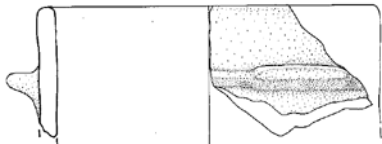

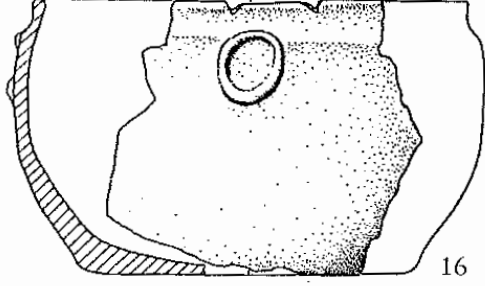

In the Southern Sector, three trenches were excavated in the area between Building V and Muro Schläger¹⁴⁶ in order to establish stratigraphic links between the two structures. These were: Trenches MS1-TT1, 2, and 3, excavated in a N-E direction. Based on the pottery, the first two trenches date to the 6th century BC, the third one to the 6-7th century BC. Among the impasto sherds, mostly dating to the IA, only one late FBA sherd (Tab. 34) was found in the SU1 of Trench 1. We are then dealing with an out of context sherd. A grey ware fragment of a vertical band handle with slightly raised edges was found in Trench 2, SU1 (Pl. LIV.587). The eastern sector included the stratigraphy of votive deposits dated to the 4th and 7th centuries

¹⁴⁶ For the excavations in the area of Muro Schläger (MS1, 1991-1992) see Kleibrink *et al.* 2004, pp. 61-62, Kleibrink 2005, pp. 768-769, Jacobsen, Handberg 2010, p. 37.

BC.¹⁴⁷ Eastwards, a section of 12 meters (N-S) is preserved, with a depth between 1.80 m and 2.80 m. A pit excavation of 4 m (E-W) x 15 m (N-S) was opened.¹⁴⁸ Materials dated to the 8-7th century BC were found, and, among them, the following diagnostic impasto sherds (Tab. 35).

Sherd	Drawing (1:4)	Date	Parallel
584 Pl. LIV		FBA 2-3	 25 1:4 Peroni, Trucco 1994, Tav. 110.25, Broglio di T., sett. D Nord, livello S

Tab. 34 Diagnostic material from SU1, Trench 1, Southern Sector.

Sherd	Drawing (1:4)	Date	Parallel
612 Pl. LVI		RBA	 1:4 Bergonzi <i>et al.</i> 1982, 1, Tav. 6.6, Broglio di T., Sett. B Ovest, Strato 3W (non distinto)
585 Pl. LIV		RBA- FBA	 16 1:4 Dec. similar, but more defined, to Bernabò Brea <i>et al.</i> 1997, 195.16, Ca' de' Cessi, Sabbioneta, MN, US 7, 96 e dal livello di incendio e crollo, RBA1.  14 1:4 For the shape Bergonzi <i>et al.</i> 1982, 2, Tav. 1.14, Broglio di Trebisacce, Sett. B, ampl. 80, strato 4 scarpata, RBA-FBA

Tab. 35 Diagnostic material from SU1, Trench 1, South-Eastern Sector.

The main difference between the Bronze Age evidence on Plateau I and that on the Acropolis is that a BA dwelling was found on the latter. This dwelling has been interpreted as a MBA3 hut.¹⁴⁹ It was covered by the

¹⁴⁷ Kleibrink, Jacobsen 2005.

¹⁴⁸ It was directed by J. Jacobsen and carried out by C. Colelli and G. Mittica.

remains of two structures dating to the 7th-6th centuries BC (buildings Vc and Vd). From its presence it is possible to infer the recognition of a MBA3 settlement phase on the top of the Timpone della Motta and an infrequent use of the surrounding area in the following phases of the Bronze Age.

By completing the analysis of the impasto sherds from Timpone della Motta, this study answers many questions about BA frequentation of the site. The discontinuous shift from the MBA3 to the IA that had seemed to characterize the site is no longer plausible any more. The RBA and FBA remains, both on the Acropolis and in the Plateau I trenches, constitute the traces of a frequentation throughout the BA. The few FBA2 and even fewer EIA1 sherds, mostly found in surface levels, attest to the severe disturbance of the site in successive periods. There might be a possibility to find more answers by excavating unknown areas, such as the northern part of Plateau I. Presumably, considering the clear presence of LBA evidence at surface layers, it will not be possible to find better preserved remains for these periods below the surface. What we could find is a larger number of LBA diagnostic sherds, which would give us a better idea about the nature and intensity of the BA frequentation of the site.

In any case, it is now possible to assume that settlement development on the Timpone della Motta started in the MBA and continued in the RBA and FBA, as provided by the constant but weak presence of evidence from this period. The observation is corroborated by the information from the stratigraphic profile of Carnevale, along the north side of the hill, and from the Area Rovitti on the Southern foothill of Timpone della Motta (Fig. 24b). The data concerning the sites of Carnevale and Rovitti are discussed below.

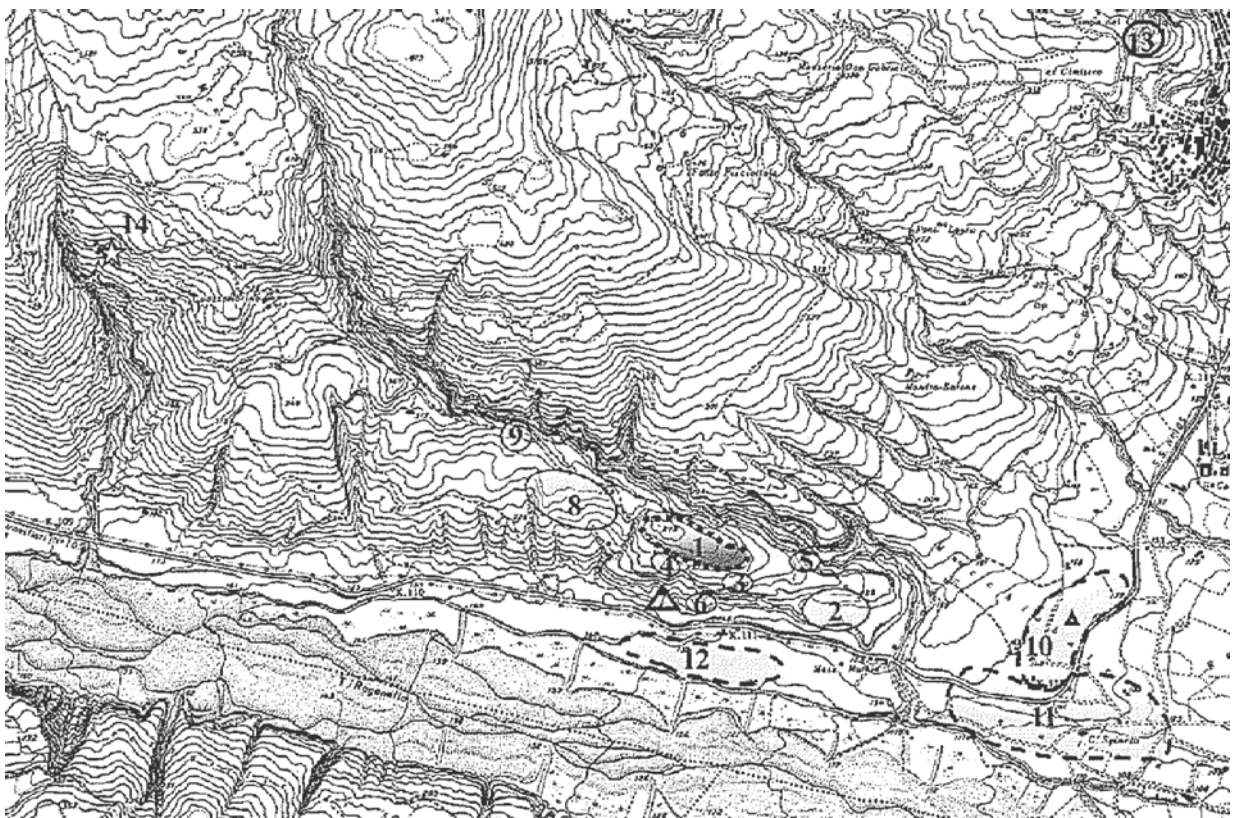


Fig. 24b. Archaeological areas of Timpone della Motta, after Colelli 2015a, Fig. 1. Sites 5 and 6 correspond respectively to the site of Carnevale and Area Rovitti, (Site 1: Acropolis).

¹⁴⁹ Kleibrink 2006, p. 135. As seen for the BA dwelling found in Zona Casa Aperta – Plateau I (Kleibrink 2006, pp. 46-53), also on the Acropolis MBA sherds were found together with other BA sherds. Even if in the squares where the postholes of the hut were found (Pits AC5.15 and AC2) most of the pottery date to the MBA3, it is also true that several sherds date to the RBA and to the MBA2.

2.2.4 Carnevale (Sherds Plates I-IV)

In 2006, a soil profile exposed in the almost vertical northern side of the Carnevale valley, just below the Timpone della Motta hill, was described by members of the Danish and Dutch groups of archaeologists working in Francavilla Marittima. The soil profile consists of stratified layers¹⁵⁰ of mainly loamy grit and stones, many of them containing archaeological material. The top of the profile, lies about 10 m above the valley floor and the layers dip slightly backwards as observed at layers 4-6 (Fig. 26). Bronze Age pottery sherds were collected at the bottom layers of the section, the study of which has been carried out by the author in 2013. Circa 140 cm of stratigraphy correspond to a settlement use that took place in the period between the end of the Middle Bronze Age and the beginning of the Recent Bronze Age (RBA), or to a period corresponding to the beginning of the LHIII B.¹⁵¹ The Bronze Age evidence stops in this phase and the upper layers show that the site was settled again from the end of the IX century BC¹⁵².

The Carnevale section provides a significant stratigraphy to understand the beginning of the Bronze Age frequentation on the hill of Timpone della Motta. Indeed, a frequentation of the at the beginning of the MBA, only discovered by my review of materials from the excavations on the Acropolis and on Plateau I, discussed above, seems to have been followed by a more consistent frequentation in the Late Bronze Age. Some changes took place in the settlement area in the course of the latter period. The presence of the Geometric Dump in the Zona Casa Aperta on Plateau I¹⁵³ containing Final Bronze Age (FBA) - Early Iron Age (EIA) materials, would confirm the deposit formation in the course of the EIA. A second disturbance occurred in the 6th century, as attested by the presence of BA sherds, including MBA3 sherds in the surface layers of Plateau I. However, it is now possible to observe that settlement development on the Timpone della Motta, started in the MBA, continued into the RBA. This is evidenced not only by the wide distribution of evidence from this period, despite its limited quantity and the lack of structures, but also by the information from the stratigraphic profile of Carnevale along the north side of the hill.

From the typological analysis carried out on 30 impasto sherds from Carnevale, it is possible to identify 4 Bronze Age Stratigraphic Units (Tab. 36):

SU	Impasto pottery fragments	Plate	Chronology
4	2	I.2-3	MBA3-RBA1
6	4	I.6, 8-9; II.7	MBA3-RBA1
8	1	III.19	MBA3
10	9	II.10-18	MBA2-RBA

Tab. 36. Bronze Age Stratigraphic Units at Carnevale profile.

Moreover, seventeen sporadic sherds have been collected. Eight diagnostic sporadic finds related to the Carnevale profile date to the MBA3-RBA1 (Plates III-IV). Table 37 shows the stratigraphic sequence recorded in 2006; three bone samples have been radiocarbon dated in 2014.¹⁵⁴ The diagnostic finds will be analyzed based on the Stratigraphic Units they come from.¹⁵⁵

¹⁵⁰ Which extend for 15 m W-E.

¹⁵¹ According to Pacciarelli 2001, Fig. 38, the MBA3 corresponds to circa 1400-1325/1300 BC, the RBA to the period between 1325/133 and 1175/1150; the LHIII B corresponds to the end of the MBA3 and the first part of the RBA.

¹⁵² Colelli, Jacobsen 2013, p. 9.

¹⁵³ The Geometric Dump in PIT ID contains intrusive FBA1-EIA, and the level corresponding to the 6th century house fill (Casa Aperta).

¹⁵⁴ Centrum voor Isotopenonderzoek, University of Groningen, The Netherlands.

¹⁵⁵ Sherds 2-18 have a further code: 4960/__. They are fr. 2-3: 4960/05, fr. 4-5: 4960/09, fr. 6-9: 4960/11, fr. 10-14: 4960/13, fr. 15-18: 4960/14.

SU 1	EIA2	Pottery (one IA pithos fragment)/ Bones	0-20 cm	(moist) carbonate rich, rooted. Loamy sharp-edged grit. Edgy crumb structure around roots. Topsoil somewhat browner with some small stones and gravel. This layer lies 'dumped' over layer 2	Bone sample Carn L 1: 2585±35 BP=cal. 805-770 BC (1-sigma)	
SU 2	8 th century BC	Pottery (Wheel-turned pottery)/ Bones	20-40 cm	(moist) carbonate rich. Clayey sharp-edged grit. Parts with ash. Densely packed flat stones (4 x 4 cm)		
SU 3	MBA3-RBA1	Charcoal/ Bones	40-90 cm	(moist) carbonate rich. Gritty loam. Small stones (5 x 5 cm), not densely packed.	Bone sample Carn L 3: 3055±30 BP=cal. 1385-1265 BC (1-sigma)	
SU 4	MBA3-RBA1	Pottery/Charcoal/ Bones	90-110 cm	(moist) carbonate rich. Clayey grit. 'Dusty' layer with big stones 10 x 10 cm, small stones 4 x 4 cm.		
SU 5	-	-	110-145 cm	(moist) carbonate rich. Loamy sand, grit and small stones. Densely packed		
SU 10*	SU 6	MBA3-RBA1	Pottery/Bones	145-153 cm	(moist) carbonate rich. Loamy grit. Many non-rounded stones	
	SU 7	-	-	153-165 cm	(moist) carbonate rich. Loamy grit. Rounded pebbles. Densely packed small stones	
	SU 8	MBA3	Pottery/Charcoal/ Bones	165-180 cm	(moist) carbonate rich. Loamy grit and sand with larger rounded and few non-rounded stones (3 x 3 cm)	Bone sample Carn L 8: 3105±35 BP=cal. 1420-1305 BC (1-sigma)
	SU 9	-	-	180-185 cm	(moist) carbonate rich. Somewhat gritty loam, stones 1-5 cm. Big stones 10 x 10 cm, alternating with pure yellow ground	

Tab. 37. The stratigraphic units identified at the Carnevale section.¹⁵⁶

*MBA2-RBA, Pottery/Charcoal/Bones, circa 40 cm N-S, (moist) carbonate rich. Grey loamy grit. Densely packed.

The analysis of the sporadic finds will follow. For each SU, the MBA finds and the following RBA finds have been typologically and chronologically defined based on the parallels established. The search for parallels started with considering analogous exemplars from sites located in the surrounding area and proceeded with examining published MBA-RBA materials from other Italian regions, until reaching the Terramare area in the Po Valley. As a result, it has been possible to find parallels for 23 sherds.

Finds from SU 10 (Tabs. 38-39)

This SU is a sub-circular feature with a diameter of circa 40 cm. It is located next to SU9-6 at the eastern end of the section. Pottery fragments dated to the MBA2 come from SU 10. It includes MBA3 and RBA pottery. The MBA finds are listed as follows.

1. a rim fragment with a notched cord-band (Tab. 39.16), which belongs to a slightly high collared vessel similar to an MBA2 example from Broglio di Trebisacce;¹⁵⁷
2. a jar with slightly flaring rim (Tab. 39.18), similar to an MBA1-2 example from the Terramare area;¹⁵⁸
3. part of an ovoid vessel with band handle (Tab. 39.11), assignable to the MBA2-3;¹⁵⁹

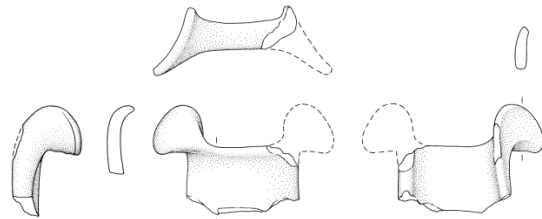
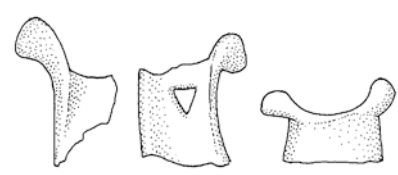
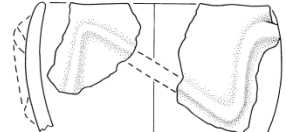
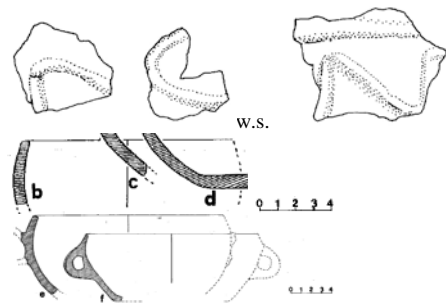
¹⁵⁶ The geological description comes from a 2006 preliminary report by Attema and Jacobsen (GIA archive).

¹⁵⁷ Peroni, Trucco 1994, Tav. 14.12, Broglio di Trebisacce, Sector E, level 3B, Shape 96A.

¹⁵⁸ Bernabò Brea *et al.* 1997, Castelvetro (MO), S. Polo Canovo, Struttura US3, Fig. 164.14.

4. at Grotta Cardini parallels concerning the shape of a bowl from Carnevale were found (Tab. 38.5);¹⁶⁰
5. regarding the decoration characterizing the previously mentioned bowl and constituted by a cord-band forming angular motifs, similar examples were found at Grotta del Noglio¹⁶¹ and at Belverde di Cetona;¹⁶²
6. a fragment of a small handle (Tab. 38.4) similar to the find in Pl. III.535 from Carnevale¹⁶³ and to examples from Grotta Cardini;¹⁶⁴
7. a bowl with high cylindrical rim (Tab. 39.10) similar to an example from Broglio di Trebisacce dated to the beginning of the MBA3;¹⁶⁵
8. a decorated rim fragment, with notched cord-band and bump (Tab. 39.12), calls to mind several MBA3 examples from the Terramare area.¹⁶⁶

The other fragments from SU10 date to the RBA. They are three small bowls. The first bowl (Tab. 39.13) dates to the RBA1, based on a parallel from Torre Mordillo;¹⁶⁷ the other two bowls (Tab. 39.14 and Tab. 39.15) date to the whole RBA, according to a parallel from Broglio di Trebisacce.¹⁶⁸

Sherd	Drawing (1:4)	Date	Parallel
4	 Pl. I	MBA3	 w.s. Bernabò Brea <i>et al.</i> 1989, Fig. 122,e; Grotta Cardini, Praia a Mare (CS); Strato Superiore; Cf. 2-3. Cardini 1970, fig. 14, Liv. C (Appenninico).
5	 Pl. II	MBA3	 w.s. w.s. For dec. see a fragment from Grotta del Noglio, Marina di Camerota, SA (Vigliardi 1975, Fig. 16.6-7, strato C) and a fragment (Cf. 2) from Belverde di Cetona, SI (Calzoni 1962, Tav. IV.b). For shape, Bernabò Brea <i>et al.</i> 1989, Fig. 99.b (but whit flattened lip) and Fig. 99.e (but less deep) from Grotta Cardini, Praia a Mare, CS, Strato superiore

Tab. 38 Finds from SU 10 (1/2).

¹⁵⁹ For the rim, see parallel after Peroni, Trucco 1994, Fig. 61.102, shape 76. See also parallel in Cocchi Genick 1995, Foggia 98, Tipo 1.

¹⁶⁰ See Bernabò Brea *et al.* 1989, Fig. 99.b, though differing for the lip and Fig. 99e, less deep than the bowl here analyzed.

¹⁶¹ Grotta del Noglio, Marina di Camerota, Salerno, after Vigliardi 1975, Fig. 16.6-7, Strato C.

¹⁶² Belverde di Cetona, Siena, after Calzoni 1962, Tav. IV.b.

¹⁶³ A similar fragment was also found at the site of Timpone della Motta di Francavilla (this thesis, Tab. 20.106).

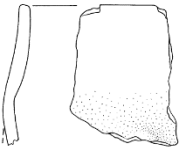
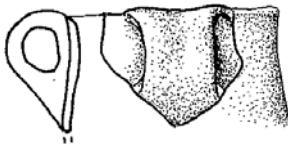

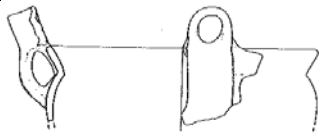
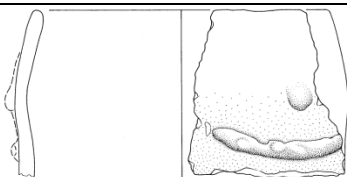
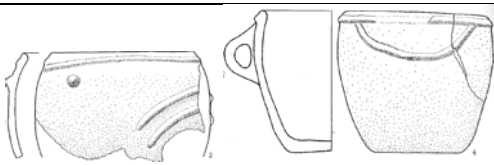

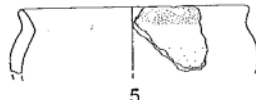


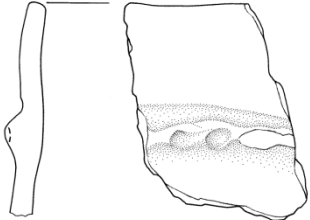
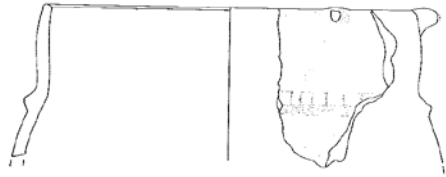
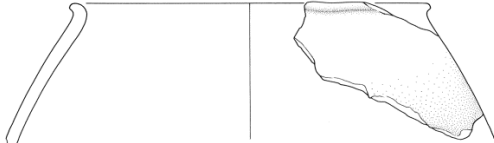
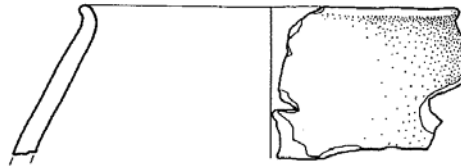
¹⁶⁴ Grotta Cardini, Praia a Mare after Bernabò Brea *et al.* 1989, Fig. 122,e, strato superiore; Cardini 1970, fig. 14, liv. C.

¹⁶⁵ Cocchi Genick 1995, Foggia 391, Tipo 2 from Broglio di Trebisacce, Settore B, ampl. '80, str. 4, *scarpata* and Sett. B, tr. '79, str. 4 inf.

¹⁶⁶ See, for instance, Mutti, Pizzi 2009, Tav. 13.1.2 (US90), Tav. 13.8.8 (US81c), Tav. 14.4.4 (US87A) from Vasca di Noceto, Torretta di Noceto, Parma.

¹⁶⁷ Cassano allo Jonio; Trucco, Vagnetti 2001, Tipo 83, fig. 64.5, US 235.

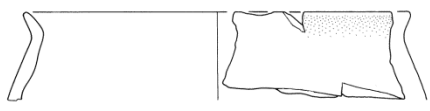

¹⁶⁸ Settore D, livello S, after Damiani 2010, Tav. 44.10, fam. 24-60, tipo 1.

Sherd	Drawing (1:4)	Date	Parallel
10 Pl. II		MBA3	 391 1:5 Cocchi Genick 1995, Foggia 391, Tipo 2, BM, fasi 1-3 (Broglgio di Trebisacce, Sett. B, ampl. '80, str. 4, scarpata, MBA3 and Broglgio di Trebisacce, Sett. B, tr. '79, str. 4 inf., beginning of the MBA3).
11 Pl. II		MBA 2-3	 102 1:6 Bergonzi <i>et al.</i> 1982, Tav. 13.4, Broglgio di Trebisacce, sporadico, p. 76
12 Pl. II		MBA3	 w.s. Vasca di Noceto (Torretta di Noceto, Parma) in Mutti, Pizzi 2009, Tav. 13.9, 2 (US 81c). For the shape, Tav. 13.4.4 (US 87a).
13 Pl. II		RBA1	 5 1:4 Trucco, Vagnetti 2001, Tipo 83, fig. 64.5 (con orlo non tagliato esternamente), US 235, Torre Mordillo, Cassano allo Jonio (CS)
14-15 Pl. II		RBA	 10 1:4 Damiani 2010, Tav. 44.10, Fam. 24-60, Tipo 1, var. B, Broglgio di Trebisacce (CS), Sett D, livello S
16 Pl. II		MBA2	 12 1:5 Peroni, Trucco 1994, Tav. 14.12, forma 96A, Broglgio di Trebisacce (CS), Settore E, livello 3B
18 Pl. II		MBA 1-2	 1:6 Bernabò Brea <i>et al.</i> 1997, Fig. 164.14, Castelvetro, S. Polo Canova (MO), struttura US3

Tab. 39 Finds from SU 10 (2/2).

Finds from SU 8 (Tab. 40)

SU 8 contained a rim fragment of a large bowl with carena (Tab. 40) similar to MBA3 examples from Vivara-Punta Capitello (Napoli)¹⁶⁹ and Palidoro (Roma).¹⁷⁰

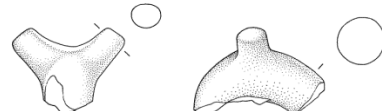
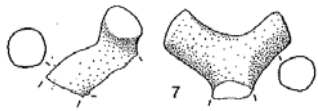
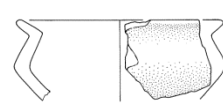
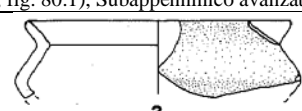
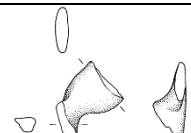
Sherd	Drawing (1:4)	Date	Parallelo
19 Pl. III		MBA3	 Cocchi Genick 1995, Fig. 50. 168, BM3, Vivara, Punta Capitello, saggio B 1937; saggio E/1A 1937 (Cazzella <i>et al.</i> 1975-80, fig. 19.1). Cocchi Genick 1995, Fig. 52. 175, MBA3, Palidoro (Roma), sett. E, str. 6 (Fugazzola Delpino 1976, fig. 18:5)

Tab. 40 finds from SU 8.

Finds from SU 6 (Tab. 41)

SU 6 contained one fragment of a MBA3 handle (Tab. 41.9) and two RBA sherds. The MBA3 handle has parallels from Grotta Cardini,¹⁷¹ as well as at Timpone della Motta (Tab. 20.106) and among the sherds collected at the Carnevale Profile in 2006 (Tab. 38.4).

RBA evidence includes a fragment of a bowl with carena (Tab. 41.8) and a fragment of a handle with zoomorphic knobs (Tab. 41.6). The former fragment dates to the RBA1, according to a parallel found at Amendolara;¹⁷² the latter is similar to fragments associated to the Ausonio I of Lipari, found at Coppa Nevigata¹⁷³ and Torre Santa Sabina (Puglia).¹⁷⁴

Sherd	Drawing (1:4)	Date	Parallelo
6 Pl. I		RBA2	 Belardelli 2004, Tav. LXI. 7, Coppa Nevigata (Manfredonia, FG), collezione Boschi, Tipo 100b1, also Coppa Nevigata-Nuovi scavi, Gruppo L (Cazzella 1987, fig. 80.1), Subappenninico avanzato.
8 Pl. I		RBA1	 Bergonzi <i>et al.</i> 1982, Tav. 38.3, Santo Cavaliatore, Amendolara (CS), confronto con Broglio di Trebisacce, Foggia B13 (Ric. 1), sett. B Ovest, liv. 3 Sup. (BR1) e sett. B Ovest, liv. 2b (BR1).
9 Pl. I		MBA3	See Carnevale Pl. 4, 535 and Timpone della Motta Pl. V.106.

Tab. 41 Finds from SU 6.

¹⁶⁹ Cocchi Genick 1995, Fig. 50.168, Saggio B 1937 and Saggio E/1a 1937, fig. 19.1 (after Cazzella *et al.* 1975-80).

¹⁷⁰ Cocchi Genick 1995, fig. 52.175, Sett. E, str. 6, after Fugazzola Delpino 1976, Fig. 18:5.

¹⁷¹ Bernabò Brea *et al.* 1989, Fig. 122.e, Upper Layer; Cardini 1970, Fig. 14, Liv. C.

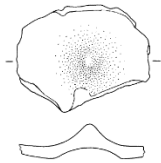
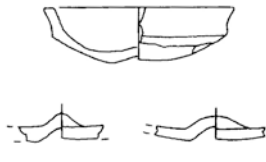
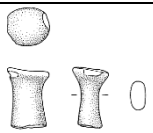
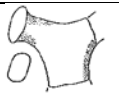

¹⁷² Bergonzi *et al.* 1982, Tav. 38.3, Santo Cavaliatore, Amendolara (CS), comparable to two bowls from Broglio di Trebisacce (Sett. B Ovest, str. 3 Sup and Sett B Ovest, str. 2b).

¹⁷³ Belardelli 2004, Tav. LXI,7, collezione Boschi, Tipo 100b1.

¹⁷⁴ Cinquepalmi, Radina 1998, fig. 417, n. cat. 9.010, Recupero del terreno di sbancamento delle strutture.

Finds from SU 4 (Tab. 42)

Only two sherds have been collected at SU4: a snail horn fragment of a handle (Tab. 42.3) and a base fragment with omphalos (Tab. 42.2). Although snail horns are typical decorations of handles dating to the whole RBA,¹⁷⁵ the presence of the base fragment with omphalos, comparable to examples from a RBA1 layer at Broglio di Trebisacce,¹⁷⁶ leads me to believe that both finds most likely belong to the RBA1 chronological phase. My interpretation also derives from the possibility that the two sherds could be part of the same vessel, namely a bowl, not only because they are very similar in fabric, color and surface,¹⁷⁷ but also because of their scaled dimensions. I would date these two fragments to a transitional period between the end of the MBA3 and the beginning of the RBA, which aligns with the date provided by a bone sample from the upper layer 3, 1337±44 cal. BC, coinciding with the beginning of the LHIIIB. Interestingly, bowls with omphalos and snail horn decoration of handles have also been found in final MBA3 layers at Vasca di Noceto (Parma).¹⁷⁸

Sherd	Drawing (1:4)	Date	Parallel
2		RBA2	 1:4 Peroni 1984, Tav. 8, 2-4, Broglio di Trebisacce (CS), Sett. D, strato I AIII
3		RBA 1-2	  Damiani 2010, Tav. 123.1, Tipo B15-1C (Monte Battaglia, Casola Valsenio, Ravenna); see also Orlando 1995, Tav. LXXXI.8, Punta Meliso (LE), Settore I-M/12-14, RBA structure

Tab. 42 Finds from SU 4.

Sporadic finds (Tabs. 43-44)

Among the sporadic finds, two of them date to the MBA3:

1. a bowl with carena (Tab. 43.21) similar in shape to a bowl from La Starza.¹⁷⁹ but without decoration, as well as to the bowl in Tab. 40 from Carnevale-SU 8;
2. a fragment of a small (Tab. 44.535) handle similar to the find in Pl. 1.4 from Carnevale-SU 10.

The other four diagnostic and sporadic finds date to the RBA1. They are:

1. a bowl with carena and strap handle (Tab. 43.24) which finds parallels¹⁸⁰ at Coppa Navigata¹⁸¹ and at Mulino Rossi;¹⁸²

¹⁷⁵ For this sherd, parallels from Monte Battaglia-Casola Valsenio, Ravenna (Damiani 2010, Tav. 123.1, Tipo B15-1C) and from Punta Meliso-Lecce (Orlando 1995, Tav. LXXXI.80) can be established.

¹⁷⁶ Peroni 1984, Tav. 8.3, see also 4, sett. D, strato I AIII; Peroni, Trucco 1994, Tav. 31,19, shape 59, Broglio di Trebisacce, Sett. BW, liv. 2A, riq.T.


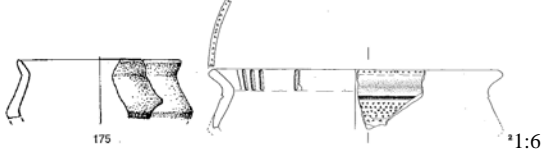
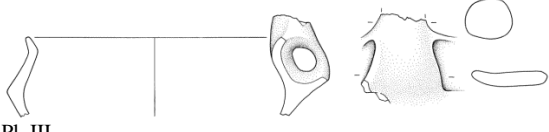
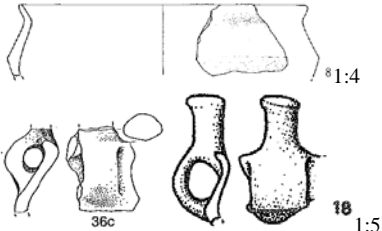
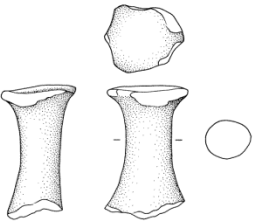
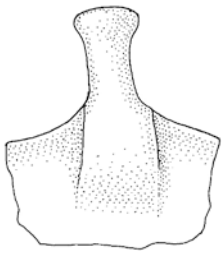
¹⁷⁷ Roughly deperated impasto with small size inclusions, burnished surfaces, surface color from Gley 2-4/5PB to 7.5YR4/3 (Munsell soil color chart 2000).

¹⁷⁸ Mutti, Pizzi 2009, Fig. 13.1.1, US 90-89, Fig. 13.1.6, US87a. Also at Torre Mordillo a continuity in the production of fine wares between MBA3 and RBA1 was noticed (Trucco, Vagnetti 2001, pp. 236-237).

¹⁷⁹ La Starza, Ariano Irpino, Avellino, after Macchiarola 1987, Tav. 38.2, uncertain context.

¹⁸⁰ See also Cocchi Genick 2004a, Fig. 7.18.

2. a fragment of a cylindrical and pumpled handle (Tab. 43.26) similar to examples from Numana¹⁸³ and from Porto Perone;¹⁸⁴
3. another fragment of handle with snail horn knobs (Tab. 44.533) comparable to a specimen from Lipari;¹⁸⁵
4. a fragment of a upright handle with snail horn-shaped endigs (Tab. 44.536) similar to a handle from Case Missiroli.¹⁸⁶
- 5.

Sherd	Drawing (1:4)	Date	Parallel
21 Pl. III		MBA3	 Cocchi Genick 1995, Fig. 52. 175, Palidoro (Roma), sett. E, str. 6 (Fugazzola Delpino 1976, fig. 18:5). Parallel 2 for the shape of the rim, without dec.: Macchiarola 1987, Tav. 38.2; La Starza, Ariano Irpino, AV, provenienza indeterminata.
24 Pl. III		RBA1	 Par. 1: Damiani 2010, Tav. 41.8, Fam. 22.54, Type 2, var. B, RBA1, Mulino Rossi, Pitigliano (GR), Scavi 1982-83, Sopr. Arch. Toscana, strato I, MBA-FBA. Par. 2: Belardelli 2004, Fig. 10.36c, tav. XVIII.6, Coppa Navigata, III trincea, fra II e III battuto, RBA1. Par. 3: Cocchi Genick 2004a, Fig. 7.18.
26 Pl. III		RBA1	 Cf. 2 Lo Porto 1963, Leporano – Porto Perone, Fig. 65.6, Scavi Quagliati, ceramica dagli strati sup. See Carnevale Tab. 43.24

Tab. 43 Sporadic finds (1/2).

¹⁸¹ Coppa Navigata, Manfredonia, Foggia after Belardelli 2004, Fig. 10.36c, tav. XVIII.6, III trincea, fra II e III battuto.


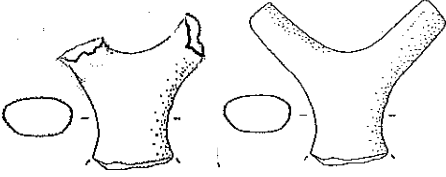


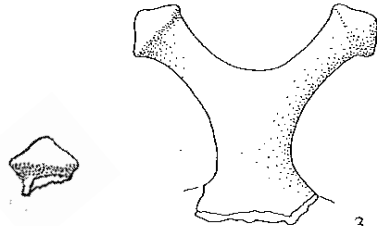
¹⁸² Mulino Rossi, Pitigliano, Grosseto, after Damiani 2010, Tav. 41.8, Fam. 22.54, Tipo 2. Var. B, Scavi 1982-83, Soprintendenza Archeologica della Toscana, strato I.

¹⁸³ Numana Cem, Soprintendenza Archeologica di Ancona after Damiani 2010, Tav. 123.4, Tipo B16-2A.

¹⁸⁴ Lo Porto 1963, Leporano-Porto Perone, Fig. 65.6, Scavi Quagliati, ceramica dagli strati superiori.

¹⁸⁵ Damiani 2010, Tav. 117, Gruppo II, B2, Tipo 2, Var. G, similar to Tav. 117.14, Lipari, Acropoli, da una trincea non precisata.

¹⁸⁶ Case Missiroli, Cesena (FC), US1, after Damiani 2010, Tav. 125.A3, Gruppo VIII, B20, Tipo 1, var. C.

Sherd	Drawing (1:4)	Date	Parallel
533 Pl. IV		RBA1	 1:3 Damiani 2010, Tav. 117, Gruppo II, B2, Tipo 2, Var. G, avv. A Tav. 117.14, Lipari, Acropoli, trincea non precisata
535 Pl. IV		MBA3	See Carnevale 4, 9 and Timpone della Motta 106.
536 Pl. IV		RBA1	 3 1:3 Damiani 2010, Tav. 125, A3, Gruppo VIII, B20, Tipo 1, var. C, Case Missiroli (US1), Cesena (FC)

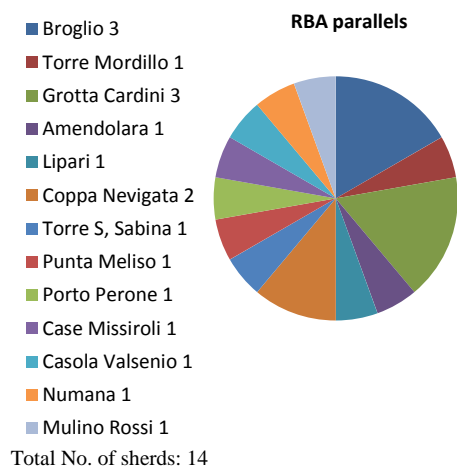
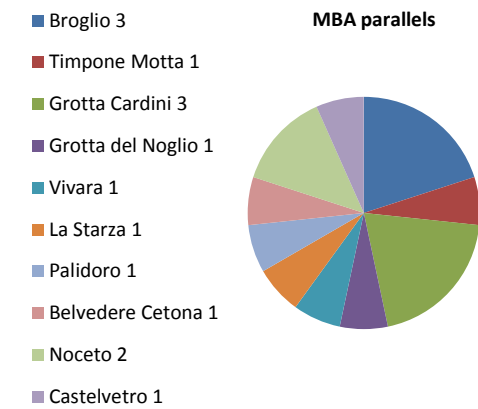
Tab. 44 Sporadic finds (2/2).

Interpretation of the site

Regarding the origin of sites that yielded parallels for the ceramics from the Carnevale site (Fig. 25), these were from the surrounding area mostly found at the site of Broglio di Trebisacce, both for the MBA and for the RBA. Only one MBA sherd from the site of Timpone della Motta attests to typological similarities. For the first period, parallels were found also at the western Calabrian site of Grotta Cardini. MBA3 parallels were found at three sites in Campania, namely Vivara, La Starza and Grotta del Noglio. A parallel comes from Palidoro, near Rome, another one from Belverde di Cetona, near Siena, and the remaining sherds find comparisons at the site of Vasca di Noceto, near Parma and at Castelvetro near Modena. For the RBA, parallels were found at three sites in the Sibaritide: Broglio, Torre Mordillo and Amendolara. A parallel was found at Lipari (Sicily). Typological analogies were found at Mulino Rossi (Grosseto), Numana (Ancona), Case Missiroli (Cesena), Casola Valsenio (Ravenna). However, most of the parallels were found at Apulian sites (Coppa Navigata, Santa Sabina, Punta Meliso and Porto Perone).

In summary (Fig. 25), parallels from Campanian sites are attested in the MBA, but not in the RBA. Parallels from Apulian sites, established for several RBA samples, are absent in the MBA. As a consequence, the MBA evidence seems to be related to MBA3 contexts found on the west side of Southern and Central Italy, while RBA finds show more analogies with Apulian sites, mostly located in the South of that region. As to the northern Italian Bronze Age sites where parallels were found, most of these regard their RBA phases of settlement. Although this derives of course from the available data, mostly depending on Damiani's

typological catalogue,¹⁸⁷ it has also to do with the typological homogeneity characterizing the Italian RBA, especially in the RBA1.¹⁸⁸



Total No. of sherds: 9

Fig. 25. MBA-RBA sites of origin of ceramics comparable to the finds from the Carnevale profile. Each group of parallels is represented by the total number of sherds from their respective site.

SU 10 can be interpreted as a shallow foundation ditch delimiting a habitation area at least 15 m wide (E-W). Indeed, SU10 delimits the adjacent and chronologically analogous stratigraphic sequence from SU 9 to SU 6. SU 10 and SU 6 are covered by a sterile level (SU5); this indicates that two settlement phases took place at this site in the Bronze Age over circa 150 years, from 1420 to 1265 BC. It appears that the abandonment of the first settlement happened after about 80 years, at the very beginning of the RBA, as both SU 6 and SU 10 contain RBA1 sherds. However, only two sherds were found at SU4 and no pottery was found at SU3. It could

¹⁸⁷ Damiani 2010.

¹⁸⁸ Pacciarelli 2001, p. 36; Peroni 1994, p. 848.

mean that the second phase is more of a frequentation phase rather than a settlement phase. The area is likely to have been an off-site area of a MBA3-RBA1 settlement situated nearby. The upper layers show that the Carnevale site was settled again from the Iron Age (Tab. 37).¹⁸⁹

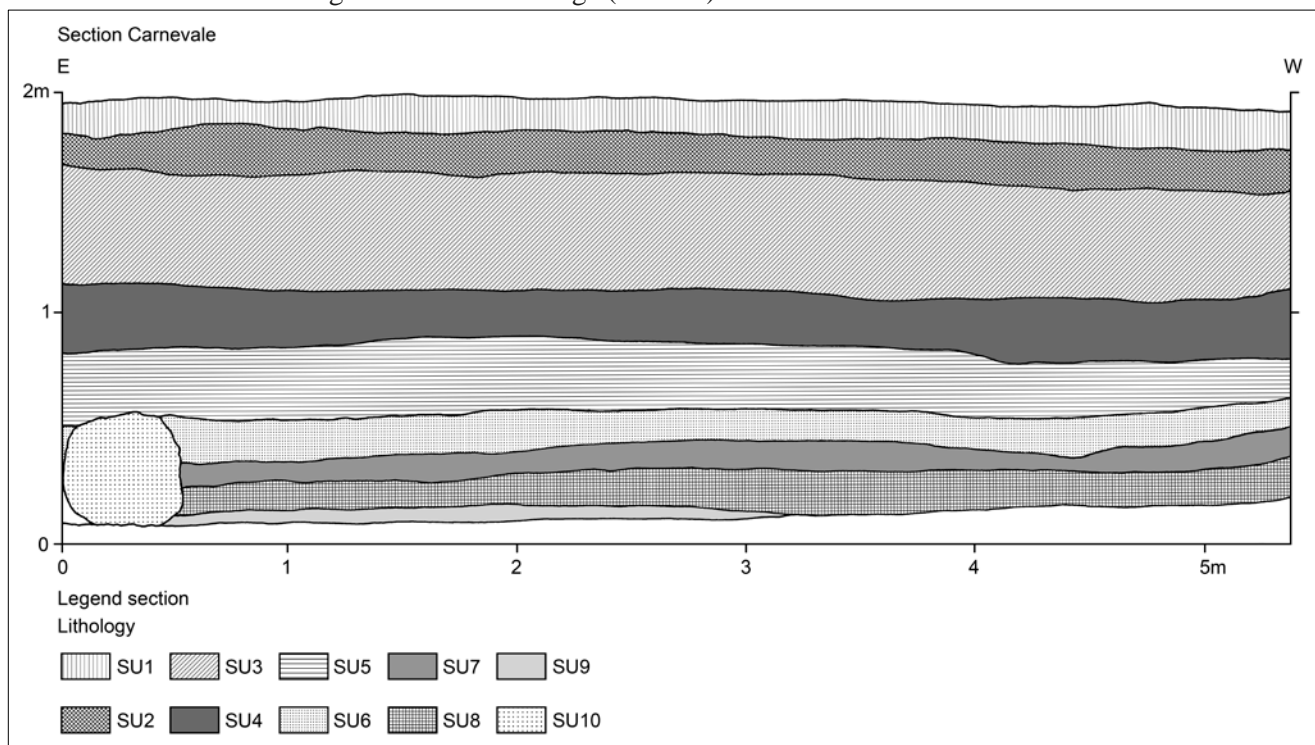


Fig. 26. Carnevale section.

¹⁸⁹ See also Ippolito *et al.* forthcoming.

2.2.5 Area Rovitti (Sherds Plates XII-XIII, XLIV-XLVII)

During the 2009-2010 excavations of Iron Age Structure A and Structure B at the Area Rovitti (Fig. 24b),¹⁹⁰ evidence for Late Bronze Age material culture was found. Handmade pottery fragments date between the Recent Bronze Age (RBA) and the Final Bronze Age (FBA) in addition to the period between the FBA and the Early Iron Age (Plates XII-XIII). The presence of Bronze Age fragments spread throughout the excavated area indicates the probable presence of Bronze Age levels in lower strata beneath the Iron Age structures that were partially damaged as a result of the building of such structures. Additionally, the presence of out of context Bronze Age material is also a consequence of the construction of the Eiano aqueduct in 1959 that further disturbed the site area.

Evidence from the first phase of the RBA includes a fragment of a handle with snail horn knobs (Tab. 45.369),¹⁹¹ which was found in the area of Structure B (8th-7th century BC) in a level dating to the end of the 8th century BC. Consequently, the RBA1 fragment may be related to the levelling of the floor within Structure B as a result of the presence of Bronze Age levels beneath the IA structures. The same process concerns both the Bronze Age fragments found during the excavation of the Structures A-B and in the area north of them, where the Eiano aqueduct had been built.

Other RBA fragments were also found. Within the levelling layer from Structure B (SU 87) a jar with in-turning rim and cord-band decoration was found (Tab. 45.489), which resembles parallels from Torre Mordillo and Castiglione-Roggiano Gravina.¹⁹² At the latter site, another parallel has been found for a short collared jar coming from SU 83 (Tab. 45.515).¹⁹³

A jar with short and straight rim (Tab. 45.502) was found in the levelling layer SU 92, from Structure A (8th century BC). It is comparable to a jar from Torre Mordillo.¹⁹⁴ At SU 38, which is a surface layer covering Structure A, a fragment of a handle¹⁹⁵ belonging to the type with solar boat made of opposing bird heads was found (Tab. 45.362). A RBA2 fragment of a bowl with carena and straight profile (Tab. 45.368) was found in SU 82, which is above SU 38; it resembles grey ware bowls from Broglio di Trebisacce.¹⁹⁶

At the surface layer SU1, up to the Eiano aqueduct, an out of context proto-Mycenaean fragment, decorated by a running spiral, was found (Tab. 46.361).¹⁹⁷ It dates to the LHIIIB-beginning of LHIIIC, corresponding to the RBA2-FBA1.

¹⁹⁰ Colelli, Jacobsen 2013, pp. 20-32; Jacobsen, Handberg 2012, pp. 688-705; Crudo 2012, pp. 1-3.

¹⁹¹ Sherd 369 from layer SU 84, see for instance the parallel after Damiani 2010, Tav. 120A.4, Type B10, var. B (Podere Montaletto, Misano Adriatico, Rimini).

¹⁹² Sherd 489; for the parallels: Trucco, Vagnetti 2001, Fig. 82.14, Torre Mordillo, Spezzano Albanese (CS), Muro Est, US 2, Type 261 A, and Peroni, Trucco 1994, Tav. 160.10, Castiglione, Roggiano Gravina (CS), survey material.

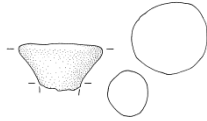
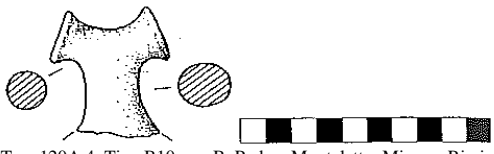

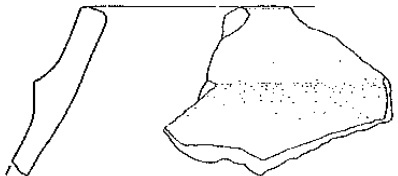




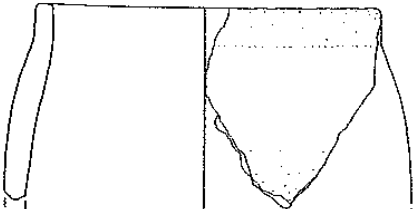
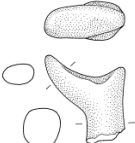
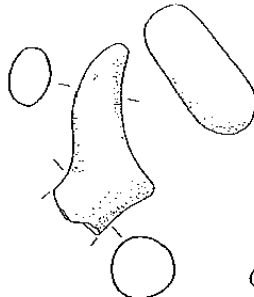

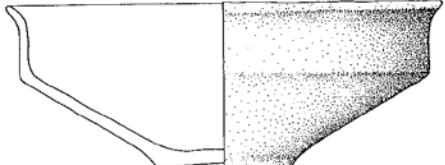
¹⁹³ Sherd 515 is similar to Peroni Trucco 1994, Tav. 160.11, Castiglione, Roggiano Gravina (CS), surface find.

¹⁹⁴ Sherd 502 from SU 92, level of frequentation of Structure A. For the parallel: Trucco, Vagnetti 2001, Fig. 61.9, Torre Mordillo, Spezzano Albanese (CS), Sett. D12dI, US 145, type 309 A.


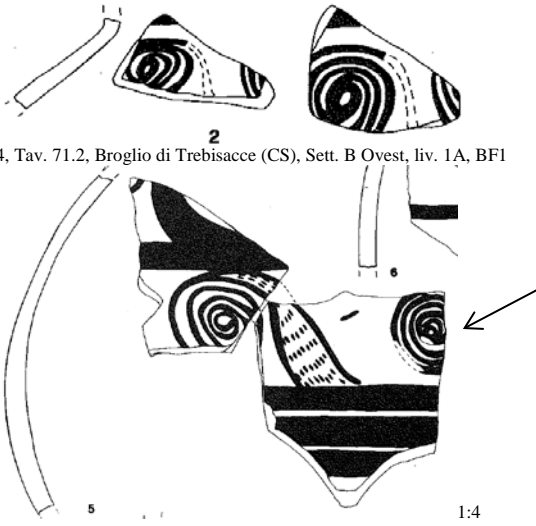
¹⁹⁵ Sherd 362 is comparable to Damiani 2010, Tav. 114.6.A48, Foggia 4, from Torre Mordillo, DE11US11/87.

¹⁹⁶ Sherd 368 is similar to Damiani 2010, Tav. 64.7, from Broglio di Trebisacce (CS), sett. D, strato 1AIII e S.

¹⁹⁷ Sherd 361. Two parallels have been established, both found at Broglio di Trebisacce. They are Panichelli 1994, Tav. 71.2, Sett. B Ovest, liv. 1A, FBA1, and Tav. 72.5, Sett. D Est, Liv. 1 Est, RBA2. Thanks to R. Jung for his observations. For further Aegean and Italo-Mycenaean pottery found at Timpone della Motta see Chapter 4, footnote 54.

Sherd	Drawing (1:4)	Date	Parallel
369	 <p>Pl. XIII</p>	RBA 1	 <p>Damiani 2010, Tav. 120A.4, Tipo B10 var. B, Podere Montaletto, Misano, Rimini</p>
489	 <p>Pl. XLIV</p>	RBA	 <p>Trucco, Vagnetti 2001, Fig. 82.14, Torre Mordillo, Spezzano Albanese (CS), Muro Est, US 2, Type 261 A</p>  <p>For the shape Peroni, Trucco 1994, Tav. 160.10, Castiglione, Roggiano Gravina (CS), survey material.</p>
515	 <p>Pl. XLIV</p>	RBA	 <p>Peroni, Trucco 1994, Tav. 160.11, Castiglione, Roggiano Gravina, Surface find</p>
502	 <p>Pl. XLIV</p>	RBA	 <p>Trucco, Vagnetti 2001, Fig. 61.9, US 145, Torre Mordillo, Spezzano Albanese, CS</p>
362	 <p>Pl. XII</p>	RBA	 <p>Damiani 2010, Tav. 114.6.A48, Foggia 4, Torre Mordillo, DE11US11/87</p>
368	 <p>Pl. XIII</p>	RBA 2	 <p>Damiani 2010, Tav. 64.7, Tipo 88C, Broglio di Trebisacce, Sett. D, Str. 1AIII and S</p>

Tab. 45 Area Rovitti. Diagnostic sherds (1/6).

Sherd	Drawing (1:4)	Date	Parallel
361	 <p>Pl. XII</p>	RBA2-FBA1	 <p>Panichelli 1994, Tav. 71.2, Broglio di Trebisacce (CS), Sett. B Ovest, liv. 1A, BF1</p> <p>Panichelli 1994, Tav. 72. 5, Broglio di Trebisacce (CS), Sett. D Est, liv. 1 Est, BR2</p>

Tab. 46 Area Rovitti. Diagnostic sherds (2/6).

Evidence for the FBA is attested at SU 87 (Tab. 47.492)¹⁹⁸ (Structure B), SU 92 (Tab. 47.505)¹⁹⁹ (Structure A), and at the surface layers SU 42 (Tab. 47.522),²⁰⁰ SU1 (Tab. 47.512),²⁰¹ SU2 (Tab. 47.520).²⁰² Seven fragments date to the period between the FBA and the EIA:

1. Sherd 523 (Tab. 48) is a grey ware small jug similar to a surface find from Amendolara;²⁰³ the upper part is similar to a specimen from Timpone della Motta.²⁰⁴
2. Sherd 507 (Tab. 48) belongs to a conical and truncated vessel and resembles an example from Broglio di Trebisacce.²⁰⁵
3. Sherd 519 (Tab. 48) is a fragment of a dolium comparable to a type from Serre di Altilia (KR).²⁰⁶
4. Sherd 532 (Tab. 48) is a part of a bucket similar to a vessel from Broglio di Trebisacce.²⁰⁷
5. Sherd 488 (Tab. 48) is a part of an ovoid jar with a short out-turning rim, which resembles parallels at Broglio di Trebisacce²⁰⁸ and at SU 92 of Area Rovitti.²⁰⁹

¹⁹⁸ At this SU the RBA fragment 489 (Tab. 45) was found. The FBA sherd 492 is a jar with in-turning and outward thickened rim and cord-band decoration similar to an example from Torre Mordillo after Trucco, Vagnetti 2001, Fig. 72.8, Sett. E8-9, US2.

¹⁹⁹ At SU 92 the RBA sherd 497 (Tab. 45) was found. The FBA sherd 505 belongs to an in-turning rim of a jar with cord-band, dated based on a parallel after Poggiani Keller, Figura 1979, Fig. 5.6, Costoletto di Lamone, Ischia di Castro (VT), Tomba 5, Tumulo III, pp. 346-381.

²⁰⁰ Sherd 522 belongs to a deep bowl with in-turning and inward thickened rim. The type of rim is similar to examples from Torre Mordillo, after Peroni, Trucco 1994, Tav. 147.7 (survey material), and from Sorgenti della Nova, Farnese (VT), Abitazione 2, Strato 4b after Dolfini 2002, Tav. 39.325, BF avanzato.

²⁰¹ Sherd 512 is a fragment of a cooking stand, for the parallel see Dolfini 2002, Tav. 43.361, Sorgenti della Nova.

²⁰² Sherd 520 is a rim fragment very similar to a rim after Dolfini 2002, Tav. 70.681, Sorgenti della Nova, Abitazione 1, sporadici.

²⁰³ Santo Cavalcatore, Amendolara (CS), survey material, after Bergonzi *et al.* 1982, also in Belardelli 1994, Fig. 104.5.

²⁰⁴ Belardelli 1994, Fig. 124.13.

²⁰⁵ Peroni, Trucco 1994, Tav. 86.36, Sett. B Ovest, Livello H, shape 37.

²⁰⁶ Capriglione *et al.* 2012, Fig. 9.3.6, Tipo 4, var. C.

²⁰⁷ Peroni, Trucco 1994, Tav. 164.2, Tarsia, surface.

²⁰⁸ Peroni, Trucco 1994, Tav. 88.8, Sett. B Ovest, Liv. H.

²⁰⁹ Colelli 2012, Tav. 113.HY102, Struttura A, SU92.

6. Sherd 491 (Tab. 48b) is a rim bevelled on the inside, of a shallow bowl that is comparable to an example from Castelluccio della Selva di Marano, at Vitorchiano, near Viterbo²¹⁰ and to another example from Santa Maria di Vastogirardi, near Isernia.²¹¹
7. Sherd 527 (Tab. 48b)²¹² is a rim fragment of a large jar similar to two jars from Torre Mordillo²¹³ and Timpone della Motta.²¹⁴

Sherd	Drawing (1:4)	Date	Parallel
492	 Pl. XLIV	FBA	 Trucco, Vagnetti 2001, Fig. 72.8, Torre Mordillo, Spezzano Albanese (CS), Sett. E8-9, US 2, tipo 314. 1:3
505	 Pl. XLIV	FBA	 6 1:4 Poggiani, Keller, Figura 1979, 346-381, Fig. 5.6, Costoletto di Lamone, Ischia di Castro (VT), Tomba 5, Tumulo III
522	 Pl. XLIV	LFB A	 1:3 Peroni, Trucco 1994, Tav. 147.7 but less deep and not dated; From Torre Mordillo, Spezzano Albanese, Superficie. 1:2 Dolfini 2002, Tav. 39.325, Sorgenti della Nova, Farnese (VT), Abitazione 2, strato 4b
512	 Pl. XLIV	LFB A	 361 1:4 Dolfini 2002, Tav. 43.361, Sorgenti della Nova, Farnese (VT), Abitazione 2, Strato 4b
520	 Pl. XLIV	LFB A	 1:2 Dolfini 2002, Tav. 70.681, Sorgenti della Nova, Farnese, (VT), Abitazione 1, sporadici

Tab. 47 Area Rovitti. Diagnostic sherds (3/6).

²¹⁰ Schiappelli 2008, 111.5, Survey 1996-97.

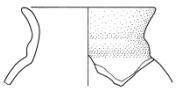
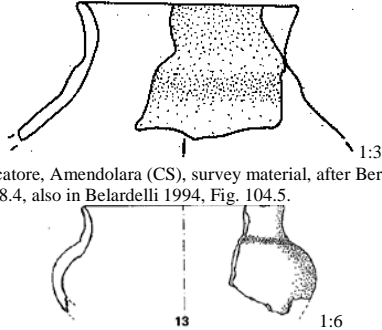




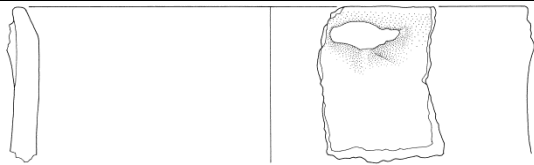
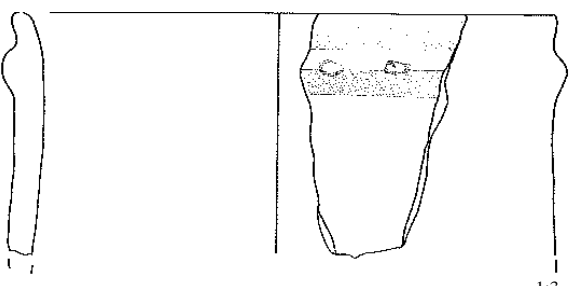
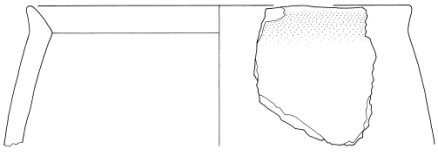
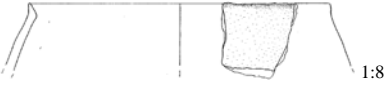
²¹¹ Mieli, Cosentino 2006, Fig. 3.10, Santa Maria di Vastogirardi (IS), Settore C, Capanna rettangolare, US 16.

²¹² SU 90, level of frequentation of Structure A.

²¹³ Trucco, Vagnetti 2001, Torre Mordillo, Fig. 32.11, sett. DE11-12, US 3B/87.

²¹⁴ Colelli 2012, Tav. 9.27, Timpone della Motte, Francavilla Marittima (CS), AC 4.30, Building Vb.

The material from Area Rovitti includes Iron Age sherds (Tab. 49), found at SU90,²¹⁵ SU92,²¹⁶ SU1 (surface above the Eiano aqueduct),²¹⁷ SU60 (disturbed level by the Eiano aqueduct),²¹⁸ SU38 (surface layer covering Structure A).

Sherd	Drawing (1:4)	Date	Parallel
523	<p>Pl. XLIV</p> 	FBA-EIA	 <p>Santo Cavalcatore, Amendolara (CS), survey material, after Bergonzi <i>et al.</i> 1982, Tav. 38.4, also in Belardelli 1994, Fig. 104.5.</p> <p>Belardelli 1994, Fig. 124.13, Timpone della Motta, Surface</p>
507	<p>Pl. XLIV</p> 	FBA-EIA	 <p>Peroni, Trucco 1994, Tav. 86.36, Broglio di T., Sett. B Ovest, Liv H, shape 37</p>
519	<p>Pl. XLV</p> 	FBA-EIA	 <p>1:12 Capriglione <i>et al.</i> 2012, Fig. 9.3, Tipo 4, var. C, Serre di Altilia (KR)</p>
532	<p>Pl. XLV</p> 	FBA-EIA	 <p>Peroni, Trucco 1994, Tav. 164.2, Tarsia, Superficie</p>
488	<p>Pl. XLV</p> 	EIA1B	 <p>Colelli 2012, Tav. 113.HY102, Struttura A, SU92</p>

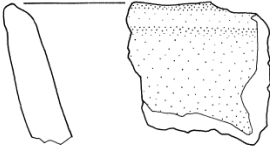
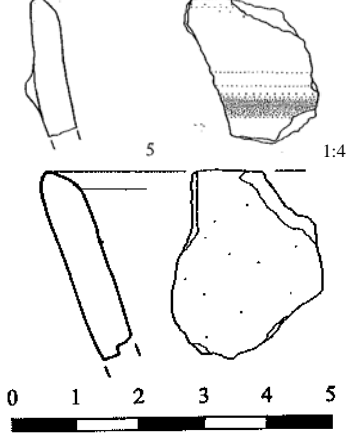

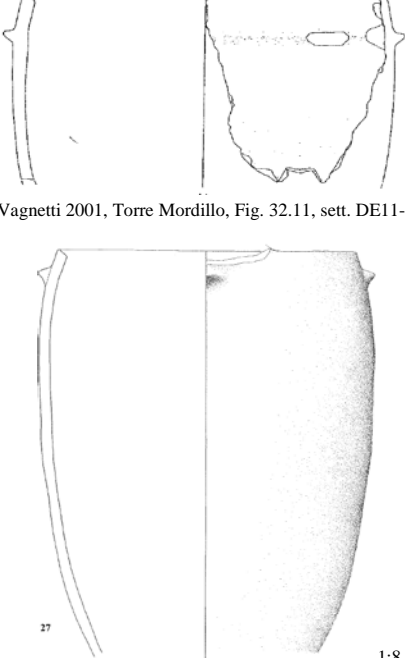
Tab. 48 Area Rovitti. Diagnostic sherds (4/6).

²¹⁵ Level of frequentation of Structure A, sherd 499.

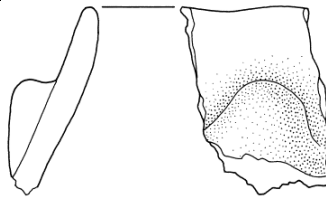
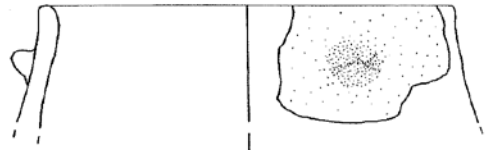
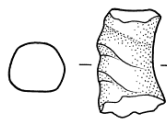
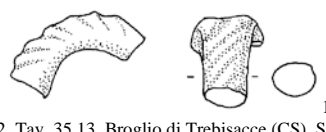

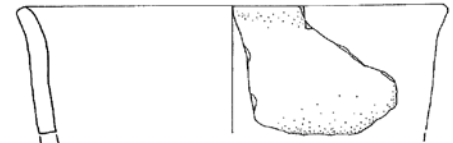
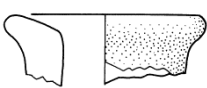
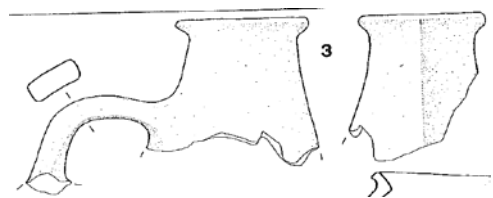
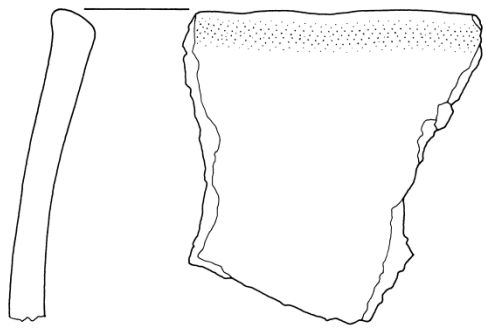
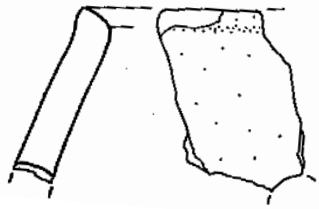
²¹⁶ Level of frequentation of Structure A, sherd 504.

²¹⁷ Sherd 510.

²¹⁸ Sherd 513.

Sherd	Drawing (1:4)	Date	Parallel
491	Pl. XLIV 	LBA-EIA	 <p>Schiappelli 2008, 111.5, Castelluccio della Selva di Marano, Vitorchiano (VT), (Survey 1996-97) Mieli, Cosentino 2006, Fig. 3.10, Santa Maria di Vastogirardi (IS), Settore C, Capanna rettangolare, US 16</p>
527	Pl. XLV 	LFB A-IA	 <p>Trucco, Vagnetti 2001, Torre Mordillo, Fig. 32.11, sett. DE11-12, US 3B/87</p> <p>Colelli 2012, Tav. 9.27, Timpone della Motta, Francavilla Marittima (CS), AC 4.30, Edificio Vb</p>

Tab. 48b Area Rovitti. Diagnostic sherds (5/6).

Sherd	Drawing (1:4)	Date	Parallel
	 <p>Pl. XLV</p>	EIA1	 <p>1:4 Colelli 2012, Tav. 84.368, Timpone della Motta, Francavilla Marittima (CS), AC 27.5, EIA 1 (Chronology I based on Kleibrink <i>et al.</i> 2012, Tab. 2, 192-216)</p>
504	 <p>Pl. XLV</p>	EIA1 B	 <p>1:3 Bergonzi <i>et al.</i> 1982, Tav. 35.13, Broglio di Trebisacce (CS), Settore B, ampl. '80, strato S1</p>
510	 <p>Pl. XLV</p>	EIA1	 <p>1:4 Cinquegrana 2013, US 13-54, p. 82, Scarlino (GR), Puntone Nuovo, Campo da Gioco, US13 (massicciata)</p>
513	 <p>Pl. XLV</p>	EIA1 A	 <p>1:4 Pacciarelli 1999, Tav. 14.B.3, Torre Galli, Tropea (VV), Tomba 8, Fase I B, 900-870 c.a, PF1 iniziale</p>
526	 <p>Pl. XLV</p>	EIA	 <p>0 1 2 3 4 5 Mieli, Cosentino 2006, Fig. 5.3, Santa Maria di Vastogirardi (IS), Settore C, Capanna rettangolare, US 56</p>

Tab. 49 Area Rovitti. Diagnostic sherds (6/6).

- Contextualization of the Bronze Age evidence at Timpone della Motta

The acropolis and the lower terrace of the Timpone della Motta hill show evidence, albeit poorly defined, of settlement use in all the Bronze Age phases.²¹⁹ The available radiocarbon dates indicate the MBA2/3 and the RBA as periods of settlement on the top of the hill,²²⁰ but this is not supported by the remains of structures and defined contexts. In this sense, the data from the Carnevale profile provide the necessary information regarding the Bronze Age to incorporate it into a diachronic sequence, while at the same time integrating the already available data from the top of the hill. The MBA2, which has been recorded at the top of the hill, is sporadically attested at Carnevale. The MBA3 is better represented in both cases, and more evidence concerns the RBA, clearly detected in both areas. After the latter period, the stratigraphy of Carnevale stops while sporadic finds seem to characterize the FBA on the Timpone della Motta, which is then again clearly settled from the EIA. It seems to be appropriate here to mention the site excavated at Area Rovitti,²²¹ on the southern side of the hill, where RBA and FBA evidence, albeit from secondary contexts, also occurs.²²² Therefore, the Carnevale section shows that one (or more) BA habitation structure were set along the Northern side of the hill, and also at the area Rovitti, along the Southern slope, a BA frequentation is attested. Furthermore, survey visits on the Western slope of the Timpone della Motta,²²³ along Plateau III, have revealed the presence on the surface of MBA3 pottery. The material scatter covers an area of 10 m x 10 m, sloping southwards, toward Area Rovitti. This includes a MBA3 fragment (Pl. LVII.623) found among FBA-EIA pottery (Tab. 50). The first fragment is part of a band handle with raised edges and triangular hole which ends with a pointed small ear. I did not find a strict parallel for this fragment, but based on examples with similar typological characteristics,²²⁴ it is possible to date it to the MBA3. So, at least on three sides of the hill, i.e. North, South and West, there are traces of BA settlements which probably were not isolated but part of a settlement system characterizing the hill from the BA to the IA.²²⁵ The Carnevale section provides further information regarding the manner of settling which was probably adopted by the inhabitants of the hill, not only in the BA, but also in the EIA. Indeed, the section is only visible now because of a collapse of the northern side of the hill of Timpone della Motta, which now steeply slopes towards the Vallone Carnevale. What is left is part of a settlement unit which was originally built probably on a terraced flat area. The same consideration can be made for the area of the MBA scatter found on the western side, which also would have been terraced. Based on the excavations carried out at Rovitti (Fig. 24b and Chapter 2.2.5), the EIA huts, which covered BA evidence, were built on a terrace that is not visible any longer. The settlement organization which can be hypothesized for the hill of Timpone della Motta is thus constituted by a series of terraces, still detectable on the top but no longer visible along the slopes. Therefore, we can imagine that the entire hill, overlooking the Raganello and surrounded by secondary water streams on the other sides, was settled from the MBA until the IA.

Timpone della Motta, Timpa del Castello di Francavilla, and other sites located in the hilly area around the Sybaris Plain²²⁶ are therefore sites in use from the MBA2 to the EIA. While, regarding the BA, the lower slopes of the foothill are characterized by sites that developed in the FBA-EIA and the hinterland appears to be more markedly settled in the MBA, the sites in the foothill are long duration sites, continuously settled without interruptions from the MBA to the IA. The hill of Timpone della Motta, unlike the other sites on the hills around the plain is characterized by a remarkable development during the Iron Age. This exceptional development might have compromised the preservation of data from the earlier phases of settlement, so far weakly attested in the archaeological record. Luckily, the site of Carnevale sheds more light on the

²¹⁹ Section 2.2.3.

²²⁰ Kleibrink 2006.

²²¹ Colelli, Jacobsen 2013, pp. 20-32 and related bibliography.

²²² Section 2.2.5.


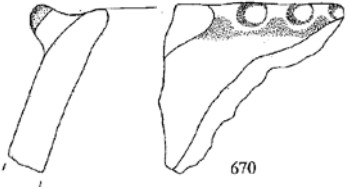

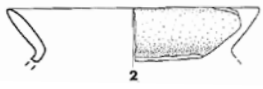

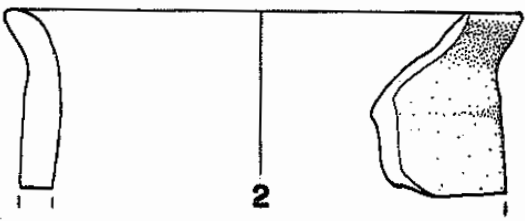
²²³ 2014 survey visits by J. Jacobsen, M. Crudo, F. Ippolito.

²²⁴ Peroni, Trucco 1994, Broglio di Trebisacce, Sett. E, liv. S, Set. B, ampl. 80, strato S2', shape 50F (apice ad orecchiette appuntita); for the triangular hole, ibidem, Sett. B Ovest, liv. 3B, taglio 3* (gruppo C, foro triangolare con vertice del triangolo in basso). See also Cocchi Genick 1995, type 559.

²²⁵ See also Colelli 2015a, pp. 59-63.

²²⁶ Section 1.5.

phases of the Bronze Age that were obliterated on the Timpone hill by subsequent settlement developments, allowing us to insert the hill of the Timpone della Motta in the list of long duration sites surrounding the Sybaris Plain.

Sherd	Drawing (1:4)	Date	Parallel
618 Pl. LVII		FBA2-3	 <p data-bbox="885 742 1428 797">Dolfini 2002, Sorgenti della Nova, Farnese (VT), Tav. 68.670, Abitazione 1, sporadici</p>
616 Pl. LVII		FBA3 (-EIA)	 <p data-bbox="885 895 1428 971">For the rim shape, an example in figulina after Bergonzi <i>et al.</i> 1982, 1, Tav. 36.2, ceramica figulina dal livello H, Sett. B Ovest, Broglio di Trebisacce (CS)</p>
614 Pl. LVII		EIA2	 <p data-bbox="885 1244 1428 1321">For the shape Bergonzi <i>et al.</i> 1982, 2, Tav. 41.2, Serra Castello (Corigliano), superficie</p>

Tab. 50. Timpone della Motta, Plateau III, Western Sector.

2.3 RAP sites in the territory of Civita

The research of the RAP carried out in the territory of the town of Civita²²⁷ (Fig. 27, outlined in white) led to the discovery of areas of archaeological interest at Pietra della Sentinella, Demanio and at Madre Chiesa (Figs. 28-29). The Raganello River, which crosses the canyon originating at Timpa di San Lorenzo, reaches the last spurs of the Pollino Mountains in the territory of Civita, going on eastwards towards the Sibari plain.

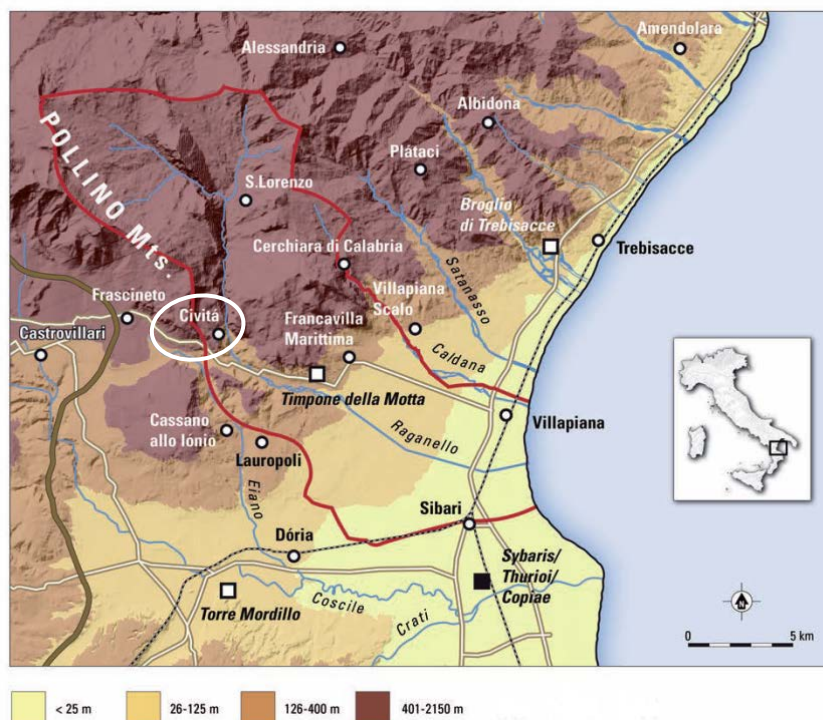


Fig. 27. The RAP study-area (outlined in red), in Northeastern Calabria, Italy (after Attema *et al.*, 2010).

2.3.1 Pietra della Sentinella (Pl. XXVI).

In 2000 and 2001, members of the “Sparviere” Speleological Group (SSG) found protohistorical pottery on the Southern slope of a rocky spur named **Pietra della Sentinella**,²²⁸ located West of Civita and at circa 550 m of altitude.²²⁹ On July 7th, 2001, Antonio Larocca, Patricia Roncoroni and Peter Attema surveyed the site and collected 41 impasto sherds. Although most of the sherds are very eroded and worn and consequently little diagnostic, the few diagnostic sherds I selected (Tab. 50b) provide significant typological information which allow to attribute the site to the Middle Bronze Age (MBA2-3). Compared to the pottery found at the MBA sites in the whole RAP study-area, fragments found at Pietra della Sentinella are characterized by a peculiar temper made of a very sandy impasto. Moreover, the surface of the fragments is always roughly smoothed or smoothed, never polished and mostly verging on reddish-yellow colors.

²²⁷ Altitude 450 asl, coordinates 39°50'0"N 16°19'0"E.

²²⁸ Rap site 210 in van Leusen *et al.*, forthcoming; scatter area m 200 (EW) x 100.

²²⁹ According to the LC10 classification by Feiken 2014 (pp. 64-78), the form of structural origin of the landscape regarding this site, as well as the other sites detected near Civita, is *isolated rock outcrop* (Unit 12 -Hill).

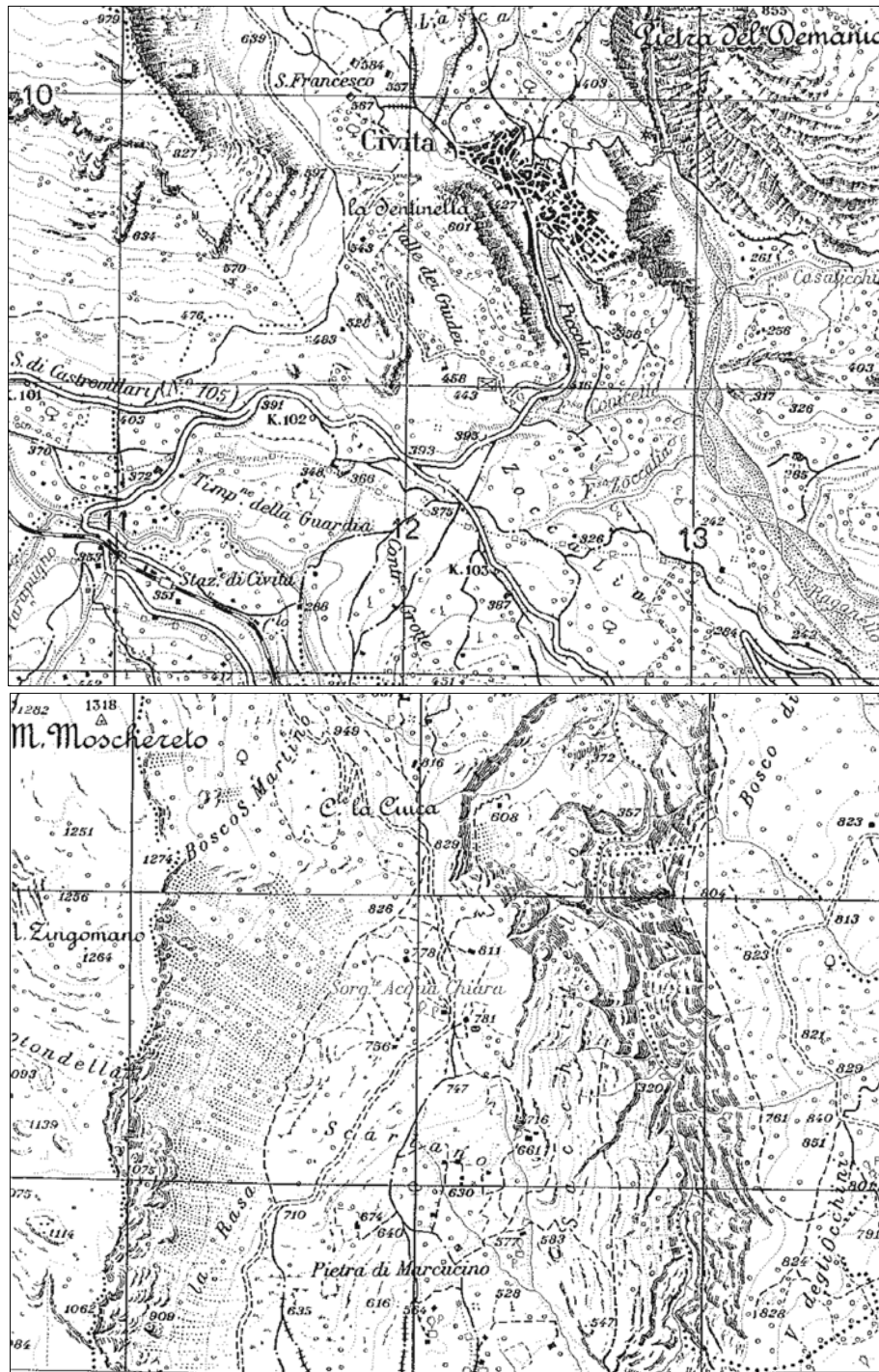


Fig. 28. Civita, La Sentinella, Pietra del Demanio (white arrows), after IGM Carta d'Italia 1:25000, F. 221 I SO – Frascineto (upper part) and F. 221 II NO –Castrovillari (lower part.).



Fig. 29. RAP sites in the territory of Civita (GIS map GIA).

2.3.2 Grotta I Rubbert and Grotta ‘Ngerije Superiore

In the area of Demanio,²³⁰ four open-air sites²³¹ and faint proto-historic evidence in two caves were recorded.²³² In the cave called **Grotta I Rubbert**,²³³ located on the Southern slope of the Timpa del Demanio, an Eneolithic fragment²³⁴ belonging to the last phase of the Gaudo facies was collected. A few Late Roman sherds were also found.

In the cave **Grotta ‘Ngerije Superiore**, East of Civita, on the southern part of the Timpa del Demanio, pottery fragments were found on November 15th, 1994 by Antonio Larocca. On November 15th, 1994, Antonio Larocca came back to the cave and on February 24th 2001 he re-visited the site together with Patricia Roncoroni. A few sherds were found, among which a Recent Bronze Age (RBA) fragment (Tab. 51) and two sherds dating to the Roman period.²³⁵ All the open sites are, instead, attributable to the Late Bronze Age and to the Early Iron Age (EIA).

²³⁰ All sites in this area are located on straight steep slope (Feiken 2014, Tab. 4.9, code 107); for the landscape classification, see Footnote 226.


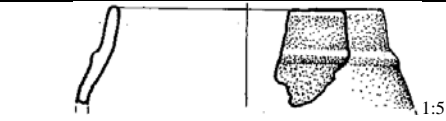




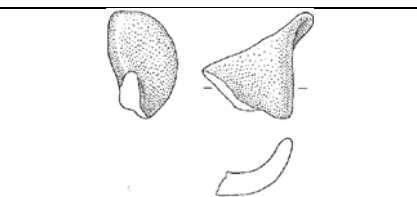
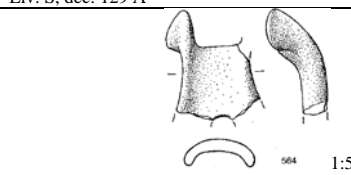
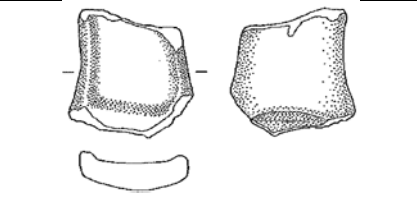
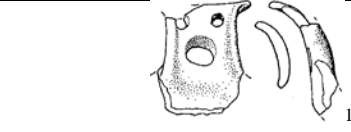
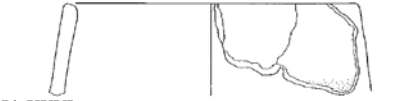
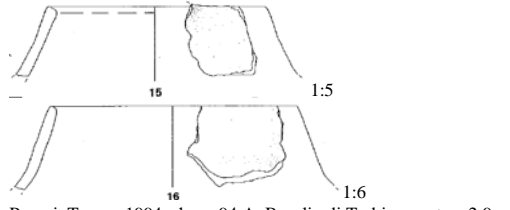
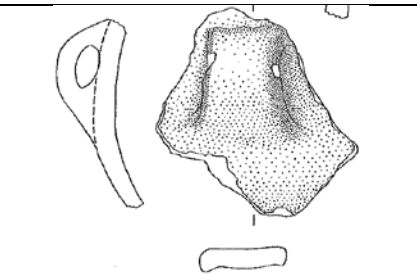
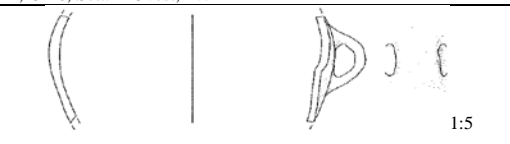
²³¹ One impasto sherd TdD-BN-1 was found at Banco-N’dappe, circa 200 m below Banco Grande, by Larocca in November 1999. The little evidence does not allow me classify the find location as a site.

²³² In a third cave, Grotta Ngerije Inferiore, located on the southern part of the Timpa del Demanio, two Middle Ages sherds were found. The finds came from the inferior part of the cave, as reported in 2001 by Roncoroni, who visited the cave together with Attema, Larocca, Delvigne, students.



²³³ Rap site 116b in van Leusen *et al.*, in press. Site discovered by A. Larocca on March 3rd, 1994 (Larocca A. 1994, pp. 11-12). Catasto Grotte di Calabria Cb 2010, 294-295.

²³⁴ TdD-i.R.-5+9 (fragment not in catalog); see parallel in Esposito 1990, tav. 21, 227158 (Piano di Sorrento, Napoli).

²³⁵ Thanks are due to Gijts Tol for the analysis of the two sherds. He provided the date of 250-400 AD for a rim fragment (GNS-7) of a jar (variant of Hayes casserole type 183, Bonifay 2004, 228, Hayes 1972, 202), and the date of 475-550 AD for a rim fragment (GNS-9) of a plate (Hayes type 104, African red slip, type D, Late Roman Age).

Sherd	Drawing (1:4)	Date	Parallel (w.s.)
305	 Pl. XXVI	MBA2	 Cocchi Genick 1995, Tipo 425B, S. Maria d' Anglona 1:5
306	 Pl. XXVI	MBA2	 Peroni, Trucco 1994, decorazione 130, Broglio di Trebisacce, Tav. 18.10, Sett. E, strato 1 1:6
309	 Pl. XXVI	MBA2-3	 Peroni, Trucco 1994, Broglio di Trebisacce, Tav. 25.15, Sett. E, Liv. S, dec. 129 A 1:4
310	 Pl. XXVI	MBA3	 Cocchi Genick 1995, tipo 564 (for the section), Bari S. Scolastica 1:5
311	 Pl. XXVI	MBA2	 Cocchi Genick 1995, Tipo 548, Spallette S. Margherita 1:4
312	 Pl. XXVI	MBA3	 Peroni, Trucco 1994, shape 94 A, Broglio di Trebisacce, tav. 2.9; 2.15-16, Sett. B Ovest, liv. 4° 1:5 1:6
314	 Pl. XXVI	MBA3	 Peroni, Trucco 1994, Tav. 14,5 (frammento ansato attribuibile alle forme 66-67, olle a orlo rientrante), Broglio di Trebisacce, Sett. E, liv. 3B 1:5




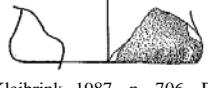
Tab. 50b. Pietra della Sentinella, diagnostic sherds.

Sherd	Drawing (1:4)	Date	Parallel (w.s.)
341	 Pl. XXIX	RBA 2 (?)	 1:8 Peroni, Trucco 1994, Broglio di Trebisacce (CS), forma 67 b, Tav. 51.14, sporadic find

Tab. 51 Grotta 'Ngerie Superiore, diagnostic sherds.


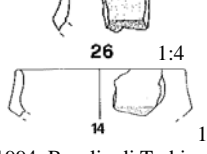

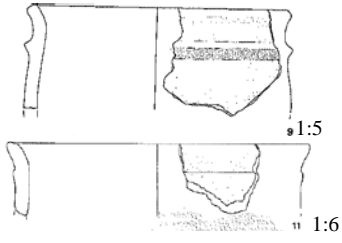
2.3.3 Timpa del Demanio, Banco Grande, Banco del Prete²³⁶ (Plates XXIX-XXX).

At Timpa del Demanio and Banco del Prete, Northeast of Civita, scatters of materials dating to the Final Bronze Age and to the Iron Age (FBA-IA) were identified. In 1998,²³⁷ Antonio Larocca found eleven sherds on the hilltop of **Timpa del Demanio**. Two of them are diagnostic:

Sherd	Drawing	Date	Parallel
354	 Pl. XXX	FBA2- IA	 1:567 1:6 Peroni, Trucco 1994, tav. 122,2, 68c (FBA2), Timpone Motta di Francavilla (superficie); Colelli 2012, Tav. 21,67, Timpone Motta di Francavilla, AC.12.16, IA
355	 Pl. XXX	IA	 1:3 For notches Maaskant-Kleibrink 1987, n. 706, Borgo Le Ferriere, Satricum, (Latina), Hut II, phase 1, D 10, S 847/257, middle of the 8th Century BC (770-750-40 BC).

Tab. 52 Timpa del Demanio. Diagnostic sherds.

In 1999, Larocca found the site of **Banco Grande**, on the hilltop and on the southern slope of Timpa del Demanio. Finds located on the slope most likely had rolled down from the hilltop. Larocca collected 4 non-diagnostic sherds and two diagnostic:



Sherd	Drawing	Date	Parallel
357	 Pl. XXX	FBA2 (?)	 26 1:4 14 1:5 1:6 Peroni, Trucco 1994, Broglio di Trebisacce, Tav. 94.26, sett. B Ovest, liv. S3; Tav. 110. 14, Sett. D Nord, liv. S
359	 Pl. XXX	EIA	 1:5 1:6 Peroni, Trucco 1994, tav. 124,9,11, Castrovillari, S. Maria del Castello (superficie)

Tab. 53 Banco Grande. Diagnostic sherds.

²³⁶ For the landscape classification see footnotes 226-227.


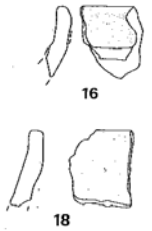
²³⁷ On September 16.th

The site of **Banco del Prete**, located on a flat area on the south side of the Timpa del Demanio, is located circa 100 m above the cave Ngerije. It was identified in 1998 by Larocca who found four sherds, among which one diagnostic:

Sherd	344
Drawing (1:4)	 Pl. XXIX
Date	FBA2
Parallel	 1:5 Peroni, Trucco 1994, Tav. 89, 19, Broglio di Trebisacce, Sett. B ovest, liv. H, shape 66

Tab. 54 Banco del Prete. Diagnostic sherds (1/2).

In 2000,²³⁸ the site of Banco del Prete was surveyed by Attema, Delvigne, Larocca, Roncoroni. They collected three not diagnostic sherds and one diagnostic sherd:

Sherd	Drawing (1:4)	Date	Parallel (w.s.)
348	 Pl. XXX	FBA1-2	 16 18 1:5 Peroni, Trucco 1994, tav. 84,16,18, Sett. B Ovest, liv. 1°

Tab. 55 Banco del Prete. Diagnostic sherds (2/2).

2.3.4 Madre Chiesa

At **Madre Chiesa**,²³⁹ North of Civita, a significant large scatter of pottery fragments led to detect a site in use from the MBA to the EIA. It is located on a terraced hill²⁴⁰ made of limestone bedrock on the edge of a canyon²⁴¹ cut by the Raganello.²⁴² The site was partially destroyed after the construction of a hostel. In 1995, Antonio Larocca identified the site on a little hill to the left of the building structure, the so-called Belvedere. He collected twelve undiagnostic sherds and an FBA-EIA sherd:


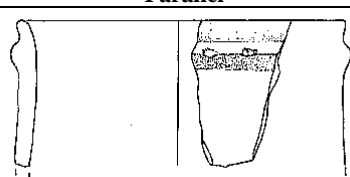
²³⁸ On October 24.th

²³⁹ Rap site 122 in van Leusen *et al.*, forthcoming. Further sherds from Madre Chiesa are stored in the Museum of Castrovillari and were collected in the Nineties by Mr. Saverio Santandrea.

²⁴⁰ Unit 12 in Feiken 2014.

²⁴¹ Unit 42 in Feiken 2014.

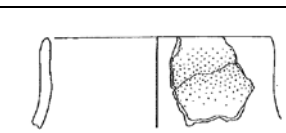
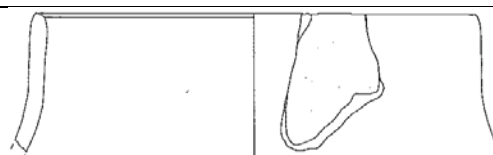
²⁴² Landscape classification unit 107 (straight steep slope) in Feiken 2014.

Sherd	Drawing (1:4)	Date	Parallel
338	 Pl. XXVIII	FBA	 1:3 Peroni, Trucco 1994, Tav. 164.2, Tarsia, survey. See also Grotta di Palmanocera, GdP-98-1 end of the FBA-EIA, not in catalogue.

Tab. 56 Madre Chiesa. Diagnostic sherds (1/3).








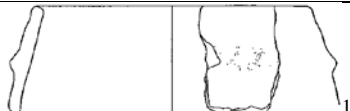


In 1999, Larocca returned to the site location and collected 28 sherds, when works for the foundation of the power distribution network were made. He found eight diagnostic sherds (Tab. 58).

Most of the pottery found at Madre Chiesa, collected in 1995 and 1999, comes from the little hill of Belvedere. The sherds date the site to a period between the RBA and the FBA-EIA. There was only one Middle Bronze Age sherd found (Tab. 57), which could indicate an older, though subtle phase of frequentation.²⁴³ In contrast to the mono-phasic and bi-phasic sites discovered in the localities of Sentinella and Demanio, the site of Madre Chiesa seems to be a long-term site. Such differences could be explained by the topographic morphology distinguishing this site that differently from Sentinella and Demanio, which are located on rocky high grounds, is placed on a canyon wall which declines in altitude going eastwards, as several terraces from the top of the hill reach the canyon bottom. In addition, soil formation can occur inside the terraces. Moreover, the southwestern side of the canyon, although cut into bedrock, is more eroded than the opposite side of the canyon. On this opposite side, the sites of Demanio are set. They are then located on a steep canyon wall where there is no soil and no easy access to the Raganello. For those reasons, they are clearly defensible and lookout sites. Madre Chiesa must have had multiple functions as its strategic position, together with the suitability for cultivation seem to indicate.

Sherd	Drawing (1:4)	Date	Parallel
318	 Pl. XXVII	MBA2	 1:5 Peroni, Trucco 1994, Broglio di Trebisacce (CS), sett. D Est, strato 2, Tav. 11. 16, shape 85A

Tab. 57 Madre Chiesa. Diagnostic sherds (2/3).

²⁴³ Larocca and Roncoroni visited the site again in 2002 (October 24th) and collected a MBA sherd.

Sherd	Drawing (1:4)	Date	Parallel
323 Pl. XXVII		RBA (?)	 1:6 Peroni, Trucco 1994, Broglio di Trebisacce, sett. B Ovest, liv. 3A, shape 22a, tav. 27,12
326 Pl. XXVII		RBA	 1:5 Bergonzi <i>et al.</i> 1982, Broglio di Trebisacce (CS), Tav. 6.6, shape 77 d, sett. D, strato IA III
327 Pl. XXVII		RBA	 1:4 Peroni, Trucco 1994, tav. 32,23, Broglio di Trebisacce (CS), sett. B Ovest, strato 2
333 Pl. XXVII		FBA	 1:6 Peroni, Trucco 1994, shape 64 a, tav. 111,12, Broglio di Trebisacce (CS), sett. D Nord, liv. S
336 Pl. XXVIII		FBA	 1:4 Peroni R., F. Trucco 1994 I, shape 41, tav. 87,7; Broglio di Trebisacce (CS), sett. B Ovest, liv. H

Tab. 58 Madre Chiesa. Diagnostic sherds (3/3).

Madre Chiesa is a long-term site in use from the MBA to the FBA-EIA and is among a group of sites of the Late Bronze Age in the Demanio area. These sites are small and all of them belong to the Late Bronze Age. Their location suggests a function of territorial control. In the territory of Civita only one mono-phase MBA site was found so far, Pietra della Sentinella (section 2.3.1). As a consequence, it appears that in the territory of Civita there is a clear predominance of Late Bronze Age sites (see section 5.2).

2.4 RAP sites in the territory of Cerchiara di Calabria

Previous studies on the pre and proto-history of the territory of *Cerchiara di Calabria*²⁴⁴ led to the identification of only one Bronze Age site at *Timpone Motta di Cerchiara*,²⁴⁵ located Southeast of *Cerchiara* and West of *Villapiana*. The *Sibari Plain* begins East of *Villapiana* (Fig. 29b). This plain is in between the Ionian Sea and the spurs of the *Pollino Mountains*, the western border of the *Sibaritide*. *Monte Sellaro* and *Serra del Gufo* are two of these spurs. *Monte Sellaro* towers over the *Sibari Plain* and is located Southwest of *Cerchiara*, at 1439 m asl. Southeast of this mountain is *Serra del Gufo*, at 923 m asl. Between *Serra del Gufo* and the river *Caldanello*, GIA researchers identified a wide area clearly settled during the Bronze Age (Figs.30-31). In the following section, the reconstruction of the proto-history of this area will be discussed, based on field data collected from the 1990's onwards. In addition to the data from field-reports by GIA researchers and by Dr. Patricia Roncoroni,²⁴⁶ I will use the information provided by the finds the researchers collected over the years, mainly pottery, and the field-report I wrote in 2013 after visiting the sites with Antonio Larocca. Also, I will explain how the typological analysis I carried out of the impasto sherds found at the RAP sites plays a determinant role in defining chronology and function of the sites in an area otherwise unknown.

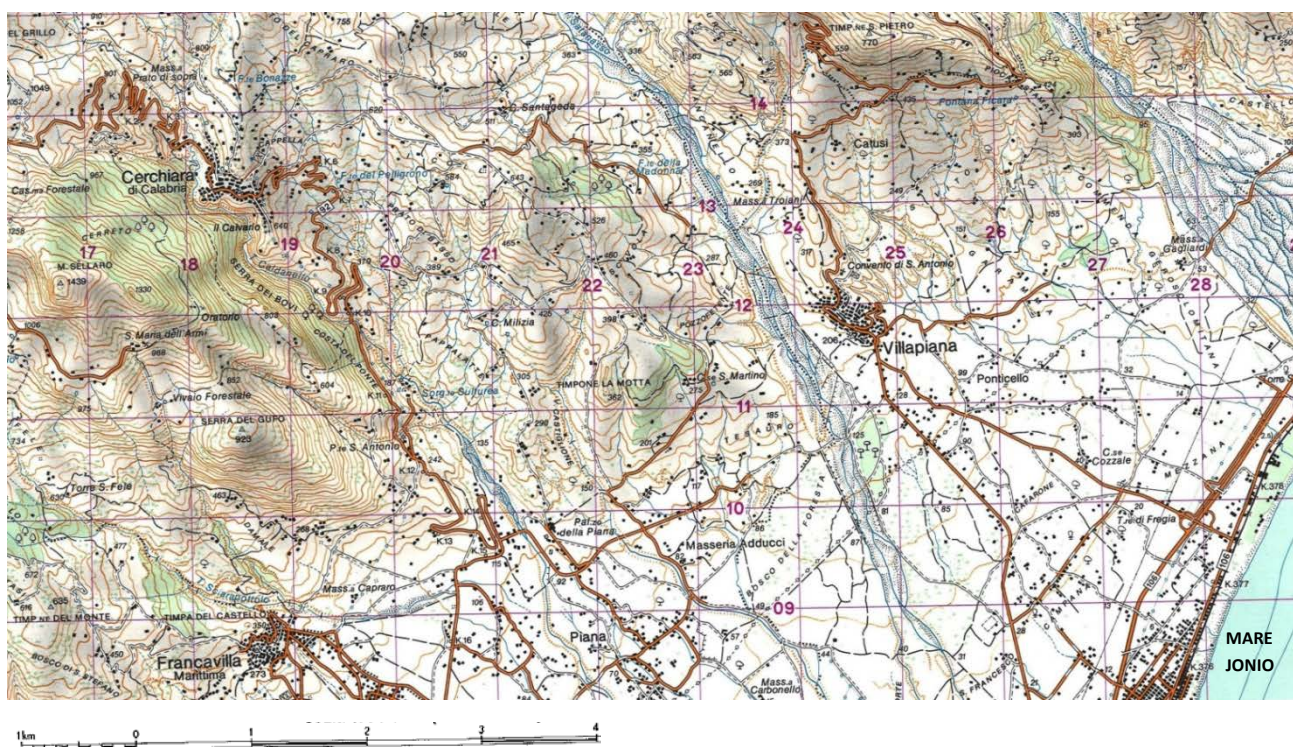


Fig. 29b. The area between Cerchiara di Calabria and the Ionian Sea, after Carta d'Italia, Foglio n. 535 – Trebisacce, scale 1:50000, IGMI 1992.

2.4.1 Grotta della Camastra and Grande Caverna di Damale²⁴⁷ (Sherds Plate XXXI).

In 1996, along the Southeastern slope of *Serra del Gufo*, the Sparviere Speleological Group (GSS) discovered a cave they named *Grotta della Camastra*²⁴⁸ (Fig. 31, lower, left-hand corner), where they had two major

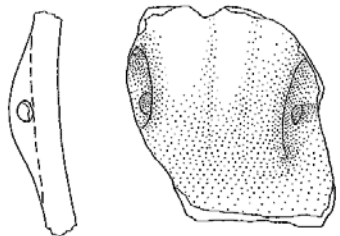
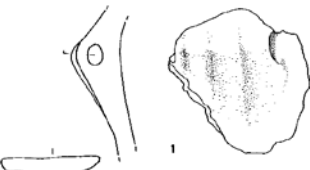
²⁴⁴ Altitude 650 a.s.l.; coordinates 39°51'41,04"N, 16° 23' 0,96" E; Cerchiara is mentioned in De Santis 1960, pp. 29-31, with regard to archaeological finds in a cave (without ulterior references). Moreover, a deposit of three bronze axes, dated to the Final Bronze Age (FBA3) has been found in the territory of Cerchiara as published in Carancini 1979, p. 635 (see footnote 352).

²⁴⁵ Bergonzi *et al.* 1982, 155.

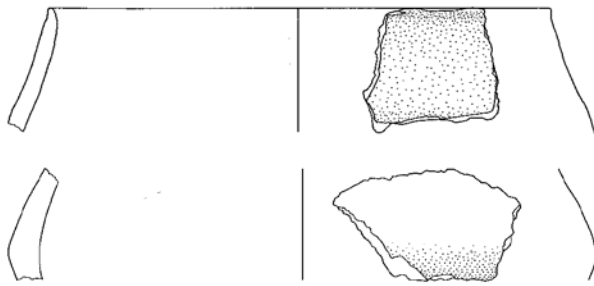
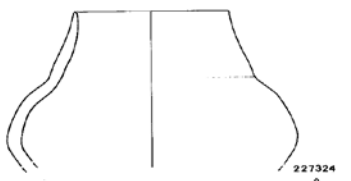
²⁴⁶ Dr. Patricia Roncoroni, researcher at the Free University of Berlin, participated in the first RAP research, until 2005.

²⁴⁷ Based on the Feiken landscape classification, these caves are located in Unit 13 (Rock wall), Feiken 2014, pp. 64-78.

finds: an Eneolithic fragment²⁴⁹ and a grinding stone.²⁵⁰ In 2002, Antonio Larocca and a GIA team revisited this site to survey and collect other non-diagnostic impasto sherds. In April 2013, I visited the cave together with Larocca, the archaeologists Dr. Carmelo Colelli and Dr. Maria Veneziano and a Rural Life Project²⁵¹ team. The cave has two narrow entrances. We accessed the eastern entrance, along a rock face overlooking the area called *Damale* (Fig. 31, lower, in the middle). It seems that the cave was frequented during the last century, since members of the GSS had found traces of everyday usage and a wooden hook (in Italian *camastra*) used to hang cooking pots over the fireplace. Crossing a very narrow passage, one can access a wide and low-ceiling room. From this room, two narrow passages branch off, the one opposite to the entrance and the other passage on the left side of the cavity. Both on the left side of the room and in the two branches, impasto sherds have been found, even though they are not diagnostic.²⁵²

Sherd	Drawing (1:4)	Date	Parallel
373	 Pl. XXXI	EE	 Livadie 1990, Tav. 8.1, 34 (Piano Conte), Grotta delle Noglie, Massalubrense, collezione Stoop 1965; Nicoletti 2004, fig. 2.18, 776, Olivotta-Borda (KR), survey

Tab. 59 Grotta della Camastra. Diagnostic sherds.

Sherd	Drawing (1:4)	Date	Parallel
374- 375	 Plate XXXI	ME	 Esposito E. 1990, tav. 29, 227324, vaso a fiasco da Piano di Sorrento, Pozzo 2/4

Tab. 60 Grande Caverna di Damale. Diagnostic sherds.

In a second cave, *Grande Caverna di Damale*²⁵³ (Fig. 31, lower, in the middle) identified along the southern slope of *Serra del Gufo*, two fragments²⁵⁴ dated to the Middle Eneolithic and probably belonging to the same vase, were collected in 2002 by Larocca and Roncoroni, in a fox-hole below a big stone along the left side of the cave. The site was originally discovered by Ettore Angiò (GSS) in 1979.²⁵⁵ In 1999, Larocca visited the

²⁴⁸ RAP site 132 in van Leusen *et al.*, forthcoming. *Catasto Grotte di Calabria Cb* 2010, 352.

²⁴⁹ Tab. 59.

²⁵⁰ Plate XXXI.372.

²⁵¹ Van Leusen 2013.

²⁵² For more information about Grotta della Camastra, see Larocca F. 2015, p. 445.

²⁵³ RAP site 138 in Van Leusen *at al.*, forthcoming; *Catasto Grotte di Calabria CB* 2023.

²⁵⁴ Tab. 60.

²⁵⁵ The finds from 1979 are in the Museum of *Sibari*.

cave with Prof. Marianne Kleibrink.²⁵⁶ *Grande Caverna di Damale* has a very large and peculiar entrance because of the pinkish colour of the chalky rock face overlooking the area of *Damale*. Inside the cave, there is an about 10 meters space well lit by a second entrance at the cave-dome and by a third opening left of the main entrance. On the floor level of the cave, no finds were collected during the survey I joined in April 2013.

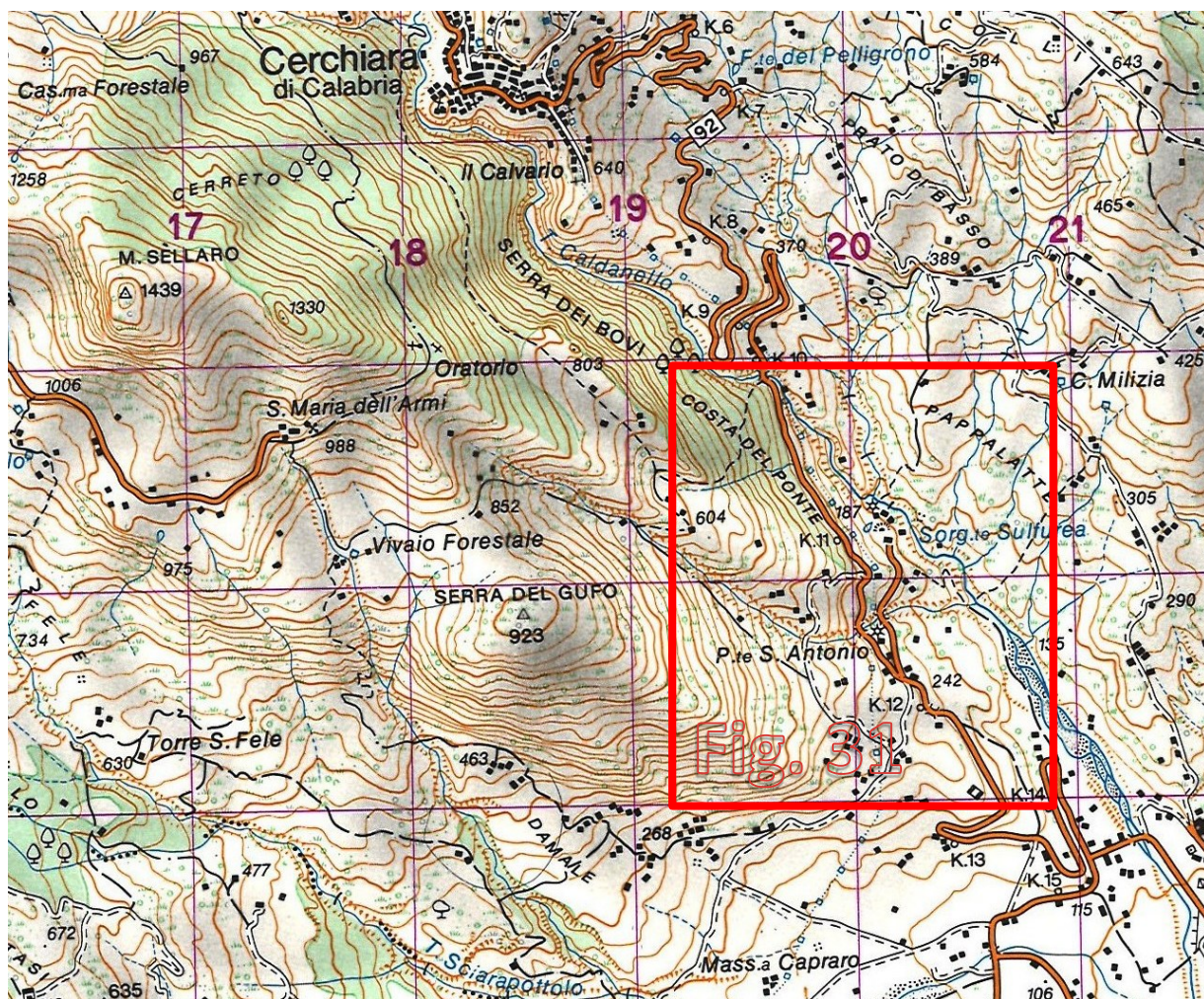


Fig. 30. The area between Serra del Gufo and the river Caldanello, detail of the Map in Fig. 29. In red, the research area including the Bronze Age sites mentioned in the text (see Fig. 31).

2.4.2 Balze di Cristo

North of the Grande Caverna di Damale, towards the river *Caldanello* and near the *Grotta delle Ninfe*²⁵⁷ (Fig. 31, top right), along a modern road (S.S. 92) leading to Cerchiara, is the area of *Balze di Cristo*,²⁵⁸ which was

²⁵⁶ The impasto sherds collected during this control visit were given by Larocca to Kleibrink. The final destination is unknown.

²⁵⁷ Also called *Caldana*, is a thermal spring still in use, at m 215 a.s.l. For the geology and hydrology of the area see Rossi Osmida 1970, pp. 9-15; the cave is mentioned also in De Santis 1960, pp. 29-30. Rap site 129 in van Leusen *et al.* forthcoming; Catasto Grotte di Calabria Cb43.

²⁵⁸ RAP site 136a-c in van Leusen *et al.*, forthcoming.

characterized by several eroded and unfortunately not diagnostic Bronze Age sherds found on the surface.²⁵⁹ Scatters of impasto fragments were identified for the first time by Larocca in the mid 90's, when sherds BdC-4+16, 13 (not in Cat.), 9, 11, 18, 22 (Pl. XXXVI. 434, 430, 431, 432) were collected. In 2000, Larocca, Attema, Delvigne, Ryan and Roncoroni returned to the site, collecting two additional impasto sherds (BdC-00-1.3, not in Cat.). They visited the site again in 2001, finding one impasto fragment (BdC-01-5, Pl. XXXVI.433).

The area of *Balze di Cristo*²⁶⁰ borders a macro-area constituted by a complex of sites spreading towards the Northwest, until reaching the limestone rock area of *Serra dei Bovi*. Between *Grotta di Terra Masseta*²⁶¹-*Grotticella Costa del Ponte*²⁶² (RAP sites 115b-c) and *Balze di Cristo* (Rap site 136a), the following sites have been found, from Northwest to Southeast (Fig. 31): *Terra Masseta 1*, *'Ngicchielle*, *Spallata di Balze di Cristo* and, Southwest of the *Terra Masseta* plateau, the site of *Crinale di Terra Masseta/Valle della Vite*, where Protohistoric impasto fragments have been found in 2005 by Larocca and a GIA team.²⁶³

2.4.3 Terra Masseta 1 (Plates XXXI-XXXV).

*Terra Masseta 1*²⁶⁴ is an open-air site at 615 m. a.s.l. characterized by dense scatters of pottery fragments dating from the beginning of the Bronze Age to the beginning of the Early Iron Age. It was reported for the first time by Antonio Larocca in 1991. The high quantities of impasto sherds have been found along the northern part of a sloping plateau (280 m NE/SW and 500 m NW/SE) coinciding with a terrace bounded to the North by a limestone rock face (fig. 32). From this latter towards the south, after 15-20 m, in the North-eastern part of the plateau, there is a gully incised by a water stream, the northern section of which exposes impasto and bones fragments deposited over time. Between the gully and the rock face, there is a strip of land slightly sloping eastwards. On this strip of land, for a maximum of 8 m S-N, from the northern section of the gully, the scattering of sherds is interrupted by the remains of boundary dry stone walls. Between these remains and the rock face there is a mule track, parallel to the rock face. The scattering of sherds covers 80 m W-E. These 80 meters coincide with the length of the river gully. Three field survey campaigns were performed by the GIA researchers at *Terra Masseta 1*, in 2000, 2004 (Tab. 63), and 2005. In 1991 Larocca collected on the surface diagnostic materials relative to a very broad chronological arc that from the Bronze Age²⁶⁵ reaches the Early Iron Age (Tab. 61b). In 1998 he came back to the site, collecting a few more sherds, among which a Middle Bronze Age (MBA1) base fragment of a plate (cat. 402, Tab. 62). In 2000, Larocca, Roncoroni and GIA researchers (Attema, Delvigne, Ryan) collected other materials.

²⁵⁹ Three bronze axes were found at site 136b, Balze di Cristo-Carlomagno (Van Leusen *et al.*, forthcoming.) during construction work on the road to Cerchiara, as reported in Paladino, Troiano 1989, p. 61. Also in Vanzetti 2013, p. 17. F. Larocca mentions six bronze axes dated to the Iron Age (Larocca F. 2015, p. 445).

²⁶⁰ Landscape classification Unit 106 (undulating slope), Feiken 2014, pp. 77-81.

²⁶¹ Actually, three caves are located above the plateau of Terra Masseta: I Grotta di Terra Masseta (Catasto Grotte di Calabria Cb250), II Grotta di Terra Masseta (Cb251), III Grotta di Terra Masseta (Cb 253). Four unsystematic surveys have been carried out by Larocca and GIA researcher between 1997 and 2005 in Grotta 2 and its surroundings. The sherd collected on October 10th, 2000 (GTM-00-2) and the sherd collected in 1997 (GTM-97-2) have not been studied yet.

²⁶² At the entrance of this inaccessible cave, located between Costa del Ponte and Terra Masseta1, impasto sherds have been found by Larocca, Feiken and Weterings in 1998 and by Larocca and GIA researchers in 2004.

²⁶³ These impasto fragments have not been studied by the author.

²⁶⁴ Coordinates 619263/4411221; landscape classification Units 103 (straight gently sloping land) and 105 (straight slope), after Feiken 2014, pp. 77-81.

²⁶⁵ A stone axe (cat. 376), presumably dating to the Early Neolithic based on a parallel established by the author, is currently being analyzed by the archaeologist and petrologist F. Larocca. Because of a very wide chronological range for these tools (see for instance the MBA axes from Grotta Cardini in Bernabò Brea *et al.* 1989, fig. 183-184), the additional data provided by the petrographic analysis would allow a more precise definition of the find. As for the stone used for the production of axes, "rocks suited for the production of axes are present in Calabria [...] where several volcanic and metamorphic rocks occur. Rocks referring to metamorphic terrains can be found in various zones of Calabria" (Barfield 1996). For the production of axes made from pebbles collected from river beds, Barfield cites the deposits of non-worked pebbles and partly worked pebbles for the manufacture of blades and axes found in the Neolithic settlement of Favella (Tinè V. 2009).

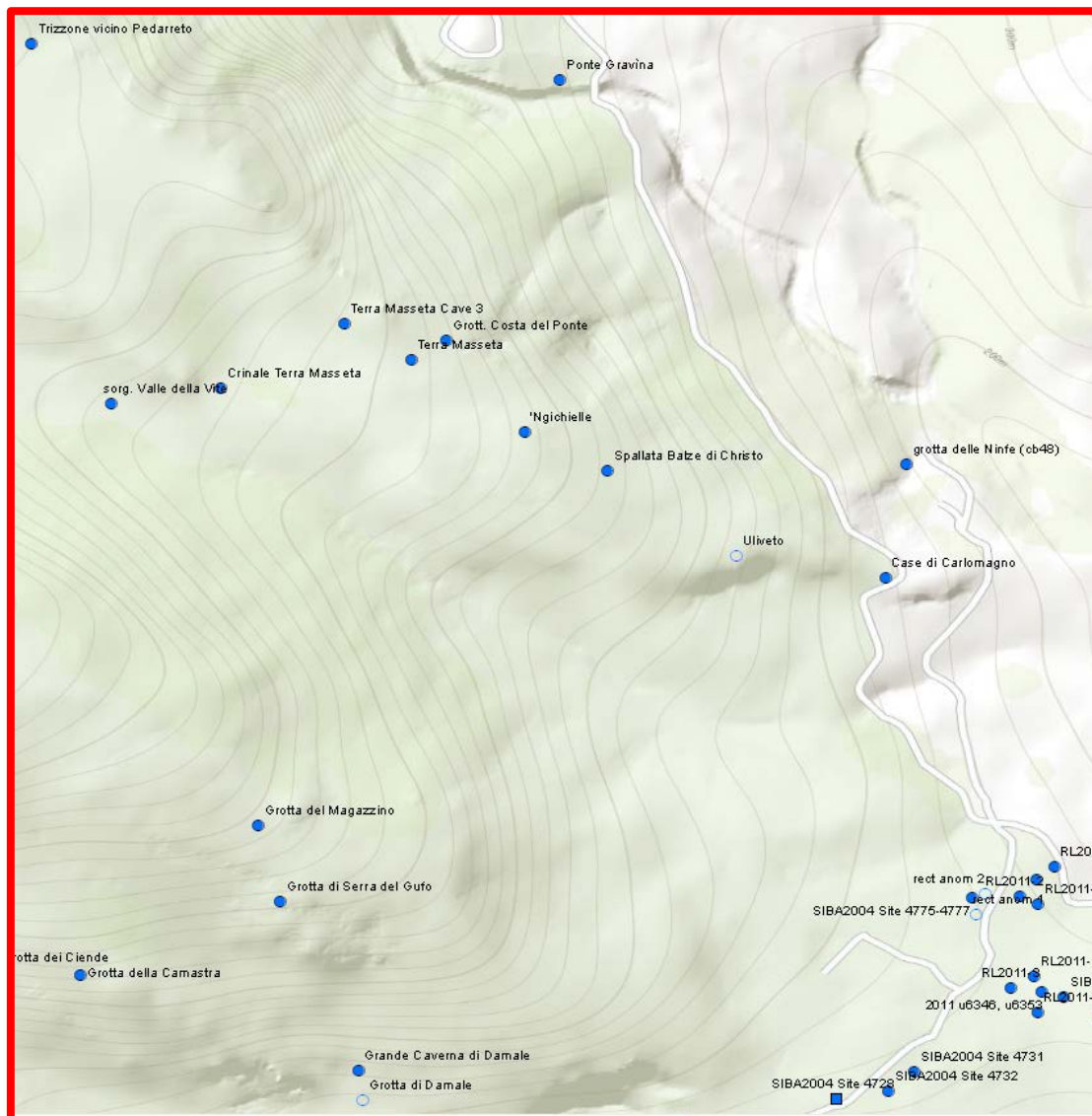


Fig. 31. Bronze Age sites between Serra del Gufo and the river Caldanello included in the outlined area in Fig. 30.

As reported by Jan Delvigne, on 7 October 2004, together with Larocca, Roncoroni, Attema, Derks and Seubers, the northernmost part of the east side of the gully was schematically drawn and sampled for pottery and bone fragments (Profile 1). Delvigne wrote in his field report as follows. "Profile 1 showed the following sequence:

1. 36 cm thick plough zone of brown homogenised brown soil mixed with stones indicating that this area was ploughed until fairly recently. The layer contains protohistorical sherds provenient from the area between the rock face and the torrent.
2. 4 cm thick plough sole consisting of a compact soil 10 YR 4/4 sandy (gritty) clay showing no effervescence with HCl 10%. This layer represents (in combination with the plough zone) a relatively stable phase. Compactness is probably due to compression by the plough share.
3. A 9 cm thick layer of very sandy (gritty) clay 2.5Y5/4 showing no effervescence with HCl 10%. This layer represents a more dynamic phase of soil accumulation (contains largest amount of grit of the layers described), colour is near to not yet eroded yellow schist.

diminish towards the surface. At circa 55 cm below ground level, a Middle Bronze Age handle fragment with a circular hole was recorded (Fig. 35). Considering that the point of the gully where Delvigne drew the section is 2.5 m deep, there is an increase in depth of the gully of circa 2 m from West to East over a distance of circa 9 m (see Fig. 33). Delvigne's Profile 1 and the section that I described in 2013 therefore match even if the layers eastward become considerably thicker. The layer with archaeological materials recorded by Delvigne and by myself are thus one and the same. This layer I distinguished in Profile 2013 most probably coincides with layers 3-4 identified by Delvigne. Both the sections show that an archaeological level can be detected at 55-60 cm circa below the surface. The difference in the depth of the levels in the east part of the section is due to colluvium processes from W to E, towards the edge of the plateau.

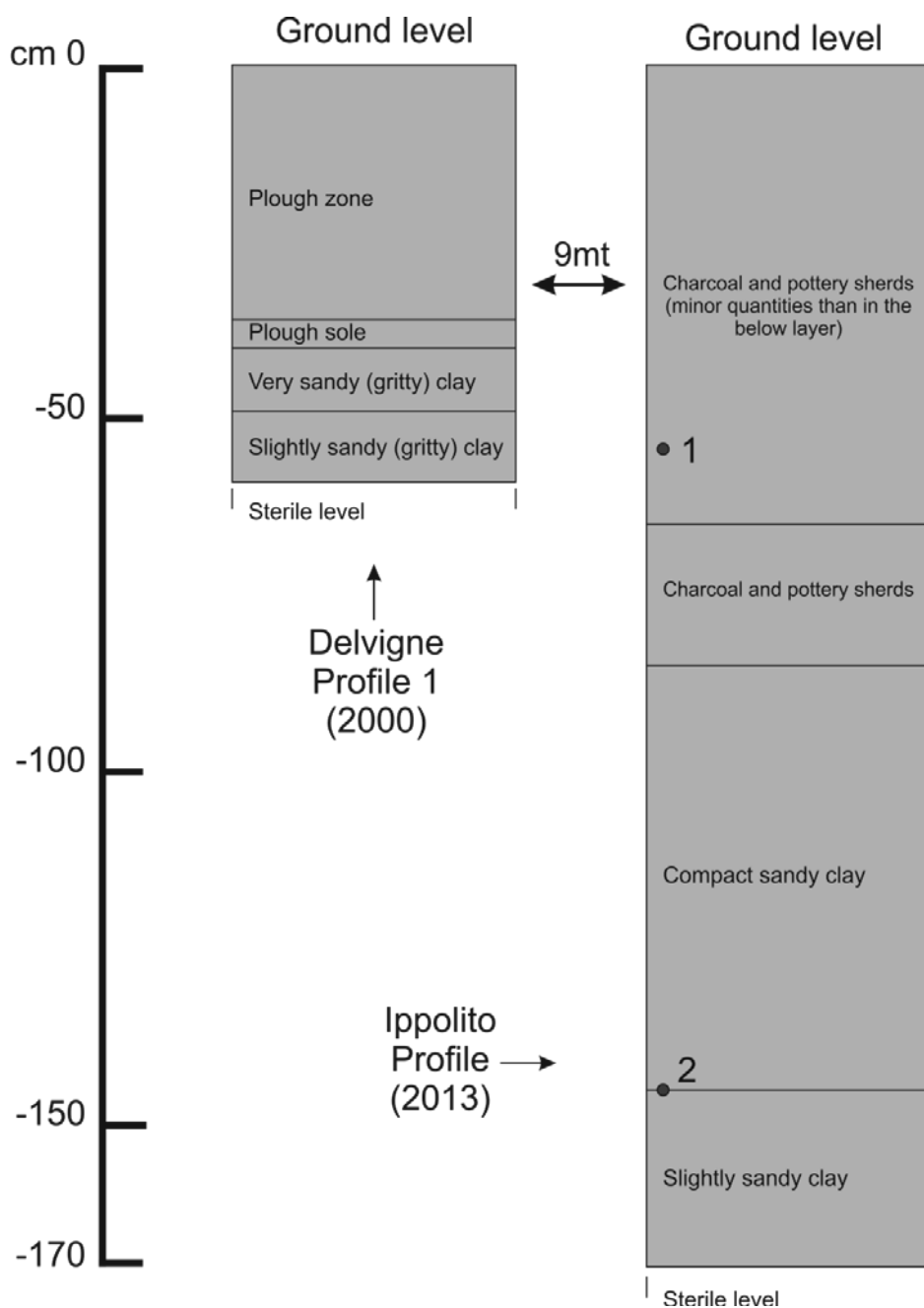


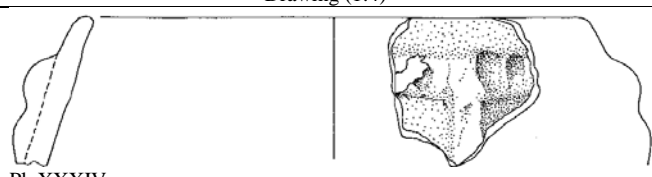
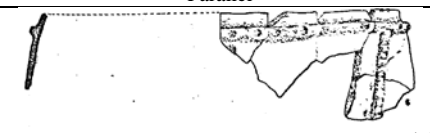
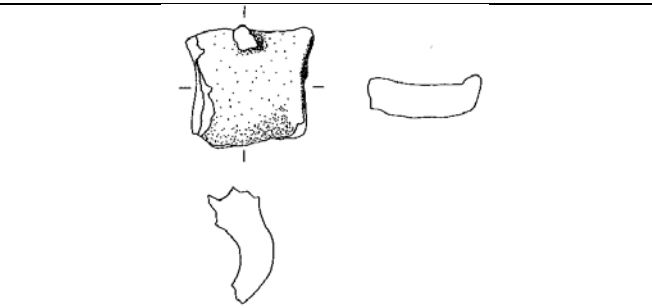
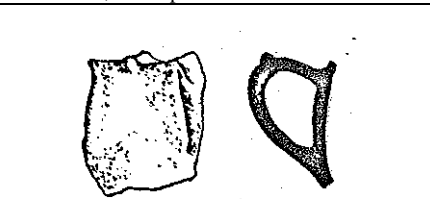
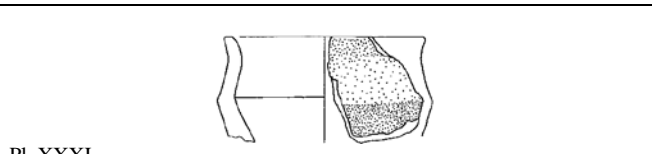
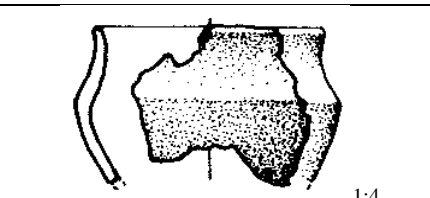
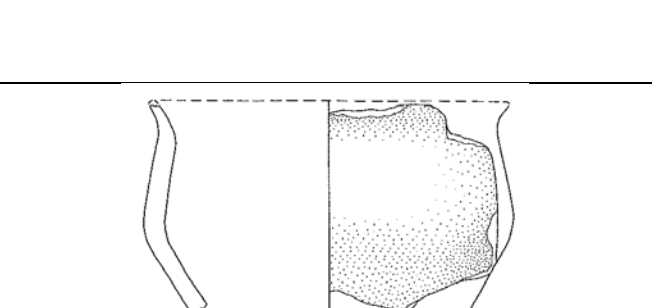
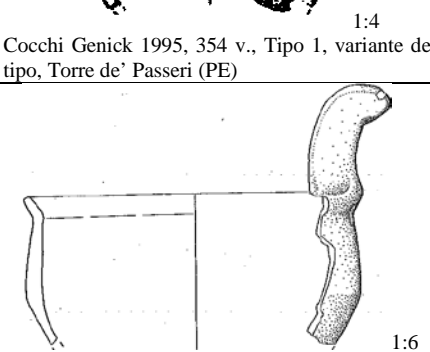
Fig. 33. Terra Masseta 1, sections profile 2000 and profile 2013. Drawing by F. Ippolito and L. Alessandri.

In 2004 still another section of the gully was investigated, Profile 2, that was recorded but not drawn. J. Delvigne reported that “it was situated downstream of profile 1 and consisted of a charcoal stratum of at maximum 4 cm thick. It is located at a depth of 80 cm and set within an undifferentiated brown soil. The charcoal in the stratum is well preserved, even containing carbonized twigs giving an impression of recent burning. Given its depth and the fact that the charcoal layer continues when setting the profile back, it may, however, be of a much older date. The fact that the charcoal stratum contained a lithic artefact (Pl. XXXII.668) and a few undiagnostic impasto sherds points at protohistorical date of this layer.”




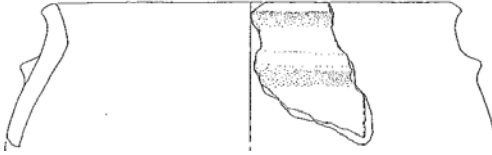

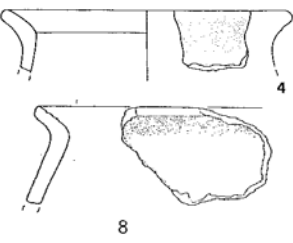


Fig.35. Middle Bronze Age sherd visible in the section profile 2013 at circa 50 cm below the ground level (photo Larocca).

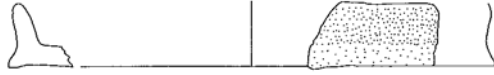
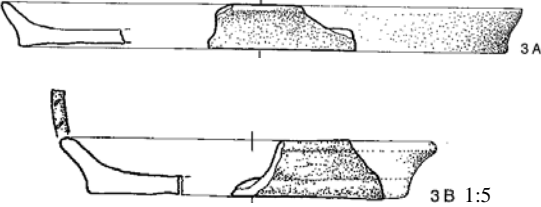
The charcoal stratum in Section 2 is 20 cm deeper than what I recorded in 2013. Consequently, besides inferring that Profile 2 was east of the section of 2013, we can deduce that there is a buried charcoal layer at circa 60-80 cm below the ground that is absent westwards and that increases eastwards. According to my direct observations of the profile, it mostly contains Late Bronze Age and Early Iron Age sherds, together with very few Middle Bronze Age sherds. I did not see older material, as the survey collections attest, but looking at the materials on the surface and at sherds below the gully surface, I can conclude that a settlement phase of the site took place in the period between the Final Bronze Age and the Early Iron Age. This assumption does not exclude an older settlement phase at this site, as the few Middle Bronze Age sherds so far acquired from the gully profiles indicate, but it does not prove the existence of older settlement phases very close to the gully. In fact, the presence of few Eneolithic and Early-Middle Bronze Age sherds among the survey collections and the presence of Final Bronze Age sherds on levels containing Middle Bronze Age sherds at the Section profile 2013, indicate that the MBA sherds are intrusive in FBA-EIA layers and that it is possible to detect previous frequentations of the site not close to the gully. Considering the colluvium processes characterizing the site, older settlement phases could be detected more Northwest of this site, probably also along the rock face.

Sherd	Drawing (1:4)	Date	Parallel
414	 Pl. XXXIV	MBA1	 1:8 Lukesh 1977, Fig. 10.6, Buccino, Tufariello, lower strata, Protoapennine e
384	 Pl. XXXII	MBA1	 1:4 Lukesh 1977, Fig. 21.9, Buccino, Tufariello, lower strata
379	 Pl. XXXI	MBA 1-2	 1:4 Cocchi Genick 1995, 354 v., Tipo 1, variante del tipo, Torre de' Passeri (PE)
386	 Pl. XXXII	MBA3	 1:6 Belardelli 2004, type 31a, BM3, Coppa Nevigata, scavi 1909, strati medi

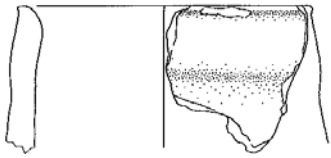
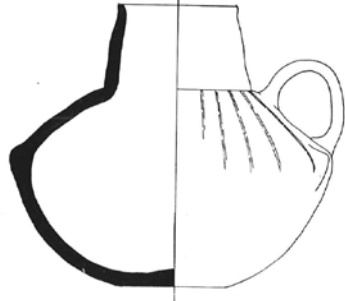




Tab. 61a. Terra Masseta 1, diagnostic finds 1991.

Sherd	Drawing (1:4)	Date	Parallel
420	 Pl. XXXV	LFBA	 1:5 Trucco, Vagnetti 2001, Tav. 36.5, F289, Torre Mordillo, Cassano allo Jonio (CS), US 11/87
422		FBA1-2	 1:6 Trucco, Vagnetti 2001, Tav. 72.3, type 292, Torre Mordillo, Cassano allo Jonio (CS), sett. E 8-9, US 2
419		FBA-IA	 1:6 Peroni, Trucco 1994, Tav. 149.4 from Torre Mordillo, Cassano allo Jonio (CS), Surface, FBA-IA; Trucco, Vagnetti 2001, Tav. 68.8, type 341C, Torre Mordillo, Cassano allo Jonio (CS), EF8-10, US 1, IA1

Tab. 61b. Terra Masseta 1, diagnostic finds 1991.

Sherd	Drawing (1:4)	Date	Parallel
402	 Pl. XXXIII	MBA1	 1:5 Cocchi Genick 1995, Tipo 3 A-B, p. 25

Tab. 62. Terra Masseta 1, diagnostic find 1998.

Sherd	Drawing (1:4)	Date	Parallel
377	 Pl. XXXI	ME	 1:6 Holloway 1973, Buccino, S. Antonio, T.6, 12Pl. XXXII
388	 Pl. XXXII	MBA3	 Peroni, Trucco 1994, Tav. 12, 1, shape 98, Sett. D Est, liv. S
425	 Pl. XXXV	FBA2	 1:8 Peroni, Trucco 1994, Tav. 93.13, shape 38a, Broglio di T., sett. B Ovest, livv. S3+H

Tab. 63. Terra Masseta 1, diagnostic finds 2004.

In 2004,²⁶⁸ Attema, Larocca, van Leusen and Roncoroni surveyed the area between Terra Masseta and Balze di Cristo, collecting impasto fragments in eight locations measured in using a hand-held GPS. Roncoroni recorded the locations of eight grab samples and the relative amount of collected impasto/bone fragments:

Grab sample 1: section above the main road to Cerchiaro (1 bone sample)

Grab sample 2: above GS1 (sherds BdC-04-1.2.3.4.5)

Grab sample 3: lower part of the area called Uliveto (8 impasto walls)

Grab sample 4: higher part of the area called Uliveto (20 impasto sherds, 1 daub fragment)

Grab sample 5: between Balze di Cristo and Costa del Ponte (sherd BdC-04-14)

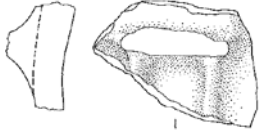
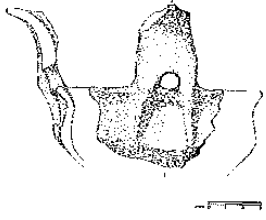
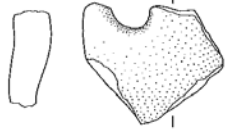
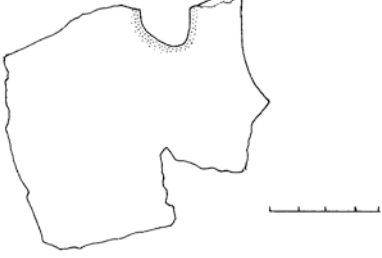
Grab sample 6: between Balze di Cristo and Costa del Ponte (sherd BdC-04-6)

Grab sample 7: between Balze di Cristo and Costa del Ponte (sherds BdC-04-8.9)

Grab sample 8: between Balze di Cristo and Costa del Ponte/Terra Masseta (sherds BdC-04-10.11.12).

The impasto fragments from Grab sample 7 were the only diagnostic sherds (Tab. 64). The other fragments from the other grab samples are worn, rolled and often too small, and do not provide detailed chronological information. The diagnostic sherds from Grab sample 7 date to the Middle Bronze Age. More specifically, sherd BdC-04-9 (Tab. 64.429) dates to the second phase of the Middle Bronze Age (MBA2) and sherd BdC-04-8 (Tab. 64.428) to a period between the second and the third phase of the same period (MBA2-3).

²⁶⁸ On October 20th.

Sherd	Drawing (1:4)	Date	Parallel
428	 <p>Pl. XXXVI</p>	MBA3	 <p>Cinquepalmi, Radina 1998, 10.062, Punta le Terrare (BR), Saggio A 1969, struttura 2</p>
429	 <p>Pl. XXXVI</p>	MBA2	 <p>Bernabò Brea <i>et al.</i> 1989, Fig. 117.c, Grotta Cardini, Praia a Mare (CS), Strato Medio</p>

Tab. 64. Terra Masseta-Balze di Cristo, diagnostic finds 2004.

In 2005, the Terra Masseta profiles were measured using a Total Station (E. Bolhuis and N. Hogan) and a number of magnetic susceptibility samples were taken (M. van Leusen, R. Feiken). Moreover, Larocca, Attema and de Haas surveyed the slopes above the Terra Masseta. On the wide plateau Piano di Pedarreto,²⁶⁹ a small quantity of protohistoric pottery was found on the western side overlooking the valley of the Caldanello. A few abandoned houses, almond trees, field boundaries and a dried out tap water attest at a recent use of the plateau. From the Piano di Pedarreto the survey team reached the adjacent Valle della Vite, where only one impasto sherd was found²⁷⁰ near a spring. Walking towards Terra Masseta 1, 7 impasto sherds were found.

In 2004, at the site of *'Ngicchielle or Ritaglio del piccolo Francesco* (115e), South-East of Terra Masseta 1, Larocca identified an area of scattered impasto sherds on the top of a small rocky terrace covered by large stones there heaped-up, overlooking the area where the site of *Spallata di Balze di Cristo* (115d) is located. In 2005, one Middle Bronze Age sherd has been collected (Pl. XXXII.385) along the *Lama de Piccolo Francesco* (Attema, van Leusen, Larocca, Feiken).

2.4.4 Conclusions

In summary, I can infer that a settlement area was constituted by small settlement units dispersed over the Terra Masseta plateau and between the Terra Masseta rock face and the area of Balze di Cristo. What is left is a non-homogeneous scattering of impasto pottery, attesting to the presence of a settlement area the non-durable structures of which are still partially buried, as the gully indicates, or disappeared after centuries of cultivation and slope processes. The name *Terra Masseta*, of Latin origin, refers to the agricultural custom of fallow fields. It is then an area involved in an agricultural production program started at least from the fourteenth century AD with the Spanish presence in Calabria.²⁷¹ In fact, the Spanish *Tierra de Maceta* means fertile, humus-rich and well-drained soil. Such a soil is the result of a resting period, during which the soil is

²⁶⁹ RAP sites 115 in Van Leusen *et al.*, forthcoming.

²⁷⁰ RAP sites 116 in Van Leusen *et al.*, forthcoming.

²⁷¹ Paraphrasing Fournel *et al.* 1996, p. 16: *considering that Spain was the only kingdom that could prevent Louis XII of France to take over the king of Naples, Frederick of Aragon, Louis XII signed an agreement with Ferdinand of Aragon at the end of 1500, in Granada; as a consequence, the French achieved Naples, the so-called "Terra di Lavoro" (between Campania, Lazio and Molise) and Abruzzo, the Spanish reigned over Puglia and Calabria.* At p. 50, they write that in 1529, the whole Italy was dominated by the Spanish, with the exception, for another year, of the last Florentine Republic. See also AA.VV., *Quadro storico-ambientale della provincia di Cosenza in età feudale.*

not cultivated and where the grazing is free to develop. In the local dialect, in fact, a *Massét* is a piece of uncultivated land, not abandoned²⁷² but left fallow to maintain its fertility. This implies that the *Terra Masseta* soil has good potential in terms of agricultural profitability, which explains why it was also in use during protohistory. The information provided by the diagnostic pottery found in the area between the foothills of Serra del Gufo and the river Caldanello, shows the following:

1. There is a difference between the pottery found at the cave-sites (Grotta della Camastra, Grande Caverna di Damale) and that found at the open-air sites, since the pottery found in the caves belong to the Eneolithic, while the pottery found in the open-air sites belong also to other periods (Bronze Age and, to a lesser extent, Early Iron Age).
2. At all of the open-air sites Middle Bronze Age pottery has been found.
3. The only site that shows a long-term frequentation is Terra Masseta 1, where, together with limited Eneolithic and Early Iron Age evidence,²⁷³ all the Bronze Age phases occur, even if the presence of the Early and Recent Bronze Ages evidence is limited. Most of the sherds found at Terra Masseta 1 belong to the MBA and to the FBA (Fig. 36).

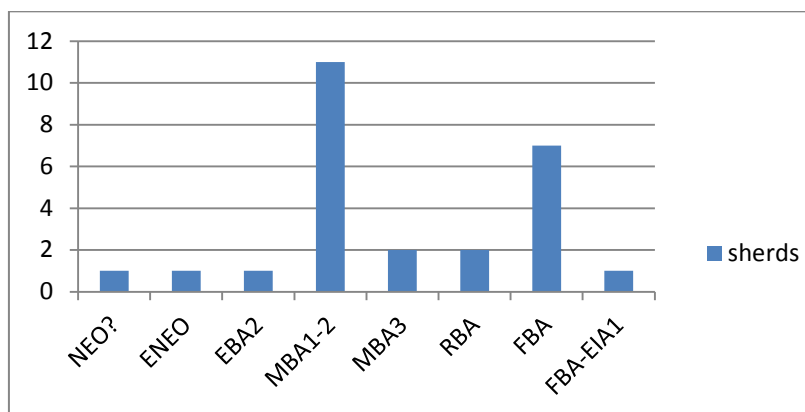


Fig. 36. Terra Masseta 1. Chronotypology.

The pottery thus clearly attests to a period of settlement development in the MBA at Terra Masseta and in its surroundings, as demonstrated by all of the scatter areas. Considering the fact that we are dealing with survey materials, it is difficult to determine with what types of settlement we deal. The pottery found at the open-air sites, clearly relating to daily activities, suggests the presence of settlement units more or less culturally connected to each other that were spread out along the small valleys in the area in the same period. Based on the evidence of Eneolithic and Early Bronze Age material found at the caves and at Terra Masseta 1, I can infer that the area was frequented already before the MBA and that in this last period, environmental and social advantageous factors allowed settlement development. Moreover, only in the case of Terra Masseta 1, also evidence for the FBA occurs, an occupation period not attested in the rest of the study-area. To understand why a second development phase occurred at Terra Masseta 1 in the Late Bronze Age, future study should focus on both its topographical features and its suitability for agricultural exploitation, moreover taking into account the regional context to which the site belongs.²⁷⁴

²⁷² An interpretation as abandoned land, depending probably on the perception of the current landscape, is provided by de Neef *et al.* 2014.

²⁷³ More EIA sherds were found by A. Larocca in 2013 along the gully at Terra Masseta 1. These sherds have not been studied yet.

²⁷⁴ Attema 2012, pp. 193-198, Attema *et al.* 2010, p. 94.

3. Other sites in the hinterland of the Sibaritide

The results of the analysis carried out on finds from other sites in the hinterland of the Sibaritide will be discussed below. Initially, a few sites situated immediately south of the RAP area, in the territories of Frascineto and Cassano allo Jonio, were excluded from the RAP site catalogue because they were not in the Raganello watershed. As I will explain in this chapter, significant data provided by these sites on two problematic chronological periods in the Sibaritide, namely the beginning and the end of the Bronze Age, led me to include them in my thesis.¹ Moreover, the study of these sites also provided new and surprising insights on cultural relations between the study area and the Adriatic as well as Aegean regions. The sites I am going to briefly illustrate are

- Timpone delle Fave,
- Sant'Angelo II Cave, and
- Sant'Angelo IV Cave.

3.1 Timpone delle Fave

The protohistoric site of Timpone delle Fave² is located on a hill³ dominating the Eiano River valley, in the territory of Frascineto, in the province of Cosenza, in between Frascineto, Civita and Cassano allo Jonio (Fig. 37). The site is located on the transition from the Sibaritide foothills to inland Calabria. In this area, the Eiano river leaves the last spurs of the Pollino Mountains and reaches a roughly flat area suitable for communication routes. Even now, the river intersects the train tracks Castrovillari-Civita and the main roads from Castrovillari to Civita and Cassano allo Jonio at this point.

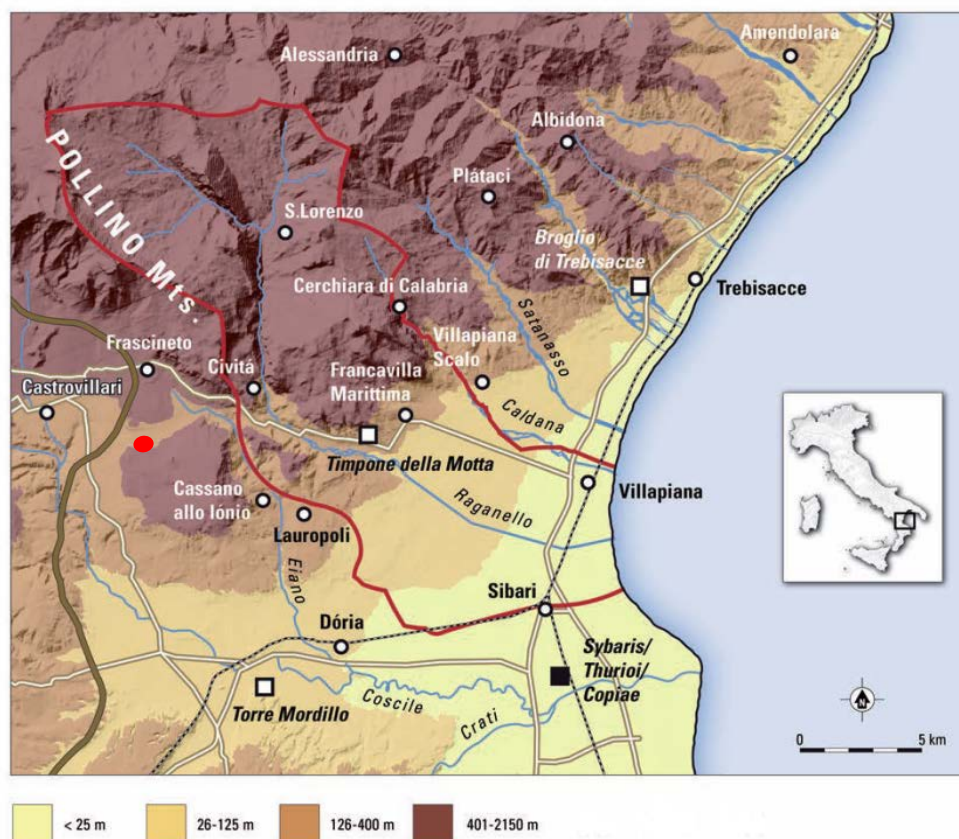


Fig. 37. Location of Timpone delle Fave site (red spot), out of the RAP study-area (outlined in red), in Northeastern Calabria, Italy (after Attema *et al.*, 2010).

¹ I thank my supervisor P. Attema for supporting my choice.

² RAP site 117 [RAP 30847].

³ Max 490 m a.s.l.; landscape classification Unit 12 (hill) after Feiken 2014, pp. 69-78.

To the SE of the site of Timpone delle Fave, the Eiano river meets a tributary stream, the Parapugno (Fig. 38). The site is thus bordered by water streams on three sides, to the NW and NE-SE (Fig. 39). The southeastern side slopes towards cultivated fields and vineyards (Fig. 43). The site is located on the top of a hill characterized by a concave area surrounded on the NW and SE by rocks (Fig. 41-42). The other two sides slope gently for circa 100 meters through the surrounding plain zone (Fig. 44-46).

The site of Timpone delle Fave was discovered by the speleologist Antonio Larocca in 1999. He collected 7 sherds, among which 4 were diagnostic and dated the site to the FBA (Tab. 65). In 2000,⁴ Larocca returned to the site with a GIA team. They collected 45 sherds, among which 28 were diagnostic (Tab. 66-71). The sherds attest to a chronological range between the RBA and the FBA-EIA, as attested by their shapes that were in use during the FBA2-EIA1A and FBA3-EIA1A. Most of the evidence belongs to the FBA (FBA1-2, Fig. 47).

It is possible to assume that the site was settled in the RBA, and that it developed further in the FBA and was continuously inhabited until the transitional phase end of the FBA - beginning of the IA. Since most of the evidence that attests to the EIA is represented by shapes in use from the late FBA onwards, it is possible to restrict the chronology of the settlement to the late FBA. In support of this choice, data from the 2013 survey campaign will be presented.

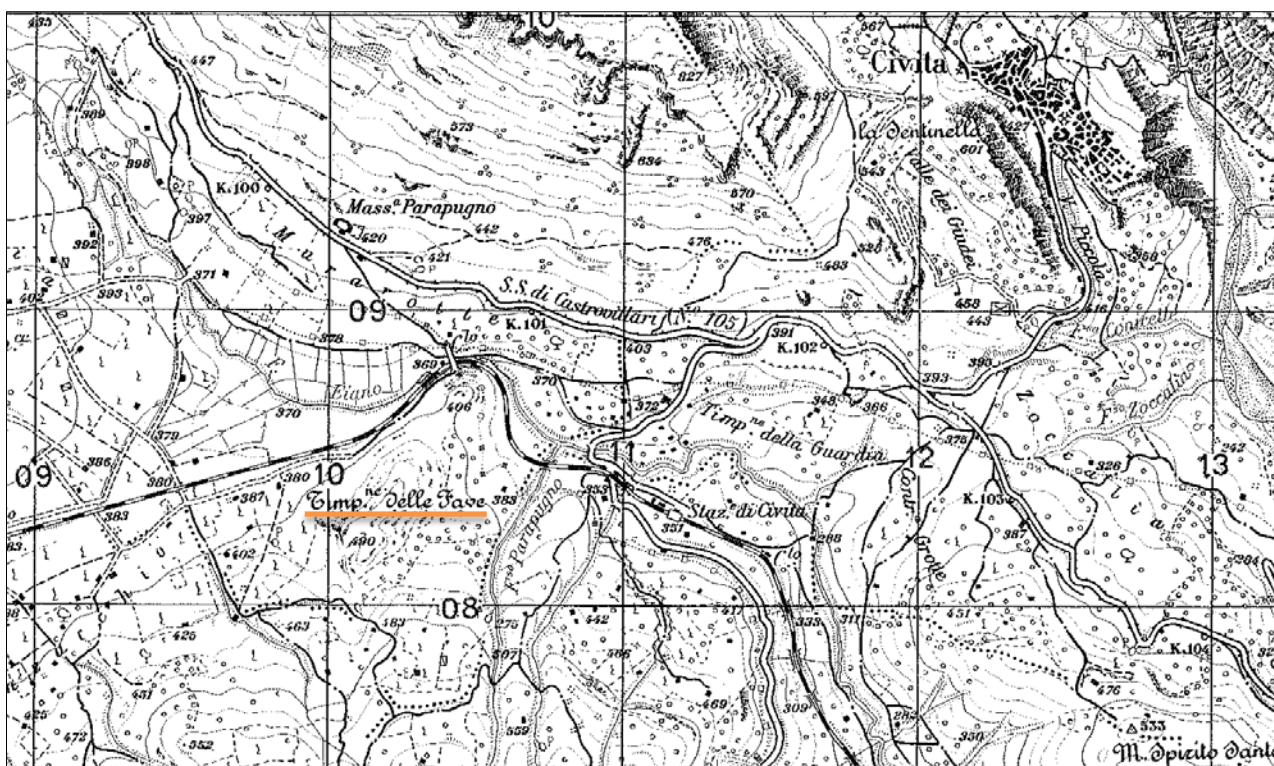


Fig. 38. Topographical location of Timpone delle Fave, after Foglio Castrovillari 221 II NO, ed. 2 – IGM, 1:25000, 1967, Scale 1:1.

In November 2013, I visited the site with Martijn van Leusen and Antonio Larocca. The aim of this survey was to define the areas of distribution of materials found in 1999 and 2000 (Fig. 39). Impasto sherds were found in the concave area on the top of the hill and on the slopes to the NE and NW, over an area of 375 m x 108 m. While measuring the scatter area, I found fragments of pithoi (*dolii cordonati*) scattered within the settlement area, over an area of 215 m x 135 m.⁵ Most of the pithos fragments are characterized by wide horizontal grooves, similar to fragments found at Broglio di Trebisacce, from Sector B West, level S3 (Tav. 63, 2, 4-11, 13-14) and level H (Tav. 62, 1-8, 10-13), dated to the late FBA.⁶ According to Levi *et al.* 1999,

⁴ On October 24th.

⁵ Many hut daub remains were found in the scatter area, see for instance fragment 192 in Pl. XLI.

⁶ Tenaglia 1994.

“the dolia ware is generally produced with fine raw material (clay), the tempers are normally carefully selected, and the colour is pale pink. In some cases, the large quantity of tempers, their size distribution, the greater porosity and the orange/brown colour produce a type of fabric that resembles Impasto, even though overall it remains rougher and less standardized. It is possible that this effect is due to soils being mixed into the clay”.⁷ The pithos fragment found at Timpone delle Fave can be assigned to the type of dolia with orange/brown colour (see, for instance, Fig. 48). However, one fragment, pink and sandy, and not decorated by grooves but with two parallel, thin and smoothed cord-bands delimiting the shoulder of a collared pithos, could be attributed to another, pale pink, type. Consequently, the visual analysis does not allow to assume that the Timpone delle Fave pithos production is exclusively related to the Southern Sibari Plain production, as attested at Broglio di Trebisacce.⁸ At this stage, it rather seems that we deal with different productions, whether all imported from nearby locations, or partially of local production. Further petrographic and chemical analysis may offer useful information on this issue. It should be noted that also many FBA1 ceramics were found during GIA surveys in the Contrada Damale, between Cerchiara and Francavilla, in sites overlooking the Sybaris plain among which was a notable presence of *dolii cordonati*.⁹ Impasto dolium fragments were found also at Amendolara,¹⁰ Timpone della Motta¹¹ and Torre Mordillo.¹² Thus far Timpone delle Fave is the westernmost site in which this ceramic production has been found.¹³ This evidence contributes to the reconstruction of a more detailed framework of the political and economic development of the Sibaritide during the Bronze Age as it allows researchers to reconstruct territories in which populations interacted during the time. Furthermore, this evidence supports my hypothesis that after the RBA a stronger network of cultural contacts was formed among the populations of the Sibaritide as can be derived from the distribution of material culture. Moreover, Aegean contacts may have contributed to changes in previous political and settlement organization in areas next to the plain that excluded the hinterland. Mostly based on the framework obtained for the S. Lorenzo Bellizzi sites (Chapter 2), it is possible to establish that no FBA sites existed in the hinterland of the Sibaritide. In addition, it is possible to infer that FBA sites are located in more accessible areas wherein their inhabitants had control of their surroundings between the hinterland and the plain and along rivers giving them access to natural trade routes, as the evidence from Timpone delle Fave proves (see also Chapter 4.10 and Ippolito, Attema forthcoming).

⁷ Levi S. *et al.* 1999, p. 328.

⁸ *Ibidem.*

⁹ Attema *et al.* 2010, pp. 93-95, Attema 2012, pp. 193-198.

¹⁰ Belardelli, Capoferri 2004.

¹¹ Elevelt 2002.

¹² Trucco, Vagnetti 2001, p. 272.

¹³ Only one fragment of a corded dolium was found at Castrovillari-Santa Maria del Castello (Peroni, Trucco 1994, Tav. 129.40).

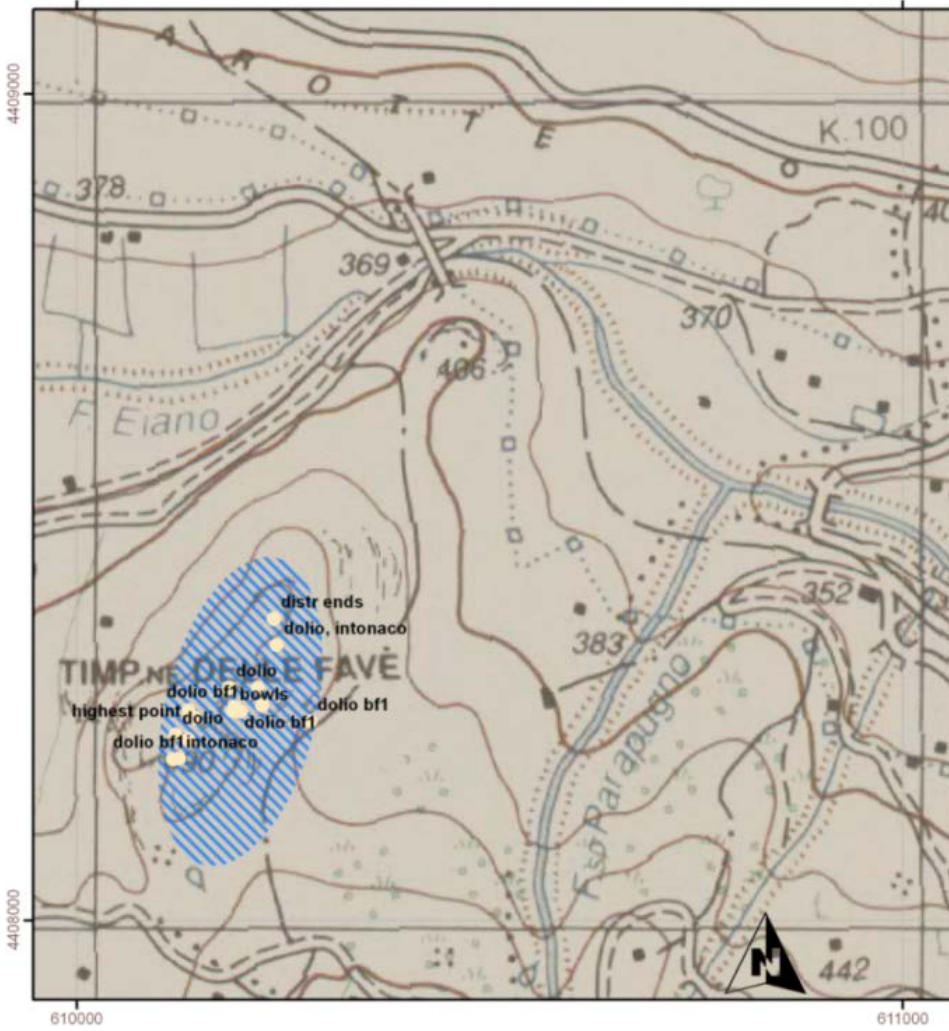


Fig. 39. Timpone delle fave, scatter area 39 (image M. van Leusen).



Fig. 41. The North-Western side of Timpone delle Fave. The settlement site is located on the spur on the right. On the left, the valley of the Eiano River and the village of Eianina (photos-Figs. 41-48 F. Ippolito 2013).



Fig. 42. E side. The rocks on the right side delimitate the concave area of the site on top of the hill, starting from the rocks into the foreground. On the background, Monte Spirito Santo in the territory of Cassano allo Jonio.



Fig. 43. SW side slope of the hill of Timpone delle Fave.



Fig. 44. North-Eastern side of Timpone delle Fave from the top. Below, the Eiano River and the road Castrovillari-Civita. On the background, Eianina and on the right, the spurs of the Dolcedorme mountains.



Fig. 45. NE side from top of Timpone delle Fave. Below, below, the intersection of the roads Castrovillari-Cassano and the Eiano River. On the background Pietra del Demanio in the territory of Civita.



Fig. 46. SE side. the concave area on top of the hill sloping South-eastwards

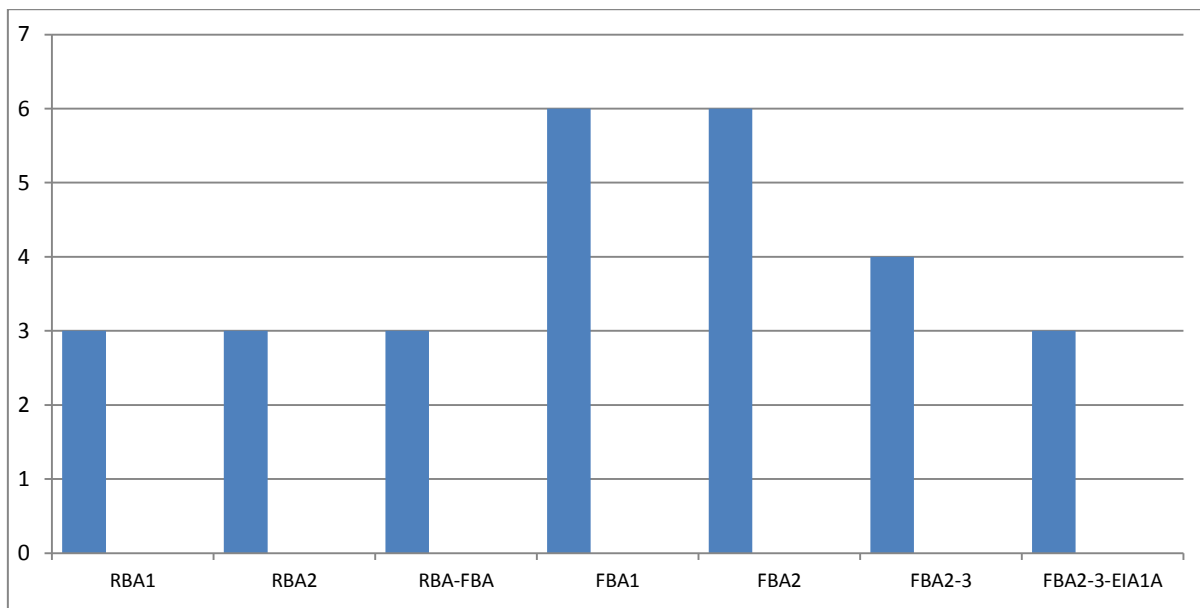










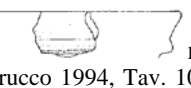














Fig. 47. Timpone delle Fave. Diagnostic sherds collected in 2000, chronological trend.




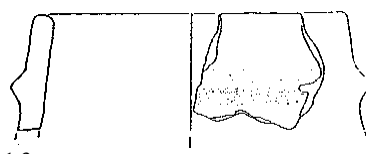
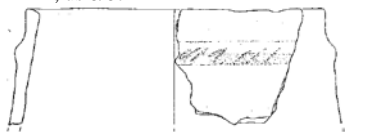


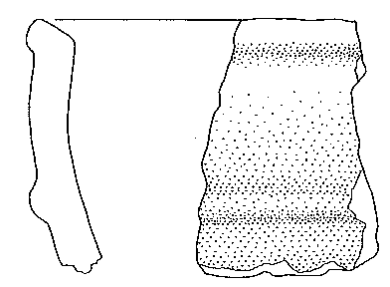
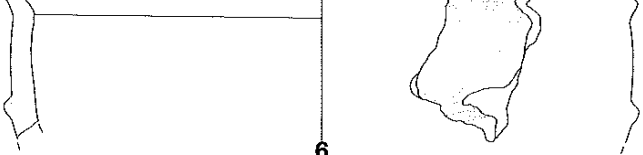
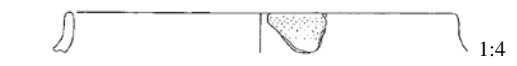
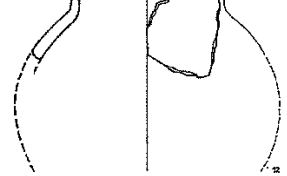

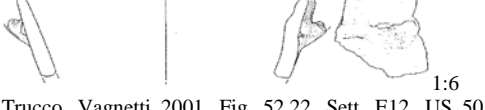
Fig. 48. Timpone delle Fave. Fragment of *dolio cordonato*.

Id	Sherd	Parallel	Date
439	 Pl. XXXVII.439	  1:6 Bianco Peroni <i>et al.</i> 2010, Tav. 26, B6, Tomba 10, scavo 1965, Pianello di Genga (AN)	FBA1
440	  Pl. XXXVII.440	  1:3 Similar to type in Trucco, Vagnetti 2001, Fig. 34.2, Sett. DE11, US 8/87	FBA1
441	  Pl. XXXVII.441	  1:6 Similar to Peroni, Trucco 1994, Tav. 108, 34, forma 42A, Broglio di Trebisacce (CS), Sett. D Nord, strato 1	Late FBA

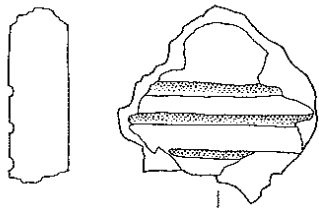

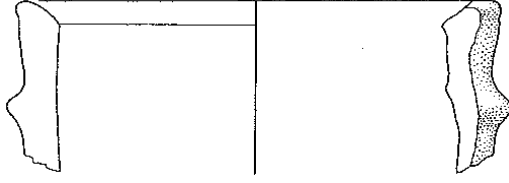

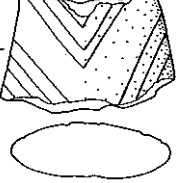


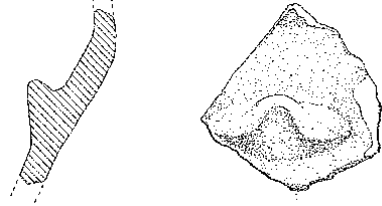

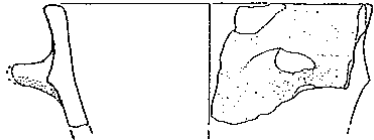

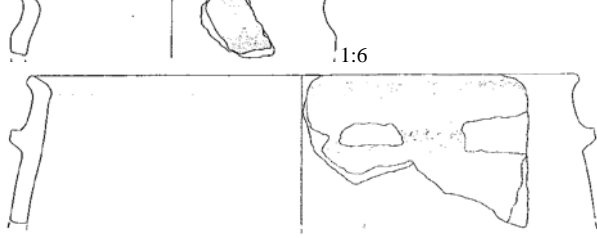
Tab. 65. Timpone delle Fave. Sherds collected in 1999.

Id	Sherd	Parallel	Date
442	  Pl. XXXVII.442	  1:6 Trucco, Vagnetti 2001, Fig. 82.11, Tipo 319, Torre Mordillo, Cassano allo Jonio (CS), Raccolte di Superficie, Area L	RBA1
443	  Pl. XXXVII.443	  1:6 Peroni, Trucco 1994, Tav. 88.10, forma 50 A, Broglio di Trebisacce (CS), Sett. B Ovest, liv. H	Late FBA
446	  Pl. XXXVIII.446	  1:4 Peroni, Trucco 1994, Tav. 102.3, Sett. Nord, strato 3	FBA1



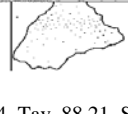

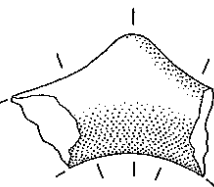

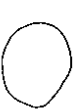
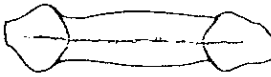
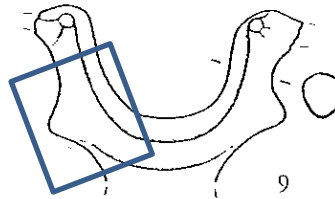


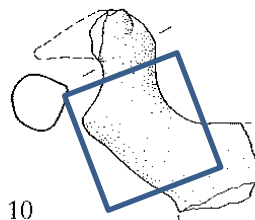





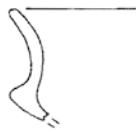

Tab. 66. Timpone delle Fave. Sherds collected in 2000 (Tab. 1/6).

Id	Sherd	Parallel	Date
445	 <p data-bbox="231 491 391 513">Pl. XXXVIII.445</p>	 <p data-bbox="957 469 1324 556">1:3 Trucco, Vagnetti 2001, Fig. 34.2, Torre Mordillo, Cassano allo Jonio (CS), settori DE11, us 8/87</p>  <p data-bbox="957 687 1324 775">1:6 Trucco, Vagnetti 2001, Fig. 29.4, Torre Mordillo, Cassano allo Jonio (CS), Settori DE11-12, superficie</p>	FBA1
447	 <p data-bbox="231 928 391 950">Pl. XXXVIII.447</p>	 <p data-bbox="805 884 1332 960">1:6 Damiani 2010, Tav. 52.7, 72. Tipo1B (Cavallo Morto, Anzio, RM, tomba 1)</p>	RBA
448	 <p data-bbox="231 1299 391 1321">Pl. XXXVIII.448</p>	 <p data-bbox="678 1146 1324 1223">1:3 Peroni, Trucco 1994, Tav. 105.6, forma 44, Broglio di Trebisacce (CS), Sett. N, buca nel riqu. B sotto lo strato 1</p>	FBA1
451	 <p data-bbox="231 1430 391 1452">Pl. XXXVIII.451</p>	 <p data-bbox="845 1517 1332 1572">* 1:4 Panucci 1969, Fig. 18.12, Grotta a Male, Assergi, L'Aquila, Strato 3, taglio 3</p>	RBA2-FBA1
452	 <p data-bbox="231 1714 391 1736">Pl. XXXVIII.452</p>	 <p data-bbox="845 1692 1332 1747">1:6 Trucco, Vagnetti 2001, Fig. 52.22, Sett. E12, US 50 base, Torre Mordillo, Cassano allo Jonio (CS), sett. E 12.</p>	FBA2-IAIA

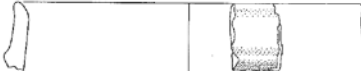
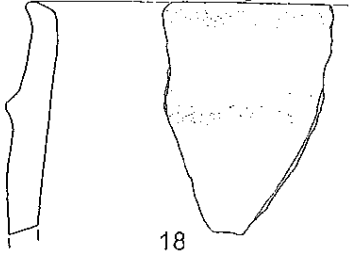

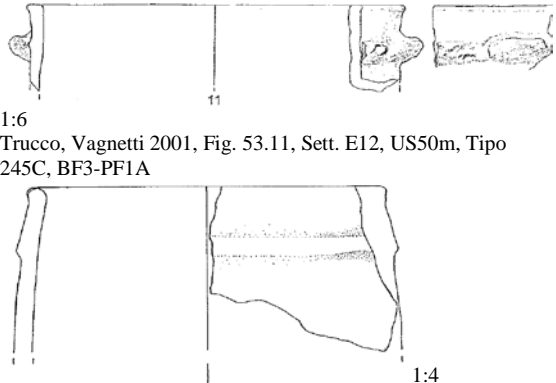

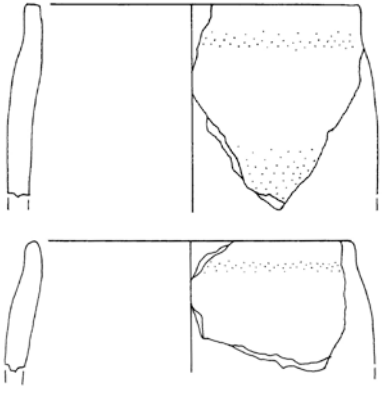
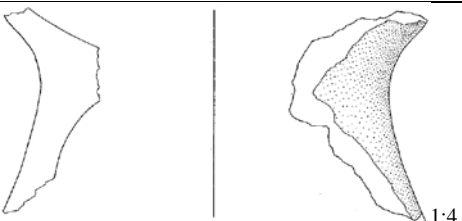
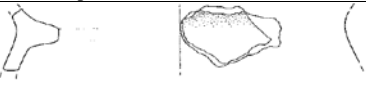
Tab. 67. Timpone delle Fave. Sherds collected in 2000 (Tab. 2/6).

Id	Sherd	Parallel	Date
455	 <p data-bbox="236 548 371 570">Pl. XXXIX.455</p> <p data-bbox="687 526 719 548">1:2</p>	 <p data-bbox="1134 366 1166 388">1:3</p> <p data-bbox="842 410 1326 460">Peroni, Trucco 1994, Tav. 108.13, decoration F, Broglio di Trebisacce (CS), sett. D Nord, strato 1, riq. B</p>	FBA2
456	 <p data-bbox="236 766 371 788">Pl. XXXIX.456</p> <p data-bbox="772 744 804 766">1:2</p>	 <p data-bbox="1214 657 1246 679">1:5</p> <p data-bbox="842 679 1326 751">Peroni, Trucco 1994, Fig. 150.42d, Broglio di Trebisacce (CS), Sett. B, ampl. '80, liv. S2, Cfr. Ric. 2, tav. 32.9</p>	Late FBA
457	 <p data-bbox="236 1006 371 1028">Pl. XXXIX.457</p> <p data-bbox="635 984 667 1006">1:2</p>	 <p data-bbox="1134 858 1166 880">1:3</p> <p data-bbox="842 908 1326 1006">For the decoration: Peroni, Trucco 1994, tav. 97.14, Sett. B Ovest. Liv. S3, Broglio di Trebisacce (CS); Bernabò Brea, Cavalier 1968, tav. CCLVI, 1 b,d (decoration), Tav. CCLVII, 4 b (decoration).</p>	Late FBA
461	 <p data-bbox="236 1257 371 1279">Pl. XXXIX.461</p> <p data-bbox="730 1214 762 1236">1:2</p>	 <p data-bbox="842 1279 1326 1330">Cinquelpalmi 1998, 9.055, p. 161, Torre Santa Sabina (BR), Struttura 2, t. 3</p>	RBA2-FBA1
466	 <p data-bbox="236 1520 336 1541">Pl. XL.466</p> <p data-bbox="826 1498 858 1520">1:4</p>	 <p data-bbox="1286 1509 1318 1530">1:3</p> <p data-bbox="879 1530 1302 1581">Trucco, Vagnetti 2001, Torre mordillo, Cassano allo Jonio (CS), Fig. 74.21, Sett. E 8-9, Us 2/1</p>	FBA2
467	 <p data-bbox="236 1738 336 1760">Pl. XL.467</p> <p data-bbox="695 1683 727 1705">1:4</p>	 <p data-bbox="1086 1633 1118 1655">1:6</p> <p data-bbox="751 1830 1318 1950">1:8 Similar to Peroni, Trucco 1994, Tav. 103.22, forma 53, Sett. D. Nord, strato 2, Broglio di Trebisacce (CS), FBA1; for the rim, see Trucco, Vagnetti 2001, Fig. 78.8, Trincea 13/66, area F, strato 8, Torre Mordillo, Cassano allo Jonio (CS), Late FBA</p>	FBA





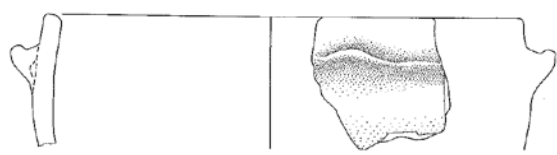

Tab. 68. Timpone delle Fave. Sherds collected in 2000 (Tab. 3/6)

Id	Sherd	Parallel	Date
470	 Pl. XL.470	  1:4 Peroni, Trucco 1994, Tav. 88.21, Sett. B Ovest, liv. H, broglio di Trebisacce (CS)	FBA
471	    1:2 Pl. XL.471	      9 1:3 10 Damiani 2010, Tav. 112.C9 (Cuma-NA, Acropoli)-10 (Villa Persolino, Faenza-RA), Tipo A44, Foggia 1.	RBA
474	  1:4 Pl. XLI.474	    1:5 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 89 A 149, Sett. E8-9, us 2, FBA1, Fig. 89 B 199, sett. E12, us 54, FBA	FBA

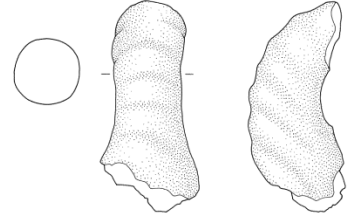

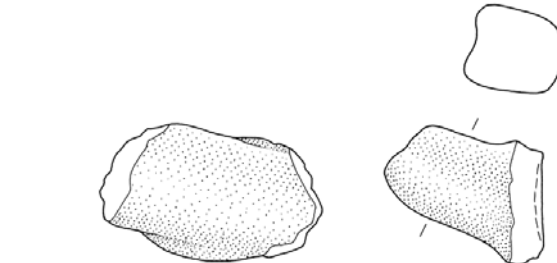
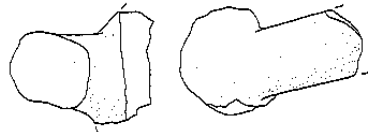
Tab. 69. Timpone delle Fave. Sherds collected in 2000 (Tab. 4/6).

Id	Sherd	Parallel	Date
475	 <p data-bbox="236 425 343 447">Pl. XLI.475</p> <p data-bbox="678 371 726 393">1:4</p>	 <p data-bbox="997 546 1029 567">18</p> <p data-bbox="1189 556 1220 578">1:3</p> <p data-bbox="821 578 1284 633">Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 41.18, Sett. D 12, US 19, BF2</p>	FBA2
477	 <p data-bbox="236 851 343 873">Pl. XLI.477</p> <p data-bbox="710 775 758 797">1:6</p>	 <p data-bbox="774 786 821 808">1:6</p> <p data-bbox="981 764 997 786">11</p> <p data-bbox="774 808 1284 862">Trucco, Vagnetti 2001, Fig. 53.11, Sett. E12, US50m, Tipo 245C, BF3-PF1A</p> <p data-bbox="1189 1037 1220 1059">1:4</p> <p data-bbox="774 1059 1332 1113">Colelli 2012, Timpone della Motta, Francavilla M.ma (CS), Tav. 12.35, AC4.30, PF1A</p>	FBA3-EIA1A
	 <p data-bbox="236 1288 343 1310">Pl. XLI.479</p> <p data-bbox="742 1212 790 1233">1:4</p>	 <p data-bbox="1204 1506 1236 1528">1:3</p> <p data-bbox="805 1528 1332 1605">Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 61.9, Sett. D11-12, US 145, BR1, Fig. 82. 9, Area L, raccolte di superficie</p>	RBA1
482	 <p data-bbox="236 1823 343 1845">Pl. XLII.482</p> <p data-bbox="710 1801 758 1823">1:4</p>	 <p data-bbox="1252 1670 1284 1692">1:6</p> <p data-bbox="805 1692 1332 1747">Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 46.11, Sett D 12, US 25</p>	RBA2

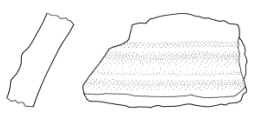
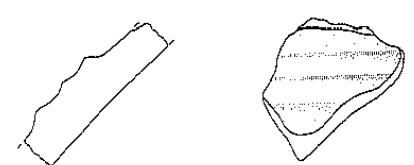
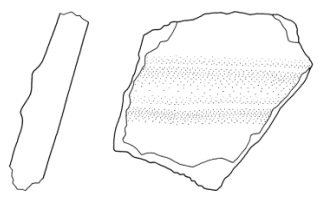
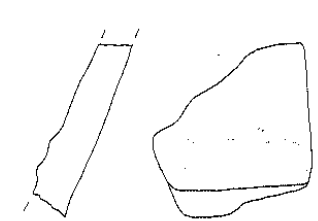

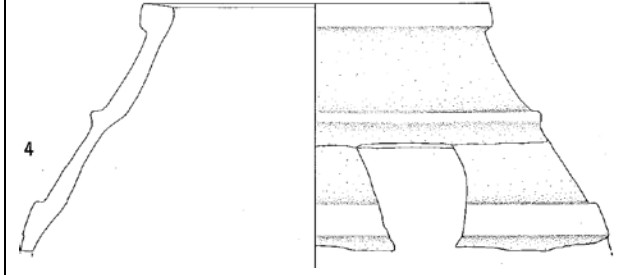
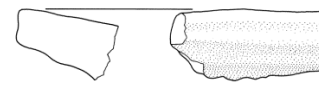
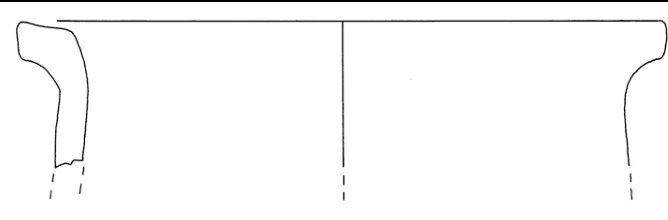
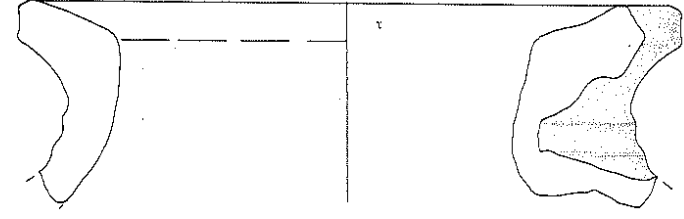

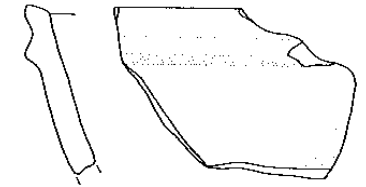
Tab. 70. Timpone delle Fave. Sherds collected in 2000 (Tab. 5/6).

Id	Sherd	Parallel	Date
481	 <p data-bbox="231 425 311 458">XLI.481</p>	 <p data-bbox="518 447 1316 524">Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 29.13, Sett. DE11-12, superficie, Tipo 297. Il tipo è presente anche in D 11 DIV Us 11/87 (non ill.), contenente materiali del BR e BF.</p>  <p data-bbox="518 600 1316 720">Colelli 2012, Tav. 69.282, AC25.1, Timpone della Motta, contesto sconvolto; il tipo è attestato anche nell' Area Rovitti (HY56), nel riempimento (US 38) di una grande fossa di forma irregolare connessa alla Struttura A; l'US38 è stata datata al VII sec. a.C. ma, oltre a ceramica corinzia, enotrio-euboica, ceramica coloniale, pareti di impasto e fr. osteologici, contiene frammenti dell'età del Bronzo Recente e Finale (Colelli 2012, Schema 2.38).</p>  <p data-bbox="518 862 1093 895">Damiani 2010, Tav. 92.8, tipo 131, foggia 4, Coriano (FO), RBA1</p>	RBA-FBA
484	 <p data-bbox="231 1102 319 1135">XLII.484</p>	 <p data-bbox="805 1026 1316 1168">Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 81.15, Area F6b, raccolte di superficie, olla tipo 253A, BF1; il tipo, senza bugna sul cordone, è attestato anche nella US 20 del Sett D12 eIII, fig. 44.7, contenente materiali del BF1.</p>	FBA1

Tab. 71. Timpone delle Fave. Sherds collected in 2000 (Tab. 6/6).

Id	Sherd	Parallel	Date
659	 <p data-bbox="231 1528 359 1561">Pl. XLIII.659</p>	 <p data-bbox="614 1474 1332 1528">Tenaglia 1994, Tav. 69.9, Sett. D Nord, sporadici, da m. 16 a Sud di D Est, Forma 4, Broglio di Trebisacce (CS)</p>	FBA
660	 <p data-bbox="231 1856 359 1889">Pl. XLIII.660</p>	 <p data-bbox="861 1758 1300 1812">Tenaglia 1994, Tav. 59.11, Sett. B Ovest, liv. 1B, ansa 12, Broglio di Trebisacce (CS)</p>	FBA1

Tab. 72. Timpone delle Fave. Sherds collected in 2013 (Tab. 1/2).

Id	Sherd	Parallel	Date
665	 <p>1:4</p> <p>Pl. XLIII.665</p>	 <p>1:4</p> <p>See Tenaglia 1994, Tav. 58.8, Sett. B Ovest, liv. 3A *, riq. W, dec. 18, Broglio di Trebisacce (CS)</p>	FBA
666	 <p>1:4</p> <p>Pl. XLIII.666</p>	 <p>1:4</p> <p>Tenaglia 1994, Tav. 61.5, Sett. B Ovest, sporadici, liv. H, dec. 18, riq. P, Broglio di Trebisacce (CS)</p>	FBA
663	 <p>1:8</p> <p>Pl. XLIII.663</p>	 <p>4</p> <p>1:8</p> <p>Peroni 1984, Tav. 41.4, Sett. D, strato 1 B a contatto con il battuto; see also Tenaglia 62.1, sett. B Ovest, liv. H, less angular.</p>	Late FBA
661	 <p>1:4</p> <p>Pl. XLIII.661</p>	 <p>1:6</p> <p>Capriglione <i>et al.</i> 2012, Fig. 4.4, Tipo 1, Tropea (VV), FBA</p>  <p>1:4</p> <p>Tenaglia 1994, Tav. 58.5, Sett. B Ovest, Liv. 1B, Broglio di Trebisacce (CS)</p>	FBA1
667	 <p>1:4</p> <p>(see also 468-TdF-00-43)</p> <p>Pl. XLIII.667</p>	 <p>1:3</p> <p>Peroni, Trucco 1994, Tav. 148.16, Torre Mordillo, surface, shape 43B</p>	Late FBA

Tab. 73. Timpone delle Fave. Sherds collected in 2013 (Tab. 2/2).

3.2 Galleria dei Vasi - Sant'Angelo II Cave – Cassano allo Jonio

The cave of Sant'Angelo II¹⁴ is part of the Sant'Angelo karst system located N-W of Cassano allo Jonio (Fig. 49). Geologically, this system consists of Mesozoic sedimentary rocks, such as dolomites, and dolomitic, re-crystallized and morained limestones, dark grey or blackish in colour, dating to the Triassic period.¹⁵ Sixteen caves have been explored in the course of a speleological expedition carried out in this area by the Cave Commission Eugenio Boegan between 1977 and 1978. Among them, the caves of Sant'Angelo I¹⁶, II, III, IV and the Pavolella cave¹⁷ yielded pre- and proto-historical evidence from the Neolithic to the Bronze Age.

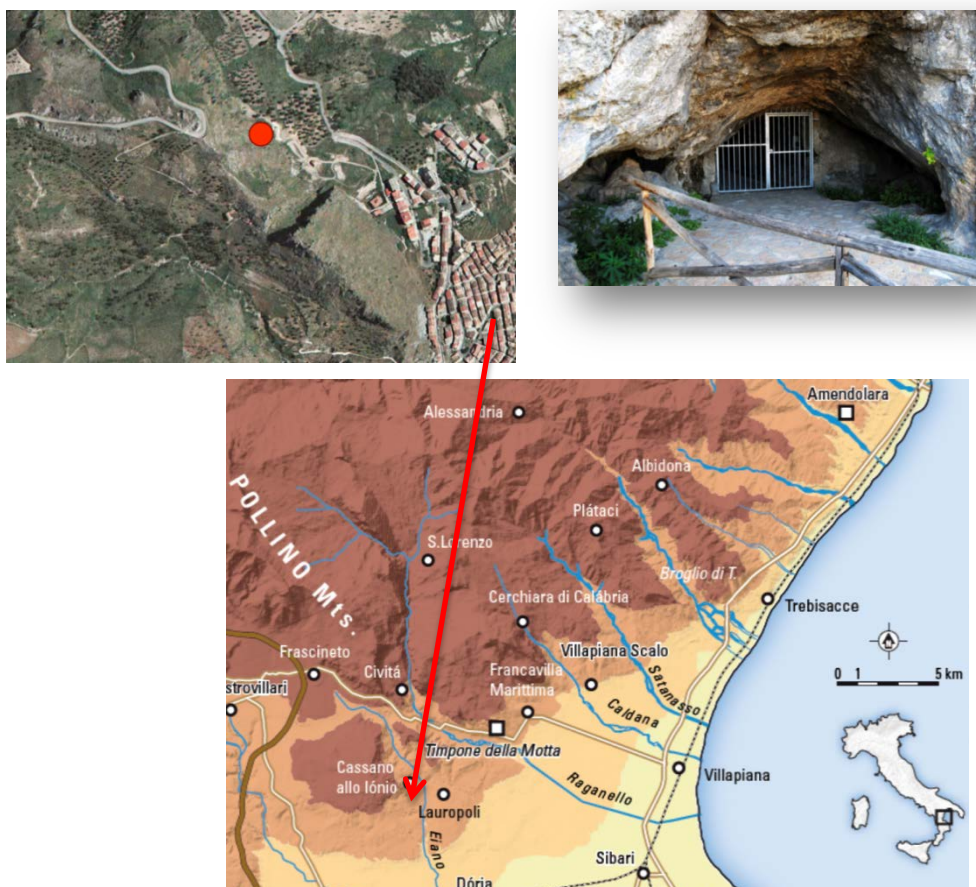


Fig. 49a. View of the entrance of the Sant'Angelo II Cave. Location of the Sant'Angelo Caves at Cassano allo Jonio, Northeastern Calabria.

In 1964, Santo Tinè published the stratigraphy recorded in the northern part of the Grotta Superiore di Sant'Angelo. On that occasion the cave was named Grotta di Sant'Angelo III to distinguish it from the so-called “Grotta di Sant'angelo II” which can be accessed through a second entrance located more to the south (Fig. 50). Via this entrance, one can access what the speleologists of the Cave Commission “Eugenio Boegan” referred to as “Ramo dei Vasi” and that S. Tinè reported as the “Galleria dei Vasi” during a survey in 1964. The materials of this survey were only recently documented during an inventory project in a storeroom of the Soprintendenza della Calabria carried out by the GIA in 2011. I studied the potsherds and three lithic tools

¹⁴ Or Grotta Superiore di Sant'Angelo – Catasto Grotte Calabria CB 103 (Larocca F. 1991, pp. 68-73).

¹⁵ Gasparo 1979, 121-124.

¹⁶ Sant'Angelo I corresponds to the Grotta Inferiore di S. Angelo (Catasto Grotte Calabria CB 104).

¹⁷ See Chapter 1, sections 1.2, 1.3.

dating to the late Middle Neolithic (Pl. LXI.668-670) collected by S. Tinè in 1964 and I will discuss the results below.¹⁸

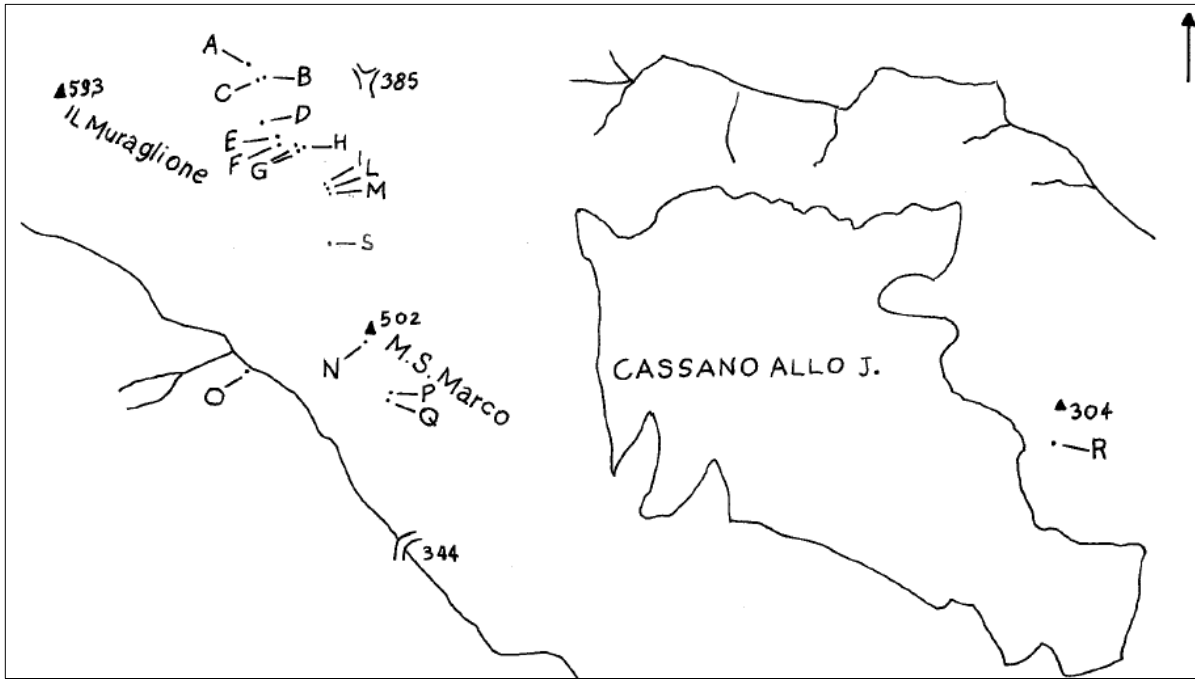


Fig. 49b. Schematic locations of the Sant'Angelo Caves west of Cassano allo Jonio. A. Pavolella I cave, B. Pavolella II cave, C. pavolella III cave, D. Pavolella fissure, E. Burrow on S. Angelo caves, F. Cave on the s. angelo caves, G. Upper S. Angelo cave, H. Lower S. angelo cave, I. Cave III - NW, L. Cave II - NW, M. Cave I - NW, N. Case Drago cave, O. Case Drago well, P. Southern cave, Q. Southern cavern, R. Vucco Ucciardo, S. Sant'Angelo IV cave.

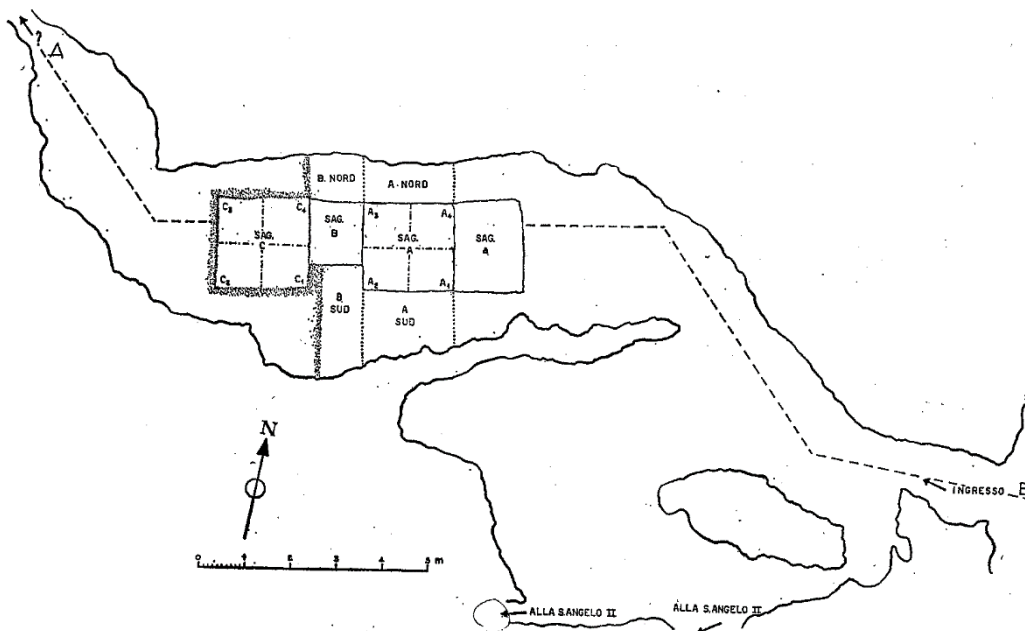


Fig. 50. Plan of the Sant'Angelo III cave, after Tinè S. 1964, Fig. 1, p. 13.

¹⁸ I could carry out the study of these materials thanks to Peter Attema and Silvana Luppino. I also would like to thank Alessandro Vanzetti and Vincenzo Tinè for sharing these data with me. Unexpectedly, in April 2014, while doing my research in the Sibaritide, Silvana Luppino passed away. I take the opportunity here to gratefully recall her interest in my research, her hospitality and the valuable and friendly discussions we had.

Some of the diagnostic sherds that I selected belong to the Middle and Recent-1 Neolithic based on

- pottery in the Passo di Corvo style (see Fig. 51 and Pl. LVIII.624¹⁹, 625²⁰),
- trichromic pottery (Pl. LVIII.626²¹), and
- Serra d'Alto-Capanna Gravela pottery (Pl. LIX.629²²).



Fig. 51. S. Angelo II, Galleria dei Vasi.
Example of Neolithic bichrome ware pottery.

Two base fragments (Pl. LVIII.627, Pl. LIX.628) are comparable to Middle Neolithic specimens from Grotta del Mitreo, in Friuli.²³

Two fragments date between the Late Eneolithic and the Early Bronze Age. They are:

- A truncated-cone shaped bowl with handle (Tab. 74.640) and
- A decorated jar with short and flaring rim (Tab. 74.641) which calls to mind examples from the Grotta Cardini²⁴ and the Polada culture area²⁵ and other southern Italian finds.²⁶

Several fragments belong to the Bronze Age. Some of the fragments that have parallels both in the Polada culture area and in Southern Italian areas can be attributed to the beginning of the Bronze Age. Other fragments, comparable to exemplars from Cessaniti-Capo Piccolo and Palma Campania sites can be assigned to the end of the Early Bronze Age. The next set of fragments dates to the beginning of the Protoapennine. Such finds are important in understanding the dynamics of the development of the Bronze Age sequence for two main reasons: firstly because settlement sites of the Early Bronze Age in the Sibaritide are few, and

¹⁹ See, for instance, Tinè S. 1964, Tav. II.g., strato IV.

²⁰ For the shape, see Cassano, Manfredini 2004, Fig. 6.19.1, Struttura Q, strato 4.

²¹ *Idem*, Tav. I.3.4, Tav. 3.8.

²² See Natali 2009, Tav. III.3.

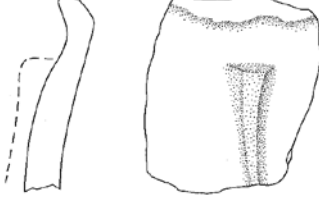
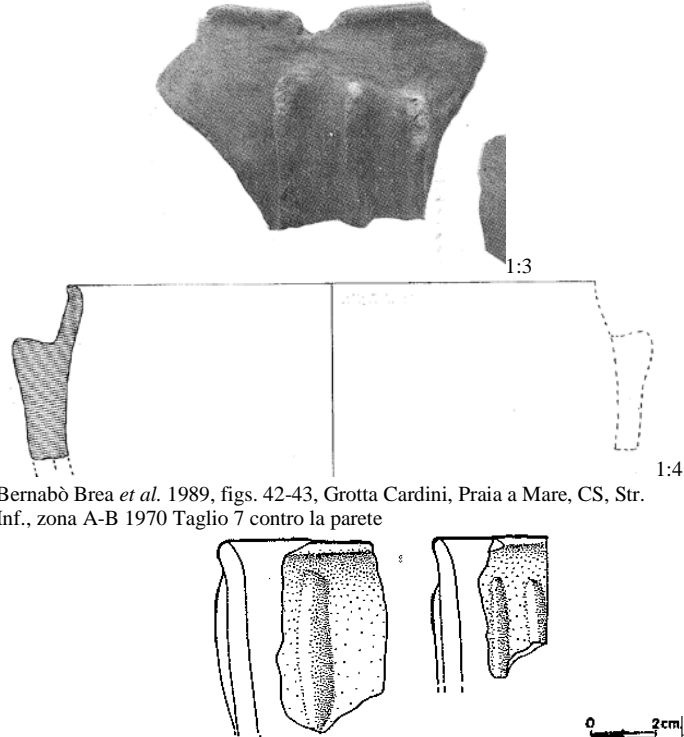

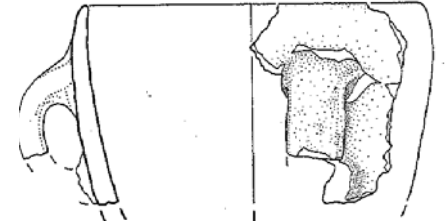
²³ Montagnari Kokelj, Crismani 1997, fig. 36.340, Danilo and Kokanj 1 cultures (Dalmatia and Croatia).

²⁴ Bernabò Brea *et al.* 1989, figs. 42-43.

²⁵ Rizzi, Tecchiati 1996, pp. 530-531.

²⁶ Talamo 1992, Tav. XLV.135 and for the dec. Marino, Pacciarelli 1996, fig. 3.6.

secondly because the available information, which tends to suggest a settlement development in the Sibaritide starting from the MBA2, can be reviewed filling in the chrono-cultural gaps characterizing the beginning of the Bronze Age in the Sibaritide.

Id	Sherd	Parallel	Relative Chronology
641	 <p data-bbox="215 742 311 775">Pl. LX.641</p>	 <p data-bbox="654 939 1308 993">Bernabò Brea <i>et al.</i> 1989, figs. 42-43, Grotta Cardini, Praia a Mare, CS, Str. Inf., zona A-B 1970 Taglio 7 contro la parete</p> <p data-bbox="654 1201 1308 1244">For. Dec. Rizzi, Tecchiati 1996, 530-531, Nössing B, Bressanone, Bolzano, terreno di sbancamento</p>	LE/EBA
640	 <p data-bbox="215 1517 311 1550">Pl. LX.640</p>	 <p data-bbox="885 1506 1324 1561">Carboni, Ragni 1986, Tav. 3.2, Mulino S. Antonio, Avella (AV), sezione stratigrafica</p>	LE/EBA

Tab. 74. Sant' Angelo II cave, Galleria dei Vasi (Tab. 1/3).

Pottery finds dated to the beginning of the Early Bronze Age include the following:

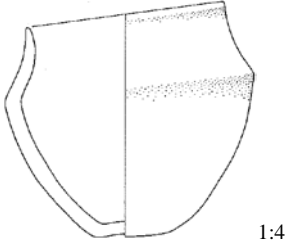
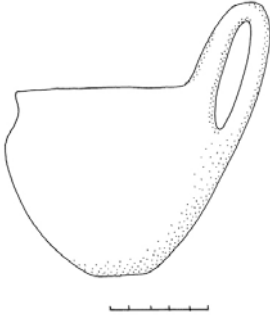
- A bowl similar to an example from Grotta dei Cappuccini (Lecce)²⁷ (Pl. LIX.630);
- A cylindrical vessel similar to Campanian and Poladian examples²⁸(Pl. LIX.631);
- A collared vessel comparable with an example from Grotta degli Zingari (Trieste)²⁹ (Pl. LX.635);
- A bowl with vertical handle also found at Grotta del Mitreo, again in the Poladian area³⁰ (Pl. LIX.632).

²⁷ Ingravallo, Orlando 1996, fig. 3.4.

²⁸ Gilli, Montagnari Kokelj 1996, fig. 37.225. For the shape see also Talamo 1992, Tav. XLIII, 107.

²⁹ Gilli, Montagnari Kokelj 1996, fig. 40.279.

³⁰ Montagnari Kokelj, Crismani 1997, fig. 20.175.

Id	Sherd	Parallel	Relative chronology
638	 <p data-bbox="181 624 280 646">Pl. LX.638</p>	 <p data-bbox="836 683 1251 755">See 564 (S.A.II) Tinè S. 1987, Fig. 48-55, Grotta di S. Angelo II, Cassano allo Jonio (CS)</p> <p data-bbox="836 1072 1299 1116">Salerno, Vanzetti 2004, Fig. 2, Grotta di S. Angelo II, Cassano allo Jonio, (scale like above)</p>	LEBA

Tab. 75. Sant'Angelo II cave, Galleria dei Vasi (Tab. 2/3).

Several finds date generally to the Early Bronze Age including:

- Two hemispherical bowls (Pl. LIX.633, 634)³¹,
- A bowl with in-turning rim (Pl. LIX.636)³²,
- A bowl occurring also in late Early Bronze Age contexts (Pl. LIX.637).³³

Two bowls belonging to the aspects of Palma Campania (Tab.75.638) and Cessaniti-Capo Piccolo (Pl. LX.639)³⁴ date to the end of the EBA. The other fragments date to the beginning of the Protoapennine period.

A truncated-cone shaped bowl with notched cord-band is similar to an example from (Pl. LX.642) the intermediate stratum at Grotta Cardini.³⁵ A bowl with carena (Pl. LX.643) is similar to a bowl from Giovinazzo (dolmen *a*).³⁶ A collared vessel (Pl. LXI.644) is comparable to examples from Pratola Serra.³⁷ A collared vessel with flaring rim (Pl. LXI.645) calls to mind proto-apennine finds from Grotta del Pino di Sassano³⁸ and Grotta Cardini.³⁹ A bowl with handle (Tab. 76.648) is similar to one from Coppa Nevigata, in Puglia.⁴⁰

³¹ Cocchi Genick 1996, fig. 6.2.

³² Cocchi Genick 1996, fig. 5.28.

³³ Cocchi Genick 1996, fig. 2.16, Talamo 1992, Tav. XL.61-62.

³⁴ Marino 2000, fig. 6.2.

³⁵ Bernabò Brea *et al.* 1989, fig. 48.f.

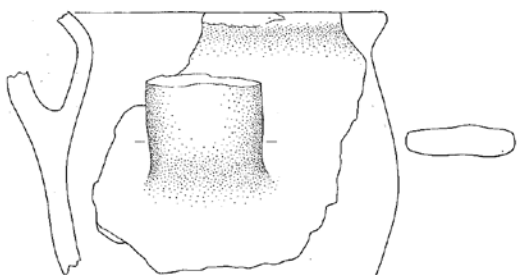
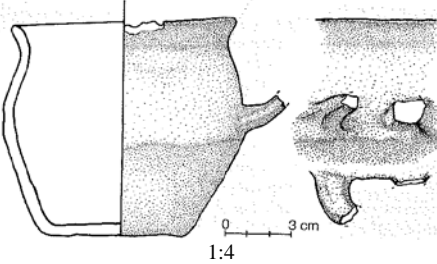
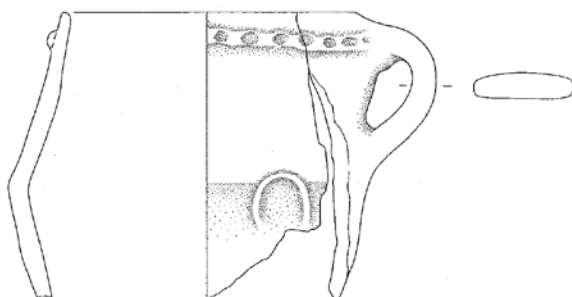
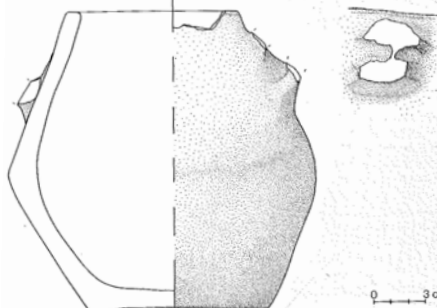
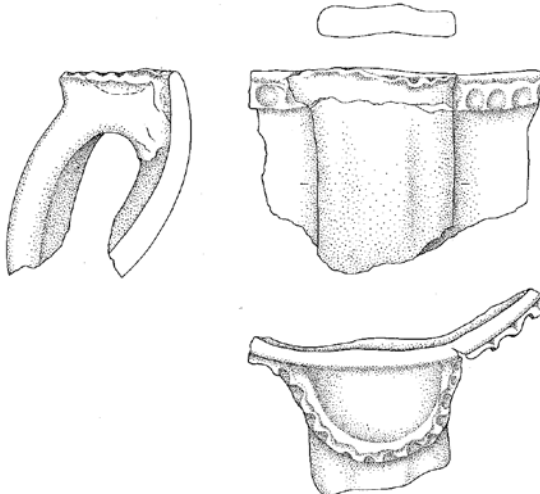
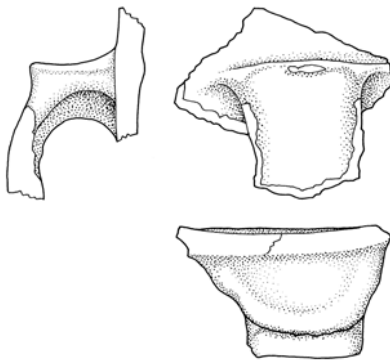
³⁶ Lo Porto 1967, fig. 24.3.

³⁷ Talamo 1992, Tav. XLIV.113-115.

³⁸ Piperno, Pellegrino 2000-2001, Tav. F.4.

³⁹ Bernabò Brea *et al.* 1989, fig. 50.c.

⁴⁰ Radina, Recchia 2010, fig. 5.11.

Id	Sherd	Parallel	Relative chronology
648	 <p data-bbox="223 666 343 687">Pl. LXIII.648</p> <p data-bbox="782 644 821 666">1:4</p>	 <p data-bbox="869 611 1324 731">Radina, Recchia 2010, fig. 5.11, Coppa Navigata, Manfredonia (FG), Struttura tardo protoappenninnica adiacente alla fronte esterna delle prime mura di fortificazione dell'abitato, CN97C4DT3II.</p>	MBA1
649	 <p data-bbox="223 1092 343 1113">Pl. LXIII.649</p> <p data-bbox="805 1070 845 1092">1:4</p>	 <p data-bbox="869 1070 1324 1135">Radina, Recchia 2010, fig. 5.39, Coppa Navigata, Manfredonia (FG), context as 648, CN97/98C4DT3II:D4AQ2f.</p>	MBA1
646	 <p data-bbox="223 1714 343 1736">Pl. LXII.646</p> <p data-bbox="805 1692 845 1714">1:4</p>	 <p data-bbox="869 1616 1316 1692">Cazzella, Moscoloni 1995, Tav. XVII, 3, Coppa Navigata, Manfredonia (FG), gruppo B, also after Recchia 2002, fig. 2.9.</p> <p data-bbox="1284 1572 1324 1594">1:3</p>	LEBA-MBA1

Tab. 76. Sant' Angelo II cave, Galleria dei Vasi (Tab. 3/3).

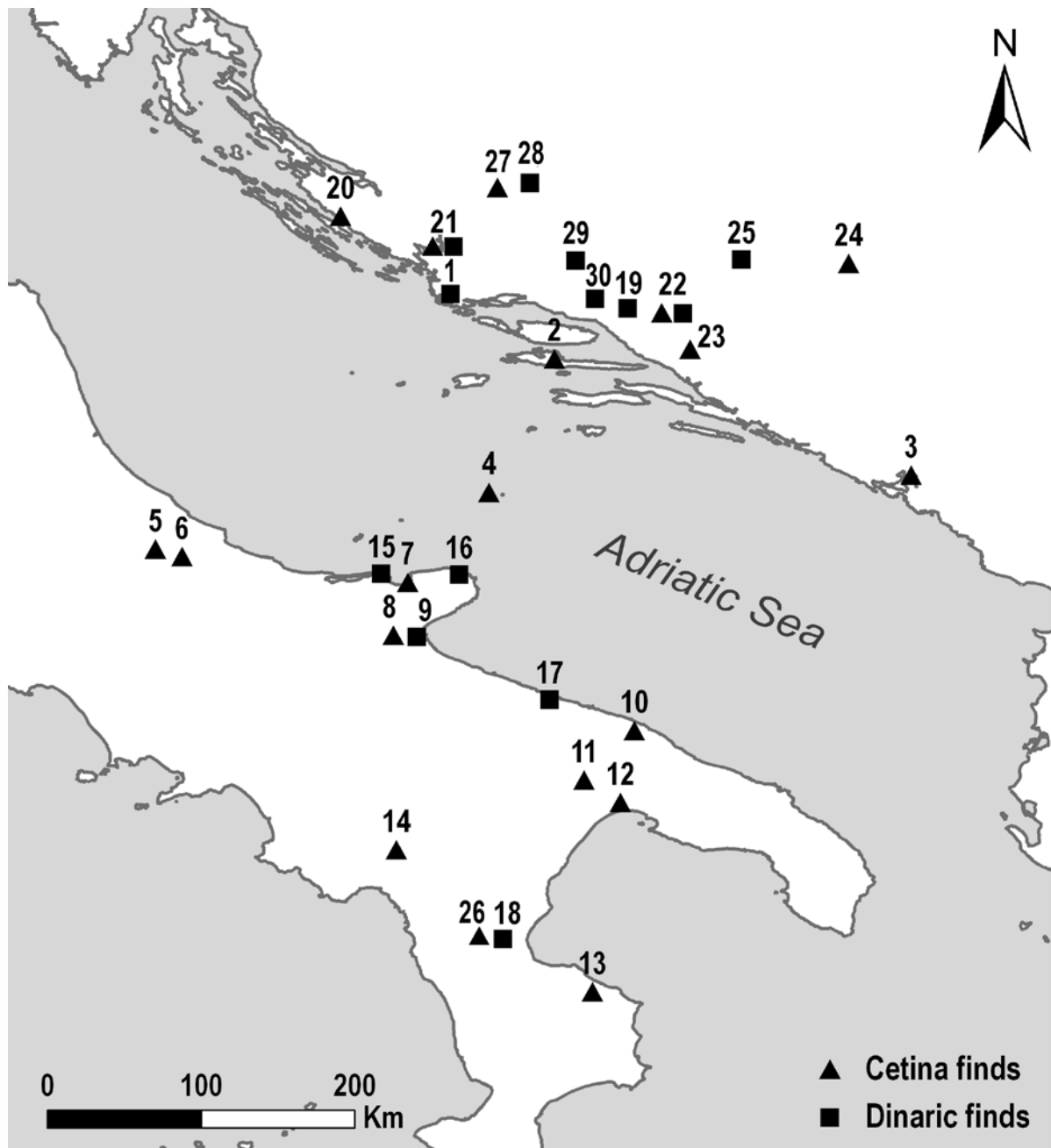


Fig. 52. Cetina and Dinaric evidence in Dalmatia and Southern Italy: 1.Ivankovača, 2.Hvar, 3.Velika Gruda, 4. Palagruza, 5. Navelli, 6. Popoli, 7.Rodi, 8. Fontanarosa, 9. Coppa Navigata, 10. Rutigliano, 11. Altamura, 12. Laterza, 13. Cariati, 14. Atena Lucana, 15. Torre Mileto, 16. Grotta Manaccora, 17. Bisceglie, 18. Cassano allo Jonio – Grotta di Sant’Angelo II, 19. Nečajno/Sovići, 20. Mala Glavica, 21. Škarin Samograd, 22. Ravlića Pećina, 23.Ograde, 24. Kotorac, 25. Varvara, 26. Saracena – Grotta San Michele, 27. Šparevine, 28. Pod, 29. Obrovac, 30. Privala (image J. Seubers, S. Boersma, F. Ippolito).

A biconical jar (Tab. 76.649) is comparable to types from Coppa Navigata;⁴¹ its decoration appears on a jug that is also similar in shape (Pl. LXII.647) from the necropolis of S. Abbondio at Pompei.⁴² A jar (Pl. LXIII.650) has a parallel at Grotta Cardini.⁴³

⁴¹ Radina, Recchia 2010, fig. 5.27, 5.39.

⁴² Information by Dott. P. Talamo.

⁴³ Bernabò Brea *et al.* 1989, fig. 25.d.

A particular interesting fragment is the one with the vertical band handle surmounted by a semi-circular lug and decorated by notched impressions which continue on a cord-band surrounding a collared vessel (Tab.76.646). This type of handle, also found in Protoapennine layers at Coppa Nevigata,⁴⁴ is reminiscent of types from the Eastern Central-Adriatic area that are assignable to the Protoapennine 1 or to the first phase of the Dinaric phase of the Bronze Age in Dalmatia.⁴⁵ The notched decoration on the lug and cord-band also occurs on examples from Grotta Manaccore⁴⁶ and the Bosnian site of Alihodže, dated to the BrA2.⁴⁷ Further typological analogies are provided by a fragment from Nečajno⁴⁸ and by a handle (as for its upper part) from SU 13 at Castelliere degli Elleri;⁴⁹ moreover, among fragments of “double rim jars” from Elleri, similar exemplars are present.⁵⁰ Furthermore, it is worth mentioning a band handle from cave 2 of Latronico,⁵¹ which shows a similar concavity of the upper part of the handle. This handle from the cave S. Angelo II represents the only element assignable to the Transadriatic Dinaric phase found in Calabria.

As the analysed materials are sparse finds, it does not seem appropriate to formulate functional hypotheses about their presence in relation to their original context. However, it is appropriate to consider the information provided by Antonio Larocca who mentions a gallery at the opening of the cave S. Angelo II. He reports that in the 1970s a series of vases, often with concretions, were visible in the wall clefts of the gallery. The same information is also given in the report of the Cave Commission “Eugenio Boegan”, in which also skeletal remains of a juvenile individual are mentioned. In this case, the evidently intentional deposition of the vases along the gallery, such as bowls, mugs, and small jars, point at collecting of water and may indicate cult practices involving the trapping and subsequent use of cave waters frequently documented in the period under discussion. However, because these observations are not supported by the necessary scientific data, in my opinion the evidence does not allow us to make functional analyses and to arrive at an interpretation. The analysed material in the find complex can be compared to the material from the adjacent Cave of Sant’Angelo III, the stratigraphy of which tells us that frequentation of the cave started in the Middle Neolithic (dichromic and trichromic pottery). The material shows connections with the Recent Neolithic. The Eneolithic phase of Piano Conte found in the cave S. Angelo III is absent among the materials of the Galleria of the Cave II, and the next phase is the start of the Bronze Age as is shown by elements that are attributable to the Sicilian area as well as to the Poladian one. Poladian pottery is found also in the cave S. Angelo II. Unlike the sequence of the Cave S. Angelo III, in the cave Sant’Angelo II the presence of materials of the first phase of the Protoapennine is well documented. These materials are assignable to a period between the EBA of the phase of Palma Campania, already suggested by the open-air site of Aciri-Colle Dogna and the numerous settlement evidences from the MBA2 of the Sibaritide. These data, which are a starting point to filling in the settlement record for the Sibaritide between the end of the Neolithic and the MBA2, also would allow to place the Sant’Angelo caves system within the broader context of the surrounding territory, shedding light on their partially cultic function for nearby settlements the nature and where abouts of which still elude us. The finds from the Galleria dei Vasi provide evidence for the Protoapennine 1 (EBA2B-MBA1), a period that has not yet been attested either in the open air sites or in the cave sites of the Sibaritide with the exception of sporadic Protoapennine fragments in the superficial level of the cave of San Michele di Saracena. The phase indicated as Protoapennine 1 (end of the Middle Helladic-Late Helladic 1) corresponds to the end of the phase of Cessaniti-Capo Piccolo and to the beginning of the cultural aspect Rodì-Tindari in Calabria, while the same phase, in Puglia, corresponds to the phase of Cavallino. These material cultural aspects include typological elements that are attributable to Palma Campania and therefore cultural aspects that developed in the course of the EBA and evolved into or lasted until the MBA1. As the fragments do not come from stratigraphic layers, it is not possible to confirm if the facies of Palma Campania is coeval with the aspects of the Protoapennine in

⁴⁴ Manfredonia, Foggia, Cazzella, Moscoloni 1995, Tav. XVII,3; Recchia 2002, fig. 2.9.

⁴⁵ See Della Casa 1995.

⁴⁶ Baumgärtel 1953, fig. 7. 8.

⁴⁷ Čović 1983, Tav. XXI, 5.

⁴⁸ Čović 1989, Tav. I. 6.

⁴⁹ Urban 1993, Tav. 1, 2.

⁵⁰ *Olle a doppio orlo*, Lonza 1981, e.g. Tav. 21, 5.

⁵¹ Ingravallo 1985, fig. 2.3.

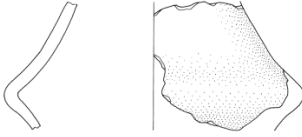
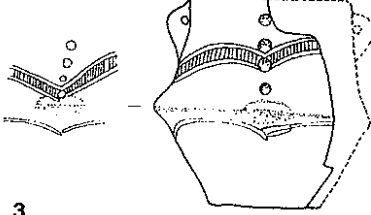
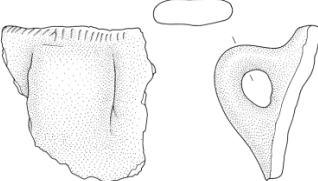

the strictest sense. This would not be possible even if we consider that all the materials were put in the cave at the same time or in a relatively limited time period. Nevertheless, the presence of materials comparable to aspects assignable to both the phase of Palma Campania and to subsequent phases, would constitute an indication in support of a contemporaneity of the considered phases in the period of transition from the EBA to the MBA. Furthermore, the difficulty of establishing typological comparisons with known repertoires from the EBA or the first MBA and the resultant impression that typological elements belong to both the suggested phases, contribute to the validity of assigning the materials to the proposed chronological range. Reassessing the whole collection, it appears that a first frequentation of the cave took place in the Middle-Recent Neolithic and a second one in the transitional period between the Early and the Middle Bronze Ages. Even together with the available data for the Sibaritide, this is not enough to contextualize the site, but it does point to long and wide ranging cultural interactions with the Eastern coast of the Adriatic sea, via Puglia.⁵² These contacts seem to follow the E-W route already established by the evidence of the West-Balkan phase of Cetina, starting from the late Eneolithic; at this stage, I would say that traces of these contacts and analogies, are gradually being revealed in several Southern Italian sites (Fig. 52).⁵³ In the next Chapter (4.1-2), I will further develop the argument of the contribution of the cave materials to our understanding of the (dis)continuity of settlement in the area.

⁵² Recchia 2010, p. 111, Recchia 212, p. 480.

⁵³ Pacciarelli, Talamo 2008, pp. 92-93.

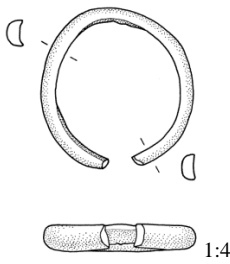
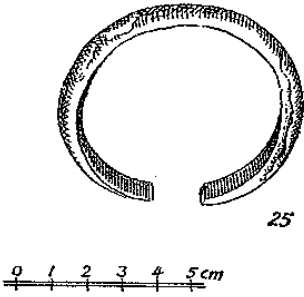
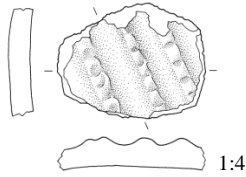
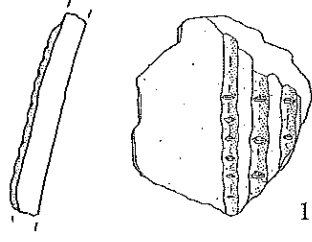
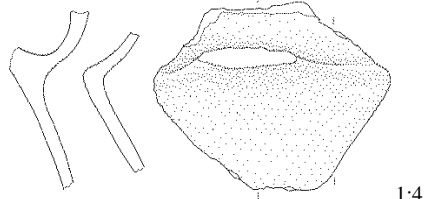
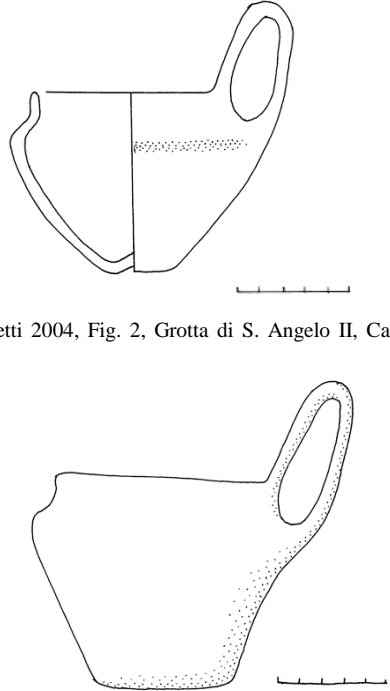
3.3 Other finds from the Sant' Angelo II cave

Apart from the finds from the Galleria dei Vasi, other materials collected by Santo Tinè in the 1960's were retrieved during the 2011 GIA inventory project in the storeroom of *Parco del Cavallo (Sibari)*. These were found in a crate, wrapped in a sheet of newspaper partly missing the date: only "30th of August" was legible. The few legible news articles referred to an avalanche that had occurred in Zermatt, in Switzerland in 1965. In 1987, Santo Tinè wrote that in the 1960's an assemblage of vessels was collected in the Sant' Angelo II cave and that they were part of grave goods found in the deeper part of the cave. He added that the materials should only be cautiously assigned to the Early Bronze Age, as they should be compared to materials from the nearby Sant' Angelo III cave, which were stratigraphically mixed up with Late Eneolithic ceramics. The materials I found in 2011 were indeed datable between the Eneolithic and the Early Bronze Age and were mixed up with human bones and a bronze bracelet (Tab. 78.575). Also three lithic tools were found (Plate LXI.668-670) which could be older.⁵⁴

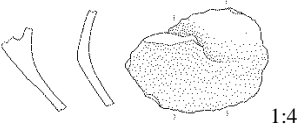
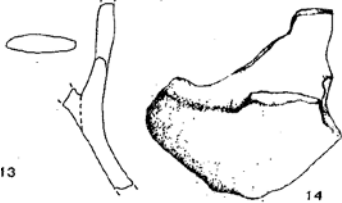
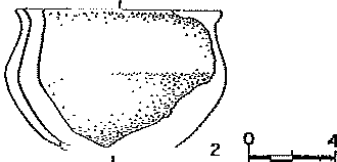
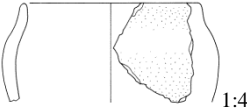
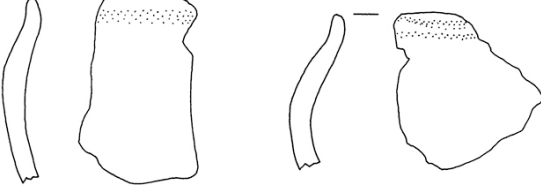
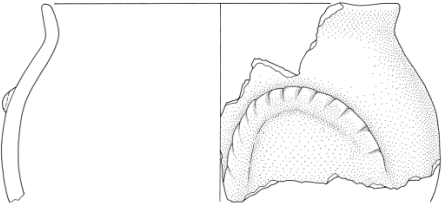
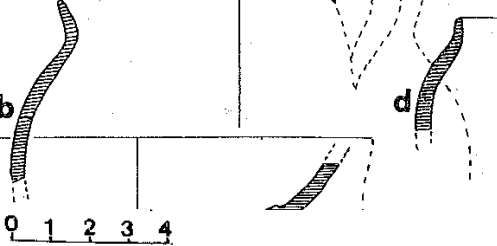
Id	Find	Parallel	Chronology
573	 <p data-bbox="225 1028 328 1050">Pl. LIV.573</p> <p data-bbox="596 978 628 1000">1:4</p>	 <p data-bbox="836 1065 852 1087">3</p> <p data-bbox="724 1100 847 1122">5 cm</p> <p data-bbox="715 1131 1305 1268">McConnell 1999, Fig. 2.3, Contrada Tranchina, Sciacca (AG), San Cono-Piano Notaro, EE. See also Lo Porto 1962-63, Fig. 13, Tomba (cella B) di Cellino San Marco (BR), Masseria Veli, Foglio catastale n. 30, particella 116, H orcio 9.5 cm. LE, 2600-2350</p>	E (?)
574	 <p data-bbox="225 1520 344 1541">Pl. LIII.574</p> <p data-bbox="612 1465 644 1487">1:4</p>	 <p data-bbox="1171 1493 1203 1515">1:3</p> <p data-bbox="715 1520 1305 1648">For the shape see Vigliardi 1996, Fig. 2.6, Grotta del Fontino (Grosseto), ceramiche dal deposito rimosso, BA iniziale. For the dec. see example of nicked rim after Nicoletti <i>et al.</i> 2011, Fig. 3.11, Favarella, Torrevicchia, S. Eufemia (CZ), LME (Gallo-Colarizzi aspect).</p>	LME/transBA

Tab. 77. Sant' Angelo II cave. Selection of finds (Tab. 1/3).

⁵⁴ Flint blades are often associated with Neolithic but it is also true that similar tools, even if only few, have been found in Bronze Age contexts like, for instance, the protoapennine hut at S. Maria del Buon Consiglio (Bari, Puglia), see Martinelli 1998, pp. 253-264.

Id	Find	Parallel	Chronology
575	 <p data-bbox="223 611 327 644">Pl. LIV.575</p>	 <p data-bbox="718 622 1236 709">Gimbutas 1965, Fig. 27.25, find from the hoard of Wąsosz, district of Szubin, western Poland, classical Únětice</p>	EBA
569	 <p data-bbox="223 971 327 1004">Pl. LII.569</p>	 <p data-bbox="718 993 1268 1113">For the dec. Mieli <i>et al.</i> 2011, Fig. 3.13, Grotta del Cervaro, Lagonegro (PZ), scavi De Lorenzo, LE. See also Čović 1983, T. XXI, 2, Rano bronzano doba, prelazna zona, Debelo brdo and T. XXIX, 1, Cetinska kultura, Skarin samograd (LE/transBA).</p>	LE/transBA
564	 <p data-bbox="223 1375 327 1408">Pl. LIII.564</p>	 <p data-bbox="718 1441 1292 1496">Salerno, Vanzetti 2004, Fig. 2, Grotta di S. Angelo II, Cassano allo Jonio</p> <p data-bbox="718 1845 1284 1867">Tinè S. 1992, Tav. IIc, Grotta di S. Angelo II, Cassano allo Jonio</p>	LEBA

Tab. 78. Sant' Angelo II cave. Selection of finds (Tab. 2/3).

Id	Find	Parallel	Date
565	 <p data-bbox="248 530 352 552">Pl. LIII.565</p>	 <p data-bbox="732 559 1294 609">Marzocchella 1986, Pl. XVII. 14, Loc. Foce, Sarno (SA), Saggio 1, Strati 20-17, BA, facies of Palma Campania</p>  <p data-bbox="732 788 1270 838">Marino 2000, Fig. 7.2, Capo Piccolo, Saggio 4C, taglio 3, BA, facies of Palma Campania</p>	LEBA
568	 <p data-bbox="248 1022 347 1043">Pl. LII.568</p>	 <p data-bbox="732 1159 1238 1188">Ardesia 2011, Fig. 13 a, Boccadifalco (PA), abitato (RTV)</p>	LEBA
570	 <p data-bbox="248 1469 352 1491">Pl. LIII.570</p>	 <p data-bbox="732 1469 1305 1613">For the shape: Bernabò Brea <i>et al.</i> 1989, Fig. 51.b, Grotta Cardini, Praia a Mare (CS), Strato Medio. For the dec.: Bernabò Brea <i>et al.</i> 2000, Grotta del Santuario della Madonna (Praia a Mare, CS), Fig. 74. P, Tagli 13-12, Protoappenninico B, corrispondente a Grotta Cardini-Strato Medio.</p>	EBA-MBA1

Tab. 79. Sant'Angelo II cave. Selection of finds (Tab. 3/3).

While describing the vessels found in the Sant'Angelo II cave, Tinè also wrote that they were generally undecorated, with smoothed or burnished surfaces, greyish or brownish/reddish in colour similar to our finds. Moreover, he stated that some of the vessels were ovoid and consisted of deep bowls with vertical band handles set from the rim to a marked concavity below the rim, like bowl fragment 564 in Tab. 78. Comparing the information provided by Tinè and the ones shown by the analysis of the sherds presented here, I can infer that the retrieved materials come from the Sant'Angelo II cave. I cannot exclude the fact that these materials were part of a larger assemblage and therefore I cannot assume that these materials are exactly the ones that Tinè wrote about. However, I think it is possible to link them to the context he described. The importance of

these finds cannot be overestimated. As I will discuss in the next chapter, these materials constitute unique evidence attesting to Early Bronze Age frequentation in the Sibaritide.

3.4 The Cave of Sant'Angelo IV

When entering the Archaeological Park of Sant'Angelo,⁵⁵ which consists of a series of caves frequented from the Neolithic period to the Bronze Age, the Sant'Angelo Cave IV⁵⁶ is located left of the caves named Sant'Angelo I, II, and III, behind a small ticket booth. This cave shows the first evidence of settlement at the end of the Middle Eneolithic and during the period between the end of the Eneolithic and the beginning of the Bronze Age in the Sibaritide. Additionally, a peculiar find was found in this cave, representing the cultural aspect of Rodì-Tindari-Vallelunga (RTV) that is attested for the first time in Northern Calabria.

3.4.1 *Distribution and interpretation of finds*

It is possible to enter the cave through two passageways when climbing the rock face for around 10 meters: either through a higher entrance or, southwards, through a lower entrance. The very narrow entrances are difficult to find because they are hidden by vegetation. However, the current entrances are not the original access points to the cave, which have partially collapsed as a result of explosives used in a nearby quarry. Consequently, the archaeological finds, found in a collapsed part of the cave, near the entrances, were originally located deeper in the cave. Above this collapsed part is probably a connection with another cave because a small part of the ceiling is not of rock, but of compact earth. This might mean that part of the upper cave fell down into a lower cave.⁵⁷ To understand the dynamics of the secondary deposition of the finds or of some of them, I will describe how they were found by the members of the Sparviere Speleological Group in 1998, who later returned to conduct a topographic survey of the cave (Fig 53). Entering the higher narrow entrance, a complete pot was found (point A, Fig. 53) upside down, which might have rolled from its original depositional place. On the left side, along the cave wall, bones, ceramics and stones were found (point F, Fig. 53). From this point all the way to the opposite wall, bones and ceramics were found (points B-C-D, Fig. 53). Toward the entrance, along the cave wall, more ceramics and bones were found (points I and Point G, Fig. 53). In order to describe the finds, I grouped them in four clusters, based on the location in which they were found.

⁵⁵ Monte San Marco, Località Muraglione, altitude 440 m asl. (IGM Castrovillari F. 221 NW). For the geological setting, see 3.2.

⁵⁶ Or Grotta dell'Antenato in Kleibrink 2002, pp. 213-219. It was discovered in 1998 by Antonio Larocca and Giuseppe Elia (Sparviere Speleological Group). Preliminary results of the analysis of finds were presented at the XVII World UISPP Congress (Burgos, 1-7 sept. 2014) by the author (Ippolito forthcoming (b)).

⁵⁷ However, some of the finds could attest to a frequentation of both caves, but only a systematic excavation could confirm that. Most likely, a tomb or more tombs were located in the upper cave and, because of the explosion, the upper floor, coinciding with the ceiling of the cave Sant'Angelo IV, collapsed, together with the finds.



Fig. 53. Plan of the Cave Sant'Angelo IV (drawing by F. Ippolito 2014, first sketch A. Larocca 1999, digital image processing S. Boersma 2014).

Cluster 1 consists of only one complete vessel (Fig. 54) found at point A (Fig. 53). It is a truncated cone bowl with the rim extending upwards to form a flat handle with an oval-shaped hole. It is similar to a Late Eneolithic bowl found at Panarea – Piano Quartara, Sicily.⁵⁸

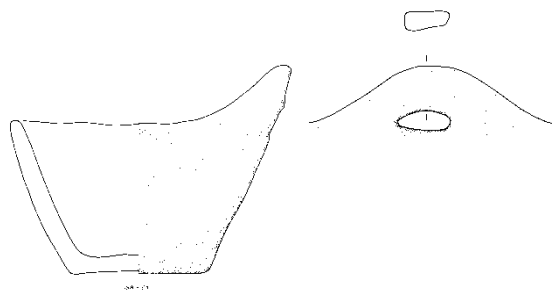


Fig. 54. Pl. XLVIII. 561 (1:4).

Cluster 2 consists of an assemblage of vessels, bones and stones collected at point F (Fig. 53). A large jar (Fig. 55) was found broken, mixed up among human bones, namely long bones and a skull. The jar has a slightly flaring rim, two band handles and two lugs, diametrically opposite. It is very similar to specimens found in two tombs in Santa Maria di Montalto - Nicotera, dated to the end of the Early Bronze Age-beginning of the MBA.⁵⁹

⁵⁸ Bernabò Brea, Cavalier 1968, III, Tav. VII.3, inv. 1891.

⁵⁹ Marino, Pacciarelli 1996, Fig. 4.B1, 3 (see Tomb 21 Rodì-Capo Graziano 1-Palma Campania aspects).

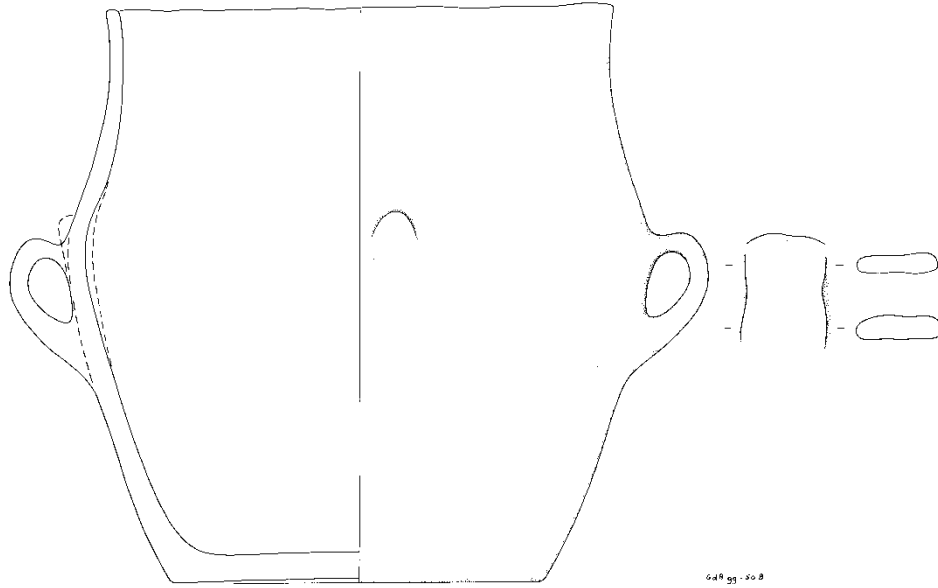


Fig. 55. Pl. LL.562 (1:4)

Other ceramics were found. Among them are three diagnostic fragments. One is a fragment of a double-ring handle (Fig. 56); the same kind of handle is present on a bowl with short funnel-shaped rim (Fig. 57). Both of the handles can be dated to the beginning of the MBA.⁶⁰

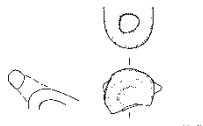


Fig. 56. Pl. L.558 (1:4)



Fig. 57. Pl. L.559 (1:4)

The third item is a very peculiar bowl (Fig. 58). It is an almost complete bowl with carena, flaring rim, and an axe-handle. This bowl belongs to the Rodì-Tindari-Valllunga (RTV) culture, known from the Northwest of Sicily as well as in south and central Calabria in the period between the end of the EBA and the beginning of the MBA.⁶¹ The Calabrian aspect of this typological group has been attributed to the MBA1-2.⁶²

⁶⁰ Tinè 1964, Fig. 10.1, Grotta di Sant'Angelo III, layer 1; Cocchi Genick 1995, Type 464A; Bartoli, Di Renzoni 2004, Fig. 2.10, from Broglio di Trebisacce, Sector 10, MBA1B1-2.

⁶¹ For the definition of this typological aspect and its spread, see Procelli 2004. See also Ardesia, Cattani 2012 and Peroni 1994, p. 838.

⁶² Pacciarelli 2001.

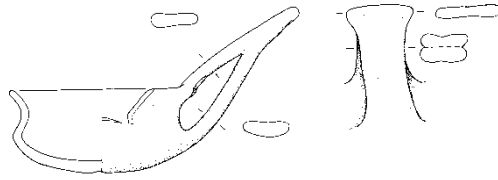


Fig. 58. Pl. L.560 (1:4)

So far, the bowl in Fig. 58 constitutes an extremely rare RTV specimen and it is the northernmost occurrence of this type of evidence. A tooth from the adult human skull in Cluster 2 has been radiocarbon dated to 3080 ± 35 BP = 1405-1295 cal. BC, which coincides with the end of the MBA2 (Tab. 80).

Cluster 3 consists of pottery dating to a period between the Late Eneolithic and the beginning of the Bronze Age. This pottery was collected at points B-C-D (Fig. 53) in 1998-99, 2001 and 2005. A sherd collected in 1998 (GA33) attaches to a sherd collected in 2005 (GdA05-4b). Diagnostic sherds are in Tabs. 82a-b. Other sherds, for which exact parallels have not been found, but which are typo-chronologically classifiable, were found. Among them, a fragment of a bowl (Pl. LI.542) with a thickened and wide rim and coarse wall, is reminiscent of rims belonging to ovoid jars found at the Madonna Cave, at Praia a Mare,⁶³ dated to the end of the Early Eneolithic. Sherd 541 in Tab. 82a belongs to the same period. The type of rim of the bowl 542 (Pl. LI) occurs also in later phases of the Eneolithic, as shown in the Grotta del Mitreo and Grotta degli Zingari (Trieste)⁶⁴ and at the Calabrian site of Gallo (Briatico).⁶⁵ Based on the pottery typology, sherds 541 in Tab. 82a and sherd 542 in Plate LI could belong to an older phase of frequentation of the Cave Sant'Angelo IV, but it is also possible that we are dealing with typological features in use for a broad period. Sherd 537 in Plate XLVIII belongs to the second phase of the Middle Eneolithic. It is a fragment of a short-collared vessel with surface *à la barbotine* with smooth bands under a notched band of clay.⁶⁶

The remaining fragments belong to a period between the end of the Eneolithic and the beginning of the Early Bronze Age. They include sherd 543 in Plate L, a fragment of a bowl with a rim that is thickened on the outside,⁶⁷ and rim fragments with notched cord-bands (Pl. LII.549, Pl. LI.550, 552) similar to sherd 551 (Tab. 82b). A human tooth has been found together with these sherds. It belongs to a late adolescent individual and dates to 4120 ± 35 BP = 2860-2620 cal. BC (Tab. 80), which coincides with the second phase of the Middle Eneolithic (aspects of Gallo-Colarizzi-Gaudo2).

Cluster 4 (Point 1) is constituted by a fragmentary jug and a human long bone. The jug (Tab. 81.563) is typo-chronologically dated to the MBA2. The bone is a fragmentary femur. This cluster can be linked to cluster 2. It is possible that the jug was originally a part of the grave goods detected at Point F (Fig. 53).

Sample	Bone	Location	BP	cal. BC (1-sigma)	Period
Ant. 1	Human (tooth)-adult	Cluster 2	3080 ± 35	1405-1295	End of the MBA2
Ant. 2	Human (tooth)-young adult ⁶⁸	Cluster 3	4120 ± 35	2860-2620	End of the Middle Eneolithic (phase 2)
Ant. 3	Animal (tooth)-pig	Cluster 4	3355 ± 35	1690-1610	End of the EBA-beginning of the MBA1

Tab. 80. Radiocarbon dates (Centrum voor Isotopenonderzoek, University of Groningen, sampling E. Panagiotopoulou).

⁶³ Pacciarelli 2011, p. 259, tagli 21-17. These levels date to the Early Eneolithic phase corresponding to the aspect of Taurasi and to the end of the facies of Piano Conte.

⁶⁴ See Montagnari Kokelj, Crismani 1997, Grotta del Mitreo, Duino, Trieste, Fig. 16.135, Settore A, Strato 4, ceramica del gruppo III. See also Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, Taglio 2, Gruppo II, for the rim Fig. 37.231-232 (TE-Trans.).

⁶⁵ Grandinetti *et al.* 2004, Fig.7.6.4,5, Gallo (Briatico).

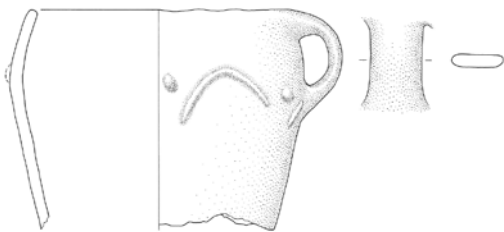
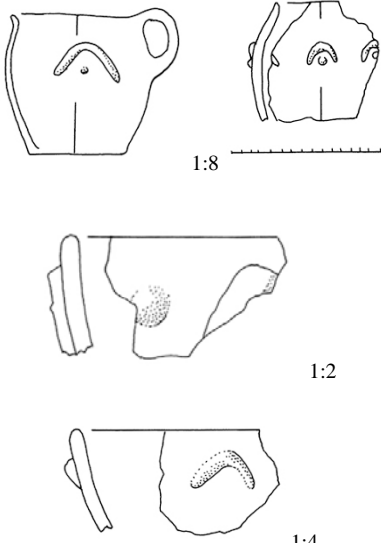
⁶⁶ Aspect of Gallo-Colarizzi, Grandinetti *et al.* 2004, Fig. 8, (2) da Gallo; Pacciarelli 2011, Fig. 12, (6), EM fase2 (3050-2800). See also Bernabò Brea *et al.* 1989, Fig. 21,a, Grotta Cardini, Praia a Mare (CS), Strato Inferiore.

⁶⁷ See, for instance, Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, taglio 2, ceramica del gruppo I, Fig. 36.207.


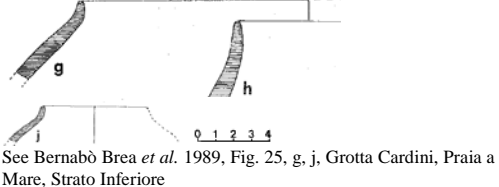
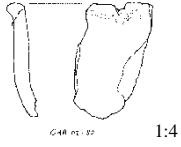
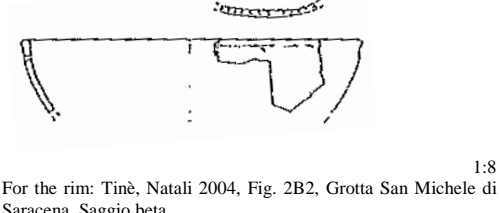
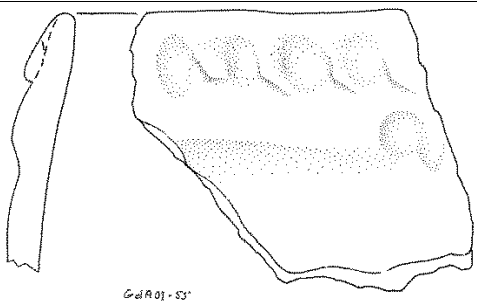
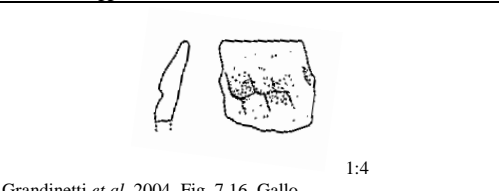
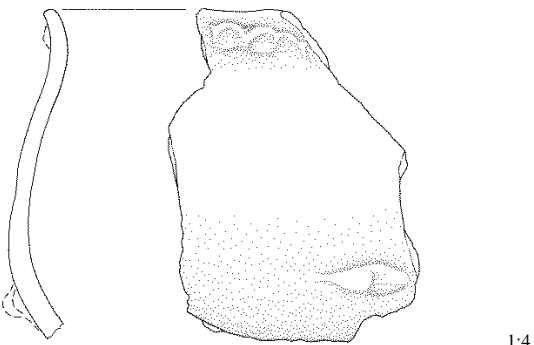
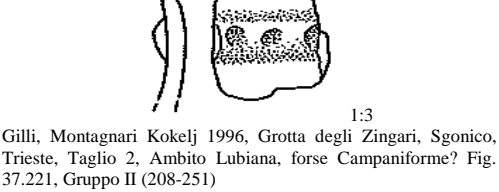
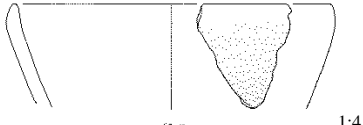

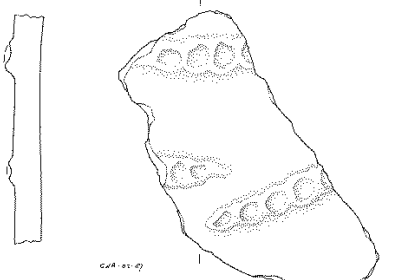

⁶⁸ Or late adolescent.

Typologically, it is possible to identify three main periods of frequentation of the cave: end of the Middle Eneolithic, Late Eneolithic-Early Bronze Age, and the beginning of the MBA.

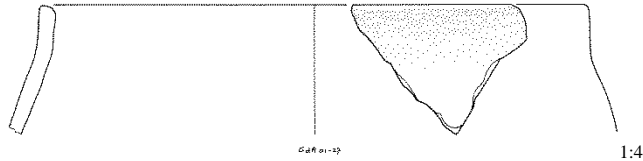

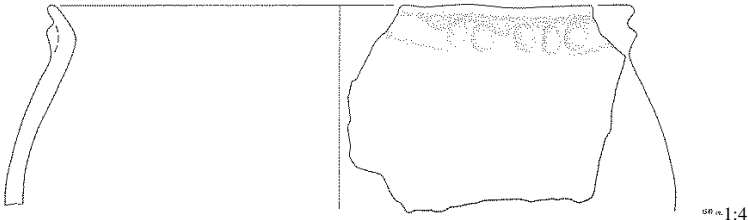
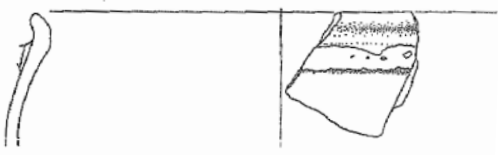
More specifically, the end of the Middle Eneolithic is also confirmed by the radiocarbon date from sample Ant. 2 (Tab. 80). A few sherds could be assigned to the end of the Early Eneolithic. Most of the sherds date to a period between the Late Eneolithic and the beginning of the Early Bronze age. The remaining sherds date between the end of the Early Bronze Age and the beginning of the Middle Bronze Age. An animal bone, a 4th premolar of a pig from cluster 4-Point G, is assigned to the latter period. The radiocarbon dating from this bone indicates a period between the end of the Early Bronze Age and the MBA (Tab. 80, sample Ant. 3, 3355±35 BP = 1690-1610 cal. BC).

Id	Sherd 1:4	Parallel	Relative chronology
563	 <p data-bbox="264 1087 363 1113">Pl. LII.563</p> <p data-bbox="751 1035 783 1061">1:4</p>	 <p data-bbox="1046 978 1078 1004">1:8</p> <p data-bbox="1166 1188 1198 1214">1:2</p> <p data-bbox="1145 1360 1177 1386">1:4</p> <p data-bbox="807 1410 1230 1509"> Decoration: Čović 1983, Tav. XXXV.3, Srednje bronzano doba u Istri, Istra III, Brioni, gradina, BRC1; Baumgartel 1953, Fig. 6.2, Manaccora, Stratum III; Lonza 1981, Tav. 23.5,8, Elleri </p>	MBA2

Tab. 81. Pottery from Cluster 4

Id	Sherd	Parallel	Relative chronology
540	 <p data-bbox="153 460 256 482">Pl. XLIII.540</p> <p data-bbox="379 445 432 460">GAR 01-20</p> <p data-bbox="533 445 564 460">1:4</p>	 <p data-bbox="746 445 1246 482">See Bernabò Brea <i>et al.</i> 1989, Fig. 25, g, j, Grotta Cardini, Praia a Mare, Strato Inferiore</p>	ME phase2 (3050-2800)
541	 <p data-bbox="153 657 256 679">Pl. XLVIII.541</p> <p data-bbox="395 642 448 657">GAR 01-22</p> <p data-bbox="496 642 528 657">1:4</p>	 <p data-bbox="746 679 1246 722">For the rim: Tinè, Natali 2004, Fig. 2B2, Grotta San Michele di Saracena, Saggio beta.</p> <p data-bbox="1219 663 1246 679">1:8</p>	End of the Early Eneo
547	 <p data-bbox="153 1028 256 1050">Pl. XLVIII.547</p> <p data-bbox="309 1013 368 1028">GdA 01-53'</p> <p data-bbox="667 1013 699 1028">1:4</p>	 <p data-bbox="746 897 1246 919">Grandinetti <i>et al.</i> 2004, Fig. 7.16, Gallo.</p> <p data-bbox="1091 882 1123 897">1:4</p>	ME Phase2
548	 <p data-bbox="153 1421 225 1443">Pl. XLIX</p> <p data-bbox="676 1406 708 1421">1:4</p>	 <p data-bbox="746 1181 1246 1268">Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, Taglio 2, Ambito Lubiana, forse Campaniforme? Fig. 37.221, Gruppo II (208-251)</p> <p data-bbox="1091 1188 1123 1203">1:3</p>	Late Eneo-EBA
553	 <p data-bbox="153 1574 256 1596">Pl. XLVIII.553</p> <p data-bbox="411 1559 432 1574">GA 23</p> <p data-bbox="587 1559 619 1574">1:4</p>	 <p data-bbox="746 1574 1246 1596">Grandinetti <i>et al.</i> 2004, Fig. 4.10, Gallo.</p> <p data-bbox="1123 1559 1155 1574">1:6</p>	Middle Eneolithic, phase 2
556	 <p data-bbox="153 1902 256 1924">Pl. XLIX.556</p> <p data-bbox="331 1886 368 1902">GAR 01-07</p> <p data-bbox="612 1902 644 1917">1:4</p>	 <p data-bbox="746 1814 1246 1836">Cocchi Genick 1996, Fig. 10.8</p> <p data-bbox="1123 1799 1155 1814">1:8</p>	EBA

Tab. 82a. Pottery from Cluster 3

Id/Parallel	Sherd	Chronology/Reference
539	 <p data-bbox="327 570 448 591">Pl. XLVIII.539</p> <p data-bbox="687 548 735 570">GdR 01-12</p> <p data-bbox="1011 548 1040 570">1:4</p>	Late Eneo-EBA
Parallel	 <p data-bbox="783 711 815 733">1:3</p>	Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, taglio 2, ceramica del gruppo II, Fig. 36.218
551	 <p data-bbox="327 978 448 1000">Pl. XLVIII. 551</p> <p data-bbox="1043 963 1094 984">GdR 01:4</p>	Late Eneo-EBA
Parallel	 <p data-bbox="959 1188 991 1209">1:4</p>	Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, taglio 2, Fig. 37.230

Tab. 82b. Pottery from Cluster 3.

3.4.2 Bone finds

Human bones (Fig. 59) were mostly found at Point G, and also at points B, C, D (Fig. 53). One fragment of a femur was found at Point 1 (Fig. 53). A preliminary analysis and identification of the bones was made by anthropologist Vana Kalenderian and zoologist Wietske Prummel. The classification of the human bones are presented in Tab. 83. That of the animal bones in Tab. 84.



Fig. 59. Bone finds (photo F. Ippolito, digital image processing S. Boersma, 2012).

Mandibles	3
Skull	1
Femur	6
Pelvis	1
Humerus	4
Metatarsal	2
Clavicle	1
Radius	4
Tibiae	3
Ulna	3
Fibulae	5
lumbar vert.	4 (?)
thoracic ver.	6 (?)
vertebrae thoracic+lumbar	several
Ribs	20 (?)

Tab. 83. Human bones.

Animal bones that were found at points G and, to a lesser extent, at points B-C-D (Fig. 53), belong to:

Sheep/goat	Scapula	2
	Humerus	1
	mandible	1
	Femur	1
	femur?	1
	Pelvis	1
	lumbar vertebra	1
	thoracic vertebra	2
	epistropheus	1
	Tibia	1
	cervical ver.	1
	metatarso	1
Pig	Maxilla	1
	mandible	1
Cattle	mandible	1
Wild boar or red deer	Humerus	1

Tab. 84. Animal bones.

The human bone remains indicate the presence of a minimum of 3 individuals at the Cave Sant'Angelo IV, as 3 mandibles and 6 femurs prove. Based on the radiocarbon dating, a young individual (cluster 3) died at the end of the Middle Eneolithic. One tomb (cluster 2) contained an adult to whom the skull and one of the radiocarbon dated teeth belong (Tab. 80, sample Ant. 1). Antonio Larocca reported that a skull and some long bones were found mixed up with the broken jar 562 at Point F (Fig. 53). Presumably, regarding cluster 2, we are dealing with a secondary burial in a ceramic jar. Analogous examples often occur between the Eneolithic and the EBA in cave sites.⁶⁹ Although the practice of burial in vases usually is associated with young individuals, skulls of adults in vases have been recorded from the Eneolithic until the MBA.⁷⁰ It is also notable to mention the presence of stones, placed against the cave wall, covering and delimiting the tomb in

⁶⁹ Leonini, Sarti 2006, p. 146.

⁷⁰ At the proto-Eneolithic necropolis of Piano Vento, near Palma di Montechiaro, isolated skulls were buried (Castellana *et al.* 1997, 235-249). See also Rossenberg 2012, pp. 145-172.

EBA sites in Northern Italy.⁷¹ That could be an explanation for the presence of stones, mixed with pottery and bones at Point F in the Sant'Angelo IV Cave. Interestingly, the parallels found for the jar in Fig. 55, that is to say two jars from the area of Nicotera in Southern Calabria,⁷² constituted the only evidence of this kind of burial in Calabria. The traces of the analogous practice at the Sant'Angelo IV cave would therefore represent supporting evidence for the same funerary ritual in use also in the North of Calabria. In order to help to explain the presence of animal bones in graves in these periods, it is possible to consider an example of an EBA grave at Toppo Daguzzo, in Northern Lucania, which included several animal bones.⁷³ The animal bones found at the Sant'Angelo IV Cave demonstrate that at least 1 sheep/goat, 1 pig, 1 cattle and 1 wild animal, that is to say boar or red deer, were brought into the cave. Excluding the sheep/goat and the wild animal, it is less probable that pigs and cattle would climb the rock face. It is uncertain at the moment if all of the animals bones are contemporary but the radiocarbon date from the pig tooth, coinciding with the transitional period between the EBA and the MBA, indicates a use of the cave in that period. Interestingly, it is possible to make a comparison between the Sant'Angelo IV cave and funerary contexts in Sicily. Here Grotta Ticchiara, near Agrigento, was frequented during the late Eneolithic and at the beginning of the BA. At Grotta Ticchiara, bone fragments had been placed in the pots holding the grave-goods while bones belonging to the same individuals were distributed over different pots. Bowls and cups belonging to the aspect of Rodi mostly characterize the grave goods. Regarding the Bronze Age Ciavolaro votive deposit, near Ribera, where pots belonging to the aspects of Rodi and Castelluccio were found, secondary burials with selections of human bones are fully attested. Moreover, the funerary offerings were accompanied by domestic and wild animals, with a significant majority of domestic animals.⁷⁴ The funerary analogies found in Sicily constitute a link between the two areas between the end of the Eneolithic and the beginning of the Bronze Age, corresponding to the spread of the RTV typological aspect so far poorly attested in Calabria. A cultural link, which at present is only based on little evidence, could be better defined by studying the human remains found at the Sant'Angelo IV cave in order to establish the provenance of the individuals. This could reveal whether we are dealing with movements of people or movements of goods, or both.

3.4.3 Main observations at Sant'Angelo IV Cave

According to the ceramic and bone finds, the cave was in use from the Middle Eneolithic until the first two phases of the Middle Bronze Age, though not continuously. It seems that the cave was used as a funerary space and we may relate the presence of the four detected animals to ritual practices. The pottery finds dated to the end of the Eneolithic-beginning of the EBA, which consists of bowls, jars and jugs, as yet cannot be associated with specific functions; these vessels may however have had multiple functions, including ritual. The same consideration can be made for the vessels dated to the transitional period EBA-MBA. Since the date of the pig tooth is contemporary to these ceramics, it would be interesting to determine if a relationship in chronology between them existed. Undoubtedly, the cave contains a RTV grave, dating to the MBA2 (cluster 2). This might mean that the RTV cultural aspect attested in Sicily at the end of the EBA, reached Northern Calabria in a secondary moment during the MBA. The same hypothesis can be made for the jar 562 (Fig. 55), which, although it is characterized by typological features related to the EBA aspects of Palma Campania and Capo Piccolo 1, based on similar finds associated with early Middle Bronze Age contexts,⁷⁵ might be dated to the beginning of the MBA. The data confirm that the Eneolithic custom of cave burials⁷⁶ continues at the beginning of the Early Bronze Age. Compared to the caves with Eneolithic multiple depositions,⁷⁷ they attest that the funerary use of caves starts to regard particular categories of individuals.⁷⁸ That implies a different

⁷¹ Footnote 69, this Chapter.

⁷² Footnote 59, this Chapter.

⁷³ Tomb 7, Leonini, Sarti 2006, p. 151.

⁷⁴ Castellana *et al.* 1997, pp. 56-74.

⁷⁵ Marino, Pacciarelli 1996.

⁷⁶ Cremonesi 1999, pp. 159-165.

⁷⁷ The nearby full Eneolithic cave Pavolella is indeed characterized by multiple depositions (Guerzoni 2004, pp. 235-249).

⁷⁸ Cocchi Genick 1999b, pp. 167-177, Bietti Sestieri 2010, pp. 112-116.

social structure or at least a different cultural meaning in funerary practices. It is possible that a growth of Early Bronze Age communities due to the development of agricultural practices⁷⁹ led to a selection of individuals selected for formal burial, probably depending on social stratification. The role of the buried in society could correspond to a more complex funerary ritual, implying that animal bones and the presence of vessels characterized by external typological features may represent votive offerings and/or “banquets”. My main questions are: where did these individuals who were buried in the cave live and what type of communities did they belong to? Unfortunately, the area surrounding the karst system has not yet been surveyed. Below I will attempt to insert the Sant’Angelo caves in a macro-regional framework.

3.4.4 Broader context of the Sant’Angelo Cave system

“How then may we construct collective human perception models of past landscape? Certainly not by means of the traditional chronological distribution maps with dots for sites.”

P.A.J. Attema 1996, p. 185.

The scientific value of the finds from the Sant’Angelo II and IV caves is manifold. Firstly, they show that between the Eneolithic and the beginning of the MBA, the Sibaritide was linked to Southern and Central Calabria, a link that cannot be established for the Neolithic period or at least not for all of the Neolithic phases. Secondly, regarding the beginning of the Bronze Age, with the exception of the site of Acri-Colle Dogna,⁸⁰ no open settlements have been excavated in the Sibaritide so far. Finds similar to the ones found at the Sant’Angelo IV cave were found only at cave sites. Indeed, the nearby cave settlement of Sant’Angelo III, excavated in the 1960’s by Tinè,⁸¹ reveals the presence of pottery of the Middle and Recent Neolithic, Early Eneolithic and beginning of the Middle Bronze Age reflecting a similar chronology of the cave. However, the big difference in the chronology of the two caves is the late Middle Eneolithic phase (aspects of Gallo-Colarizzi) detected at the Sant’Angelo IV Cave and absent at the Sant’Angelo III cave. A consequential consideration can be made. Considering the Early Eneolithic pottery found at another cave in the Sant’Angelo karst system, named Grotta Pavolella and characterized by multiple graves,⁸² it seems that Eneolithic people made selections for different uses of caves in the Sant’Angelo system. Indeed, after settling Sant’Angelo II and III caves in the Middle Neolithic, in the Early Eneolithic (with ceramics in the style of Piano Conte) they buried their relatives in the Grotta Pavolella, and temporarily settled the Sant’Angelo cave III where ceramics in the Piano Conte style but not related to graves were found. In the Middle Eneolithic, the Sant’Angelo IV Cave was in use, while Grotta Pavolella was abandoned.

The shift between the Eneolithic and the EBA is shown at Grotta di Sant’Angelo II and at Grotta Sant’Angelo IV. Both of them were in use until the beginning of the Middle Bronze Age. It seems that after the beginning of the Middle Bronze Age, the Sibaritide was characterized by a settlement pattern characterized by the spread of open air sites and the abandonment of cave sites (sections 1.3-1.5). Environmental studies could perhaps shed light on the reasons that led to the different use of the territory from the second half of the Middle Bronze Age and the possible existence of a “hidden” EBA landscape (section 1.4). In the meantime, pottery typology is able to show that from the Eneolithic until the MBA2, the caves in the Sibaritide were frequented by people characterized by a material culture widespread in the South of Calabria (and Sicily). For the first time, the Late Eneolithic is represented by cultural aspects found at Southern Calabrian sites, as the sites on the promontory of Tropea attest,⁸³ at the same time revealing homogeneous typological characteristics occurring even at Eneolithic sites in the North of Italy. Moreover, the presence of finds similar to ceramics found in

⁷⁹ Forni 2001-2002, pp. 102-110.

⁸⁰ Castagna, Schiappelli 2004, pp. 295-307.

⁸¹ Tinè S., 1964.

⁸² Guerzoni 2004, pp. 235-249 and related references.

⁸³ Pacciarelli 2011.

Northeastern Italian sites suggests the possibility of cultural interactions with the Eastern Adriatic coasts already seen at the nearby Galleria dei Vasi of the cave Sant'Angelo II.⁸⁴ According to other funerary or votive caves in Central Italy, like the caves along the Fiora river,⁸⁵ they were in use in the same period, that is from the Eneolithic to the early MBA, and often located in restricted areas on account of the local geology. Some authors assumed that these areas constituted ritual landscapes in the landscape.⁸⁶ I agree on the ritual aspect that the Sant'Angelo caves system may have had because of its geological characteristics, and I agree on it as a pilgrimage place during the beginning of the EBA, but there is more. According to the data from the Sant'Angelo caves, this area undoubtedly had a cultural significance for contemporary society, but it is not yet possible to understand the different meanings of cultic behaviour. Compared to the other Sant'Angelo caves, the Sant'Angelo IV Cave together with the Pavolella Cave shows how a funerary place gained a sacred value as a place dedicated to ancestors worship. This interpretation derives from the social selection the Sant'Angelo IV Cave finds suggest when compared with Grotta Pavolella. Indeed, the latter cave is characterized by Early Eneolithic multiple depositions while the funerary evidence from Sant'Angelo IV cave indicates that a selection of individuals started to be made from the Late Eneolithic.⁸⁷ That shows us the change in perception of caves and ritual practices that took place in the transitional period between the end of the Eneolithic and the beginning of the Bronze Age.

⁸⁴ See also Ippolito 2013 and Ippolito forthcoming (a).

⁸⁵ See Guidi 1991/1992.

⁸⁶ Negroni Catacchio *et al.* 2012, pp. 595-604.

⁸⁷ "The placement in ancestral places of selected human remains, mainly skulls and long bones, seems to highlight a notion of ancestorhood that is different from the tradition of primary burials in Copper Age places of burial (irrespective of subsequent disarticulation)." Rossenberg 2012, p. 167.

4. Material culture: new insights

My research on the reconstruction of the settlement dynamics from the Neolithic to the end of the Bronze Age in Northeastern Calabria entailed the analysis of ceramics found in surveys, excavations, and the reassessment of old collections. More specifically, materials from survey come from 21 settlement areas within the RAP area, excavation finds come from Timpone della Motta, Area Rovitti and Carnevale profile (Francavilla Marittima), and finds from old collections come from the Sant'Angelo caves at Cassano allo Jonio. I conducted a typological study, providing a relative chronology of the finds based on parallels established with materials from reference contexts. When ceramics were found together with bones, or in stratigraphic layers or tombs, I could cross-reference the data and obtain more precise chronologies. Based on the ceramic evidence I described in the previous chapters, I would here like to propose new insights on cultural chronological aspects that characterized the proto-history of the RAP area, west of the Sybaris plain. I will start out with a discussion of new insights into the typo-chronological articulation of the Neolithic to Eneolithic periods, based on the, admittedly, still limited but now expanded evidence found in the study area.¹ In particular, I will discuss the importance of the presence of pottery dated to the Late Eneolithic. The discovery of Late Eneolithic pottery at the Sant'Angelo IV cave (section 3.4) is fundamental since the finds rather than showing typological aspects related to the *facies* of Laterza,² show a relationship with North-Eastern Italian contexts, which was also the case in the nearby site of Grotta Sant'Angelo II.³ It must be noted that until now, long duration shapes that last until the transitional period LE/EBA, had not been recorded in the study area. The second major discovery of this study is evidence attesting to the initial phase of the Early Bronze Age, a problematic chrono-typological phase, which is as good as absent in the Bronze Age sequence of Southern Italy (see sections 1.5 and 3.2). New Early Bronze Age artifacts characterized by Poladian cultural traits were found in the Sant'Angelo IV and the Sant'Angelo II caves.⁴ These new artefacts, including features from both the end of the EBA and the beginning of the MBA, support the hypothesis introduced in section 1.5 (and final part of section 3.2) that the pottery from the late EBA and the MBA1 in the Sibaritide reflects a single transitional chrono-typological phase. These two discoveries, together with observations I made in relation with C14 dates of specific associated contexts presented in previous studies as well as here, has led me to suppose new chronological insights. Finally I want to draw attention to the new insights obtained on the final stages of the Bronze Age, which, thanks to this pottery study, seem now well-connected to the initial phase of the Iron Age.⁵ These issues I will discuss below, after summing up the cultural traits of the study area from the Neolithic to the beginning of the Iron Age.

4.1 Considerations concerning the Neolithic period

The reconstruction of the Neolithic sequence based on the pottery typology as proposed in section 1.2 in all probability provides an incomplete chronological framework as it depends on very few excavated contexts and surface finds. What we can infer is that Early Neolithic material culture, in particular archaic impressed pottery, recorded at Favella della Corte - the only excavated Neolithic open air site in the Sibaritide - is still absent in Neolithic cave sites (Tab. 85). In the latter, however, painted pottery from the Middle Neolithic is found, which, in turn, is absent at Favella della Corte. As already mentioned in section 2.1.1, the RAP surveys revealed evidence of impressed pottery at Pietra Sant'Angelo (Plate XIII.371), an inland site near San Lorenzo Bellizzi.

¹ See sections 1.2-1.3.

² *Facies* attested in Puglia, Campania and Southern Lazio from the Late Eneolithic to the transitional phase Late Eneolithic/EBA (Pacciarelli 2001, p. 24, Pacciarelli 2011, Tab. 1). See also section 1.3 in this thesis.

³ Ippolito 2013 and this volume, section 3.2.

⁴ This volume, sections 3.2-3.

⁵ See section 4.8.

Though one sherd does not necessarily indicate a trend, Neolithic impressed pottery has never been found in the hinterland of the Sibaritide North of the Raganello before.⁶ The type of impressed pottery found there, together with the evidence from Favella della Corte, indicates that the Northern Sibaritide culturally belongs more to the area including Southern Lucania and Puglia rather than to Southern Calabria and Sicily,⁷ characterized in the same period by the typological facies of Stentinello. As I also mentioned in section 2.1.1, the impressed fragment, even if it is generally attributable to Early Neolithic ceramic production (Fig. 85), is likely to be associated with a Middle Neolithic site since a few Middle Neolithic sherds were found at the same location.⁸

Middle Neolithic painted pottery is well attested at the caves of Sant'Angelo II (Pl. LVIII.624-626, Pl. LXI. 668-670) and III (Tinè 1987, 48-54), but so far we did not record Neolithic painted pottery at open-air sites (Tab. 86).

The Late Neolithic pottery characterised by the style of Diana is also attested at Favella della Corte, but in most of the caves occurs only in modest numbers. Since impressed pottery has not been recorded in caves thus far, but exclusively in open air sites, this may indicate a conscious settlement choice. Middle Neolithic communities would have preferred to settle also cave sites, while early Neolithic communities would have preferred to live in open air sites. This observation is corroborated by the fact that also along the Tyrrhenian coast in Northern Calabria (Praia a Mare caves) several cave sites are settled during the Middle Neolithic. At this stage of our research, the existence of contemporary open air sites is, however, not excluded, as the evidence for Middle Neolithic activity found at Timpa Sant'Angelo near San Lorenzo shows (sections 1.1, 1.3).

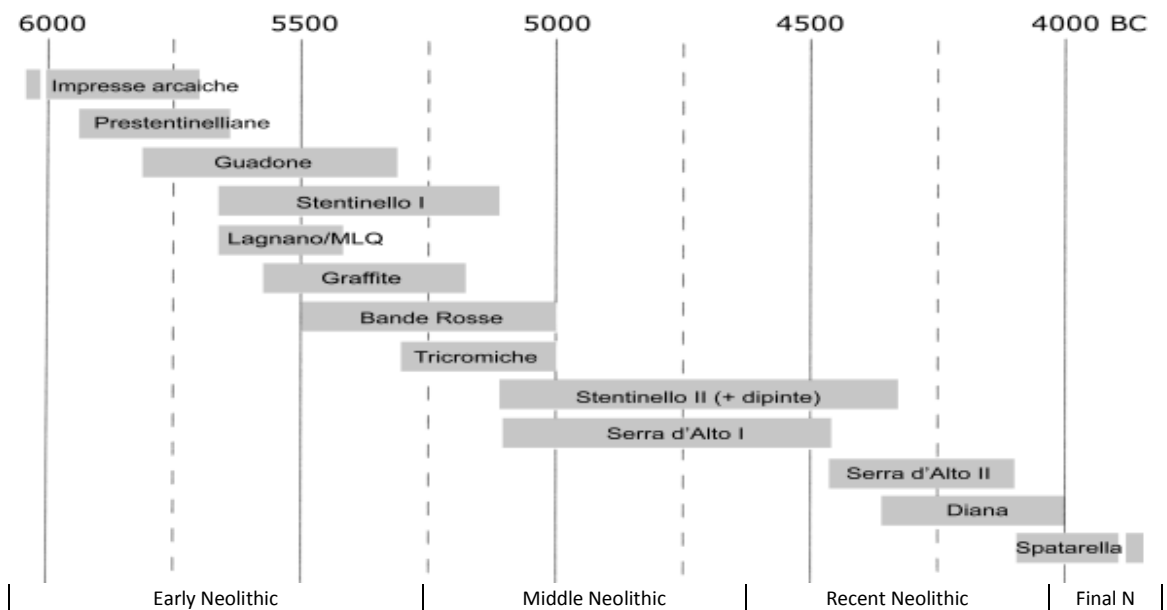
Some scholars suggest that, at the end of the Early Neolithic, the foothill zone underwent severe environmental changes due to a combination of tectonic subsidence and sea level rise, and a massive and rapid development of a fluvio-deltaic system that led to the development of a large aggrading coastal plain and major seaward shift of the coastline.⁹ This might explain why at the Neolithic site of Favella, after a hiatus in occupation in the Middle Neolithic, this site was settled again during the Late Neolithic. From the end of the Neolithic, and therefore during the Eneolithic and Early Bronze age, a new environmental setting, associated with the eastward migration of the land-sea boundary, characterized the plain. In how far environmental changes inland may have influenced choices to settle either open air sites or cave sites during the various periods of the Neolithic, remains to be studied in more detail both from a settlement and environmental perspective.

⁶ I saw Early Neolithic impressed pottery at the Museum of Castrovillari, coming from the surrounding of Castrovillari itself, south of the Raganello River.

⁷ Pre-Stentinello pottery was found only at Grotta di San Michele di Saracena (Section 1.2).

⁸ This volume, p. 32.

⁹ Bernasconi *et al.* 2010, pp. 387-389 (see Chapter 1.4).



Tab. 85. Cultural Neolithic *facies* in Southern Italy (after Pessina, Tinè V. 2008, Fig. 1, p. 39).

4.2 Considerations concerning the Eneolithic period

From the Late Neolithic to the beginning of the Middle Bronze Age, archaeological evidence from open air sites in the Sibaritide is limited. Indeed, the chronological framework described for the Neolithic, with archaeological evidence coming mostly from caves, lasted for all of the Eneolithic period until the Early Bronze Age (Tab. 86). The following RAP sites revealed Eneolithic evidence:

- Grotta del Caprio (Francavilla Marittima)
- Grotta della Camastra (Cerchiara)
- Grande Caverna di Damale (Cerchiara)
- Grotta Sant'Angelo IV (Cassano)
- Grotta Sant'Angelo II (Cassano)
- Terra Masseta (Cerchiara)
- Timpa del Castello (Francavilla)

The latter two are the only open air sites with Eneolithic evidence found so far in the part of the Northeastern Sibaritide coinciding with the RAP area.¹⁰ Eneolithic evidence includes a single Middle Eneolithic fragment¹¹ found at Terra Masseta,¹² and a Late Eneolithic fragment belonging to the Laterza facies¹³ found at Timpa del Castello. Since we are dealing with very few surface pottery fragments, it is difficult to interpret their presence as an indication of permanent Eneolithic settlements. Based on the literature, it should be noted that these fragments would typologically relate more to grave goods than to domestic uses. From this perspective, it would then be possible to infer that graves were in the site area of Timpa del Castello. However, it is also noteworthy that most of the published ceramics from the Eneolithic were found in funerary contexts and, therefore, could bias our interpretations.

The other four sites confirm the Eneolithic presence in caves in the Sibaritide.¹⁴ A few Eneolithic finds were retrieved at Grotta del Caprio (Pl. XIII.303,304), Grotta della Camastra (Tab. 59) and

¹⁰ Other open air settlements in the Sibaritide, outside the RAP area, which gave evidence of an Eneolithic frequentation are Torre Mordillo, Rosa Russa and Serra Cagliano (Trucco, Vagnetti 2001, p. 233).

¹¹ Gaudo 2 aspect, Tab. 63.377.

¹² Terra Masseta 1.

¹³ Tab. 13.261.

¹⁴ For the function of cave finds see Section 3.4.3 and 3.4.4 concerning the Sant'Angelo cave system.

Grande Caverna di Damale (Tab. 60). In the first two caves, Early Eneolithic finds were found and attributed to the Piano Conte facies. Two Middle Eneolithic finds related to the Gaudo facies were found at Grande Caverna di Damale and probably belong to the same type of vessel. As mentioned before, very few Middle Eneolithic finds attributed to the Gaudo facies were found in Northern Calabria. In regard to these Gaudo finds, we are presumably dealing with the phase 2 of this aspect because based on the literature it always seems to be associated with Laterza pottery. In fact, two Gaudo contexts are Dipignano¹⁵ and Aciri-Colle Dogna.¹⁶ The latter site is not mentioned in Tab. 1 of Pacciarelli 2011, who attributes the earliest complex of Aciri to the Late Eneolithic (Laterza facies). Moreover, according to Pacciarelli, there is no evidence for the Middle Eneolithic in Northern Calabria. However, since the discovery of the cave of Sant'Angelo IV,¹⁷ this period is now represented in Northern Calabria. At Sant'Angelo IV, I identified Middle Eneolithic potsherds related to the Southern Calabrian aspect of Gallo-Colarizzi, which indeed corresponds to the Gaudo phase 2. Since there were no direct and exclusive cultural links with Southern Calabria during the beginning of the Neolithic, and considering that, for the Late Neolithic-beginning of the Eneolithic, Diana and then Piano Conte aspects are quite homogeneously spread overall in Southern Italy (including Calabria), these finds are significant. The presence of Gallo-Colarizzi pottery indicates the establishment of interaction between Southern and Northern Calabria that became more clearly defined at the beginning of the EBA (see Cessaniti-Capo Piccolo facies). Additionally, several LE/EBA finds from Sant'Angelo IV cave (Tab.82a.548, Tab.82b.539, 551) and from Sant'Angelo II cave (Tab. 74, Tab.78.569, Tab. 77.574, Pl. LII.572) have parallels in the North Adriatic area.

BC (ca) 1400- 1500	Middle Bronze Age 2	-	MBA 2	-	MBA 2
1600	-	Middle Bronze Age 1	MBA 1	-	-
1800	-	Early Bronze Age 2	EBA 2	-	EBA 2 (Aciri - Colle Dogna)
2200	Early Bronze Age 1	EBA 1	(EBA 1)	(EBA 1)	-
2400	-	(Late Eneolithic)	(Late Eneolithic)	-	-
2800	-	-	Middle Eneolithic	-	-
3500	Early Eneolithic	-	-	EE	-
4000	(Final Neolithic)	-	-	(FN)	FN (Favella)
4500	(Recent Neolithic)	(RN)	-	-	RN (Favella)
5000	Middle Neolithic	MN	-	MN	-
6000	-	-	-	-	Early Neolithic (Favella)
	Sant'Angelo III cave	Sant'Angelo II cave	Sant'Angelo IV cave	Other caves	Open Air Sites

Tab. 86. From the Neolithic to the beginning of the Bronze Age: chronological phases based on the material culture detected in the Northeastern Sibaritide.

¹⁵ Salerno, Vanzetti 2004, pp. 219-220.

¹⁶ Castagna, Schiappelli 2004.

¹⁷ This volume, Section 3.4.

4.3 The beginning of the Bronze Age

In 2012, Pacciarelli published a chronological sequence from the Late Neolithic to the beginning of the Bronze Age, dating the latter phase from 2150 to 1650 (± 50) BC. The main chronological issue that I want to discuss here concerns the scarcity of settlement evidence for the MBA1 which is probably due to the fact that the EBA material remains have not been properly classified according to a valid typo-chronological scheme. I compared Pacciarelli's most recent chronology (2012) to the chronological framework in Fig.1 (p. 7), based on Pacciarelli 2001.¹⁸ In the latter, the EBA2 lasts from 2100/2000 until circa 1700 BC and the following MBA1 lasts from circa 1700 until 1550/1500 BC. That leads to the following considerations.

In the 2012 chronological sequence, the EBA encompasses the EBA2 and most of the MBA1. Strictly speaking, this would imply that in the Sibaritide record there is no chronological space for the existence of a MBA1 phase in between the EBA and the MBA2 from a typological point of view.¹⁹ Instead the finds from the cave of Sant'Angelo II I studied,²⁰ showed chrono-typological features that matched both the EBA2 and the MBA1 phases. Consequently, apart from providing data for formulating a new chronological sequence, they constitute the first settlement evidence that can be dated in a transitional phase between the Early Bronze Age and the MBA2 in this region. Taking this evidence into consideration, I would like to propose the following chronology regarding the EBA.

Clear evidence for the late EBA (or EBA2) was found in the Sibaritide at Acri-Colle Dogna, Capo Piccolo and Grotta Sant'Angelo II;²¹ their material culture includes typological features that characterize the Palma Campania facies. What we currently consider Palma Campania pottery would date to the EBA2 (2000-1700 BC circa), the chronology of which has been defined based on Campanian contexts chronologically dated in relation to the Plinian eruption of Avellino Pumices. Before the EBA2 there was a phase (circa 2400-2000 BC circa), namely the EBA1, which included EBA pottery not involving Palma Campania aspects but characterized, in a questionable manner, by Laterza aspects, as a consequence of the assumption that the Late Eneolithic facies of Laterza faded into the beginning of the EBA.

Recent studies in contexts where both Palma Campania pottery and Protoapennine pottery were found revealed that the Avellino Pumices eruption occurred in 3945 ± 10 cal. BP (1995 ± 10 cal. BC²²), an age roughly consistent with the earlier date of 3550 ± 20 cal. BP (1935-1880 cal. BC) proposed by Passariello *et al.* 2009.²³ Therefore, the eruption took place during this transitional phase between the end of the EBA and the beginning of the MBA (MBA1). The evidence from the Cave of Sant'Angelo II (Galleria dei Vasi),²⁴ characterized by typological elements matching both Early Bronze Age and early Middle Bronze Age features, in association with Palma Campania pottery, led me to agree, in part, with the new chronology proposed by Pacciarelli (2012), who formulated a transition phase LE-EBA. Indeed, in this way, he explains the presence of Laterza also in late contexts (and the presence of LE-EBA pottery found in the Cave Sant'Angelo IV²⁵), and posits a unique EBA phase which is not split up into EBA1 and EBA2 anymore. Assuming that the Avellino eruption took place during a transitional cultural phase between the end of the EBA and the beginning of the MBA (MBA1), I would hypothetically add to the chronology proposed by Pacciarelli the latter phase: we would have a transition phase LE-EBA and a phase EBA+MBA1 (2150-1650 BC). In this way, the MBA2 would start circa 100

¹⁸ Pacciarelli 2001, Fig. 38, p. 68.

¹⁹ Bartoli, Di Renzoni 2004, pp. 349-359.

²⁰ But also a few survey materials from Timpa del Castello (Francavilla) and Timpa Sant'Angelo (San Lorenzo Bellizzi) dating to the EBA2-MBA1 (see sections 2.2.2 and 2.1.1).

²¹ Tinè 1987, pp. 56-62.

²² Sevink *et al.* 2011, pp. 1035-1046.

²³ Passariello *et al.* 2009, pp. 7-12.

²⁴ Section 3.2.

²⁵ Section 3.4.

years earlier and all the subsequent chrono-typological phases would be brought forward. Or maybe the often mentioned MBA1-2 typological phase should be revised.

Going back to the EBA, ceramics characterized by the *facies* of Palma Campania referring to the LEBA were found in the RAP area at Timpa del Castello (Francavilla),²⁶ Pietra Sant'Angelo (San Lorenzo Bellizzi)²⁷ and mostly at Grotta Sant'Angelo II.²⁸ At the latter two sites²⁹ and at Grotta Sant'Angelo IV,³⁰ LEBA-MBA1 pottery was discovered. The shapes mostly concern jars. Furthermore, the presence of the RTV *facies*, a typological trait attested on Sicily at the end of the EBA, was detected at Grotta Sant'Angelo IV,³¹ and, based on radiocarbon dating, it seems to reach Northern Calabria only later, at the beginning of the MBA, as already stated by Pacciarelli.³² Most of the LEBA-MBA1 parallels established for the materials from the RAP area (Fig. 60, Fig. 92) were found at Grotta Cardini (Praia a Mare, CS); other parallels were found in Southern Italy, and to a lesser extent in Northern and Central Italy (Belverde di Cetona, Farneto, Elleri). Moreover, a very peculiar handle at the cave Sant'Angelo II proves cultural links with the Eastern and Central Adriatic area.³³

Regarding vessel shapes in the LEBA-MBA1, there are cups, bowls, neck vessels and jars. The same shapes are found in the succeeding period, MBA1, which differs from the previous period due to the presence of jugs (Fig. 66).

MBA1 potsherds that are very similar to specimens from Tufariello (Buccino, Campania) were found at Timpa del Castello and Terra Masseta. Material culture from Timpone della Motta provided evidence of cultural links with Northern Puglia (Cupola Beccarini) and Northern Campania (La Starza). Additionally, many MBA1 sherds were found at Grotta Sant'Angelo II. In general, most of the MBA1 parallels were established with Coppa Nevigata and secondarily with Tufariello (Fig. 61). Other parallels were found at Pompei – Sant'Abbondio, Sarno (Campania), Spigolizzi, Muro Maurizio (Puglia), and Masseto (Lazio). The Apulian sites of Coppa Nevigata and Sarno in Campania, are the sites which provided parallels for both the LEBA-MBA1 and the MBA1.

4.4 The beginning of the Middle Bronze Age

During the MBA1-2, shapes do not differ from the ones in the previous phases with the exception of the absence of jugs. MBA1-2 sherds (and related parallels, Fig. 62, Fig. 92) were found at Pietra Sant'Angelo (with parallels in sites from Lucania and Umbria), Trizzone della Scala (with parallels from Torre Mordillo), Mandroni di Maddalena (parallels with North Puglia), and Carnevale (with parallels from the Terramare area).

²⁶ Tab. 13.246, Tab. 17.249.

²⁷ Tab. 3.144.

²⁸ Tab. 75, Tab. 78.564, Tab. 79.565, 568. The fact that comparisons for the evidence dating before the MBA2 come mostly from the Campanian area, as also attested by the typological analogies reported with the Calabrian site of Capo Piccolo, likely derives from the availability of attestations of the Early Bronze Age in that region. I also underline the lack of comparisons with typical aspects of the Apulian *facies* of Cavallino/Protoapenninic. Moreover, it is important to point out that references of the Middle Bronze 2 from Southern Puglia (initial horizon of the *facies* of Punta le Terrare) are also missing and that, at the same time, aspects relative to the Early Apenninic of Central-Northern Puglia appear, as attested by several comparisons with exemplars from Coppa Nevigata.

²⁹ Tab. 2.147, 149, Tab. 79.570, Pl. LIII.571.

³⁰ Fig. 55.

³¹ Fig. 58.

³² Pacciarelli 2001, Fig. 38.

³³ Tab. 76.646.

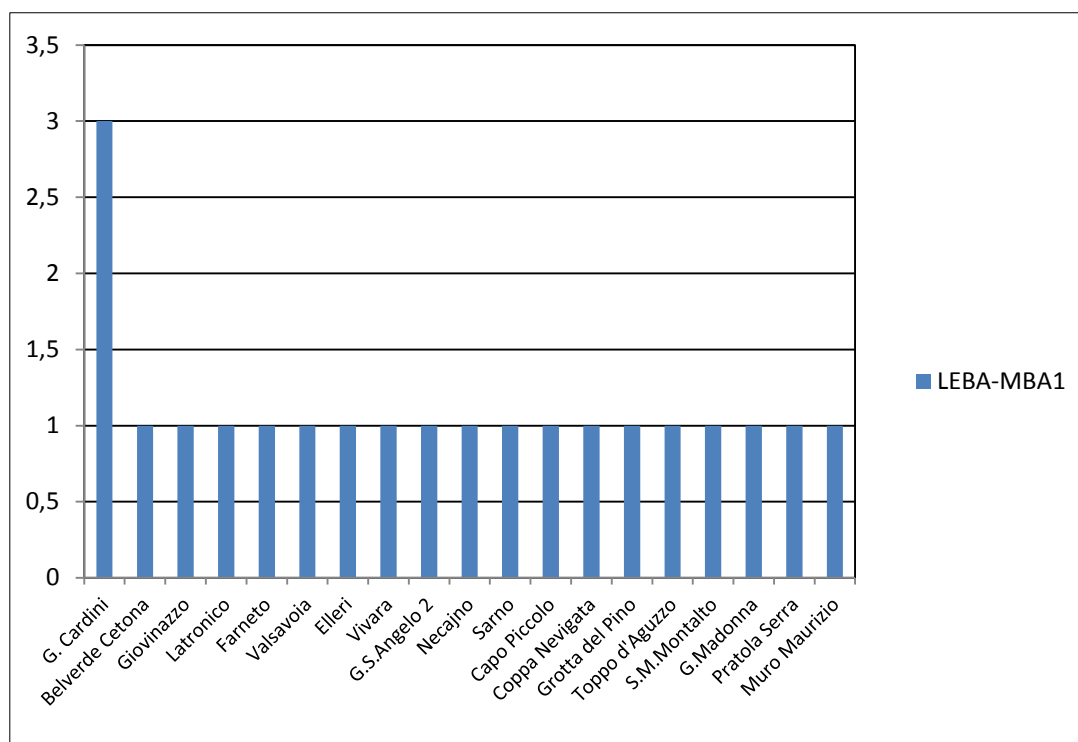


Fig. 60. Late Early Bronze Age – Middle Bronze Age 1 contexts with ceramics comparable to the finds from the RAP area.

From the MBA1-2 to the MBA3, most of the parallels are found at Broglio di Trebisacce. Since the MBA1-2 at Broglio is comparable to the Protoapennine repertoires in Apulia and Lucania (Protoapennine B),³⁴ most of the MBA1-2 and MBA2 materials found in the RAP area should be linked to these regions. In fact, considering the parallels found for the rest of the MBA1-2 and MBA2 RAP materials, it is clear that the MBA1 parallels are connected to Campania, while the MBA1-2 and MBA2 parallels are connected to Puglia. There are no parallels with Campania in the MBA1-2 and MBA2. At the same time, there are more analogies with Central Italy for these two phases. Besides Broglio, the Sant'Angelo II and III caves are sites where the most parallels come from for the MBA1-2 (Fig. 62).

MBA1-2 sherds were found at Pietra Sant'Angelo, Mandroni di Maddalena, Trizzone della Scala, Terra Masseta, Grotta Sant'Angelo IV, and Carnevale.

Shapes that occurred in the MBA1 are also present in the MBA2. As mentioned before, most of the parallels for the MBA2 were found at Broglio, followed by Torre Mordillo (Fig. 63). MBA2 sherds were found at Pietra Sant'Angelo, Trizzone della Scala, Mandroni di Maddalena, Grotta di Pietra Sant'Angelo IV (S. Lorenzo), Timpone della Motta, Timpa del Castello (Francavilla), Pietra della Sentinella, Madre Chiesa (Civita), and Grotta di Sant'Angelo IV (Cassano).

³⁴ Trucco 1994, p. 171.

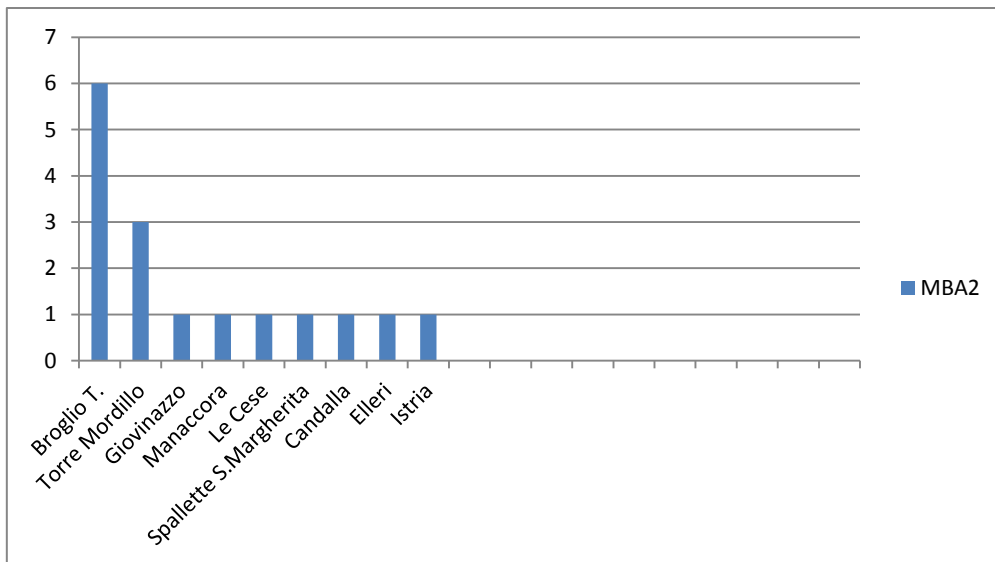


Fig. 63. Middle Bronze Age 2 contexts with ceramics comparable to the finds from the RAP area.

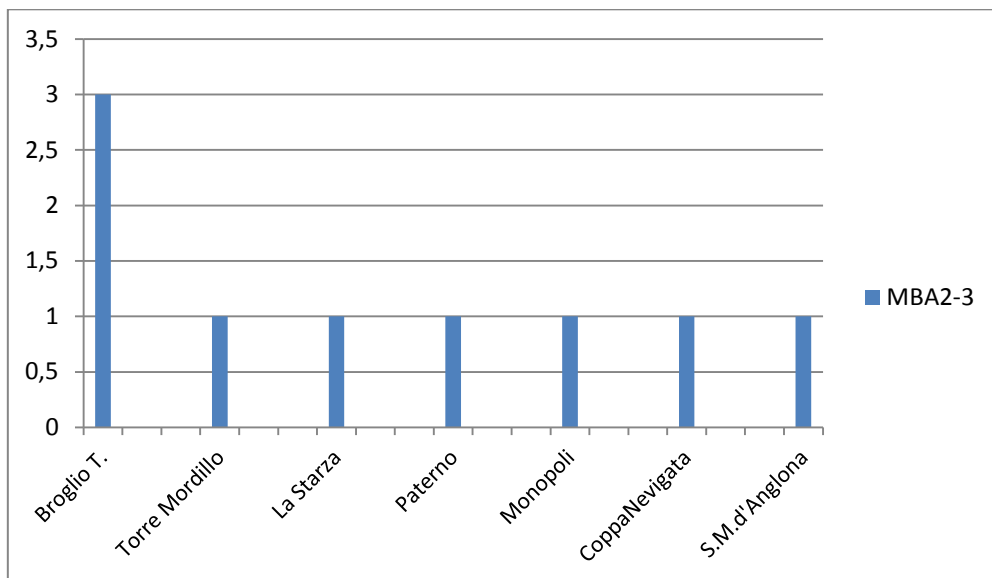


Fig. 64 Middle Bronze Age 2-3 contexts with ceramics comparable to the finds from the RAP area.

Few fragments with incised decoration were found. All of them came from the major sites at Francavilla: Timpone della Motta and Timpa del Castello. At the former site, one wall fragment with spiral decoration was found (Tab. 20.79) and from the latter site the following fragments were found:

1. Rim fragment with linear zig-zag (Tab. 13.253),
2. Wall fragment with oblique false meander on band filled with dots (Pl. 23.271),
3. Wall fragment decorated by a linear band parallel to a pronged band both filled with dots (Pl. 22.254).

Incised decorative motifs on Middle Bronze Age ceramics are not very common in the Sibaritide, considering that very few fragments were found at either the excavated sites of Broglio³⁵ or Torre Mordillo.³⁶ Moreover, the decoration types found at Timpone della Motta often have different

³⁵ Peroni, Trucco 1994, pp. 176-177.

³⁶ Trucco, Vagnetti 2001, pp. 230-231.

features from the types from Torre Mordillo. At the latter site, for instance, there are more curvilinear motifs than at Broglio, while decorative motifs from Broglio are usually irregular and filled with dots. The decorated sherd from Timpone della Motta compares to the decoration type 480 from Torre Mordillo,³⁷ while the wall fragments from Timpa del Castello have more similarities with the decorative repertoire of Broglio, including the rim fragment with zig-zag decoration. This is a funnel-shaped fragment resembling examples found at Broglio and is possibly related to the Capo Graziano facies.³⁸ As the Sicilian facies of Capo Graziano indicates a very initial phase of the Middle Bronze Age, it provides further justification to reconsider the emergence of the “MBA2-3” settlement system on the hilly strip around the Sibari plain to an earlier period (see section 4.3).

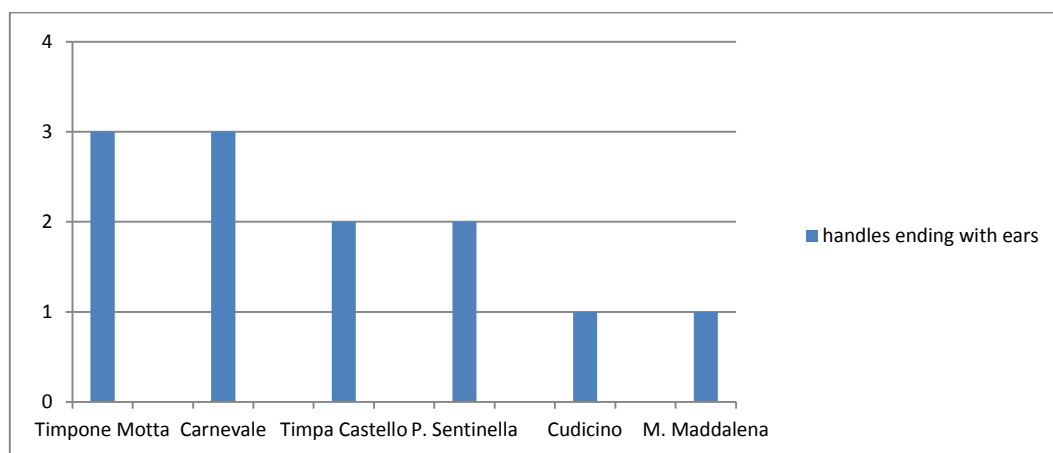


Fig. 65. MBA3 fragments of handles ending with ears found in the RAP area.

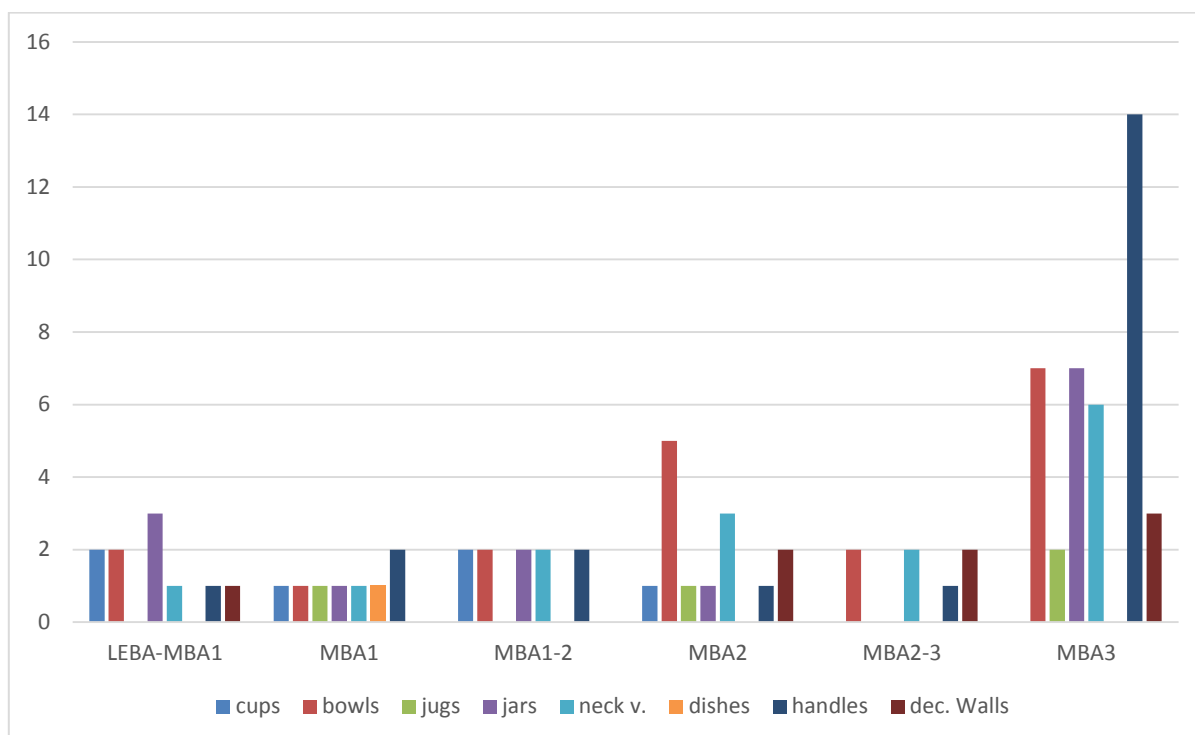


Fig. 66. LEBA-MBA shapes of vessels from the RAP area.

³⁷ Trucco, Vagnetti 2001, Fig. 85.

³⁸ Bowls with funnel shaped rim related to the facies of Capo Graziano were found at Rossa Russa (Peroni 1987, pp. 69-72).

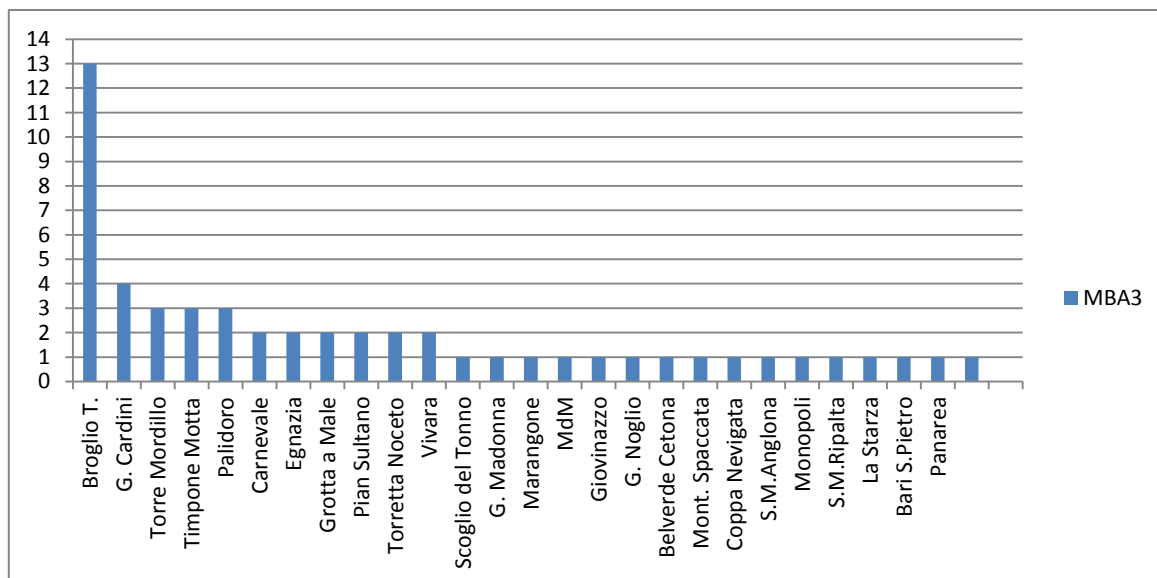


Fig. 67 Middle Bronze Age 3 contexts with ceramics comparable to the finds from the RAP area.

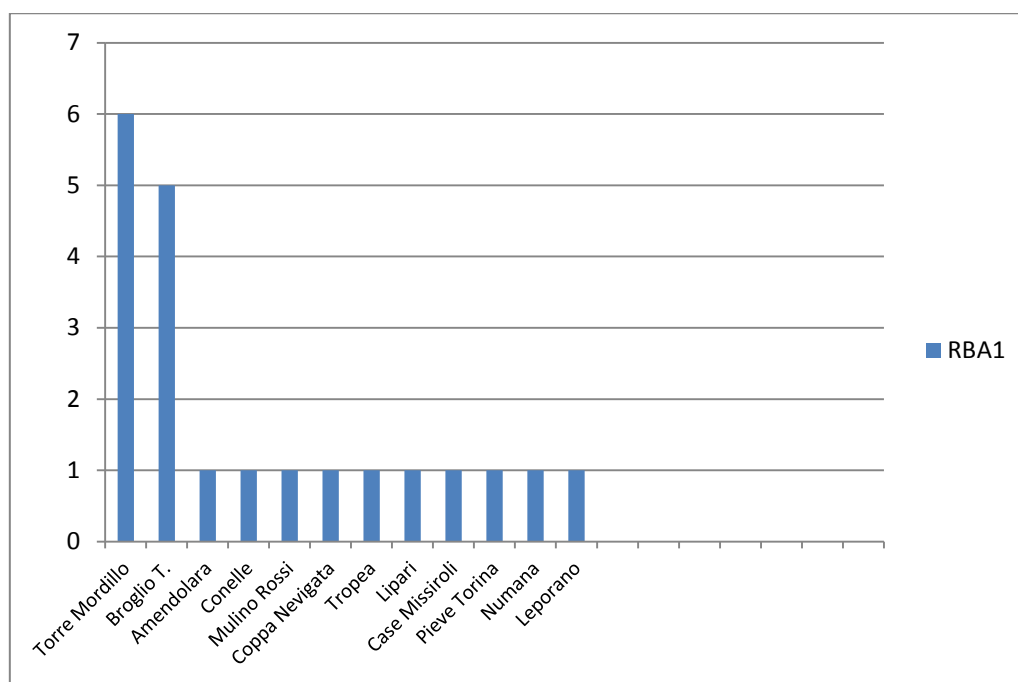


Fig. 68 Recent Bronze Age 1 contexts with ceramics comparable to the finds from the RAP area.

4.6 End of the Middle Bronze Age - beginning of the Recent Bronze Age

The information provided by the pottery typology shows that, besides the predominance of comparisons established with the materials from the sites of Broglio di Trebisacce and, secondarily, Torre Mordillo in Northeastern Calabria, the relations with Puglia and Basilicata already reported in the Apenninic and Subapenninic pottery repertoire of Broglio³⁹ are confirmed. Many of the typological analogies regard the sites of Coppa Nevigata, Leporano, Egnazia, Monopoli and, for the late phases, Torre Santa Sabina (Fig. 93).

³⁹ Trucco 1994, pp. 171-183; Giardino 1994, pp. 262-264; Buffa 1994, pp. 566-569.

In the MBA3 the amount of sherds increases (Fig. 66). Broglio is still the main site from where most of the parallels originate, followed by Grotta Cardini, Torre Mordillo, and Palidoro (Roma). Fewer parallels were found at Vivara (Napoli), Egnazia (Brindisi), Grotta a Male (L'Aquila), Pian Sultano (Roma), and Torretta di Noceto (Parma, Fig. 67). MBA3 sherds were found at Pietra Sant'Angelo, Grotta del Banco di Ferro, Trizzone della Scala, Timpa del Castello, Timpone della Motta, Carnevale, Pietra della Sentinella, Terra Masseta, and Mandroni di Maddalena. The larger amount of sherds, their variety, the consequent high frequency of parallels in more sites and in several geographical areas reflects a general trend in the MBA3 of an almost homogeneous spread of ceramic types over all of Italy. This trend would intensify in the RBA.⁴⁰

For the RBA1, most of the parallels were found not only at Broglio, but also at Torre Mordillo. Amendolara and Tropea are the Calabrian sites which provided other specimens comparable with the RAP materials. Several parallels were found at sites along the Adriatic coast from Puglia to Marche and Emilia Romagna.

Most of the RBA1 sherds found were handles, often endings with snail horns. Cups were the next most frequent shape, mostly attested in this phase rather than in the RBA1-2 and RBA2. Bowls and jars are the next most frequent and are followed in turn by other shapes less represented in the assemblages (jugs and a vessels with internal ledge, Fig. 72). RBA1 sherds (and related cultural contacts) were found at Mandroni di Maddalena (Broglio), Terra Masseta (Conelle), Timpa del Castello (Tropea, Torre Mordillo), Timpone della Motta (Broglio, Torre Mordillo), Rovitti (Rimini), Timpone delle Fave (Torre Mordillo), and Carnevale (Torre Mordillo, Amendolara, Broglio, Grosseto, North and South Puglia, Lipari, Cesena).

4.7 Recent Bronze Age

In the transitional phase RBA1-2 more bowls and jugs appear than in comparison to the RBA1 and RBA2, but mostly jars were found (Fig. 72). Only two cups and two handles were found. RBA1-2 sherds (and related cultural contacts) were found at Madre Chiesa (Broglio), Timpone delle Fave (Cavallo Morto, Torre Mordillo, Cuma, Villa Persolino), Rovitti (Broglio, Torre Mordillo, Timpone della Motta, Castiglione Roggiano Gravina), Carnevale (Monte Battaglia, Punta Meliso, Broglio), Timpone della Motta (Broglio), Mandroni di Maddalena (Torre Mordillo) and Pietra Sant'Angelo (Broglio, Lipari, Fig. 69, Fig. 94).

Fewer RBA2 sherds were found in the RAP area, mostly comprised of bowls and handles (Fig. 76). One cup was found at Timpone della Motta that is comparable to a specimen from Casale Nuovo (Latina), and one jar at Timpa del Castello is similar to a specimen from Torre Mordillo. Regarding bowls from Carnevale and Rovitti, there were parallels at Broglio. Handles come from Timpone della Motta and Carnevale and their parallels were found at Torre Mordillo, Coppa Nevigata and Torre Santa Sabina (Fig. 70). The same trend was noticed at Torre Mordillo, as parallels for the RBA1 were mostly found at Central Italian sites while reference contexts for the RBA 2 were found along the Southern Adriatic coast.⁴¹

⁴⁰ For the typological homogeneity characterizing the Italian RBA see, for instance, Pacciarelli 2001, p. 36 and Blake 2014, p. 102.

⁴¹ Trucco, Vagnetti 2001, p. 37.

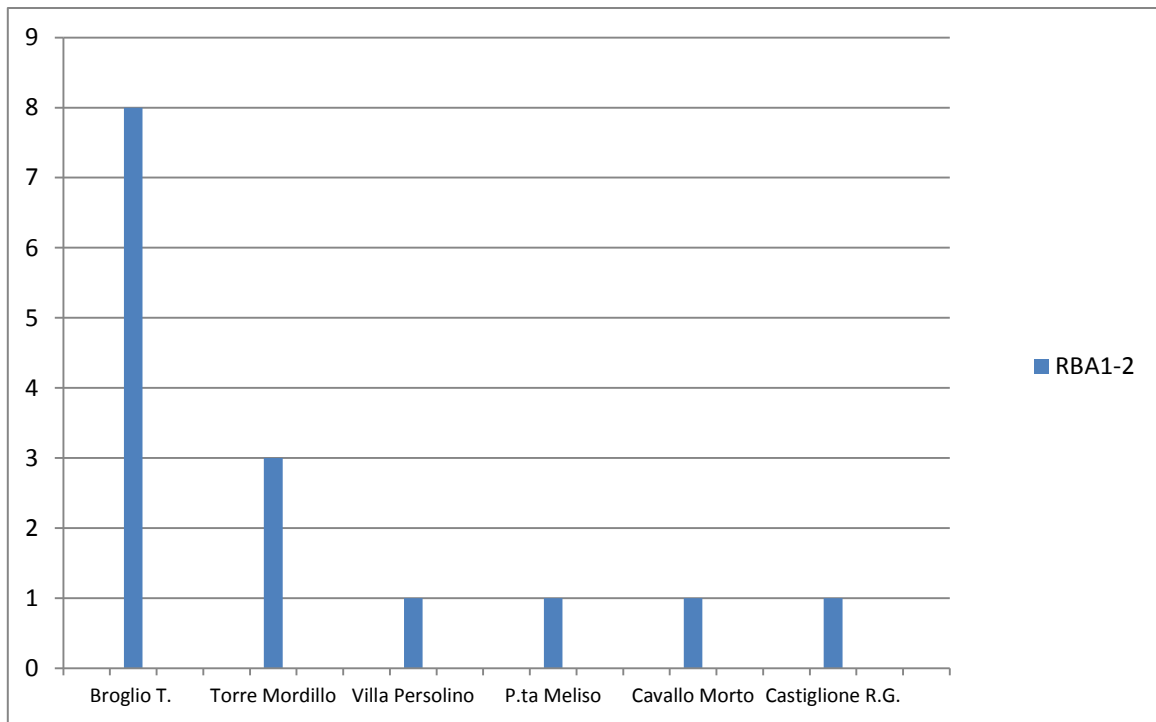


Fig. 69 Recent Bronze Age 1-2 contexts with ceramics comparable to the finds from the RAP area.

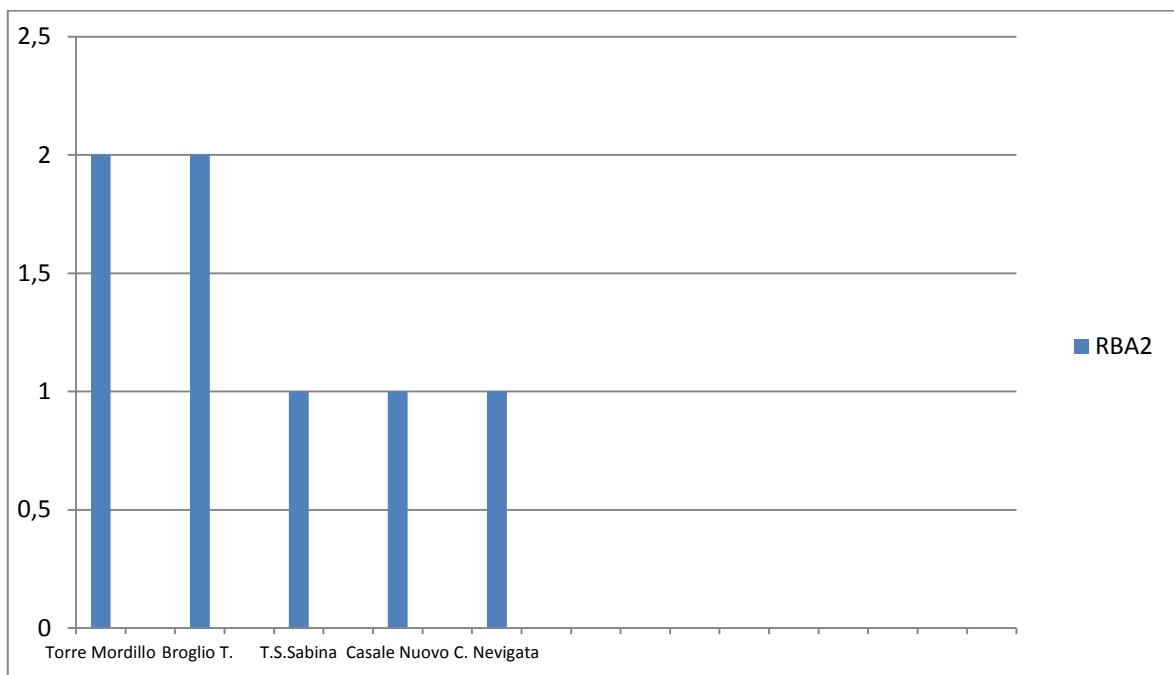


Fig. 70 Recent Bronze Age 1-2 contexts with ceramics comparable to the finds from the RAP area.

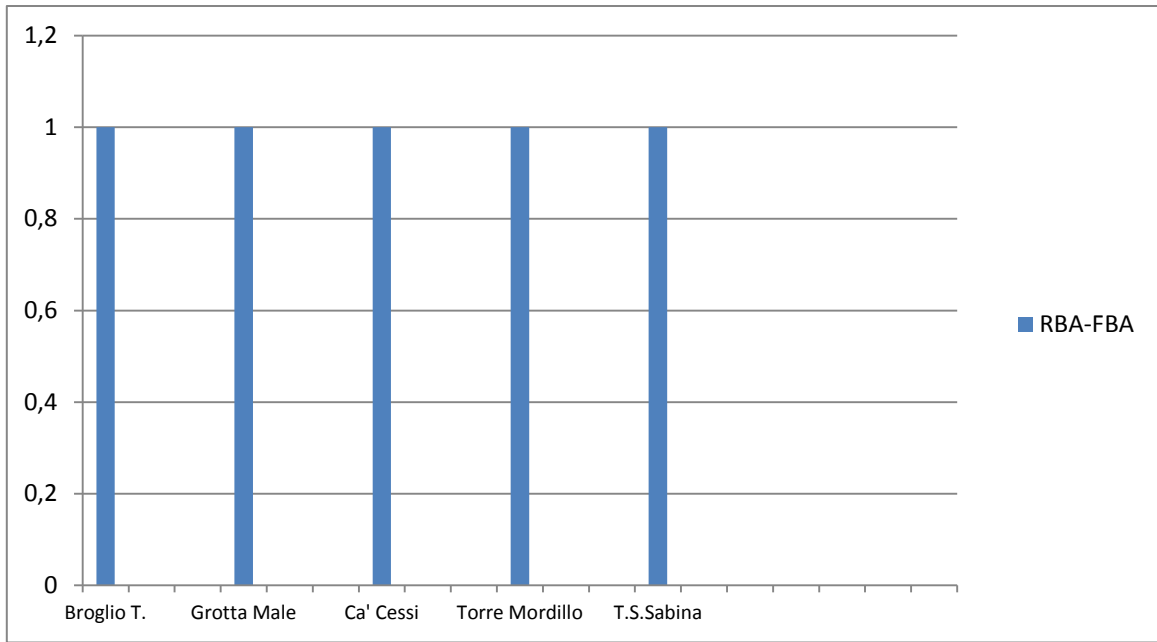


Fig. 71 Recent Bronze Age 1-2 contexts with ceramics comparable to the finds from the RAP area.

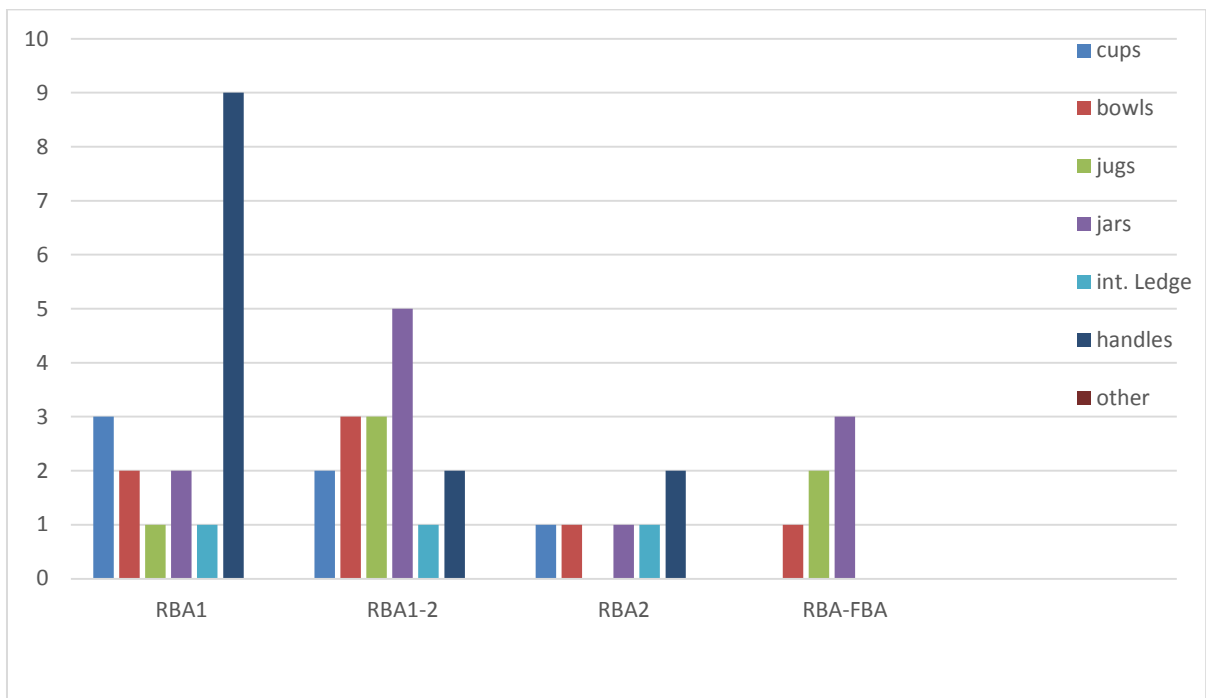


Fig. 72. LBA shapes of vessels from the RAP area.

4.8 End of the Bronze Age – beginning of the Iron Age

Besides long duration types characterizing the RBA period, I noticed typological differences between a first RBA phase closer to the MBA3 and a second RBA phase more related to FBA1 types and to the so-called Sub-apennine phase occurring in Puglia. Indeed sites like Torre Santa Sabina in Puglia provided several parallels for the RAP materials that matched typological features belonging both to the end of the RBA and to the beginning of the FBA. For that reason, I think that the RBA2 fades into the FBA1.

In general, parallels for the FBA1 were found with materials from Broglio, Torre Mordillo and secondarily Pianello di Genga (Ancona) and Tropea (Fig. 73, Fig. 95). These parallels are made up of cups and jars found at Timpone della Motta and Timpone delle Fave. Two fragments of pithoi with cord bands found at Timpone della Fave date to the FBA1.

In the FBA2-3, analogies with Sorgenti della Nova in Etruria occur in addition to parallels from Broglio and Torre Mordillo, mostly concerning jars from Timpone della Motta (Fig. 74).

In the period between the FBA and the EIA, there are fewer parallels found at Broglio and yet there are still many comparisons with Torre Mordillo and secondarily with Pianello di Genga (Fig. 75, Fig. 96). Some parallels have been established with specimens from other Calabrian sites such as Tarsia and Serre d'Altilia, and from Molise (Castelluccio Selva di Marano, Santa Maria di Vastogirardi). Most of the FBA-EIA sherds belong to bowls again from Timpone della Motta and Timpone delle Fave (Fig. 77). Interestingly, at the latter site, no pithos fragments belonging to this transition period were found as the pithoi of Timpone delle Fave all date to the FBA. Some of them date to the FBA1 or to the LFBA, but other fragments date to a general FBA based on available parallels. In contrast, pithoi dating to the FBA-EIA were found at Rovitti and Timpone della Motta where storage practices continue using this type of vessel.

Parallels for the EIA (Fig. 76, Fig. 97) were established with evidence from Torre Galli for fragments from Timpone della Motta (Tab. 25.44, Tab. 29) and Area Rovitti (Fig. 49.513). Other parallels were found at Pontecagnano and Poggiomarino in Campania (Tab. 27.605, Tab. 30, Tab. 35.609), Scarlino near Grosseto (Tab. 27.599, Tab. 49.510), Broglio (Tab. 49.504) and Santa Maria di Vastogirardi (Isernia, Tab. 49.526).

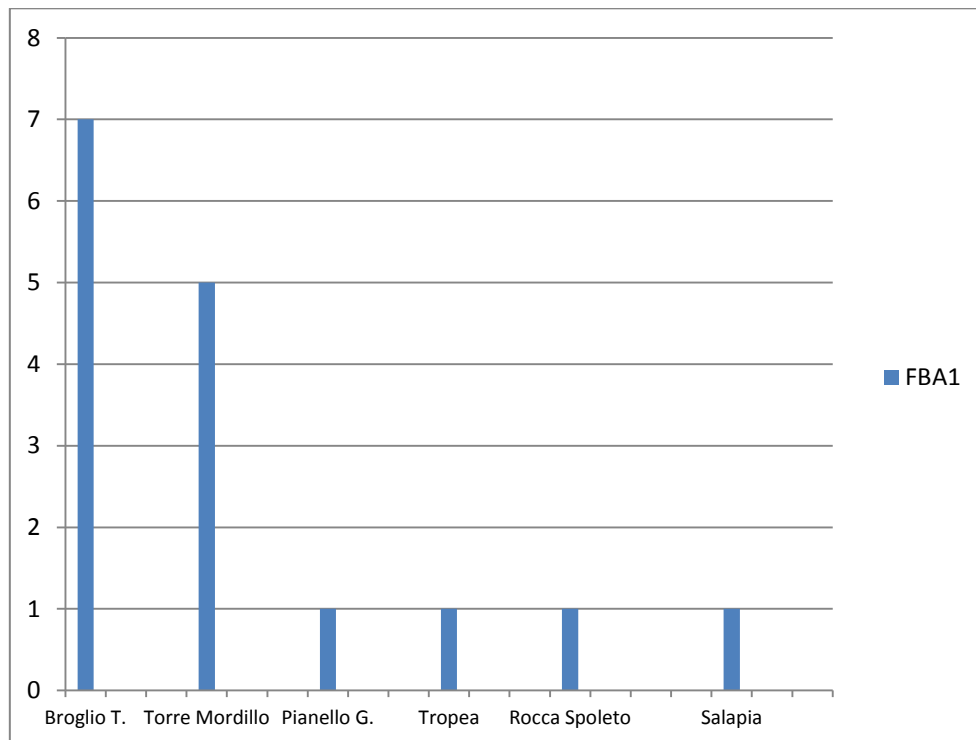


Fig. 73 Final Bronze Age 1 contexts with ceramics comparable to the finds from the RAP area.

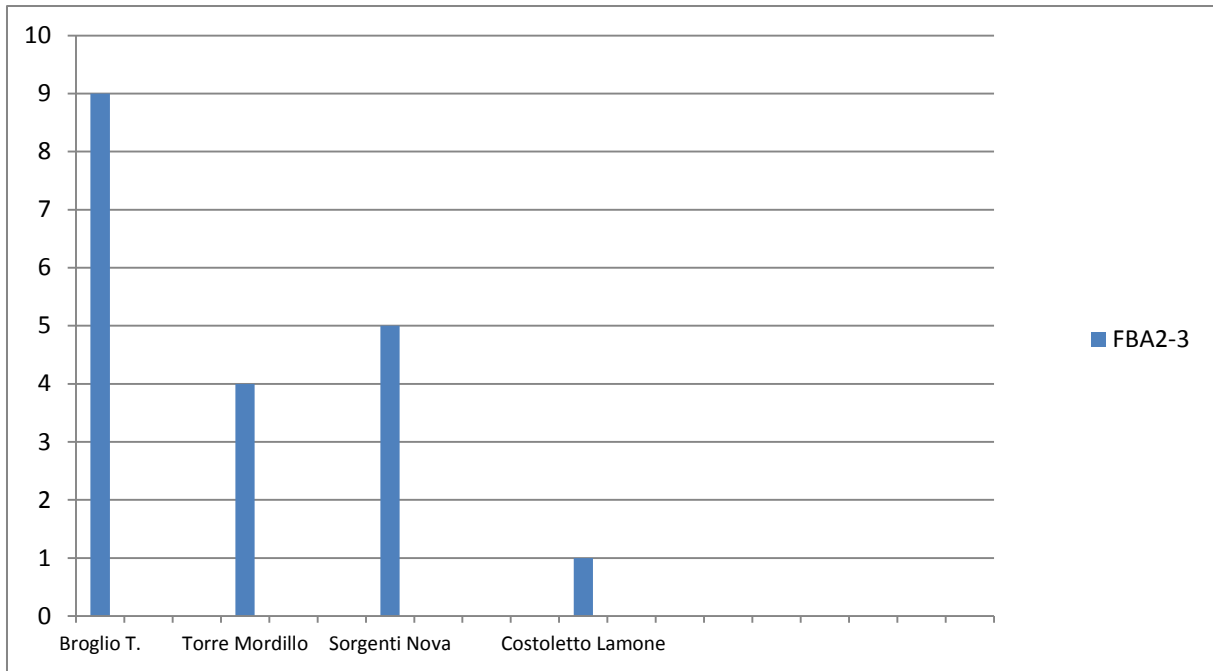


Fig. 74 Final Bronze Age 2-3 contexts with ceramics comparable to the finds from the RAP area.

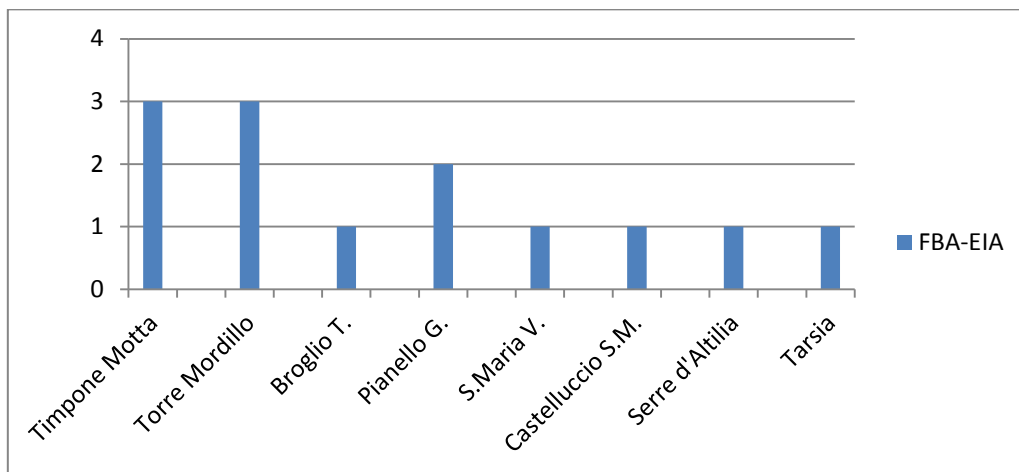


Fig. 75 Final Bronze Age - Early Iron Age contexts with ceramics comparable to the finds from the RAP area.

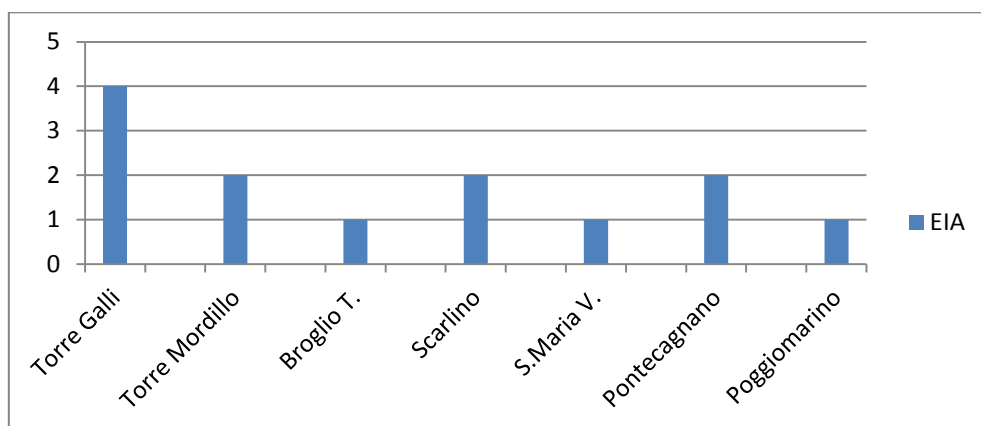


Fig. 76 Early Iron Age contexts with ceramics comparable to the finds from the RAP area.

The study materials include few Iron Age impasto potsherds. As in the EIA, cups and bowls are mostly comparable with specimens from grave goods, and mostly from Torre Galli, while jars are comparable with other jars from settlement records. This suggests that pottery from grave goods could have had various uses. In addition, the IA ceramics from Timpone della Motta and Timpa del Demanio (Civita) that mostly belong to jars are comparable to fragments from the area of Castrovillari (CS) and, to a lesser extent, from the Pontecagnano necropolis.

If we simplify these data in Fig. 77 by excluding long duration shapes and sub-phases, it becomes clearer that the FBA is followed by a general decrease in material evidence (Fig. 78).

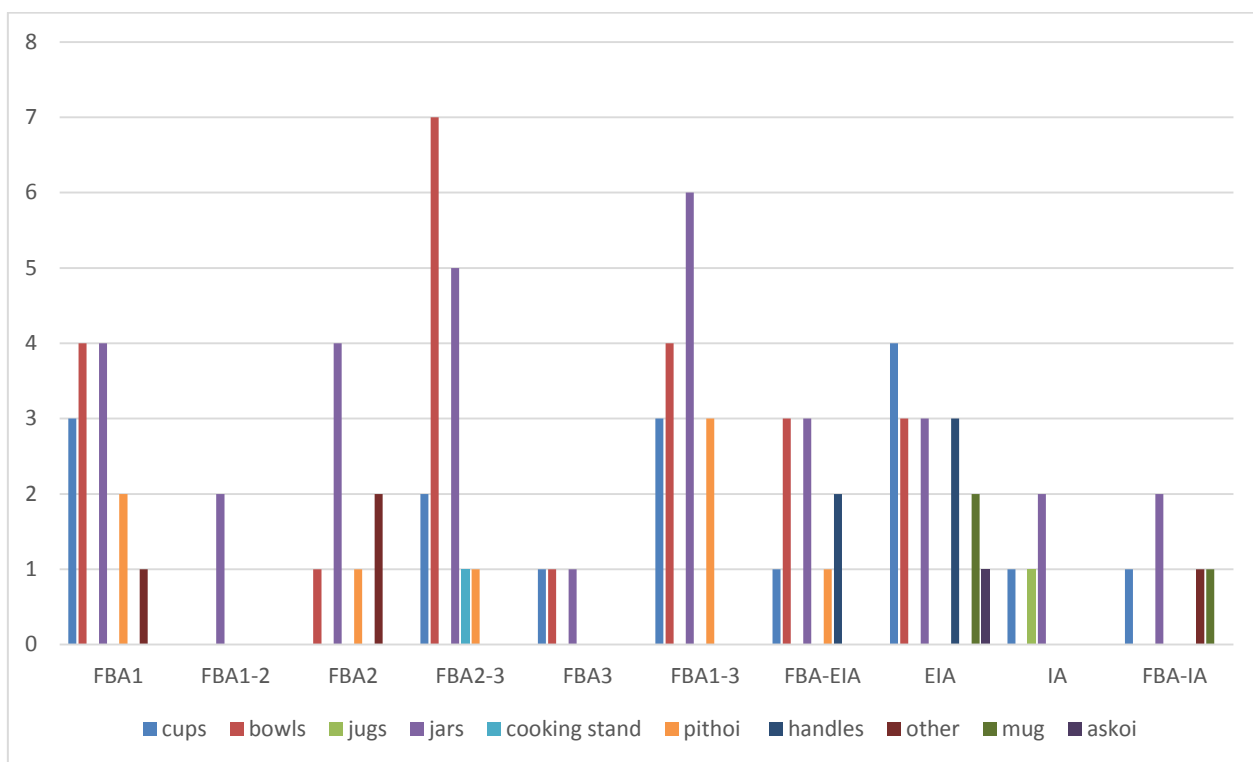


Fig. 77. FBA-IA shapes of vessels from the RAP area.

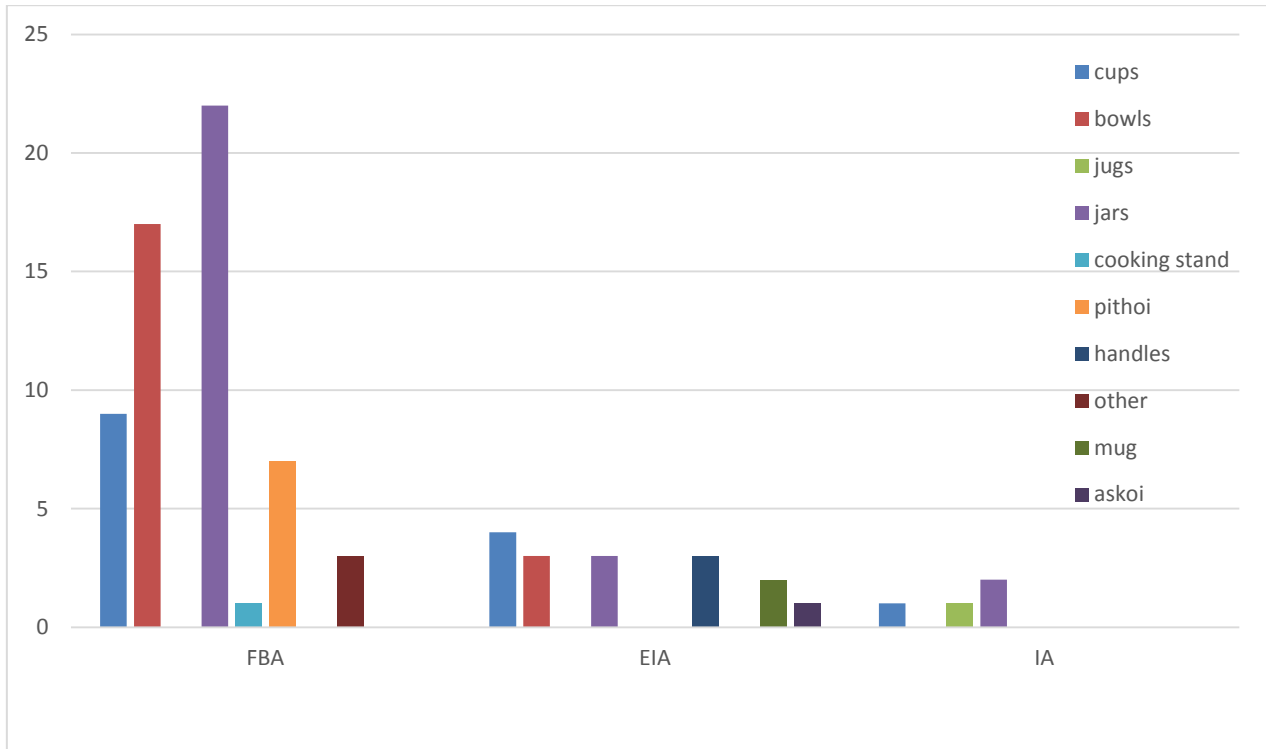


Fig. 78 FBA-IA shapes of vessels from the RAP area (without sub-phases).

a												
RBA	FBA		FBA-EIA				EIA		IA			
RBA-FBA												
FBA-IA												
RBA-IA												
RBA2-FBA1	FBA1		FBA1-3									
		FBA1-2		FBA1-EIA								
	FBA2											
		FBA2-3		FBA2-EIA1A	FBA2-EIA1B	FBA2-EIA1	FBA2-EIA	EIA1A	EIA1	EIA		
	FBA3			FBA3-EIA1A				EIA1B				
								EIA2A	EIA2A-B			
											IA1	IA
											IA1-2	
											IA2	
b												

Tab. 87. LRBA-IA phases detected by analyzing the study-materials. This table is based on relative dates provided by the parallels established for each diagnostic sherd. It shows: 1. shapes in use within one period (in orange), 2. shapes dated to a single phase of a period (in green), 3. shapes in use within two sequential phases (in blue), 4. shapes in use within three sequential phases (in pink), 5. long duration shapes (in brown), 6. very long duration shapes (in red); *a*= periods (from Late Recent Bronze Age to Iron Age), *b*= phases of *a*.

4.9 Observations on the transitional period between the FBA and the EIA

La ceramica grigia, prodotta senza soluzione di continuità per un lungo arco cronologico, è difficile da datare in assenza di contesti chiusi e di associazioni sicure.
Danile 2008, p. 41.

“(…) va sottolineato che la ceramica d’impasto è attestata sin da epoca preistorica e che nel Bronzo Medio e Recente conosce un processo di standardizzazione delle forme, il quale determina il reiterarsi delle stesse in un ampio arco cronologico, tra età del Bronzo finale e età arcaica”.
Garaffa V., Vullo M. 2009, p. 39.

On account of the limited FBA3 evidence found in the RAP area, only few stratigraphic contexts known in the literature can provide parallels. FBA3 shapes from Broglio di Trebisacce⁴² and Torre Mordillo, the main reference sites in the Sibaritide, moreover are very few. When considering other FBA sites outside of Calabria, such as Sorgenti della Nova and Pianello di Genga, the range of comparisons is also very limited. The scarcity of material evidence for the FBA3 is mainly due to three factors:

1. The development of larger sites between the FBA and the EIA,⁴³ which regarding the material culture presumably led to the inclusion of late FBA typological features in the EIA pottery assemblages;
2. The decrease of the number of settlements as a consequence of the growth of few FBA-EIA centers controlling wider territories. While a network of smaller sites characterized the Middle Bronze Age, the IA centralization process could have implied a reduction in the number of sites already during the FBA-EIA. In this sense, it is likely to find in a given survey area many small MBA sites spread out over the territory, but only few, likely larger, FBA-EIA sites;
3. The presence of matt-painted pottery in archaeological records from the FBA,⁴⁴ and the implications this has for studying the contacts with the Greek cultures, has drawn the attention of many scholars to the study of the matt-painted class, to the detriment of the study of FBA-EIA impasto pottery.

Many fragments that are typologically difficult to classify come from the RAP area, especially from Area Rovitti (Chapter 2.2.5). However, based on stratigraphic criteria it is possible to date them between the end of the FBA and the EIA. In general, a sense of continuity between the two periods is suggested by some cultural material aspects such as long duration shapes and types.⁴⁵ Indeed, it is not always possible to detect clearly defined differences that could attribute the ceramics to one period or to the other (Tab. 87).

Since they do not typologically match either the first two phases of the FBA or the initial phases of the IA already established for the Sibaritide, I am tempted to assign these materials to two different phases, namely the end of the FBA and the beginning of the EIA. Reducing in this way the range of long duration shapes, the typological framework for the FBA3 is enlarged, or it would at least provide useful data for further studies. Sites with late FBA-EIA pottery are:

⁴² Alessandri *et al.* 2004.

⁴³ Pacciarelli 2010, p. 383.

⁴⁴ Matt painted pottery “starts to appear at Broglio at the beginning of the Final Bronze Age”, Buffa 1994, p. 568.

⁴⁵ Buffa 1994. Also noticed by C. Colelli (Colelli 2012, pp. 232-233 and in particular footnote 8 at p. 232) for sherds from Area Rovitti.

Timpone della Motta, Rovitti, Timpa del Castello, Contrada Portieri, Pietra Catania and Macchiabate in the territory of Francavilla, Contrada Damale and Terra Masseta at Cerchiara, Madre Chiesa, Timpa del Demanio and Monte San Nicola at Civita an, at a lesser extent, Timpone delle Fave at Frascineto. All of these sites are located between the plain and the hilly zone, mostly along rivers (Raganello and Eiano). A further difficulty in separating the FBA from the EIA material culture is that in this transition period the typological comparisons of the RAP pottery with Broglio and then with Torre Mordillo, the major sites to which we refer in the Sibaritide, decrease.

In an attempt to split the two phases I referred to sites outside the Sibaritide, but the differences between the FBA1 and the EIA are not great as regards cups, bowls and jars, which appear in all periods. The main differences between these two periods are the absence of cups between the FBA2 and FBA3 (cups occur again in the EIA) and the presence of corded pithoi.

Most of the FBA parallels have been established with Broglio di Trebisacce. Therefore, although the knowledge on the period between the late FBA and the EIA is based on a limited range of FBA-EIA reference assemblages from investigated sites, and on only few specific studies on impasto pottery, it is possible to deduce the following:

- A continuous cultural relation with Central and Tyrrhenian Italy;
- A constant presence of parallels with Calabrian sites and, for the EIA, mostly with Torre Galli;
- Fewer parallels with Broglio di Trebisacce and Torre Mordillo after the FBA and more cultural contacts with Campania during the EIA;
- Fewer parallels with central and southern Adriatic regions after the RBA2-FBA1, with the exception of very few analogies with Grotta a Male (L'Aquila, Abruzzo) and Torre Santa Sabina (Brindisi, Puglia);⁴⁶
- Among the RAP sites, most of the FBA-EIA sherds were found at Timpone della Motta and, at a lesser extent, at Timpone delle Fave. While the former is a long duration site in use from the MBA to the Hellenistic period, the latter site was inhabited only between FBA and transitional period FBA-EIA.

With regard to Timpone della Motta, it is then possible to confirm that the site belongs to the group of long duration sites located on the foothills of the Sibaritide. Moreover, it is a continuously inhabited site, also in the periods that were considered missing (section 2.2.3). During the LBA, Timpone delle Fave rises and, before the transitional period FBA-EIA, is abandoned as no clear EIA sherds have been found yet. This is a site more distant from the Sibari plain, located along the Eiano River in a position dominating a valley strategically suitable to control access roads westwards. That suggests an expansion of control points along rivers valleys towards the inland. Therefore, the fact that cultural contacts with Campania are attested in the IA⁴⁷ can be seen as a consequence of the interactions with the west that had started already in the Early Iron Age.

⁴⁶ Respectively for a jar from Timpone delle Fave (sherd 451, Tab. 67) and a bowl from Timpone della Motta (sherd 34, Tab. 25).

⁴⁷ Or they increase again in reference to the cultural influences of the *facies* of Palma Campania in the Sibaritide during the EBA.

4.10 Functionality

“A theory based on the qualities of an object, will prevent its being unfolded according to its objects: and who arranges topics in reference to their causes, will cease to value them according to their results.”

Landor. E.A. Poe, “The mystery of Marie Roget”,
Text-B, Tales, 1845, footnote 175, pp. 151-199

“And what should they know of England who only England know?”
Rudyard Kipling, The English Flag, 1891

Considering my dataset, shapes that are consistently in use from the MBA to the EIA are cups, bowls,⁴⁸ and jars⁴⁹ (Fig. 79). The majority of cups and jars date to the FBA, and most of the bowls date to the MBA and FBA. Neck vessels, incised walls and dishes are mainly present in the MBA. Vessels with internal ledge⁵⁰ are exclusive to the RBA. Jugs⁵¹ were found in both MBA and RBA contexts. The presence of pithoi and cooking stands differentiates the FBA from the other periods. Mugs and askoi appear in the EIA. Cups, bowls and jars reflect general functions of drinking, eating, cooking and storing. For the bowls, shallow shapes are considered in this case more for eating than for drinking. Shapes in use in specific periods shed light on specific functions and therefore on changes in habits and socio-economic structures. It seems that neck vessels were used in the first phases of settlement. This type of vessel could contain liquids or solids, with the same function as the jars, though unlike the jars they were not used for cooking. They were containers with a high or very high neck, straight or inward. This kind of neck could have a function of preventing the leakage of content out of the vessel. Neck vessels disappeared in the Late Bronze Age and were replaced by other shapes.

One of these shapes is the storage jar, the rim of which is considerable shorter or just outlined, probably implying less possibilities of leaking contents. This could suggest that storage vessels in the Late Bronze Age were kept for a relatively long time in one place and that they were not moved often from one place to another. Thus, I can relate the use of neck vessels to societies with economically mobile structures, while the storage vessels, which became larger in the FBA, can be related to more stable economic structures. Economic structure is meant in this case as the management of daily activities rather than as economic system. Wider economic organization is instead revealed by very large storage vessels, namely pithoi, which indeed are often partially sunken into the floor, assuming more the function of silo than of simple vessel. The large size of the container, larger population, and therefore the larger demand for food and the need to store it for longer periods of time can indeed imply social and economic stability. A supposed FBA pre-urban aristocracy was described by Pacciarelli as a social class involving different social sectors in the production and management of goods and facilities.⁵² In fact, during the Late Bronze Age, cultural influences from the Aegean area start to appear in the RAP area as one of the indicators of

⁴⁸ For definition of cup and bowl see Cocchi Genick 1995, p. 209, pp. 69-70.

⁴⁹ Definition of jar after Cocchi Genick 1998, pp. 364-365 and Bailo Modesti *et al.* 1999 II, p. 446.

⁵⁰ Definition of vessel with internal ledge after Cocchi Genick 1995, p. 242.

⁵¹ Definition of jug after Cocchi Genick 1998, p. 364 and Bailo Modesti *et al.* 1999 II, p. 446.

⁵² Pacciarelli 2004, pp. 447-474; see also Wijngaarden 2002, pp. 255-256.

changes in the social organization.⁵³ Besides LH fine pottery⁵⁴ or imitations of it, Grey Ware and corded pithoi characterize the largest LBA sites detected⁵⁵.

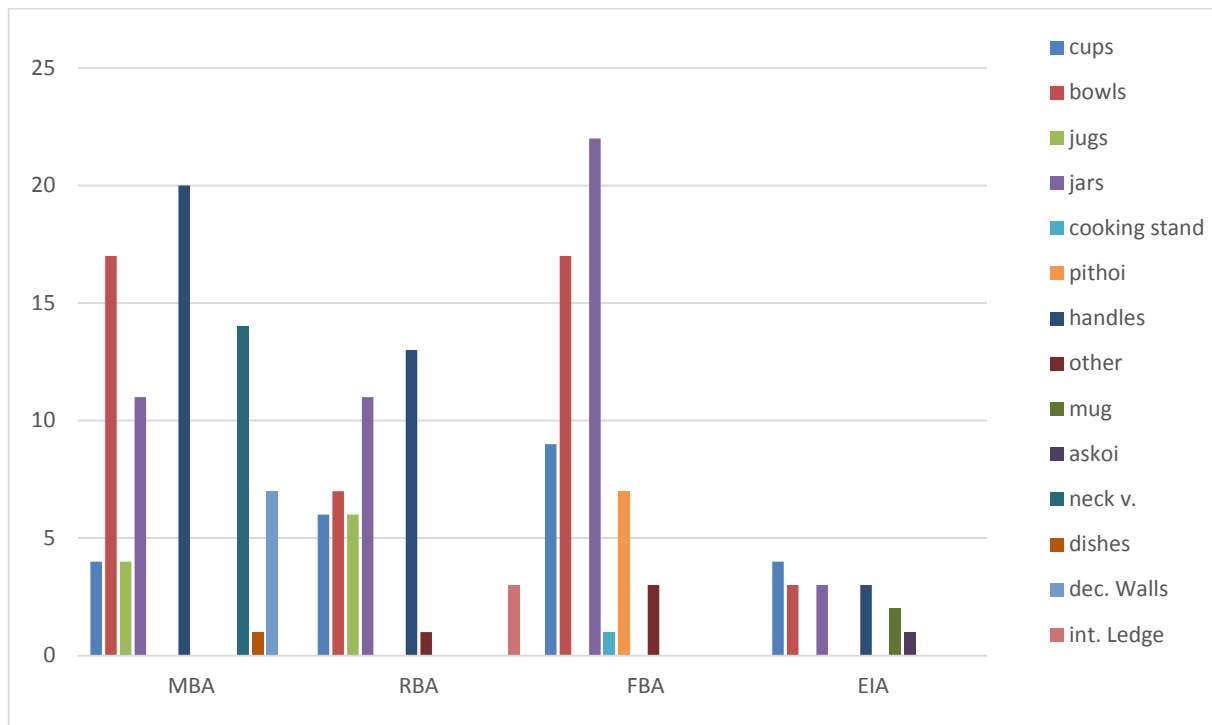


Fig. 79. Shapes of vessels from the RAP area from the MBA to the EIA.

To understand what happened in this transition period, I suggest using the information provided by pottery characterized by Aegean material cultural traits not as a starting point for understanding the local cultures, but rather as a contribution toward reconstructing an as objective as possible archaeological framework considering foreign and local features as a whole. As an example, I would like to re-consider the RAP site of Timpone delle Fave, which dates to the FBA, although including in the dataset long duration shapes generally assignable to the transitional period FBA-EIA. Besides impasto sherds, at Timpone delle Fave fragments of storage jars of the corded pithos type occur. It was previously stated that corded pithoi derive from an Aegean production,⁵⁶ but is not clear if the pithoi of Timpone delle Fave were made locally or not. Even if they were locally made, they were in use together with impasto pottery which differs in fabric and production. Even if fabrics correspond to specific functions,⁵⁷ different production techniques need to be explained in order to understand the perception that the local population had of foreign input. Indeed, the high technical level of production of the pithoi, which required specific clay and temper, wheel refining, high temperature and therefore complex kilns,⁵⁸ reveals strong

⁵³ “[...] the first local production of Mycenaean-type pottery seems to begin in the LH-LM IIIA, as few data from the plain of Sybaris seem to show [...]”, Bettelli 2011, p. 111.

⁵⁴ Figuline ceramics from the Aegean area were mostly made in the Peloponnese in the Pre-Palatial and Palatial period or Italian MBA (Bettelli 2008, p. 17-18). For the RAP area, “from Timpone della Motta [...] one fragment of a stirrup jar has been reported”, after Wijngaarden 2002, p. 248, and at the same site other three Mycenaean fragments were found, after Jacobsen 2007, pp. 9-10. See also Jones *et al.* 2014, Site 33, p. 34. A further fragment was found at Area Rovitti, in this volume, Pl. XII.361.

⁵⁵ Already Wijngaarden observed that LHIIIA2 and LHIIIB pottery was concentrated at relatively few large centers in the central Mediterranean (Wijngaarden 2002, pp. 266-267).

⁵⁶ Levi, Schiappelli 2004, pp. 96-104.

⁵⁷ Wijngaarden 2002, p. 257.

⁵⁸ Bailo Modesti *et al.* 1999 II, p. 445.

differences if compared to the coeval impasto pottery. This choice reflects a different social organization influenced by economic and/or cultural factors. There are therefore two aspects to consider in the pottery production: a functional aspect and a cultural aspect. The functional aspect concerns the effective use of vessels, which is explained by shape, as shapes correspond to functions of eating, drinking and so on. The disappearance or adoption of certain shapes constitutes the variable of this aspect. The cultural aspect regards types of shapes and decorations. The functional aspect can exist without the second aspect. The cultural aspect can then be considered as a secondary aspect and does not replace the functional aspect. However, the cultural aspect constitutes the means to detect cultural changes and contacts. Besides pithoi, from the beginning of the LBA, Grey Ware pottery was also in use together with impasto pottery. In my dataset regarding the RAP area, occur 14 Grey Ware sherds found in the sanctuary at Timpone della Motta and three from the Area Rovitti excavation at Francavilla Marittima.⁵⁹ Colelli published another 30 Grey Ware sherds from Area Rovitti, 27 of which he dated between the RBA and IA periods.⁶⁰ Regarding the sherds found at Area Rovitti, one dates to the LFBA based on a parallel,⁶¹ and one to the EIA, as it is a fragment of a handle similar to examples dated to the first half of the 8th century BC from Bellolucio⁶² and Area Rovitti itself.⁶³ For the Grey Ware found at Timpone della Motta, I could establish only two EIA parallels (Tab. 27.605, Tab. 25.44), in addition to a burnished ware cup (Pl. LIV.586) for which I found a Grey Ware parallel dating to the FBA. The rest of the Grey Ware materials can be generally attributed to the EIA-IA. The fragment of handle in Pl. LIV.587 is for instance similar to an EIAIIA handle from Torre Mordillo,⁶⁴ the rim fragment in Pl. LVI.606 is reminiscent of a Late Geometric jug from Efestia⁶⁵ that is characterized by a wavy profile and the type of light bluish-grey fabric similar to the base fragment in Pl. VII.117, which is datable to the IA.⁶⁶ Therefore, although my dataset does not include RBA Grey Ware evidence, it does occur as four Grey Ware RBA fragments were previously found at Rovitti.⁶⁷ At the beginning of the RBA, local shapes from Torre Mordillo were made in Grey Ware. Later in the same period wheel-turned or handmade Grey Ware coexists with handmade impasto pottery.⁶⁸ The functional aspect is the same; a Grey Ware bowl has the same function as an impasto bowl. However, why would a different fabric be chosen? The Grey Ware ceramics are related, morphologically and technically, to Aegean productions but studies on this topic⁶⁹ show that reference parallels were found between local impasto and grey ware shapes, but not between local and imported Grey Ware shapes.⁷⁰ In addition, chemical analysis of these ceramics show that the Mycenaean pottery was initially imported (LHIIIA) and later locally made (see the so-called Italo-Mycenaean pottery).⁷¹ This could indicate the presence of Aegean potters in Italy⁷² or that potters from Italy had contacts with the Greeks.⁷³ In any case, the presence of Aegean potters in Italy is not sufficient to explain the

⁵⁹ For the presence of Grey Ware evidence at Francavilla Marittima and specifically Area Rovitti, see Colelli 2012, pp. 210-213.

⁶⁰ Colelli 2012, Plates 128-131. Furthermore, 35 IA Grey Ware pots and fragmentary pots from Timpone della Motta are being studied by M. Fasanella Masci, as part of her doctoral thesis (Fasanella Masci, forthcoming).

⁶¹ Tab. 47.520.

⁶² Peroni, Trucco 1994, Tav. 134.4 and Tav. 135.3 for sherd in Pl. XLVII.524.

⁶³ Colelli 2012, Tav. 130.HY_G17.

⁶⁴ Peroni, Trucco 1994, Tav. 156.10, Tomb XXVI.

⁶⁵ Danile 2011, Fig. 17, Lemnos, Efestia, Area 17, wall F.

⁶⁶ Colelli 2012, p. 210 with reference to light bluish grey ware found at Broglio di Trebisacce, IA levels, Sector B West.

⁶⁷ Colelli 2012, Tav. 130.HY_G19, G_13, G_15, Tav. 131. G_22.

⁶⁸ Trucco, Vagnetti 2001, pp. 253-255.

⁶⁹ See for instance Bettelli 2008, pp. 21-24.

⁷⁰ The same process happened, for instance, in Western Anatolia (Pavúk 2007, pp. 295-308).

⁷¹ Jones *et al.* 2005, p. 539-544.

⁷² Wijngaarden 2002, pp. 237-238.

⁷³ On this topic, see Bettelli 2011, pp. 112-117, and Wijngaarden 2002, pp. 262-263. See also the recent but “fatalistic” observation by E. Blake in Blake 2014, p. 213: “The Aegean-style gray wares and local impasto vessels do share some of the same forms, which Damiani suggests is a sign of the exchange of ideas between the two groups of potters, but that is the extent of it.”

occurrence of local shapes made in Grey Ware, also considering that in the LHIII B-C in Greece and Crete⁷⁴, local Handmade Burnished Ware was used to make Italic-shaped vessels.⁷⁵ It suggests that Italic pots or potters were also in Greece and, thus, it is a significant point to consider in the mechanisms of cultural transfer/spread.⁷⁶ New technologies are not often immediately adopted, especially if well-established techniques maintain efficiency. It is possible that in periods of technological transition different production techniques coexisted. Moreover, logistical and environmental factors can influence success and spread of technical tools. However, as seen above, also where the wheel was already in use, handmade pottery continued to be made. The coexistence of different techniques and productions indicates that the level of exchanges between cultural areas was balanced, in-so-far as places of origin of techniques have to be related to times and circumstances.⁷⁷ The ability to understand if the adoption of a technique can provide improvements depends on the awareness that a society has about its structure. This awareness, and as a consequence the need to modify a technique to meet production standards of a specific time period, depends of course on economic and social changes.⁷⁸ Therefore, methodological approaches based on categories and patterns and, in addition, on societies and groups of societies that are geographically defined, probably obscure the understanding of how the adoptions of variables can depend on individual choices irradiating beyond “defined” cultural areas.⁷⁹ Cultural traits can influence or substitute other cultural traits or they can merge at the discretion of individuals who make choices related to the physical and social setting they belong to. Consequently, interregional contacts create further common production strategies⁸⁰ and lead to the sharing of different expressions of cultures. The adaptive use of objects that bear cultural traits implies the acceptance of shared cultural characteristics. This mechanism creates a cultural *koinè*⁸¹ which in the RAP study area can be illustrated by the adoption of various shapes, wares, and production techniques, such as is the case with the grey ware class, discussed above.

4.11 Intraregional and interregional contacts

The chronology of the pottery and the archaeological contexts in which parallels were found for the materials of the RAP surveys as presented in this study, allow the following observations on cultural connections within the Italian peninsula and in adjacent areas (Fig. 98). The Neolithic material cultures, as attested in the RAP survey area, even if based on limited evidence, appear the same as those established at excavated Neolithic sites in the Sibaritide: Favella, Sant’Angelo III cave, San Michele di Saracena cave. Just as the latter, the RAP material can be assigned to the Southeastern Italian cultural aspects⁸² occurring north of the Sibaritide likewise excluding, until the Middle Neolithic, resemblances with the cultural aspects of Southern Calabria and Sicily.

⁷⁴ Belardelli *et al.* 2005, p. 512.

⁷⁵ Moreover, in Crete, Grey ware locally made disappears in the EMII B and it is imported, probably from Italy, from the LMIIIA (Wilson, Day 1994). See, for the *barbarian ware*, Peroni 1994, p. 853.

⁷⁶ On the “Italian” contribution in the alteration and adaptation of Grey Ware shapes in Greece, see Girella 2009, p. 279-314. See also Bettelli 2009, p. 95-115 and Dickinson 1986.

⁷⁷ Therefore, I am not in line with the opinion about the lack of real symmetry of relationships among Aegean and local Italian communities proposed by Cazzella, Recchia 2010, p. 27-40. I rather agree with Bietti Sestieri when she writes about relationships not based on cultural subordination (Bietti Sestieri 2008, p. 25).

⁷⁸ Wijngaarden 2002, pp. 275-280.

⁷⁹ For instance, Borgna speaks about a LFBA “network society” in which single individuals managed exchanges (Borgna 2013, pp. 125-153).

⁸⁰ See Wijngaarden 2002, pp. 273-275 on the economic strategies that influence the distribution of Mycenaean pottery in the Mediterranean.

⁸¹ An idea of high “connectivity” regarding LBA Mediterranean communities as part of a global system is also in Borgna 2009, p. 289-309; “international world” in Wijngaarden 2002, p. 272.

⁸² For the term “aspect” see footnote 14 in section 1.

Evidence for cultural interactions of the RAP study area with Sicily and Southern Calabria are instead attested in the Late Neolithic and during the Eneolithic. Other evidence indicates that the Tyrrhenian coast as far as Campania showed common cultural trends. The beginning of the Bronze Age again reveals relationships between the RAP area and with Southwestern Italy and Sicily. Moreover, cultural links with the Adriatic coast, from the North of Puglia as far as the Northern and Central coast of the Balkans, are established in this period.

From the end of the Middle Bronze Age until the first phase of the Recent Bronze Age, many cultural analogies are established, mostly with sites of the Sibaritide itself and the area of the Terramare in the Po valley. In the full RBA there is a strong link with the North Adriatic coast. The Terramare culture appears indeed as an exceptionally strong regional network in the analyses of Emma Blake.⁸³ As attested at the important site of Roca Vecchia, in Puglia, the visibility of contacts with the Terramare area depends strongly on the exchange of metal and amber objects.⁸⁴

From the second phase of the Recent Bronze Age until the beginning of the Final Bronze Age most of the contacts are recorded again within the Sibaritide, Puglia and Aegean areas. Instead, from the end of the FBA until the beginning of the EIA, the RAP pottery suggests that material cultures of Calabria, Campania and Central Italy become more connected to each other.

Mostly from the RBA, Aegean cultural influence in Southern Italy starts to be testified by the presence of diagnostic materials which often become chronological references for Italian archaeological contexts. In the RAP area, for instance, grey ware, decorated storage jars and, later, matt-painted pottery, and also the effects these had on impasto productions, constitute evidence for this interaction. The dynamics of this interaction are, however, not yet clear. In general, comparing Greek and Southern Italian chronotypological phases could help clarify periods of interaction involving both areas.

Can our archaeological materials add information on the nature of these cultural affinities and how they come about? This study, based on a typological approach, indeed leads to the formulation of such intriguing questions that require however further studies, including petrographic analysis. Starting from the typological analysis carried out on the RAP sherds, and the consequent chronological implications, I note here an important implication for the existing chronological framework as there are several factors that would incline one to consider of moving back the absolute chronology. The following observations on chronological relationships are relevant in this respect taking into account recent scholarship on the subject:

- The consequences of the absolute dating of the Avellino Pumices eruption I made in section 4.3 on the EBA – MBA1 period, also in light of the review of the EBA periodization after Pacciarelli 2012, Tab. 1,
- The radiocarbon dates of bone samples that appeared to correspond with the MBA1-2 period from Sant'Angelo IV cave,⁸⁵
- The MBA3 – RBA1 dates from the Carnevale profile,⁸⁶
- information from the Terramare area,⁸⁷
- the boundary MHIII/LHI, placed around 1700 BC and based on the Lerna 14C results obtained by Voutsaki *et al.* 2010, and
- the proposal by Nijboer and van der Plicht⁸⁸ to move the beginning of the Late Geometric pottery phase from ca. 770 to 800 BC,⁸⁹

⁸³ Blake 2014.

⁸⁴ Jasink *et al* 2011, p. 207.

⁸⁵ Tab. 80, Samples Ant. 1, 3.

⁸⁶ Tab. 37, Samples Carn L 8, 3.

⁸⁷ Damiani 2010, pp. 375-376, in particular footnote 2.

It would appear that the conventional chronology should be re-dated 50 to 75 years earlier. As a consequence, going back to the RAP materials, the RBA would start in 1350⁹⁰ and not in 1300 as shown in Tab. 1. However, since these chronologies are based on radiocarbon dates too often resulting in wide ranges and therefore too little detailed for protohistoric periods, I suggest waiting for more precise chronological results, while in the meantime sticking to the available chrono-typological sequences in Tab. 1.

As described in Chapter 2 – *Methodology: pottery*, in pottery studies the process of sherd selection is followed by the identification of wares, by drawing each sherd, and then defining its chronology and function by means of parallels. The parallels, that come from published materials from stratigraphic layers, provide data about chronology and diffusion of types that sometimes come from nearby sites, but often also from sites far away. As seen in this paragraph, parallels for the material culture of our study area were found all over Italy and along the Dalmatian coast. On the basis of the parallels we can therefore observe the following trends, as summarized in the table below:

EBA-MBA	South Italian-Dalmatian connection (Neolithic heritage)
MBA	Peninsular connectivity
RBA	Intensification of contacts with the Terramare area
FBA	Reduction in connectivity (following Terramare and Mycenaean collapse)
FBA-EIA	“Inward looking period” – regionalisation
EIA	New connectivity – Tyrrhenian coast

Tab. 88. Main connectivity pattern from the EBA to the EIA.

Conclusions

Tracing supra-regional contacts on the basis of local handmade pottery is difficult as this type of pottery was produced during a long period from the MBA to the FBA and is by and large typologically homogeneous, not only showing similarities with pottery from other sites within the Sibaritide but also with that from other Italic regions. However, if we look in more detail at specific objects, that we may label *exotica*,⁹¹ networks can be recognized on basis of their provenance.

While such networks are mostly based on Aegean imports, I have been able to identify specific traits in the impasto repertoire also of the EBA and the EIA periods. For some objects I found, in the absence of parallels within the Sibaritide and its surroundings, chrono-typological similarities with material culture from regions farther away. For the EBA and EIA periods, the pottery record of Campanian archaeological sites proved useful. In chapter 3, while dealing with finds from the cave Sant’Angelo II and IV (chapter 3), I mentioned some peculiar potsherds displaying resemblances with pottery from both trans-Adriatic

⁸⁸ Nijboer, van der Plicht 2008, pp. 103-118. See also Pacciarelli 1999, pp. 62-63.

⁸⁹ Unfortunately, radiocarbon dates are not yet available from the recent excavations at the Macchiabate necropolis (Guggisberg *et al.* 2013).

⁹⁰ As already proposed by A. Guidi in 2008 (Guidi 2008, Tab. 1).

⁹¹ For instance, studies on RBA southern Italian networks are based on the common presence of Aegean pottery along the coasts (Blake 2014, p. 221).

regions and Sicily. However, on account of the fact that we still deal with few finds and sites, the resulting interregional network pattern remains patchy and conclusions would be based on a too small number of hubs for now, adding too little information to the currently known general cultural framework. Nonetheless, my observations do indicate that networks were more complex than the Aegean network alone and developed and functioned over a longer time period (see Fig. 98).

5. Settlement dynamics and the Bronze Age landscape of the Sibaritide

“We feel the possible continuation of the prehistoric settlement pattern into the hinterland must be studied before further regional interpretations can be made.”

P.M. van Leusen and P.A.J., Attema 2003¹

*Nihil est enim simul et inventum et perfectum.
Cicero, Brutus, 71*

Introduction

The aim of this study is to contribute to the debate on the chronology, distribution and organization of Bronze Age settlements in the Raganello valley west of the Sybaris plain in north-eastern Calabria. To this end, ceramic data from 26 sites were studied from different landscape zones in the study area. As stated in the Introduction to this thesis, most of the ceramics studied and catalogued derive from systematically and unsystematically obtained surface collections. These were made at archaeological sites that for the greater part were first located by the Gruppo Speleologico “Sparviere”, as part of judgemental survey, both caves and open air sites. The sites were over the years revisited by GIA researchers, often together with members of the Sparviere group, for further mapping and pottery collection within the framework of the Raganello Archaeological Project. It should be noted that the ceramic dataset dealt with in this thesis is the result of a careful selection of diagnostic materials from among the pottery collected at the sites, and this explains the – for surface materials at least – high quality of the dataset, furnishing reliable date ranges for human frequentation of the sites. The study of the material from Timpone della Motta forms an exception as these for the larger part stem from excavation. The detailed restudy of the impasto materials from this excavation allowed to fill in gaps in the settlement history of this particularly important settlement.

One main result of the ceramic study is that we now dispose of a representative diachronic overview of Bronze Age frequentation of the Raganello valley that can be linked to other datasets that above all regard the foothills of the Sibaritide, such as those from Broglio di Trebisacce and Torre del Mordillo, but also datasets resulting from systematic surveys carried out under the umbrella of the Raganello Archaeological Project in the course of the Hidden Landscapes and the Rural Life in Protohistoric Italy projects that are about to be published.²

Another main result from the ceramic study is the proposed revision of the Bronze Age chronology for the region with relevance for the transition from the Early Bronze Age to the Middle Bronze Age and that between the Final Bronze Age and the Early Iron Age. Detailed study of key materials from excavation and surface collections, among which materials from two caves of the Sant’Angelo complex for the former transition (sections 3.2-3-4), and materials from the Francavilla excavations for the latter transition (sections 2.2.3-2.2.5), were at the basis of this revision (section 4.11). Furthermore the study has given a first insight in human frequentation of the study area before the

¹ Van Leusen, Attema 2003, pp. 397-416.

² The Hidden Landscapes Project 2006-2010 (HLP) mainly focused on postdepositional/landscape taphonomic biases and their effect on visibility of the archaeological record. Preliminary work was reported in 2007 (Van Leusen *et al.* 2011). The Rural Life in Protohistoric Italy Project 2011-2015 (RLP) aims to better understand the mostly undiagnostic protohistoric sites mapped by the RAP by taking a closer look at a representative subset using geophysical methods.

Early Bronze Age, during the Eneolithic. What we may consider as the third main result of this study is the potential to formulate hypotheses on basis of the detailed chronological insight obtained in the dynamics of the protohistoric frequentation of the study area, and the changing role of the study area within the wider settlement pattern of the Sibaritide. These latter aspects form the main subject of this concluding chapter.

To describe the dynamics of the protohistoric frequentation of the study area, a *longue durée* landscape archaeological perspective is helpful as well as a critical look at the nature of the dataset on the basis of which the hypotheses in this chapter are formulated.

Landscape archaeology is an interdisciplinary field which studies the physical and cultural territory in combination, taking into account environmental, economic and social factors within a regional context, often over a long time span. Therefore, next to the analyses of the ceramic evidence (and in some cases other artefacts types) from the studied sites presented in this study, also results of environmental and methodological studies conducted by the GIA in previous years were taken into consideration. While these studies have had a follow-up in recent years within the framework of the Hidden Landscapes and Rural Life projects, the current study was confined to geological and geographical observations made during revisits of the sites made in the period 2000-2010, by members of GIA's Raganello Archaeological Project complemented by my own observations in the field in the period 2008-2013. These observations have provided insight in the local context of sites and the way the contexts differ between them. Combining the two datasets, it becomes possible to study the changing relationship between cultural and environmental factors through time.³ In my case, the study of the cultural remains consisted mainly of scatters of small fragments of ceramics and only in a few instances were there actual settlement traces, such as at Timpone della Motta and the caves discussed in Chapter 3. Therefore it has been mainly the artefacts that have defined the sites I have discussed in their quality of places in the landscape containing traces of human activities that delimit them in time and space.⁴ In combination, they form both the tangible signs of the anthropogenic component in the wider physical setting, and the means for understanding the settlement dynamics within the landscape. Environmental data in the current study were restricted to observations on the place of the sites within the landscape, their altitude, position, nearness to water and natural passages through the landscape as well as their specific geological setting. These observations were important, as they led to insight in what probably constitute profound changes in the settlement organization in the Raganello valley, which as proposed in this thesis, should be read in relation with changes in settlement organization in the foothills of the Sibaritide. These changes could only be studied thanks to the long perspective of this study from the Neolithic to the Early Iron Age. It should be noted, however, that the current data derive from sites that from a landscape point of view are often in prominent positions that in some cases may be linked to specific functions in the wider settlement organization, and thus are not to be considered representative of location preferences in general.⁵ Also, the settlement data derive from locations where surface visibility was relatively high within a landscape that has a generally very low ground visibility. There is thus a possibility that the clear trend in settlement dynamics detected is an artefact of the biased nature of the dataset. Pending the final pottery studies from the Hidden Landscapes and Rural Life projects carried out in the framework of the Raganello Archaeological Project, it is too early to state whether or not the

³ European Landscape Convention, CEP-CDCPP, Chapter I, General provisions, Article 1 – Definitions: "Landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. Strasbourg, 10 April 2015, CEP-CDCPP (2015) 35E, General Activity Report on the European Landscape Convention.

⁴ See also Farinetti 2012, p. 92.

⁵ See van Leusen, Attema 2001-2002, p. 20.

diachronic changes in settlement organization hypothesized in this study will be corroborated by the results of the systematic surveys of the RAP as a whole.

Below, the results obtained in the first four chapters will be synthesised by reviewing the evidence from the sites within the study-area and expanding this evidence to discuss the settlement pattern and changes therein. This will include the relevant environmental data, type and function of sites, and the socio-economic conditions that played a role in shaping the Bronze Age landscape.

The study area of the Raganello Archaeological Project in which the sites discussed are located is part of the site catchment of the protohistoric settlement of Timpone della Motta at Francavilla Marittima. The latter site can be considered one of the *central places* of the Sibaritide together with Broglio di Trebisacce and Torre del Mordillo.⁶ The wish of the GIA excavation team to place the development of this center in a regional and long term perspective, as pioneered in the RPC project, led to the Raganello Archaeological Project and its related sub-projects.⁷ As stated earlier (Chapter 2, pp. 13-16), a fundamental point of departure of the investigations of the Raganello Archaeological Project was the knowledge of archaeological sites in the Raganello basin gathered by the Gruppo Speleologico “Sparviere” and the ceramic collections deriving from them. These sites are located in the territories of present-day S. Lorenzo Bellizzi (section 2.1) and Francavilla Marittima (section 2.2), and partly in the territories of Civita and Cerchiarà (sections 2.3, 2.4). Other investigations in the territory of Cassano allo Jonio and Frascineto were included in this study (Chapter 3). Below we look into the articulation of sites over the landscape in a diachronic perspective. To this end I will divide the study area in a northern and southern part, as I noticed that the chronology of the sites differs: the northern part includes the oldest settlements while the southern part is characterized by a stronger development during the Final Bronze Age.

5.1 North of the Raganello

Surveys in the surroundings of Timpone della Motta led to the detection of sites dating from the Neolithic to the Middle Bronze Age in the area between the plain and the foothills. From the second phase of the MBA (MBA2), sites started to develop also in the highland. These were naturally defended sites, but characterized by the same material culture as recorded in the foothills, next to the plain. The site of Timpone del Castello, located on a hilltop inland from Timpone della Motta in the territory of Francavilla, dates to the MBA.⁸ Timpa del Castello constitutes an example of a naturally defended site, being located on a rocky spur surrounded by cultivable lands declining towards the plain. This site was frequented during all of the Bronze Age until the EIA (Section 2.2, see fig. 81, site 6). In the territory of Francavilla, there occur no significant settlement changes in the RBA. However, there is an increase of FBA-EIA sites in the area of the foothills next to the plain (Macchiabate and Portieri, Fig. 86).

Besides the long-term sites of Timpa del Castello and Timpone della Motta, the investigations led to the discovery of another long-term site, Terra Masseta at Cerchiarà,⁹ in an elevated position above the plain and strategically located between the hinterland and the plain (section 2.4.3, see fig. 80, site 4). This site is part of a settlement area constituted by small settlement units dislocated between the plateau (where Terra Masseta1 is located) and the area of Balze di Cristo (section 2.4.4). Sites in the

⁶ “Sintomatico [...] il caso di Torre del Mordillo, vero e proprio *central place*, il cui sforzo di realizzare un’espansione ed uno stabile controllo territoriale va forse inteso come il tentativo, troncato dalla colonizzazione greca, di creare nella Sibaritide un nuovo assetto socio-politico sul modello dei grandi centri protourbani dell’area tirrenica “ (Peroni 1994, p. 874).

⁷ Attema et al. 2010, Van Leusen 2012.

⁸ Chapter 2, footnote 96.

⁹ Interestingly, the chrono-typological trends of these two sites are very similar.

territory of Cerchiara, with the exception of Terra Masseta, which lasts until the EIA, date to the MBA-RBA.

As seen in section 2.1, surveys have also been done in the territories of S. Lorenzo Bellizzi. In the area of S. Lorenzo seven MBA sites were found, in addition to 30 sites found in the systematic GIA survey, with pottery that has not yet been published but at first inspection contains MBA artefacts. Some of the sites date to the MBA-RBA. These sites are mostly located below rock faces or on small terraces overlooking the Raganello stream. Consequently, at least judging from the materials studied in this thesis, from San Lorenzo Bellizzi going southward, toward the Raganello, the hinterland appears to be settled foremost in the MBA, and to a lesser extent in the RBA.

5.2 South of the Raganello

Regarding the sector north of the Raganello, we saw that the sites discovered in the territory of San Lorenzo Bellizzi, located in a clearly internal and apparently isolated position, date to the MBA-RBA. From the town of S. Lorenzo, towards S-E, Pietra S. Angelo and the nearby cave sites (Banco di Ferro and G.P.S. Angelo IV) present the same chrono-typology. Going further towards SE, the majority of the sites in the municipality of Cerchiara also show the same material characteristics, with the exception though of the site of Terra Masseta that, in the Final Bronze Age, shows an increase in the number of datable artefacts again. In this case the data seem to be in agreement with the Peroni settlement model that indicates the establishment of large and long duration settlements nearby the plain in the MBA. Moreover, parallel to the site of Terra Masseta, towards the South, there is the site of Timpa del Castello that seems to follow the same developments as Terra Masseta. Going south of the Raganello, the scenario is different. From Timpa del Castello, looking towards NW, in the Demanio area, there is a group of sites of the Late Bronze Age placed alongside a long-term site, Madre Chiesa, that is similar to Terra Masseta and, for the pottery typology, resembles Timpa del Castello. The other sites in the Demanio area are definitely little extended and all of them belong to the Late Bronze Age. In fact there is only one mono-phase MBA site in the territory of Civita, Pietra della Sentinella (section 2.3.1), while there is a clear predominance of Late Bronze Age sites in the Demanio area. These sites clearly have a general function of territorial control, as is apparent from their location. The most Southwestern site in the study-area, Timpone delle Fave, is also a Late Bronze Age site, with a peak of evidence dating to the FBA1. As seen in section 3.1, this site is characterized by the presence of fragments of *dolii cordonati*, so far found only in the lower foothills of the Sibaritide.

5.3 Territorial analysis

On the map in Fig. 80, which includes the territories north and south of the Raganello, we can draw a hypothetical axis between the cluster of sites around site 14 (Balze di Cristo-Carlo Magno) in the southeast, and site 10 (Trizzone della Scala) in the northwest, along which concentrations of coeval Bronze Age settlements are found. This axis connects the zone of the foothills close to the Sibari plain with the internal area of the Raganello basin. This observation contradicts the supposed geographical dichotomy, as posited in current literature, between internal sites on one hand and sites in the foothills on the other.¹⁰ In fact, the observed settlement organization not only fails to correspond to clear chronological divisions as hypothesized in the current model of settlement organization in the Sibaritide and its hinterland, it also indicates that differences in altitude did not condition settlement choices in the earlier phases of the Bronze Age. Rather than corresponding to an *a posteriori* schematic interpretation of the Bronze Age landscape that tends to divide it on the bases of topographic parameters, settlement choices for this period reflect a territorial repartition that is based on the resources that a determined portion of territory could provide to man. This brings to

¹⁰ Bettelli *et al.* 2004, Vanzetti 2013 and relative bibliography.

mind the notions of Catchment Analysis from its first application by Vita-Finzi and Higgs¹¹ and related theories,¹² models and theories that take account of the off-site conditions in site analysis.¹³ The functional portions of a given site territory indeed include uplands, lowlands, water stream segments, natural cavities, cultivable fields, wooded areas and all those economic resources that constitute the basis for subsistence of a human group.¹⁴ In my opinion, the Bronze Age settlement distribution mapped in figure 80 is structured by such micro-landscapes or “Siedlungskammer”.¹⁵ Together they constitute a settlement pattern that was kept together by infrastructural and socio-cultural networks. A physical factor to consider as relevant to the development of economic and cultural networks, is the road network. We may imagine a dense network of paths to have existed in the RAP area connecting the various ‘Siedlungskammer’ mapped in fig. 81. Most of the paths are likely to have been used by farmers and shepherds from ancient up till sub-recent times. Unfortunately, in the absence of structures, tombs along roads and other archaeological traces like off-site pottery, it is very difficult to prove that these roads were actually in use in the proto-history without dedicated research.¹⁶

Only later in the Bronze Age do we see that the settlement framework changed. In the FBA the micro-landscapes in the hinterland were abandoned and settlement organization started to gravitate towards the foothills. The probable reasons for this will be dealt with in section 5.9. Below I will elaborate on the micro-landscapes of the study area, starting from the interpretation of the material cultural remains in the context of their physical setting.

¹¹ Vita-Finzi, Higgs 1970.

¹² Bintliff 2002, p. 32.

¹³ Bintliff *et al.* 2000.

¹⁴ Cambi 2011, pp. 113-114.

¹⁵ Bintliff proposed to refine the concept of *Siedlungskammer* viewing them as “long-term nucleated-settlement niches” in resource pockets and/or separated by natural barriers (Bintliff 2002, p. 32).

¹⁶ See for instance the Project “Lost Highways – The archaeology and cultural significance of drove-roads in Southern Italy” presented at the Workshop CAA 2013 in Berlin by Christian Heitz, University of Innsbruck (Poster by C. Heitz and A. Klammt on Academia.edu).

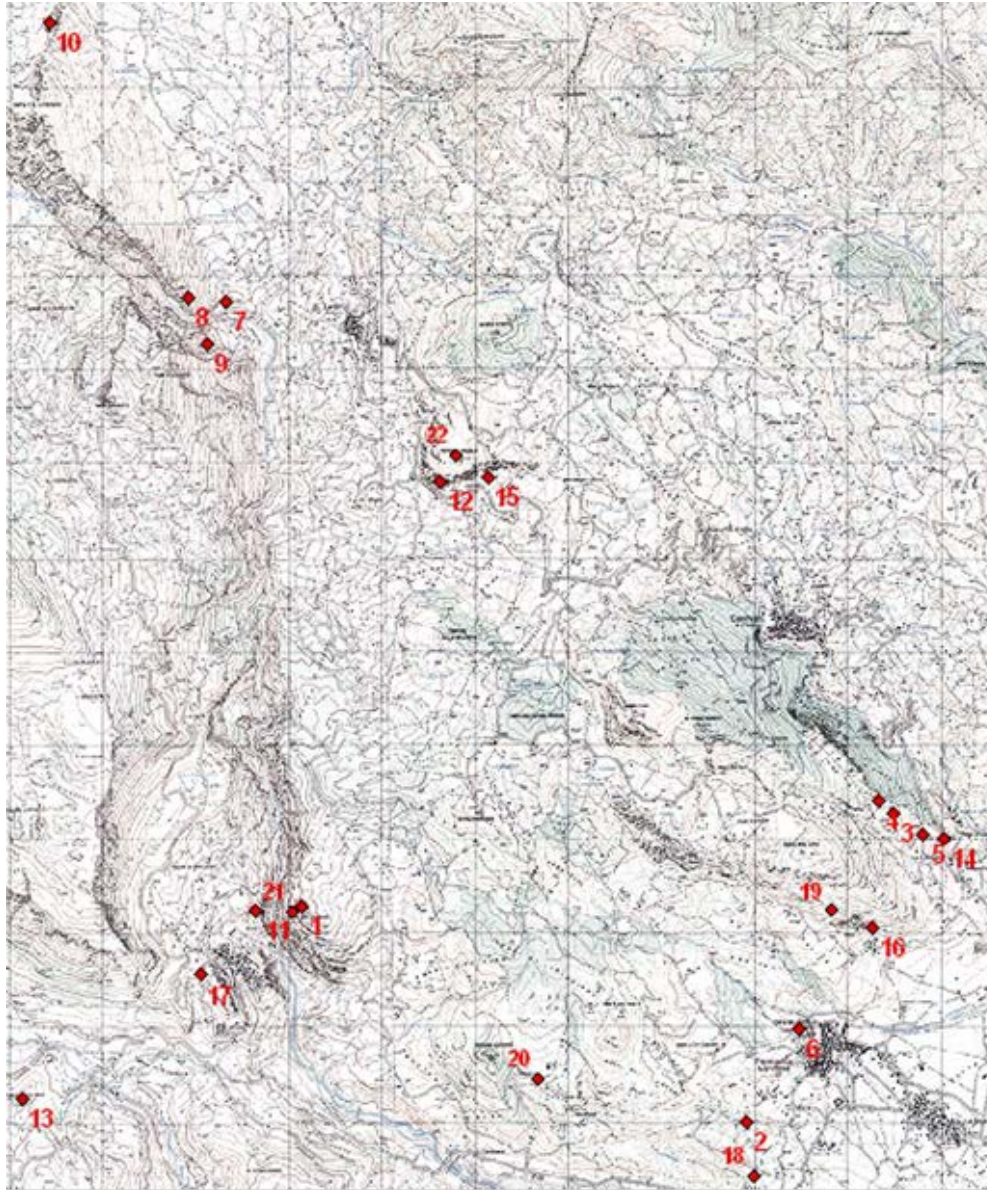


Fig. 80. Distribution map of the RAP proto-historic sites found in the territories of Civita (S-W), Francavilla M.ma (S-E), Cerchiara di Calabria (North of Francavilla) and S. Lorenzo Bellizzi (O-N-O). 1. Timpa del Demanio; 2. Pietra Catania; 3. 'Ngicchielle; 4. Terra Masseta; 5. Balze di Cristo-Spallata; 6. Timpa del Castello; 7. Mandroni di Maddalena; 8. Cudicino; 9. Grotta di Palmanocera; 10. Trizzone della Scala; 11. Madre Chiesa; 12. Grotta del Banco di Ferro; 13. Timpone delle Fave; 14. Balze di Cristo-Carlo Magno; 15. Grotta di Camilla; 16. Grande Caverna di Damale; 17. Pietra di Sentinella; 18. Macchiabate; 19. Grotta della Camastra; 20. Grotta del Caprio; 21. Grotta I Rubbert; 22. Pietra S. Angelo.

1. chronology
2. location in the physical landscape and embedding in physical networks
3. water sources, soil productivity, primary material sources
4. type and function of individual sites (based on presence/absence of natural or artificial defence structures, craft and production, and of cult and funerary activities)
5. evaluation of socio-economic conditions.

It should be noted that the socio-economic conditions will derive from the analysis of the first four factors, as “the final aim of landscape archaeology is an interpretation of the evidence in the context of past environmental and social conditions.”²⁰ In the case of the RAP study area, the discussion of the five criteria will lead to insight in the dynamics of the protohistoric frequentation of this area from a *longue durée* landscape archaeological perspective while critically looking both at the nature of the dataset (see Introduction to this chapter) and current archaeological knowledge of the Sibaritide during Proto-history.

5.5 Chronology²¹

Comparing table 89, based on the research of Peroni *et al.* (see Fig. 4, Chapter 2), with table 90, which takes into account the sites studied by me in the Northern sector of the Sibaritide, it becomes clear how the earliest date for permanent settlements must be moved from the MBA to the Neolithic period, even if based on only few sherds. The recent revaluation of the site of Valle Carlodraga corroborates this assumption.²² Figures 83-88 show the chronological settlement phases in the study-area based on the pottery, outlining the new chronology of frequentation of the Sibaritide. It indeed shows how current knowledge is indicative of frequentation during the period Neolithic-Early Bronze Age.

Subcoastal strip sites	Chronology			
	MBA	RBA	FBA	IA
Amendolara	x	X	x	X
Tarianne	x			
Broglio	x	X	x	X
Villapiana	x	X		
Timpone Motta di Cerchiara	x	X	x	X
Torre Mordillo	x	X	x	X
Timpone Lacco	x	X		
Timpa Cast. F.	x	X	x	X
Timpone Motta F.	x	X	x	x
Pietra Castello C. J.				x
M.te S. Nicola			x	x
Valle Carlodraga ²³				

Tab. 89. Sites of the Northern Sibaritide classified by Peroni *et al.* (Peroni, Trucco 1994).

²⁰ Attema 2002, p. 18.

²¹ Details about this topic in Chapter 4.

²² See Chapter 1, footnote 23.

²³ Valle Carlodraga was not dated in Peroni, Trucco 1994 and Levi *et al.* 1999 (see in this volume, Fig. 4, site 4). In 2012, Vanzetti and Di Renzoni stated that Valle Carlodraga is a Late Neolithic open air site (Vanzetti 2013, pp. 14-15) located on a moderate slope, along the valley of the Carlodraga River. Timpone Golla (see in this volume Fig. 4, site 2), even if located in the Northern sector of the Sibaritide, is not in Tab. 89 because its chronology is uncertain.

Sites	NEOLITHIC	ENEOLITHIC	EBA	LEBA-MBA1	MBA1	MBA2	MBA3	RBAl-2	FBAl	FBA2	FBA3	EIA	TOT SHERDS
G. Sant' Angelo II													43
Pietra S. Angelo													51
G. Camastra													2
G. di Damale													2
Grotta del Caprio													2
G. I Rubbert													1
G. Sant' Angelo IV													26
Timpa Castello													56
Trizzone Scala													13
La Maddalena													28
Terra Masseta 1													51
Timpone della Motta													172
G. Pietra S. Angelo IV													3
Pietra Sentinella													12
Carnevale													36
Balze Cristo													8
Madre Chiesa													20
G. Banco Ferro													4
Cudicino													5
Rovitti													53
G. Ngerije Sup.													3
Timpone delle Fave													60
Banco Prete													7
Timpa Demanio													13

Tab. 90. Chronology, the colour refers to diagnostic sherds; the total number of sherds refers both to diagnostic and non-diagnostic sherds (total sherds 670).²⁴

Sherds quantity	Intensity
1<sherds<2	
2<sherds<4	
4<sherds<6	
6<sherds<8	
8<sherds<12	

Sites	NEOLITHIC	ENEOLITHIC	EBA	LEBA-MBA1	MBA1	MBA2	MBA3	RBAl-2	FBAl	FBA2	FBA3	EIA
Macchiabate												
Portieri												
Pietra Catania												
Sites 53, 56, 57												
Site 52, 58												
Site 51, 47, 54												
F.te Maddalena 1, 5												
Grotta di Palmanocera												
C.da Damale												

Tab. 90b. Chronology of sites mentioned in the text and based on the forthcoming RAP site catalogue (Van Leusen *et al.*, forthcoming).

²⁴ Other sites mentioned in the text but not in Tab. 90, as not dated are Grotta di Zivilella, Mass. Francomano 1, Palmanocera, Scala di Barile, Mass. Armentano, F. te Maddalena 2,3,4, Mass. Francomano, Mass. Filardi (S. Lorenzo Bellizzi), Banco 'N dappe (Civita), Grotte di Terra Masseta I-III, Grotticella Costa del Ponte, 'Ngicchielle, Spallata Balze di Cristo, Crinale T. Masseta-Valle della Vite (Cerchiara).

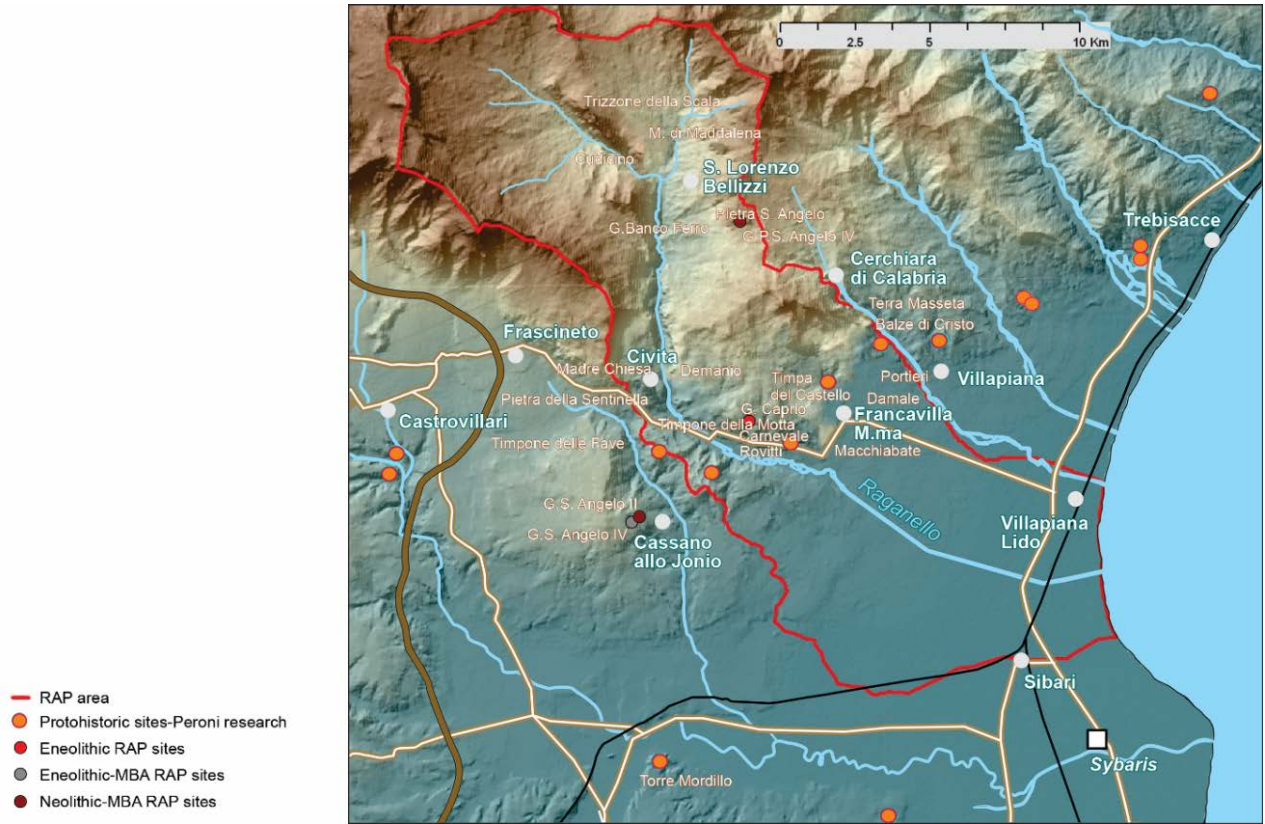


Fig. 83. RAP sites with pottery from the period between the Neolithic and the beginning of the Middle Bronze Age.

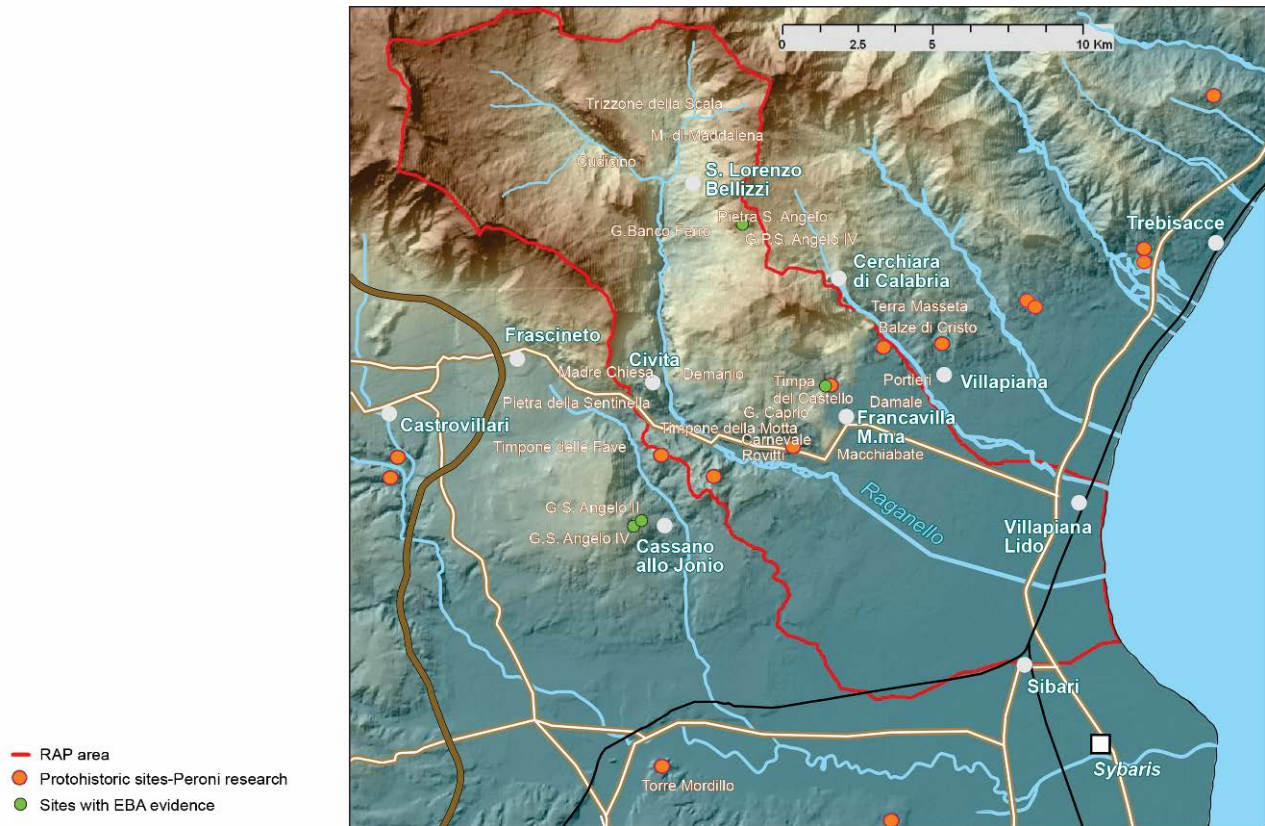


Fig. 84. RAP sites with EBA pottery.

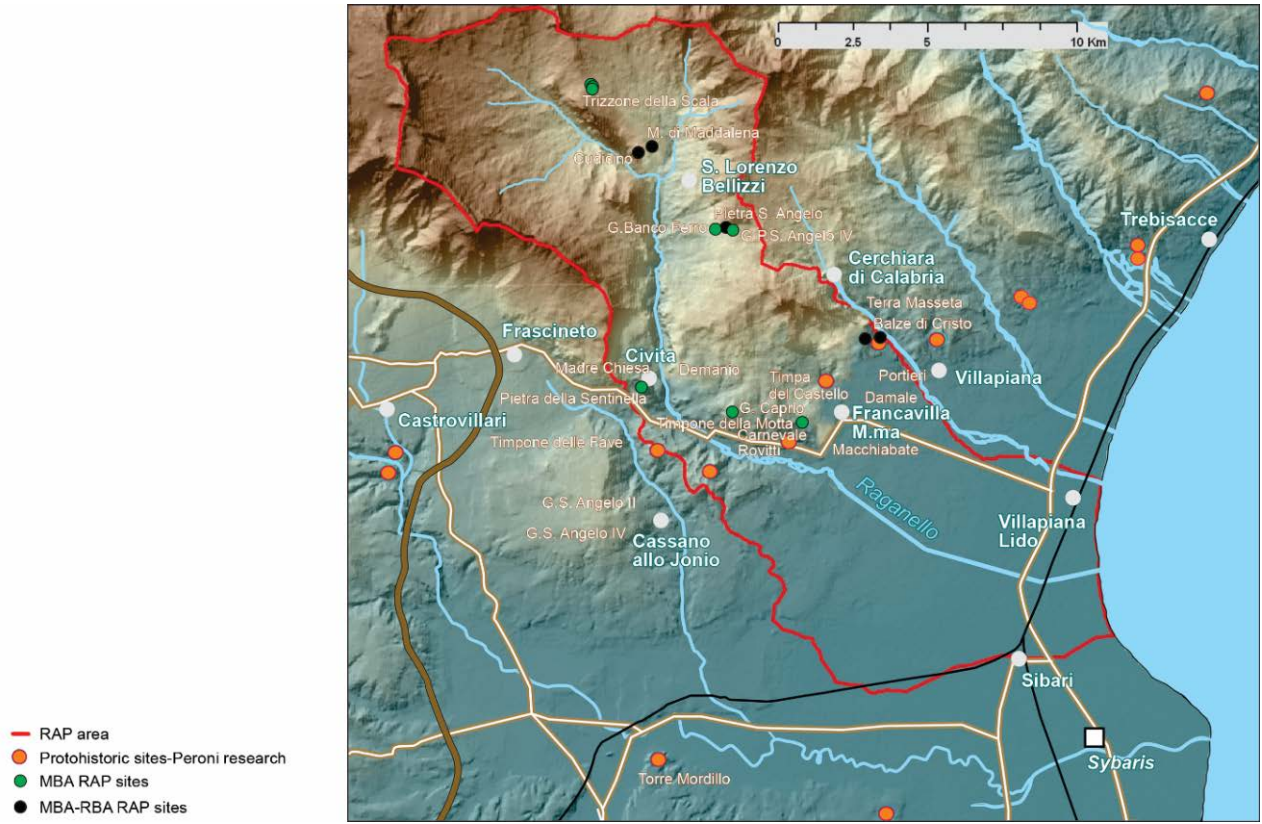


Fig. 85. RAP sites with MBA-RBA pottery.

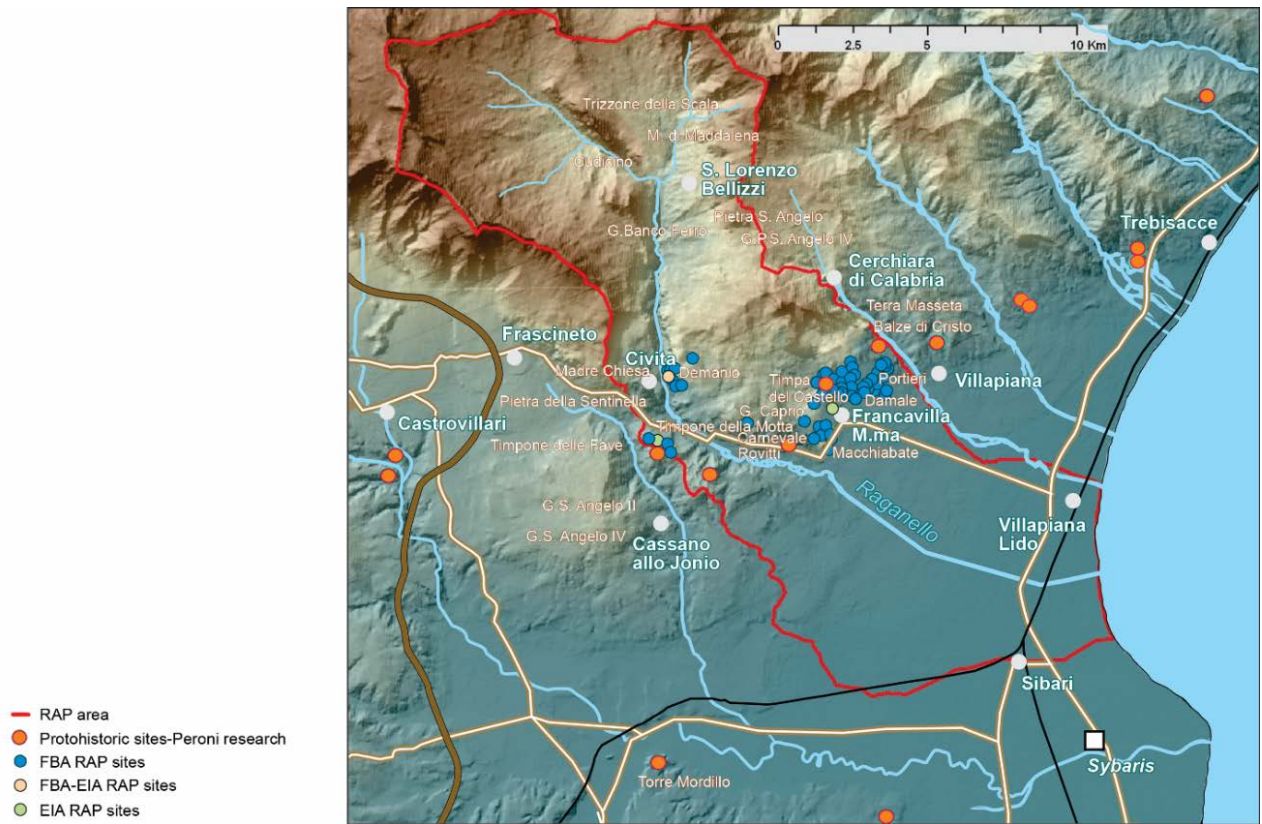
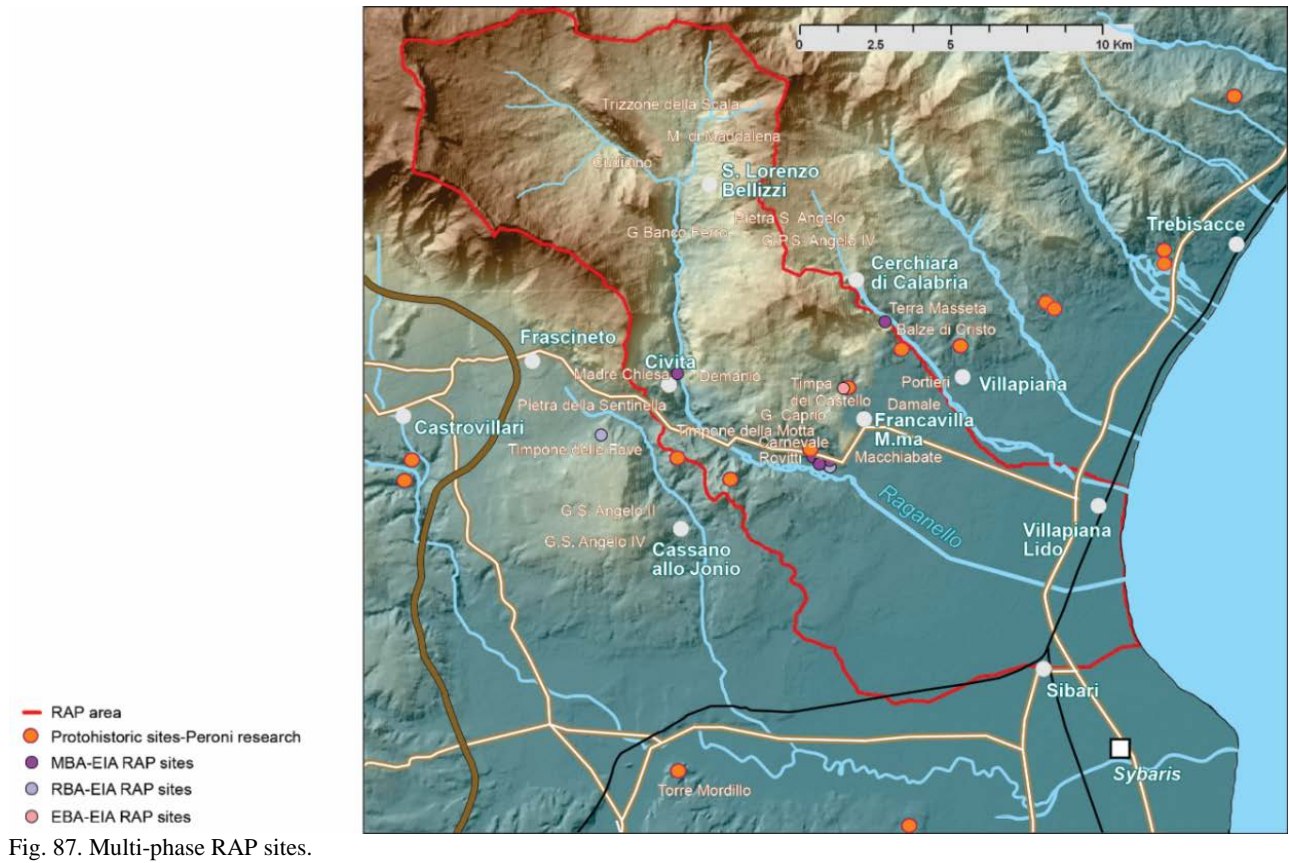


Fig. 86. RAP sites with FBA-EIA pottery.



Importantly, the new chronological evidence resulting from the sites analyzed in this study, allows us to distinguish single-phase, two/three-phase and multi-phase sites (Tab. 91). It needs to be emphasized that this is a particularly important advance in the study of long term settlement development in the Sibaritide hinterland that allows us to relate the protohistoric archaeological record of the hinterland to the results of the regional survey carried out by Peroni *et al.* in the foothills.

Town	Single-phase sites	Two/three-phase sites	Multi-phase sites
Francavilla M.ma	53	Carnevale	Timpa del Castello
	56		Timpone della Motta
	57		Rovitti
	G. del Caprio (?)		Macchiabate
			Portieri
			Pietra Catania
		51	
		47	
		54	
S. Lorenzo B.	G. Banco di Ferro	Trizzone della Scala	La Maddalena
	G. Pietra S. Angelo IV	Cudicino	Pietra S. Angelo
		G. Palmanocera	
Cerchiara	G. Camastra		Terra Masseta
	G. C. di Damale		Balze di Cristo
			C.da Damale
Civita	G. Ngerije Sup.	Pietra Sentinella	Madre Chiesa
	G. I Rubbert	Timpa Demanio	
		Banco Prete	
Cassano allo J.			G. S. Angelo IV
			G. S. Angelo II
Frascineto			Timpone delle Fave

Tab. 91. Single phase, two/three phase and multiphase sites.

5.6 Position and physical background

Comparing the distribution of sites over the landscape as presented in the research directed by Peroni (Fig. 4, Chapter 2) with that of the Raganello Archaeological Project (Figs. 82, 88), there is, except Timpa del Castello di Francavilla, no overlap. While Peroni's team searched almost exclusively the foothills and related uplands around the Sibari plain, the Groningen team covered also a sample of an internal valley and its related uplands.

Based on the environmental and geographical characteristics, Peroni *et al.*²⁵ discerned in their research area three types of sites:

- Coastal sites (type 1),
- Hilly internal sites (type 2), and
- Sites in a mountain environment (type 3).²⁶

Using this classification, the data on the distribution and chronology of the sites detected during the Peroni research²⁷ (Tab. 92) can be summarized as follows:

²⁵ Peroni, Trucco 1994, pp. 793-835.

²⁶ Defining, moreover, the sites as belonging to three lithological types (A = sandy-conglomeratic-terraced litho-types, B = sandy-conglomeratic- non terraced litho-types, C = other formation).

²⁷ Peroni, Trucco 1994.

Subcoastal strip sites	Internal hilly sites	Mountain sites	Lithological type
Amendolara			A
Tarianne			A
Broglia			A
Villapiana			A
Timpone Motta di Cerchiara			A
Torre Mordillo			A
	Timpone Lacco		C
	Timpa Cast. F.		C
	Timpone Motta F.		B
	Pietra Castello C. J.		C
		M.te S.Nicola	B

Tab. 92. Sites of the Northern Sibaritide classified by Peroni *et al.* (Peroni, Trucco 1994).

Table 92 shows indeed that sites in the Peroni dataset are mostly located in or near the sub-coastal strip while presenting only few mountain sites. In table 93 I have applied the landscape classification of Peroni *et al.* to the Groningen dataset. This shows a higher number of mountain sites as such compensating for the limited cover of Peroni *et al.*

Levi *et al.* (1999)²⁸ were right in stating that Peroni's hypothesis on the settlement dynamics in the Sibaritide based on processes of selection and concentration of sites ideally should incorporate the submountainous and mountainous zones as well. Although the research carried out so far by the Raganello Archaeological Project, as presented in this thesis, only deals with a part of the available data, it constitutes already a more representative dataset. As such, it is an ulterior stimulus for further elaboration of Peroni's hypotheses.

²⁸ Levi *et al.* 1999, p. 37, footnote 1: "I dati dipendono in larga misura dalle ricerche territoriali condotte nella Sibaritide fin dal 1978, da parte di R. Peroni e collaboratori (...). Le ricerche territoriali citate hanno permesso per la prima volta una lettura complessa dello sviluppo insediamentale in una regione dell'Italia meridionale; in ogni modo, dopo il 1985 esse non sono più riprese (dal 1990 in poi sono stati effettuati solo sopralluoghi su siti già segnalati...). Lo stato delle indagini presenta quindi alcuni difetti, di cui siamo consapevoli, e che da anni si progetta di colmare: stato diseguale delle conoscenze tra parte settentrionale e centro-meridionale della regione (la prima assai meglio nota, nonostante le indagini 1983-85 abbiano iniziato a riequilibrare la situazione); insufficiente conoscenza della reale situazione delle aree sub-montane e montane (anche nella Sibaritide settentrionale), per cui alcune considerazioni (...) sul grado di densità nella stabilizzazione insediamentale tra ambiente subcostiero e interno sono particolarmente fragili e solo tendenzialmente indicative."

Town	Lithological type	Subcoastal strip sites	Internal hilly sites	Mountain sites
Cerchiara	C		Terra Masseta I	
	A	Balze Cristo	Balze Cristo	
Francavilla	C		G. di Damale	
	A		C.da Damale	
	C		Timpa Castello	
	C		G. del Caprio	
	A,C	Timpone Motta (+Carnevale)	Timpone Motta (+Carnevale)	
	A	Rovitti		
San Lorenzo	A	Macchiabate		
	A	Pietra Catania		
	A	Portieri		
	A	53,56,57,51,47,54		
	C			G. Banco Ferro
	C			G. Pietra S. Angelo IV
	C			La Maddalena
Civita	C			Trizzone Scala
	C			Cudicino
	C			Pietra S. Angelo
	C			G. Palmanocera
	C			F.te Maddalena 1,5
	C			Madre Chiesa
	C			G. Ngerije Sup.
	C			G. I Rubbert
	B		Pietra Sentinella	
	C			Timpa Demanio
Frascineto	C			Banco Prete
	C		Timpone delle Fave	
Cassano allo Jonio	C		Grotte di Sant' Angelo II, IV	

Tab. 93. Position and physical background. This table is based on footnotes 562-563, Geological Map of Italy, F. 211, 1:25.000 and Feiken 2014, Fig. 5.16.

The position and physical setting of the RAP sites (Tab. 93), shows that except for two site-areas located in between the subcoastal strip and the internal hilly area (Balze di Cristo and Timpone della Motta-Carnevale), most are mountain sites. The remainder are hill sites. Most of the sites are in areas where the soil is variously composed due to the varied geology of the local mountain environment among which limestone rock and flysch complexes and marine lithotypes (having sandy-conglomerate geology). Only one site, Pietra della Sentinella, is on lithotype B which differs from A being an older geological rock formation. Timpone delle Fave is the only site set on the geological formation *f4* in the legend of the Geological Map, which consists of a mix of fluvial materials and limestone debris. As stated in section 3.1, the presence of storage jars of the doli cordonati type at Timpone delle Fave has shed light on its particular location in the landscape, which may be related to particular economic choices that played a role in settlement location strategies in the period between the LBA and EIA in the Sibaritide.

The following considerations result from the data shown here:

1. Sites from before the LBA are present both in the hinterland and near the plain, while from the LBA onwards sites are located on the hilly strip overlooking the plain.
2. Independently of chronological period, single-phase sites are mostly cave sites; only the Sant' Angelo caves are multi-phase cave-sites (sections 3.2-4).
3. The multi-phase sites are located on terraces, like Terra Masseta (section 2.4) and/or in the vicinity of amply available arable soils, like Timpa del Castello (section 2.2.2).
4. Most of the two-three phase sites are located on high grounds in positions allowing territorial control.

5. Compared to the chronological sequence for the Sibaritide, which traditionally starts in the MBA2, data relative to the Neo-Eneolithic and EBA2-MBA1, although quantitatively scarce, constitute a useful element to understand the mechanisms that led to the consolidation of the emerging MBA2 settlement pattern.
6. Sites in the territory of S. Lorenzo, the most internal RAP area, are MBA sites (few of them revealed Neolithic, EBA and RBA evidence, sections 2.1.1-2.1.7).
7. The analysis of the impasto pottery from the Timpone della Motta indicates settlement changes between the end of the RBA and the beginning of the FBA (comparable to those at Broglio and Torre Mordillo where the RBA also was a period of settlement changes).²⁹
8. The sector of the RAP area north of the Raganello experienced a homogeneous development of sites in the MBA, while the sector below the river reveals a clear LBA settlement predominance (section 5.2).
9. The sporadic evidence before the Middle Bronze Age (Neo-Eneolithic and Early Bronze Age) is followed by a pick of evidence in the MBA that gradually decreases towards the beginning of the Iron Age. It is relevant here to underline that materials assignable to the 8th c. BC have been found only at Timpone della Motta. The lack of such materials in the regional survey by Peroni et al. and the RAP team is presumably related to the political and economic changes described by Peroni in his protourbanization model reflecting the establishment of centralized power forms³⁰, attested by funerary evidence and centralized settlements located in strategic positions in the foothills on the intersection of the plain and the inland.
10. The study of these sites has led to a new definition of the Sibaritide hinterland.

In reference to the tenth consideration, it is important to remark that in the definition of hinterland, distance to the coast and altitude of sites should both play a role in explaining the diachronic settlement dynamic over the landscape that we witness. Traditionally, the Sibaritide region is divided into four geographical sectors, following Peroni et al. 1994.³¹ These are, from the coast inwards, a large alluvial plain, a coastal area, a hilly internal area, and a mountain area. Marine terraces of significant size extend for more than 20 km from the coast towards the inland and are at an altitude between 80 and 200 m asl; they are followed by a hilly strip that reaches altitudes of 400-500 m asl, followed in turn by the mountain ranges, at an altitude between circa 600 and 1000 m asl. This classification, based on altitude,³² tends to group the sites based on the altitude sector in which they belong and leads to the conclusion that many hinterland sites are located in the mountain area and, therefore, should be classified as mountain sites. However, looking more closely into the criterion, it appears that MBA-RBA sites at S. Lorenzo are located at about 1000 m asl in an inland area in the middle valley of the Raganello river, while the FBA sites found at Civita are located at much lower

²⁹ “Based on stratigraphical documentation, the existence of an uninterrupted settlement cycle is certain both at Broglio di Trebisacce and at Torre Mordillo running from the Middle Bronze Age to the Early Iron Age (8th c. BC. at Torre Mordillo). At the site of Broglio the use of artificial terraces has been attested between the Middle Bronze Age and the Recent Bronze Age. Also traces of a palisade with a defensive function have been found near the edge of the settlement plateau which date back to the earliest phases of the settlement and probably meant to fence off the site from the valley. It was followed by another one dating to the Recent Bronze Age. At Torre Mordillo, a fortification with defensive function of the agger-type can be dated to an advanced phase of the Recent Bronze Age. It was erected on top of leveled strata that date to the beginning of the Recent Bronze Age. The destruction of the agger can be situated in the Recent Bronze Age and early Final Bronze Age (Arancio *et alii* 1995, p. 230). (...) The ceramic fragments found in the destruction layers (...) date to the advanced Final Bronze Age. Along the hill slope, a thin layer of yellowish clay, on top of a stratum of stones of small dimensions that lie on sterile soil, can be interpreted as the upslope side of a ditch, or as the modification of the slope, which in some way or another was connected with the defensive works.” Attema, Ippolito forthcoming.

³⁰ Peroni, Trucco 1994, pp. 835-845.

³¹ Peroni, Trucco 1994, pp. 793-835.

³² Peroni, Trucco 1994, pp. 785-786.

quota between 400-500 m asl on hills overlooking the lower Raganello basin nearer to the coast. Consequently, in classifying these sites, distance from the coast might, apart from altitude, have played a decisive role in site location over time and a means for us to explain the settlement dynamics over time.³³ As the S. Lorenzo sites so far all date to the MBA-RBA phase, we may establish that no FBA sites existed in the hinterland of the Sibaritide as defined by altitude and distance from the coast. In addition, it is possible to infer that FBA sites were located in the more accessible areas with control over their surroundings, between the hinterland and the plain and along the river, giving them access to natural trade routes.³⁴ This is the case of the LBA site of Timpone delle Fave, that lasts until the transitional phase FBA-EIA, situated where the Raganello meets the Eiano River. The hypothesis is therefore that the LBA settlement pattern in the Raganello valley dominated the foothill zone between the territories of Cerchiara and Francavilla, and the lower Raganello basin between the territories of Francavilla and Civita. As the exclusively MBA-RBA dates of sites in the territory of S. Lorenzo have demonstrated, the hinterland would have been abandoned for settlement purposes on the transition of RBA-FBA (Fig. 88).

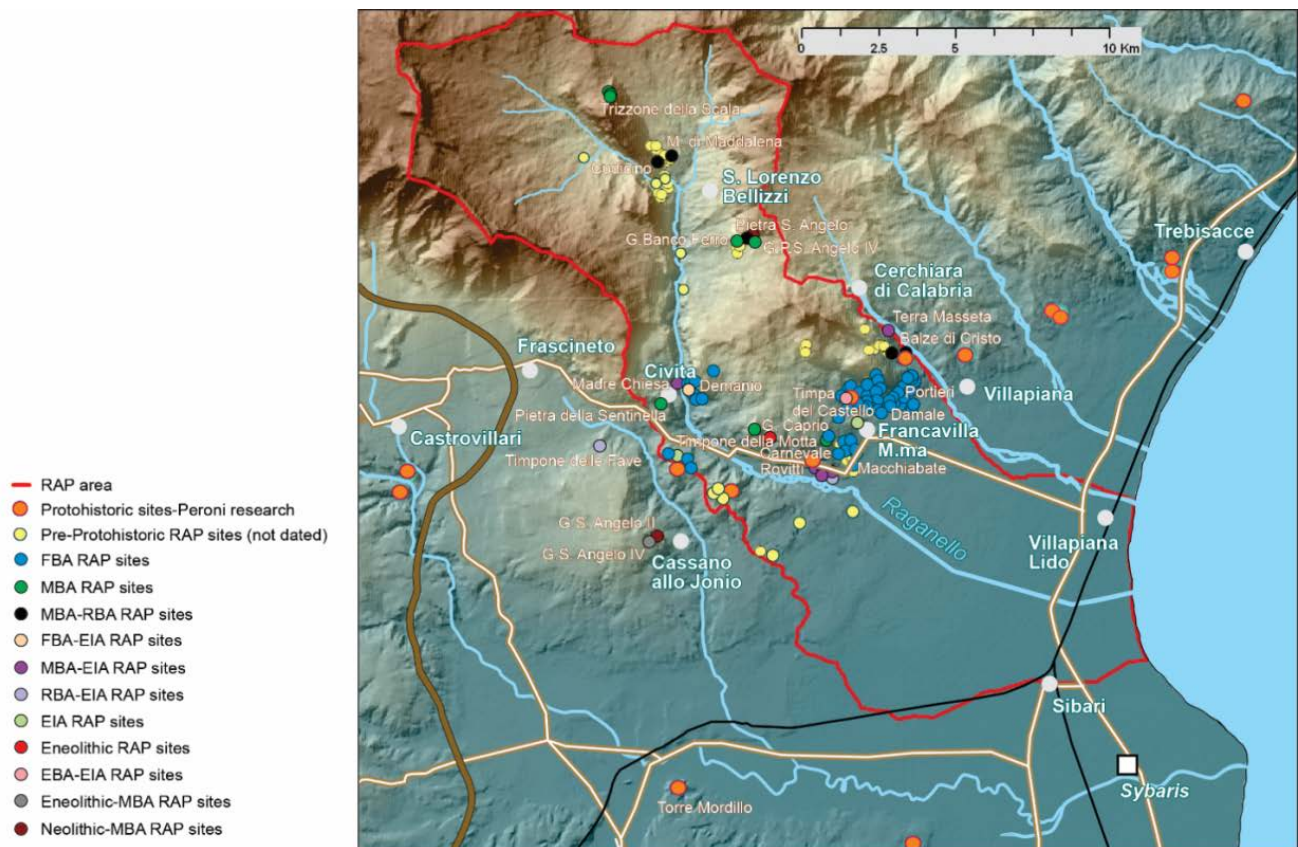


Fig. 88. Distribution of all the RAP sites and their chronology.

5.7 Water sources, soil productivity, raw materials

Settlement choice is conditioned among other things by presence of water sources, productivity of soils, and availability of raw materials. Below I present data concerning these three variables to

³³ See landscape zones in Feiken 2014, Fig. 2.7.

³⁴ See also Attema 2001, p. 152.

obtain insight in possible economic choices that were at the basis of settlement location preference between the BA and the EIA (Tab. 94).

Sites	Water sources	Soil productivity	Raw materials
G. Sant' Angelo II		X	
Pietra S. Angelo		X	
G. Camastra		X	X
G. di Damale		X	
Grotta del Caprio	X	X	
G. I Rubbert			X
G. Sant' Angelo IV		X	
Timpa Castello	X	X	
Trizzone Scala		X	
La Maddalena	X	X	
Terra Masseta I	X	X	
Timpone della Motta	X	X	X
G. Pietra S. Angelo IV		X	
Pietra Sentinella		X	
Carnevale	X	X	
Balze Cristo	X	X	
Madre Chiesa	X	X	
G. Banco Ferro	X		
Cudicino	X		
Rovitti	X	X	X
G. Ngerije Sup.			X
Timpone delle Fave	X	X	
Banco Prete			X
Timpa Demanio			X
Macchiabate	X	X	
Portieri	X	X	
Pietra Catania	X	X	
Sites 53, 56, 57		X	
Site 51, 47, 54		X	
F.te Maddalena 1, 5		X	
Grotta di Palmanocera		X	X
C.da Damale		X	

Tab. 94. Physical factors with economic value (based on IGM maps and site visits).

As of yet, there are no specific studies on distance between sites and *water sources*. Feiken noted that 217 of 327 sites are located less than 200 m from streams or springs, but as he justly remarks, this is not a statistically significant location factor.³⁵ Table 94 shows that two-thirds of the sites dealt within this thesis are located in proximity of water and one-third farther from water sources. We must however realize that changes in the hydrology of the area may have occurred, and springs active during the Bronze Age may not be there anymore. Moreover, we should realize that even when sites are near streams, there may be a notable difference in altitude between the stream and location of a site, as in the case of Madre Chiesa, which overlooks the Raganello but itself lies on a rocky spur 200 meter higher than the river bed (Fig. 89). It is likely that people who settled sites like Madre Chiesa collected water from the river and stored it at the site, but also may have tapped water from nearby springs (now gone) or used water supplied by rivulets during the wet season. In any case water provision would have been necessary on a daily basis, especially during periods of drought, and managed by the communities implying an organized social structure. A comparative evaluation of

³⁵ Feiken 2014 , pp. 99-107. Also, this landscape is characterized by a very dense river network with tributary rivers that feed the main river Crati. The mountains system of the Catena Costiera has undergone uplift rates of more than 1 mm/year from the beginning of the Pleistocene and it is characterized by a hydrographic network that changed considerably also in function of the lifting and climate changes. (Regione Calabria, Quadro Territoriale regionale a valenza paesaggistica, Assessorato Urbanistica e Governo del Territorio, Quadro conoscitivo 5 – Difesa del suolo e prevenzione dei rischi, 2009, pp. 3-5).

water provision of the sites should in future include a list of walking distances between sites and water sources using cost analyses. This might shed light on the complexity of water management strategies as a necessary feature of social organization.



Fig. 89. The terrace of Madre Chiesa and the Raganello River below (Photo F. Ippolito 2013).

Assessment of *soil productivity* in the catchments of the sites discussed in this thesis is likewise not a straightforward task. What does soil productivity related to a site mean? If we state that this relationship concerns sites that are located on fertile and workable soils, like present at Terra Masseta or the sites at Damale, we must conclude that most of the sites are not related to productive soils. This would hold not only for cave sites but also for sites set on rocks, like Trizzone della Scala. However, when looking at the wider setting, using catchment analysis, it may be possible to identify patches of productive soils, as is indeed the case with Trizzone: while the area where the pottery was found is itself located on a rocky spur, there is ample fertile soil west of it. In fact, it is not unusual that dwellings were set on rock formations with the arable fields in their immediate surroundings. This is a pattern that is still visible in the recent history of Southern Italy.³⁶ With the caves, the situation may be similar and the inhabitants would have sought out fertile pockets of soil within easy walking distance of their dwellings. It follows that the factor of soil productivity needs sophisticated analysis and is highly dependent on scale. With respect to scale, the availability of larger contiguous areas of productive soils suited for agriculture may have been a decisive factor in the migration of sites at the end of the RBA from the hinterland towards the foothills.

A discussion of the availability of *raw materials* is problematic since we know almost nothing on this topic for the hinterland of the Sibaritide. For instance, clay sources used in pottery production have

³⁶ See the concept of “Agro-towns” in Block 1969.

not yet been mapped for the RAP area. Only two geological samples have been obtained to analyze the origin of the clay used to make certain pottery-wares. One was taken within the framework of a project carried out by Levi *et al.* in the Sibaritide. This study however included only one sample at the edge of the RAP area (sample RAG in Fig. 23, Levi *et al.* 1999, p. 59), in sandy deposits. Indeed, looking at the lithological map of the Sibaritide in Fig. 22 in the same volume, there would be no clear clay outcrops in the RAP area. As pointed out in this book, the geology of the Sibaritide is very complex, as the uplift and consequent erosion of the mountain ranges triggered a sedimentary process that led to the formation of thick alluvial layers sometimes associated with marine deposits. The rocks resulting from this process are therefore a heterogeneous mixture of fragments of preexisting rocks that may also totally mask every indication about areas of their origin. However, for each geological formation Levi was able to identify one or more distinctive petrographic features in order to relate minerals found in the pottery to particular sedimentary deposits related to bedrock formations.³⁷ In order to avoid too general reconstructions about the origin of raw materials for pottery production in the RAP area, a geological sampling (and petrographic analysis) in the surroundings of the RAP sites should therefore be made. Levi and her colleagues, however, also did archaeometric analysis on pottery fragments from Timpone della Motta and Timpa del Castello.³⁸ They concluded that the impasto from Timpone della Motta is mostly consistent with the lithology characterizing the area, although one fragment from their sample is not made of local components, while the impasto of two fragments from Timpone della Motta and one from Timpa del Castello would have come from the Southern Sibaritide. A second sampling was made by Andaloro *et al.*,³⁹ who also did archaeometric analysis on sherds from Timpone della Motta. They sampled 20 sherds belonging to three ceramic classes dating between the 8th and 7th century BC (matt painted pottery, Oinotrian-Euboean pottery and Colonial ware) and 15 samples of clay sediments for comparison. The clay samples were taken near Laupoli, about 3 km from Timpone della Motta. A further 35 impasto sherds were sampled and published in 2013.⁴⁰ These samples revealed that 34 sherds are made of local clay components and that only one sherd is made of clay from outside of the Sibaritide. Therefore, the results of the analysis revealed that the raw materials used for making the sherds were mostly local.⁴¹ We could assume similar frameworks for the other sites of the RAP area, but we do not yet have data to generalize.

Mineral mines, quarries, salt production, and production facilities such as kilns, are all still archaeologically hidden. One particularly important and necessary daily commodity is indeed salt. This might have been obtained from the area of Altomonte,⁴² or from Lungro, a town at 650 m asl and at circa 30 km to the southwest of the RAP area. Here a salt mine was active until the last century.⁴³ Cerchiara itself had a salt mine in use in the XIV c. AD.⁴⁴ However, sediments with salt are attested in other areas in Northern Calabria.⁴⁵ So far, and considering the particular geological

³⁷ Levi *et al.* 1999, p. 58.

³⁸ Levi *et al.* 1999, p. 68.

³⁹ Andaloro *et al.* 2011.

⁴⁰ Andaloro, De Francesco 2013, pp. 291-319. The clay samples were taken at Pietra Catania, near Timpone della Motta (Andaloro, De Francesco 2013, Fig. 76).

⁴¹ Colelli 2013, pp. 333-341.

⁴² Valente 1968, p. 21.

⁴³ Tegani 1927.

⁴⁴ Quadro storico-ambientale della provincia di Cosenza in età feudale, web.provincia.cs.it, p. 31.

⁴⁵ Pleistocenic clay-silty sediments of lacustrine and fluvial-lacustrine origin, mainly consisting of clay, silt and sandy clay, with levels of white-yellowish clay marls and lignite, are more consistent in the Mercure basin, along the borderline between Calabria and Lucania and less attested at Campotenese, Morano Calabro and Castrovillari. Evaporite sediments of the upper Miocene were assimilated to this complex. These sediments emerge only on the Ionian coast of Calabria and more extensively in the areas of Rossano and Crotona. Studies in the area of Crotona, reveal that weld-rocks mark salt withdrawal by local overloading and that "data from salt mining areas show that halite is interposed between organic-rich laminates similar to the Tripoli Fm (Lower

history of the Sybaris plain, there is no archaeological evidence for coastal salt production by evaporation of salt water.⁴⁶

One of the raw materials that ecological and palaeobotanical studies (and eventually ancient maps) could reveal is wood. In 2001 and 2003, two pollen corings were made by GIA researchers at Lago Forano in the Sparviere uplands near Alessandria del Carretto.⁴⁷ The results from the first coring show that the most suitable conditions for arboreal species were around 7600-7900 cal BC, after which arboreal cover diminished until 3400-3500 cal BC, most likely not because of climatic reasons, but because of human activity. A second coring was made by GIA researchers at Fontana Manca (Alessandria del Carretto) in 2004.⁴⁸ It revealed a diminishing of arboreal species, indicating an intensified human impact on the landscape from the beginning to the end of the Bronze Age. Interestingly, the pollen record from Fontana Manca revealed open water conditions during a short period in the Late Eneolithic, during the transitional environmental phase discussed in section 1.4. The researchers think that wood felling for agriculture and grazing are responsible for the decrease in arboreal species. In any case, the effects of human activity on the environment played a decisive role in the evolution of the vegetation cover of the area during the Bronze Age. However, it is still difficult to establish changes through time in a more detailed way, starting from the present-day landscape, based solely on these two cores. A complicating factor is that there are very few places in the RAP area where corings for pollen analysis are possible.⁴⁹ To further the study of human impact on the landscape, pollen analysis may be combined with the evaluation of vegetation patterns preserved in the current landscape.⁵⁰ In tandem this could lead to a hypothetical reconstruction of the past vegetation that, however, would not cover the entire area. Current vegetation areas, which have not been completely affected by human activity, could be compared to archaeobotanical data from archaeological excavations, in order to obtain data about the natural vegetation and climatic conditions. With regard to this, it would be useful to compare species typical of a specific climatic area with species found in archaeological contexts to establish which species could have characterized the past landscape. At the moment it is possible to say which species of tree were present or used at Broglio di Trebisacce⁵¹ and Torre Mordillo.⁵² Similar data should be obtained for other sites as well, in order to provide a statistically significant data set that would allow a more precise reconstruction of the vegetation in the Bronze Age.

5.8 Type and function of sites

In order to increase our understanding of the natural and human factors that led to the choice of particular site locations, we may look into the type and function of sites as can be derived from specific settlement features and the position of a site within the wider settlement organization. In order to do so, defensive structures and disposition of sites, as well as evidence for domestic, cultic and funerary activities will be considered. Table 95 gives an overview of the possible functions the sites discussed in this thesis may have had and linked to this the possibility to identify the type of settlement we may deal with. The interpretations in table 95 are based on the distribution, quantity,

Messinian) below and uppermost Messinian gypsarenites, arenites and pelites above. Based on the lower Sr isotopic ratio of these fine-grained gypsarenite (...), the unit capping the salt is derived from dismantlement of the primary evaporates of the younger Upper Evaporites (...), now outcropping south of the study area. In this case the study area is the northwestern part of the Crotona Basin (Costa et al. 2010).

⁴⁶ See for instance, Harding 2013, pp. 27-34.

⁴⁷ Kleine et al. 2005, Kleine et al. 2003.

⁴⁸ Woldring et al. 2006. The pollen cores are now under revision, especially the C14 dates (information by P. Attema).

⁴⁹ For pollen locations see Feiken 2014, pp. 125-128.

⁵⁰ See Veenman 2002, pp. 104-109.

⁵¹ D'Angelo, Oràzie Vallino 1994, pp. 789-791.

⁵² Coubray 2001, pp. 419-431.

typology and chronology of the pottery studied. Most of the finds from the RAP sites show characteristics that would indicate daily use (eating, drinking, cooking, storing). The combination of pottery assemblages, presence of human bones and metal finds led to the classification of sites as funerary sites (section 3.2-4). No open air sites within my dataset could be assigned this function.⁵³ As to type of settlement, the evidence of the site of Timpone della Motta, notably its articulation in several plateaus with Bronze Age settlement traces, would classify it as a village. The same may hold for the evidence found at Terra Masseta-Balze di Cristo, and other settlement areas with similar features, although in these cases we probably rather deal with smaller agglomerations of dwellings forming hamlets. Timpone delle Fave has in Tab. 95, just as Timpone della Motta, been defined as a village, because of its evidence for specific pottery production (corded pithos) and its distinct territorial disposition. Both sites may well have been characterized by a more complex economic and social organization than the other sites listed in the table.

Site	Daily activity	Defence structure/position	Cult-funerary activity	Type
G. S. Angelo II	?		x	Tombs.+Shelter-dwelling?
Pietra S. Angelo	x		?	Hamlet
G. Camastra	x			Shelter
G. di Damale	?		x	Tomb
Grotta del Caprio	?		?	Shelter-dwelling?
G. S. Angelo IV	?		x	Tombs.+Shelter-dwelling?
Timpa Castello	x	x	?	Hamlet
Trizzone Scala	x	x		Hamlet
La Maddalena	x			Hamlet
Terra Masseta I	x		?	Hamlet
Timpone della Motta	x	x		Village
G. Pietra S.A. IV			x	Tomb
Pietra Sentinella	x	x		Hamlet
Balze Cristo	x		?	Hamlet
Madre Chiesa	x	x		Hamlet
G. Banco Ferro	?			Shelter
Cudicino	?		?	?
G. Ngerije Sup.	x			Shelter
Timpone delle Fave	x			Village
Banco Prete	x			Hamlet
Timpa Demanio	x	x		Hamlet

Tab. 95. Function and type of settlement.

Here we need to go a bit deeper into the characteristics of the site of Timpone della Motta as it is the only excavated site in the study area. As proposed in section 2.2.5,⁵⁴ the entire hill of Timpone della Motta was settled from the MBA until the end of the Archaic period and classifies as a multi-phase site that existed over an exceptionally long period. The archaeological evidence points to an early defensive structure that would classify the site as an important node on the Raganello River from the later Bronze Age onwards. In 1994, during the construction of the *antiquarium* on plateau I, Delvigne and Attema noted in a section along the servicing road leading up to the hill of Timpone della Motta,

⁵³ In 2013, during test pitting of anomalies visible in geophysical investigations at the site of Monte San Nicola (van Leusen 2012, pp. 2-3), I noted pottery fragments belonging to shallow bowls with inward rims decorated by oblique grooves. These resemble a type of EIA bowls used as lids to cover cinerary urns. To me this was a clear indication for the presence of a necropolis. In this regard, it has to be considered that two tombs characterized by cremation were found in the necropolis of Amendolara, dated to the FBA (Peroni 1994, p. 860). Moreover, from Monte San Nicola, I saw fragments of pottery from survey similar to late BA Apulian pottery found, for instance, at the necropolis of Canosa-Pozzillo, also a necropolis characterized by cremation (see Lo Porto 2004). Therefore, I suppose that a LBA-EIA necropolis is located at San Nicola. However, this site is not included in my thesis and further information will be published elsewhere.

⁵⁴ This volume, p. 86.

a gully filled with a clayey-silty layer light brown-yellowish in color (layer 3, see also Fig. 22, section 2.2.3), large limestone boulders and fragments of impasto pottery (see fig. 90, roadside exposure). The gully was visible in the section at a depth of 5 m below the rim of plateau I (Fig. 89c). In the area of Trench VII on the plateau itself, they likewise intercepted a clayey-silty layer containing ceramic fragments and large limestone boulders covering a deep gully (Fig. 89b). The ceramic fragments and large limestone boulders appeared to date to the Recent Bronze Age (phase 1) and the EIA (phase 1A).

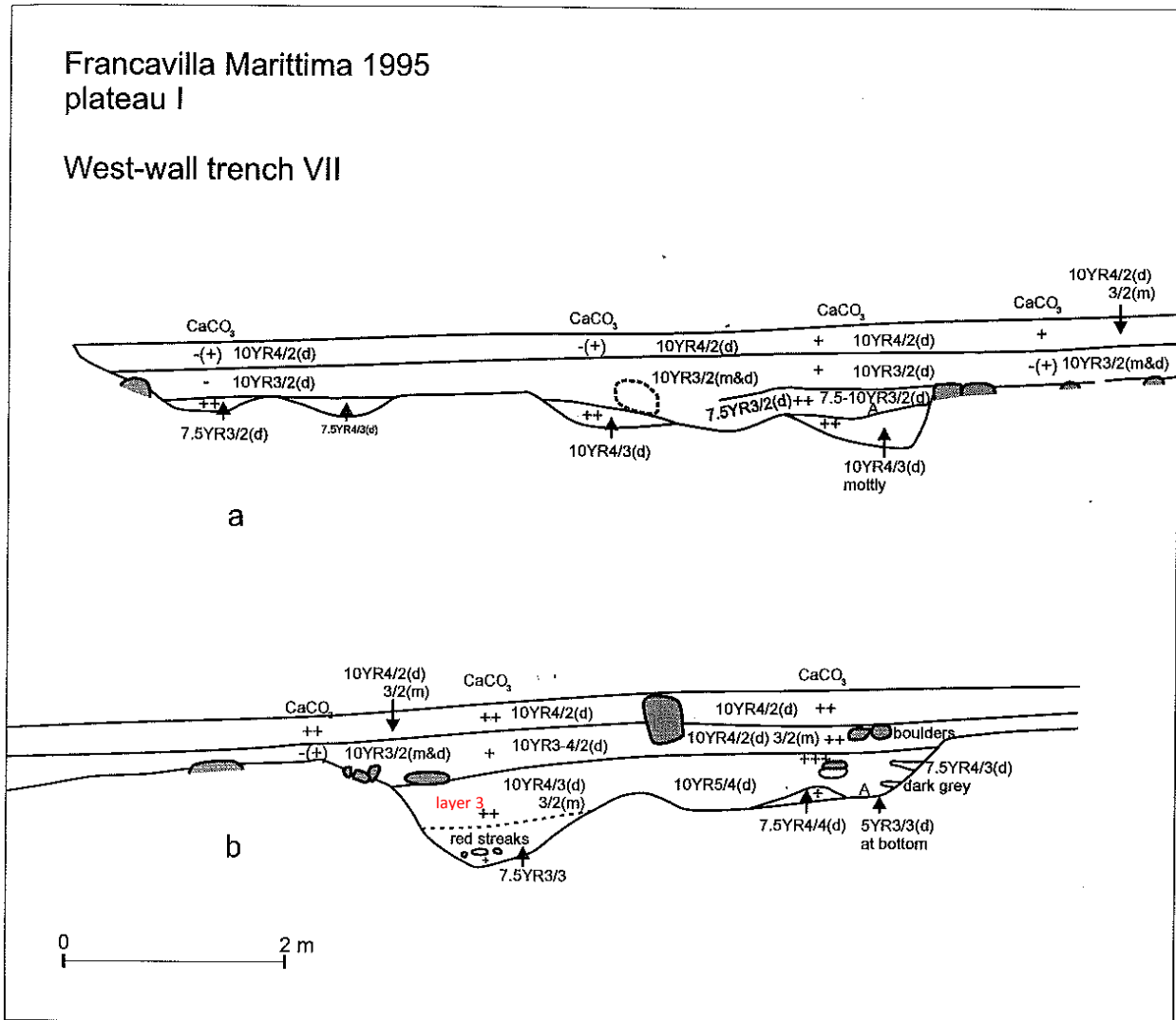


Fig. 89b. Profile Trench VII after Attema *et al.* 2000, Fig. 24.

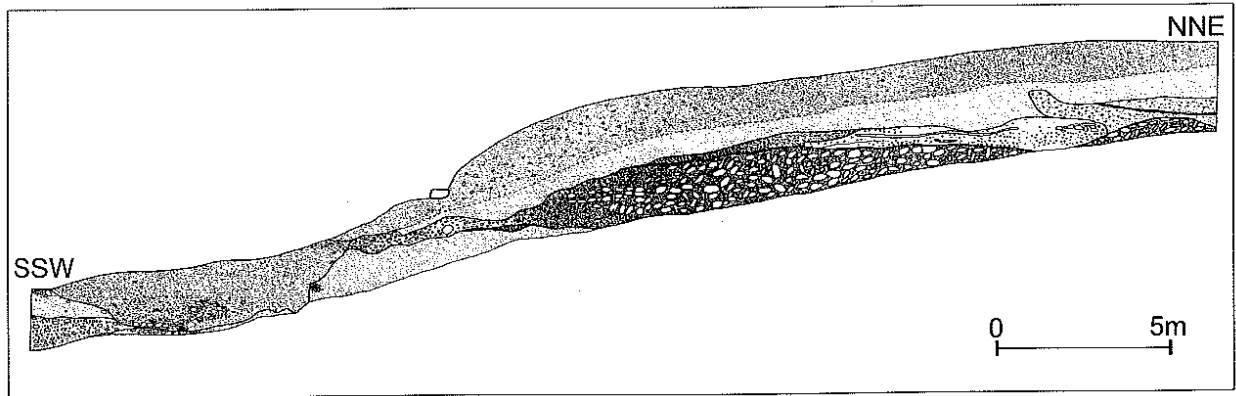


Fig. 89c. Roadside section showing a gully filled with a pale brown silty deposit containing settlement debris of Plateau I, after Attema *et al.* 2000, Fig. 3.

My revision of the documentation of the excavation (section 2.2.3) revealed that all sections except those of Trench IV placed westward, show this clayey-silty layer (light brown-yellowish in color) with high ash content, often containing fragments of impasto (from the MBA to the EIA) and bones, as for instance in Trench I, where in a deep depression, in PIT IC, LBA pottery was found. The gully can be reconstructed to have cut the southeastern protruding cliff characterizing plateau I. This would have resulted in a nearly oval area that was detached from the plateau forming an on all sides delimited and protected area overlooking the Raganello River and the road running below it (Fig. 90).

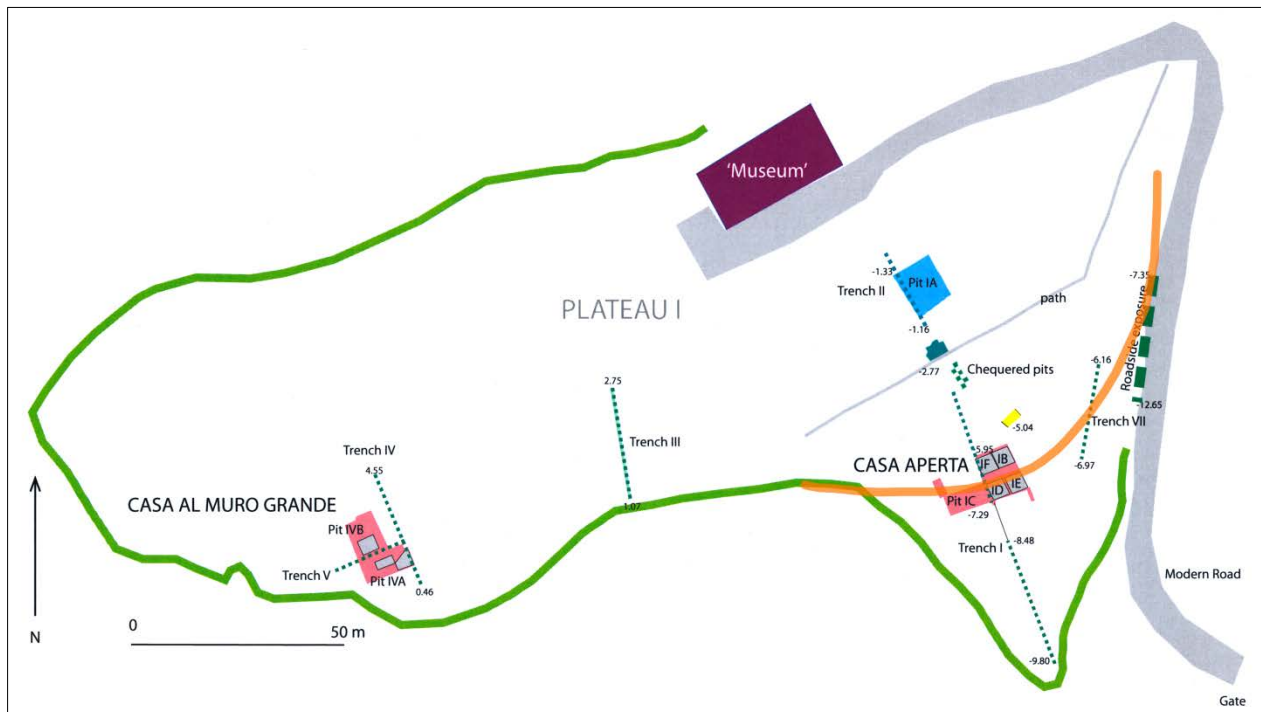


Fig. 90. Timpone della Motta, traces of a boundary of the Southeastern edge of Plateau I (hypothetical reconstruction of the fence or/and defence feature in orange; original figure after Kleibrink 2006, Fig. 9).

Remains of a house (the Casa Aperta) and abandonment layers above it were found north of the gully. The ceramic fragments found in the destruction layers below the house date back to the end of the Final Bronze Age. Along the slope, a thin layer of yellowish clay, placed above a layer of small stones resting on the sterile ground, can be interpreted as the upstream side of a ditch, or as a stabilization of the slope in some way linked to the defensive/boundary structure.

Traces of a boundary at the southeastern edge of Plateau I at Timpone della Motta, described above, do not preclude, as a hypothesis, a similar management of the lower terraces constituting the hill, and suggests that the entire hill, from the Acropolis to Area Rovitti on the south slope and Carnevale on the north slope, had management works in place to supply the necessary settlement space for settlers from the Bronze Age to the EIA. The management of a plateau set at medium altitude, surrounded on three sides by rivers with plenty of fertile soil available, resembles situations in Etruria in the MBA - RBA.⁵⁵

Further study may better define the morphology and function of the feature identified at Timpone della Motta, that as to its location and composition shows resemblance to other fortification structures found at settlements in the Sibaritide. Artificial terraces from the Middle Bronze Age to the Late Bronze were identified at Broglio, together with traces related to two defensive fences (one dated to the MBA, the other to the RBA) along the edge of the terrace. At Torre Mordillo, a defensive fortification, dated to the late RBA was constructed by leveling the underlying layers, and was dated to the beginning of the Recent Bronze Age. The destruction of the structure took place between the Recent Bronze and the beginning of the Final Bronze Age. The archaeological record indicates that this phase corresponds to quite sudden settlement instability.⁵⁶

Other defense structures were not detected in the RAP area, but several sites are located in a defense position with control function. The MBA site of Trizzone della Scala can be classified as a highland site with function of territorial control, as it is set on a rocky spur between the Raganello and the approaches of Sinni valleys (section 2.1.4). Pietra della Sentinella (section 2.3.1) is located on a rocky hill and is also a MBA site. In the area of Demanio there are small LBA sites on a rock ridge dominating the Raganello (section 2.3.3). The long duration sites of Timpa del Castello (section 2.2.2) and Madre Chiesa (section 2.3.4) are also set in a dominating position.

5.9 Socio-economic conditions and reflections on social structure

All of the sites recorded in the territory of S. Lorenzo, which is the most internal area investigated by the RAP, show a same diachronic development. Mandroni di Maddalena, Trizzone della Scala, Timpa Sant'Angelo and its caves were frequented during the later phases of the MBA, to a lesser extent in the RBA and did not last after the RBA. Although the sites in the territory of S. Lorenzo are relatively far from the foothills overlooking the plain of Sybaris, interactions of sites in the Raganello valley, as noted in sections 5.1-2, took place within a spatially continuous network of sites that included the foothills. Indeed the pottery found at Mandroni di Maddalena is very similar to the MBA-RBA pottery found at Timpa del Castello and partially also to that collected at Terra Masseta, two sites overlooking the Sybaris plain. At a certain point in the RBA, this spatially continuous system ceased to function and the inland sites were abandoned. Sites like Timpa del Castello at Francavilla Marittima, and Terra Masseta near Cerchiara in the foothills, in contrast, were frequented during the whole Bronze Age until the beginning of the Iron Age. This has certainly to do with their specific locations in the landscape dominating large tracts of potential agricultural land. Sites in the foothills or near to them indeed continued to be settled until the beginning of the Iron Age. Therefore, the hinterland area coinciding with the territories of San Lorenzo Bellizzi seems not to have been

⁵⁵ Bietti Sestieri 2010, pp. 133-135, Di Gennaro 1986.

⁵⁶ Arancio *et. al* 1995, p. 230. See also Attema, Ippolito, forthcoming.

involved in those Late Bronze Age socio-economic developments that characterized the foothills of the Sibaritide, a zone that was easier to access, easier to cultivate, and easier to be controlled.

The results of the RAP (see section 2.1.7) would indicate that these settlement changes in the RBA probably do not coincide with environmental changes, but rather with geo-political changes. At macro-level, it has recently been pointed out by Emma Blake, in line with Peroni and Pacciarelli,⁵⁷ that huge changes took place in the structure of Italian settlement organization between the RBA and the FBA. These changes are apparent from the preference for defensible sites during this period, and the selection of larger sites. Blake observes moreover that “the FBA sees a rise in the numbers of autonomous subgroups or networks”. This may mean that these smaller networks formed for the first time, or it may mean that in the FBA there was greater access to the kinds of objects that reveal these circulatory pathways.”⁵⁸ At Rovitti (on the lower slopes of the Timpone della Motta), a Mycenaean or Italian-Mycenaean sherd dated to this period has recently been found in a disturbed layer containing RBA-FBA pottery (this thesis, section 2.2.5). Clear Mycenaean evidence has also been found at the excavated north Calabrian sites of Broglio di Trebisacce and Torre Mordillo. In the FBA it seems, therefore, that also in our study area a new type of economic organization developed, as a large cluster of small rural sites of Damale, located in a position overlooking the Sibari Plain between Cerchiara and Francavilla, demonstrate.⁵⁹ Indeed, the presence of *dolii cordonati* found there as well as at the hilltop site of Timpone delle Fave, attests to Aegean cultural influences during the LBA in the foothill zone (see sections 3.1, 4.10).

The quantitative decrease in archaeological material after the MBA in the inland parts of the Raganello basin could be due to socio-economic changes related to the consolidation of relations with the Aegean area. This is attested by the presence of Mycenaean pottery both in Torre Mordillo and in Broglio that for the greater part dates from the Recent Bronze Age.⁶⁰ Indeed, while Aegean material culture occurs in the foothill area next to the plain, Mycenaean or Mycenaean-type pottery fragments have not yet been discovered in the mountainous inland area examined by the RAP. When discussing the RBA network in Southern Italy, in its quality of a network traditionally composed of coastal sites connected through the common presence of Aegean pottery,⁶¹ Blake excludes that Aegean groups would have disrupted local dynamics in Southern Italy.⁶² Interestingly, Blake argues that the lack of penetration of goods from the coast to internal areas suggests an absence of interaction that would be a precondition for settlement hierarchies and territorial control in the RBA.⁶³ This lack of territorial interaction could have prevented the formation of territorial units⁶⁴ that in other Italian regions led to the beginning of urbanization processes.⁶⁵ In this sense and with respect to the RAP area, the presence of foreign inputs has not been viewed as a factor of political and territorial crumbling. Instead, compared to the MBA, this area in the Final Bronze Age seems to be characterized by an internally driven political and economic organization, now gravitating upon the foothills in which communication routes and cultivable land played a central role.

According to Peroni, already in the course of the MBA the socio-economic organization was managed by élite groups, then perhaps at an early stage of their formation.⁶⁶ Since there are no burial

⁵⁷ Blake 2014, pp. 107-111, Pacciarelli 2010, Peroni 1994, pp. 861-863, pp. 865-868.

⁵⁸ Blake 2014, p. 107.

⁵⁹ Attema 2012, pp. 193-198.

⁶⁰ Vagnetti *et al.* 2009, pp. 171-183 and relative references; Bettelli *et al.* 2010, pp. 109-118.

⁶¹ Blake 2014, p. 221.

⁶² Blake 2014, p. 138.

⁶³ Blake 2014, p. 221.

⁶⁴ Pacciarelli 2004, pp. 465-469.

⁶⁵ Bietti Sestieri 2010, pp. 251-257, di Gennaro 1982, Gnesotto 2006, Pacciarelli 2010.

⁶⁶ Peroni 1994, p. 838, p. 842.

data for the Bronze Age in the study area that could reveal the presence of élites, nor any other evidence suggesting a hierarchical settlement structure, we do not dispose of convincing evidence to prove that élite groups were present at the larger sites. However, the fact that some sites show topographical features that made them suitable for expansion and long term diachronic development of sizeable communities, does make it feasible that the communities inhabiting these sites were not based only on relations of parental type.

The RAP dataset analyzed in this research indicates that settlement organization in the MBA for the first time consists of a pattern made up of scattered sites within distinct territories (*Siedlungskammer*) that were culturally interlinked but politically independent from each other (see section 5.3). Settlement organization in such territories could be constituted by a combination of small sites grouped around a major long-term site, like Timpa S. Angelo at S. Lorenzo or Terra Masseta at Cerchiaro. Such sites were often located in strategic positions, such as Trizzone della Scala at S. Lorenzo, Pietra della Sentinella at Civita and Timpa del Castello. This is a type of settlement organization that resembles that of the upland plain of Poro⁶⁷ in South Calabria.

The fact that the larger sites were connected to smaller sites scattered in the arable plains and mountainous hinterland may admittedly be interpreted as a two-tiered hierarchical settlement pattern. Based on the available data, we would deal with a socio-cultural hierarchical rather than a political hierarchical system. Indeed, the MBA-RBA pottery from the RAP surveys relates mostly to small communities that were not very different from each other and that must have had economic, social and cultural bonds. The analysis of the pottery coming from the RAP surveys brings out that the internal sites are characterized in general by a chrono-typology that is entirely similar to the one found in the sites placed on the foothills near the plain. Therefore, it does not seem possible to classify sites exclusively on the basis of topographical features (see section 5.6).

However, from the end of the RBA, defence structures, Aegean goods and new production choices appear at major sites in the foothill zone. These features are by Peroni seen as proof of the growing power of single élite groups within their respective communities. These élite groups would have managed exchanges and redistribution among the surrounding communities.⁶⁸ In the FBA, due to demographic growth, settlements would have been controlled by multiple élite groups. Indeed, the development of metal production characterizing the FBA allows glimpsing a difference between the behaviour of RBA and FBA élite groups, as the development of primary and craft production in the FBA would indicate that élite groups started to control the economic activities also at a regional scale.⁶⁹ This means that alongside the redistribution mechanism that characterized the RBA, in the FBA economic exchange networks develop within communities and among communities on an equal footing.⁷⁰ In this framework, FBA élite groups were therefore distinct groups that managed economic activities in the interest of the communities. The RAP sites at Contrada Damale may indicate that storage in the FBA was no longer restricted to élite families living in major settlements, but was also practised by families living in the countryside, and that these families may have been controlled by élites families.⁷¹ The analysis of the RAP dataset confirms Peroni's idea that settlement organization as recorded for the MBA in the entire study area only fully developed in the Late Bronze Age in the foothill zone thanks to a relative political balance in place during the latter period. In this period FBA sites located on the crossroads of different ecosystems and those between the hinterland and the Sibari Plain took on a more geopolitical than defensive role in the territory. According to Pacciarelli, the failing of landed collective ownership, the increase of weapons in tombs and therefore the

⁶⁷ Pacciarelli 2010, p. 375.

⁶⁸ Peroni 1994, p. 852.

⁶⁹ Peroni 1994, pp. 853-859.

⁷⁰ Peroni 1994, pp. 865-866.

⁷¹ Attema *et al.* 2010, p. 94.

formation of warlike communities between the FBA and the EIA led to the formation of aristocratic societies.⁷² The necropolis of Macchiabate at Francavilla, in particular its sector called Timparella with the collective burial mounds, reveals the presence of several families belonging to the same wealthy social class.⁷³ The same social structure results from coeval necropolis in Etruria.⁷⁴ Accumulation of goods and private ownership led to the affirmation in the EIA of an aristocratic class. In the Sibaritide, however, this class did not have the power to unify large populations like it did on the vast settlement plateaus in South Etruria. The fact that true urbanization processes did not take place in the Sibaritide has been attributed to the small size of the EIA communities and to the lack of a centralized power.⁷⁵

So far, there are not enough data to give an answer to the question what the reason was for the difference between aristocracies in Etruria and in the Sibaritide from a political point of view. So traditionally the question is posed from an Iron Age and Greek perspective: why was the establishment of a Greek colony, in our case the colony of Sybaris, so easy in this area? The traditional “theory of destruction”⁷⁶ of the indigenous Iron Age settlements by the Greek colonizers is corroborated by the lack of settlement data and by the fact that the two excavated sites of Broglio and Torre Mordillo were abandoned at the beginning of the EIA.⁷⁷

What was the settlement situation at Timpone della Motta in the first decades around Greek colonization? In the so-called Area Rovitti (section 2.2.5), the system of terraces, possibly going back to the Bronze Age, contains, apart from levels of structures dated to the 8th and 7th centuries BC, also settlement traces on the lower terraces that date in the course of the 7th century BC. This shows that the concentration of archaeological evidence on the Acropolis was not an isolated phenomenon. Moreover, the most recent excavations of the Groningen Institute of Archaeology carried out by Jan Jacobsen at Area Rovitti revealed both imports and imitations of Euboean pottery, the latter manufactured at the site.⁷⁸ This shows how in the 8th c. BC connections with the Euboean world took shape and therefore that an Euboean phase preceded the foundation of Greek Sybaris by a half century. Furthermore, during the 7th century BC, the tombs at the Macchiabate necropolis, although they experienced a quantitative and qualitative decline, reveal the coexistence of Greek and indigenous influxes.⁷⁹ The presence of bichrome local Geometric pottery⁸⁰ at Amendolara and at the Building Vc⁸¹ at Timpone della Motta indicates moreover that the end of the production of local Geometric pottery took place after the foundation of Sybaris.⁸² All these arguments support the idea that the foundation of Sybaris implied change in the local setting but that these changes encompassed a transitional phase of interaction and gradual cultural exchanges.

The fact that a notable development, in a religious and cultural sense, of the site of Timpone della Motta in the EIA2 could point at a coexistence of indigenous and Greek elements drawn together by shared religious choices. This would imply an equal relationship between the two groups from a religious point of view rather than from a social and economic point of view.⁸³ If so, we would ignore both the role of religion in other aspects of social life and religion as reference system of social and

⁷² Pacciarelli 2010, p. 382, 403.

⁷³ Pacciarelli 2004, p. 461.

⁷⁴ Peroni 1994, p. 871.

⁷⁵ Pacciarelli 2010, p. 399.

⁷⁶ I took the liberty to borrow the words of Attema *et al.* 2010, p. 104.

⁷⁷ Vanzetti 2008, pp. 179-202.

⁷⁸ Jacobsen 2013 and related literature.

⁷⁹ Jacobsen 2007, pp. 113-125.

⁸⁰ Fasanella Masci forthcoming.

⁸¹ Kleibrink 2016.

⁸² Local matt-painted pottery production stops at the beginning of the 7th c. BC (Jacobsen, Handberg 2010, p. 26).

⁸³ Quondam 2008, p. 163.

political values.⁸⁴ Moreover, we would interpret traces of social activities related to indigenous communities as ritual traces related to the Greek world.⁸⁵

The 8th century tombs recently excavated at Macchiabate in the “Area Strada” could indicate a causal relationship between the abandonment of an indigenous necropolis and the foundation of Sybaris,⁸⁶ but this is a sample and we will have to wait for data from further research, as the modalities of the abandonment are not yet clear and depend, however, on each single case. In the meantime, I suggest to consider, rather than thinking about the prevailing of one group over another, that the political weakness that would have facilitated the establishment of a Greek colony in the Iron Age in the Sibaritide may have been the result of a long and archaeologically complex process that, surprisingly, may have been based on egalitarian cultural relationships between indigenous population and the newcomers, mediated by the physical characteristics of the territory and previous settlement choices. Indeed, the indigenous choices could have implied changes to pre-existing political structures, but also the maintenance of successful socio-political achievements. The persistence of small to medium sized settlements in the LBA that did not evolve towards urban forms, and the continued occupation of sites during the whole Bronze Age, indicate that the inhabitants of this area wanted to keep up existing political structures that were likely compatible with their economic needs and territorial setting. The fact that they could manage this settlement pattern is also revealed by the choices they made at the beginning of the LBA, when they abandoned some of the hinterland areas and founded new sites with specific functions in areas economically well supplied (Fig. 86).

To fully understand the effects of the foundation of Sybaris on the long-term site development of a site like Timpone della Motta we would have to reassess the EIA funerary evidence⁸⁷ together with the domestic pottery, both impasto and fine productions.⁸⁸ The data from Timpone delle Fave suggests that already at the end of the FBA, therefore even quite before the foundation of Sybaris, a large settlement was abandoned. Between FBA and EIA, other sites in the Sibaritide were abandoned. This is also the case with Broglio and Torre Mordillo. Therefore before understanding what happened when Sybaris was founded, we should understand the settlement situation in the transitional period between the FBA and the EIA. Further research of the FBA-EIA sites in Fig. 86, from Contrada Damale to Timpone delle Fave, would surely provide the necessary information.

Concluding remarks

Ceramic finds from the sites in the Raganello basin discussed in this thesis are mostly characterized by local handmade pottery. Their similarity in shapes and wares indicate that we deal with an internally culturally interconnected area, even if, just on basis of the pottery, we are not able to conceptualize the socio-economic nature of the network.⁸⁹ However, the very quick overview of

⁸⁴ « In other words, there was no sphere of life without a religious aspect. “Church” and “state” were not yet separated, as is the rule in the modern world (...). Consequently, there is no Greek term for “religion,” which as a concept is the product of eighteenth-century Europe. This absence also meant that there was no strong distinction between sacred and profane, as became conceptualized only in Western Europe around 1900. The Greeks did not even have a term for “profane”, although they had a relatively large vocabulary for “holy”. » (Bremmer 2005, p. 3677).

⁸⁵ Osanna 2014, pp. 238-239.

⁸⁶ Guggisberg *et al.* 2013, p. 12.

⁸⁷ See for instance Guggisberg *et al.* 2013 and, for a synthesis, Colelli 2015b and related bibliography.

⁸⁸ I would like to add a quote about local pottery by P. Zancani Montuoro: “Inutile insistere sul valore convenzionale di questa definizione (referred to *materiale indigeno*): solo quando si potrà pubblicare il materiale, sarà lecito discutere le sue analogie con i prodotti di altre culture già note e quindi la provenienza e i rapporti della gente, che nell’età del ferro occupò questa regione”. Zancani Montuoro 1966, footnote 8, p. 11.

⁸⁹ Knappet 2011, pp. 61-97.

parallels in section 4.11 illustrates how even a small region, or, in the words of Horden and Purcell,⁹⁰ a micro-ecology, may be part of a wide-ranging network in which people, technological concepts, and objects travelled from place to place and how this connectivity changed considerably over time (Tab. 88). Indeed, the study of the pottery presented here enables the emergence of a more complex protohistoric network pattern that integrates existing exchange networks based on specific artefacts or exotica (see Introduction, section 4.10-11 and 4. Conclusions). The local handmade pottery studied here is able to show that this class of pottery can provide the diachronic and synchronic observations that we could not make when just considering specific classes of materials actually complementary to local productions.

Focusing on the study area, prior to this study, the diachronic settlement development in the Northern Sibaritide included two main gaps: a first gap from the Middle Eneolithic to the beginning of the MBA, and a second chrono-typological gap regarding the end of the Final Bronze Age.

Regarding the first gap, material evidence for the Middle and Late Eneolithic, a transitional phase Eneolithic-Early Bronze Age and MBA1 is recorded for the first time. The materials dated to those periods come from cave sites. These discoveries can be seen as an interesting spin-off of this PhD research, since they helped establish, for instance, the relationships between the cave contexts and the function of the ceramics found in there. Also, it may help to solve the question whether these ceramics, among which the RTV pottery found in the Sant'Angelo IV cave, were made locally, and if the fact that parallels with the Adriatic coasts can be established for Early Bronze Age materials found in the caves indicate specific cultural networks. In order to answer these and other questions, petrographic and chemical analysis could help. Moreover, the surroundings of the Sant'Angelo cave complex should be surveyed to contextualize the cave sites in their archaeologically still unknown territory.

The second chrono-typological gap, regarding the end of the FBA, was confronted by studying the material record of Timpone della Motta at Francavilla (section 2.2.3). Extensive study of the pottery revealed that many materials generally dated between the FBA and the EIA based on parallels required further analysis in order to obtain more precise dates. As already mentioned, for the end of the FBA, the FBA3, very few stratigraphic contexts that can provide parallels are known. In order to gain more data about the transitional period FBA-EIA, RAP sites dating to this period should be further investigated. Among these sites, the site of Timpone delle Fave (section 3.1.1) that has not yet been systematically investigated should be taken into account. The artefacts from this site include many hut daub fragments that indicate the presence of a settlement established in the Late Bronze Age and abandoned, for reasons currently unknown, in the transitional period FBA-EIA.

In the introductory paragraph to Chapter 5, I stated that a landscape is constituted by multiple factors. Consequently, research that aims to reconstruct a landscape must be interdisciplinary and characterized by a wide range of environmental and cultural/anthropogenic data. The data on which this research is based belongs foremost to the latter group, since it is the pottery found in the RAP sites that underpins this work. In order to contextualize the pottery, I carried out a preliminary reconstruction of the territorial context. In this reconstruction, possible avenues of research were discussed that under ideal circumstances would lead to a full landscape archaeological approach. As seen, many of these avenues of research are not yet possible to investigate due to a lack of data. It shows how a holistic landscape archeology requires integrated approaches, long-term projects and sufficient resources. Therefore, this study should be considered as a part of a wider research project into the Bronze Age settlement dynamics of the Sibaritide and its hinterland, as formulated in the Raganello Archaeological Project of the Groningen Institute of Archaeology. In such a research, besides the research avenues outlined in section 5.4, also the diachronic

⁹⁰ Horden, Purcell 2000.

reconstruction of the settlement dynamics in this area as part of long-term history should be taken into account. With this in mind, the main question is how to avoid isolating the Bronze Age landscape from the long-term history of the territory studied in the Raganello Archaeological Project. Filling the gaps in the *longue durée* of the settlement history of the Raganello basin through further research would create a sequence of patterns based on which the current landscape would be perceived as the result of previous landscapes. That would lead to the construction of a collective memory that would surely provide cultural heritage management tools, hopefully leading to investments for the benefit of the territory and its inhabitants. According to the mayor of San Lorenzo Bellizzi,⁹¹ the historical archive of the town of San Lorenzo was destroyed during a fire and for this reason, the precise date when San Lorenzo was founded is unknown and little is known about its history in general. While considerable historical information has been lost, archaeological information has been gained, and it is now possible to show through this study that the territory of San Lorenzo Bellizzi had numerous Middle Bronze Age settlements and was thriving during the Bronze Age. But more should be done. Indeed, a lack of historical and archaeological information may bring about a sense of detachment and indifference with the inhabitants that prohibits economic and cultural developments, prompting them to accept the *status quo* instead. This detachment is further deepened by the social attitude towards the past in regions renowned for archaeology, where inhabitants generally become overly accustomed to the historical relics that are consequently taken for granted.⁹² Thus, reflection on the relationship between socio-cultural circumstances and development of a lively territory, as promoted by the European Landscape Convention, should be fostered.⁹³ Realizing that historic processes are part of the landscape changes how people perceive and imagine their landscape and how perception changes with knowledge:

“A field is a field, for example, until it is pointed out that beneath it lie the remains of a medieval or Roman abandoned city, or a deserted village – then we can perceive it differently. [...] Managing changes in perception is largely a matter of communication, dialogue and sharing. Archaeologists contribute their own perspectives to this process, perspectives that illuminate the contribution of the deeply ancient as well as the very recent past, whether through visible or invisible remains. They can provide stories in the shape of human processes and actions – cultural explanations for a cultural phenomenon, ones that focus on society and human agency.”⁹⁴

The attempt to bridge the distance between the territory and its history, aiming to change the general perception of distance towards the (historical) landscape and to improve the “connectivity” between people and territory, should be included in a process, even if slow and gradual, of construction of a historical-political consciousness. Contributing to this end will give a real impact to our research.

⁹¹ Ing. A. Cersosimo.

⁹² “(...) these were remnants of an age so distant that there was little need to know about it.” Pamuk 2005, p. 55. See also the concept of “saturazione” in Morelli 2011, pp. 159-161.

⁹³ European Landscape Convention, Explanatory Report, I. 23. *Landscape must become a mainstream political concern, since it plays an important role in the well-being of Europeans who are no longer prepared to tolerate the alteration of their surroundings by technical and economic developments in which they have had no say. Landscape is the concern of all and lends itself to democratic treatment, particularly at local and regional level.* Florence, 20.X.2000.

⁹⁴ Fairclough 2008, pp. 157-158.

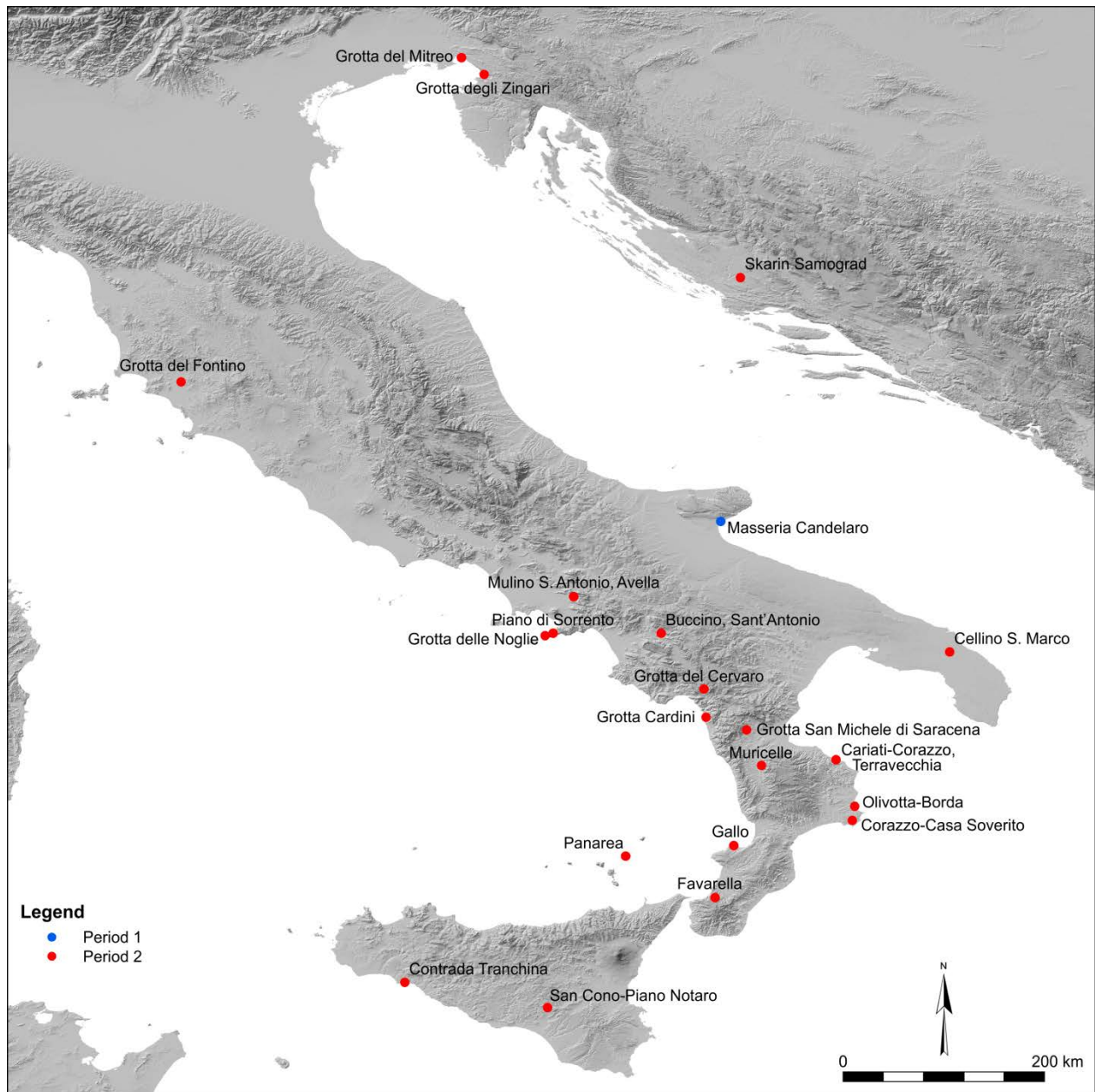


Fig. 91. Sites from the Neolithic and Eneolithic-beginning of the Early Bronze Age where parallels for impasto sherds from the RAP area were found (Neolithic site in blue, Eneolithic-Early Bronze Age sites in red).

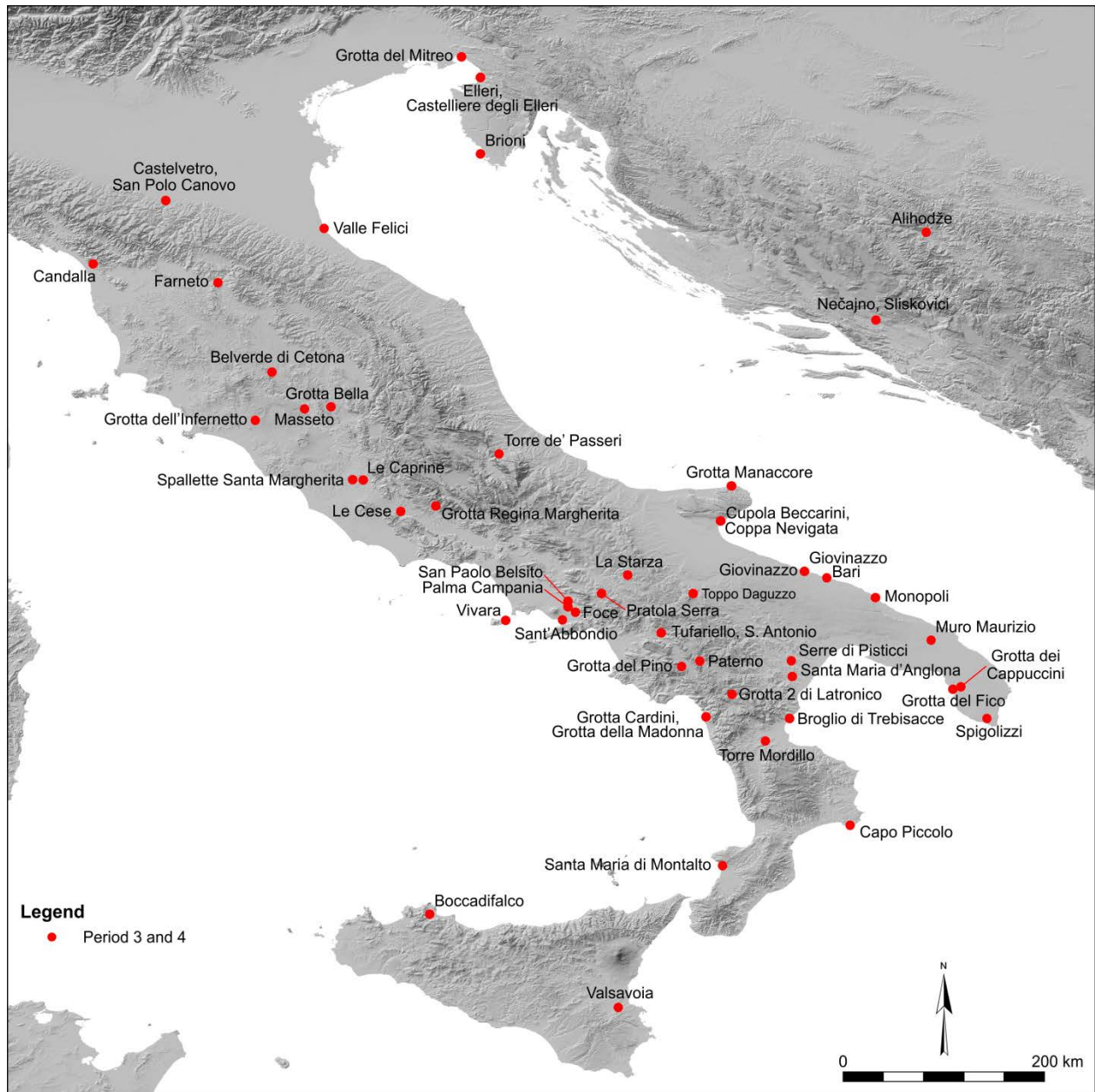


Fig. 92. Sites from the end of the EBA-Middle Bronze Age 2 where parallels for impasto sherds from the RAP area were found.

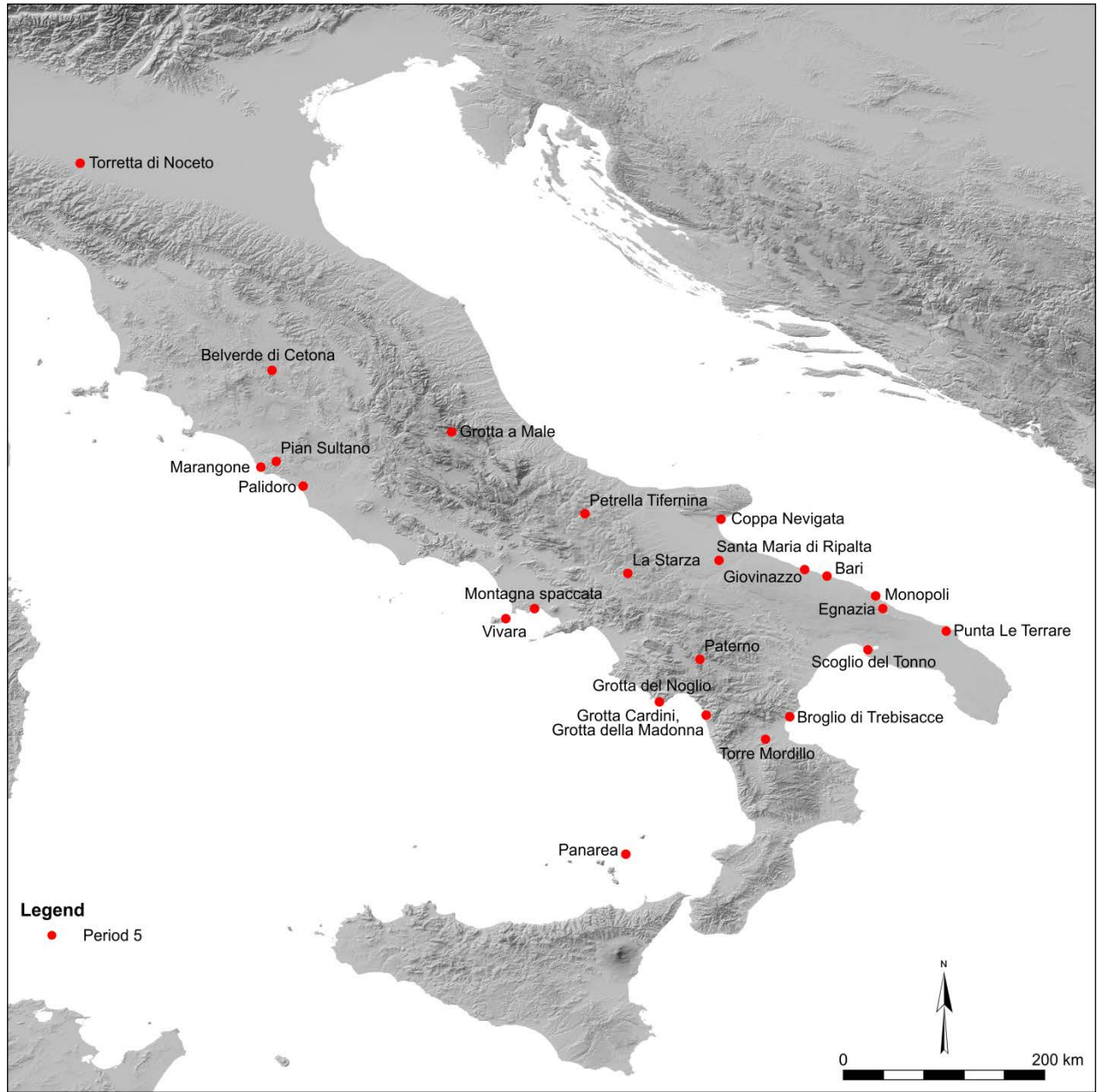


Fig. 93. Sites from the Middle Bronze Age 3-beginning of the RBA where parallels for impasto sherds from the RAP area were found.

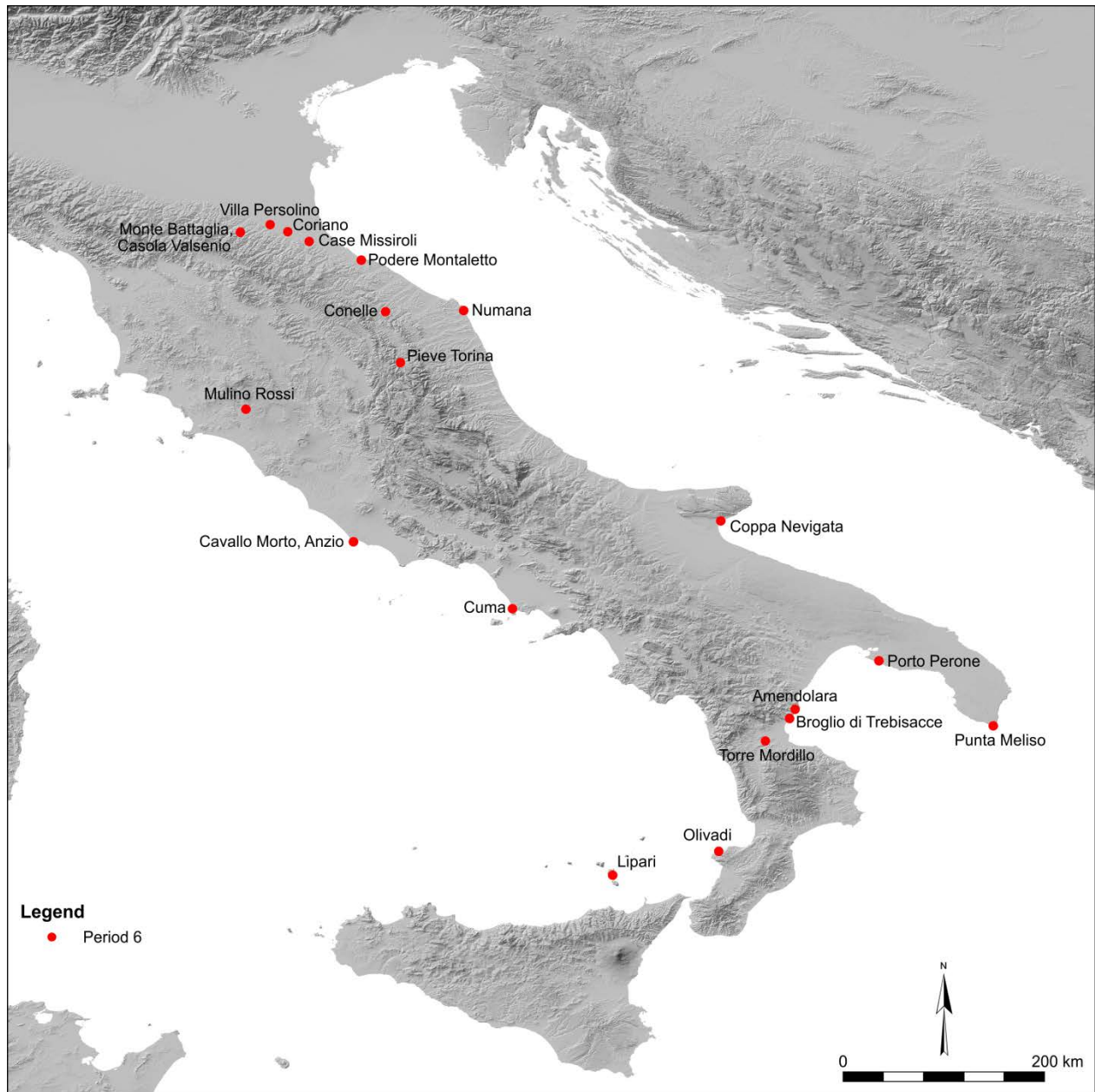


Fig. 94. Sites from the full RBA-RBA2 where parallels for impasto sherds from the RAP area were found.

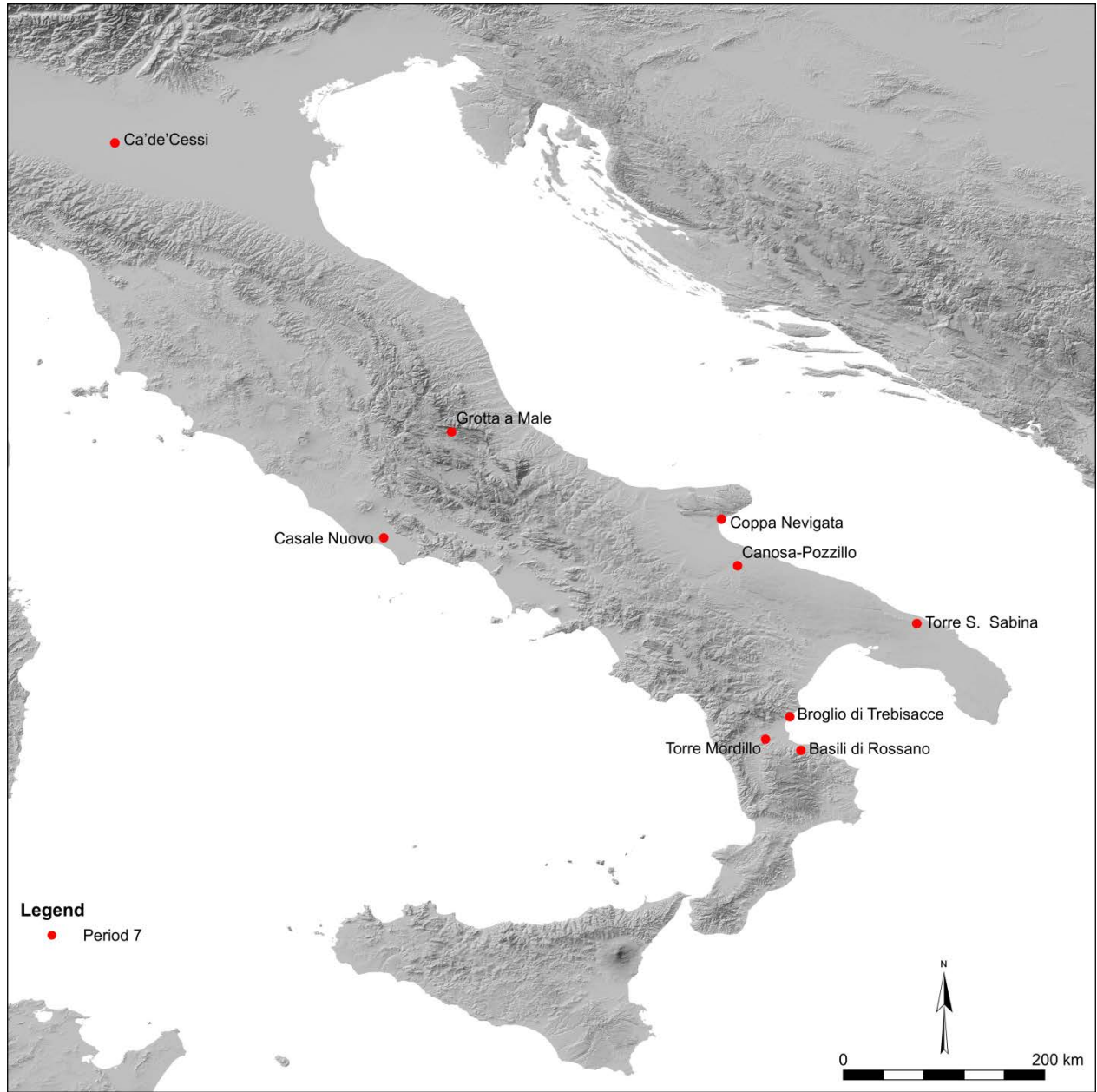


Fig. 94b. Sites from the end of the RBA-beginning of the FBA where parallels for impasto sherds from the RAP area were found.

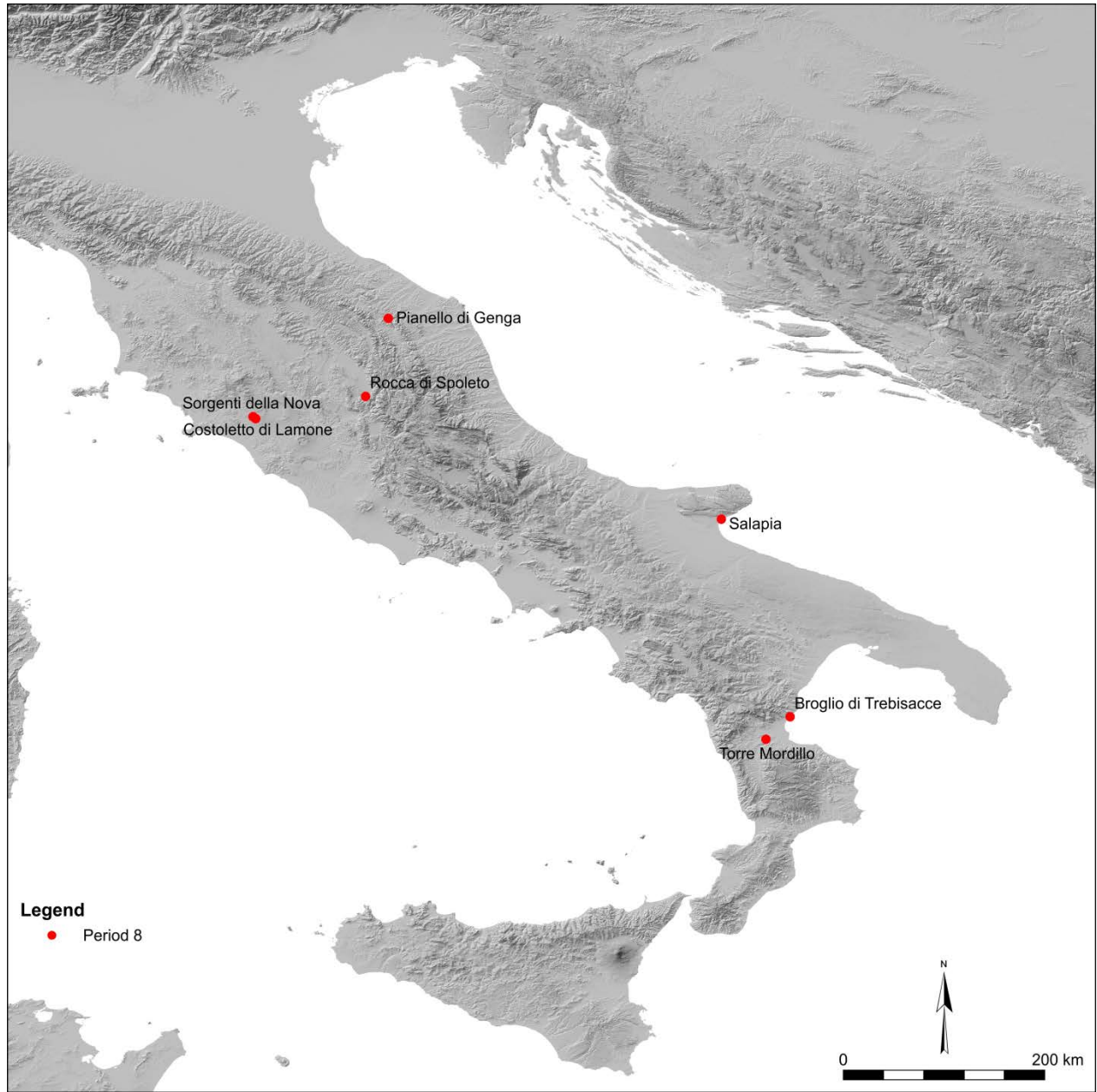


Fig. 95. Sites from the full FBA where parallels for impasto sherds from the RAP area were found.

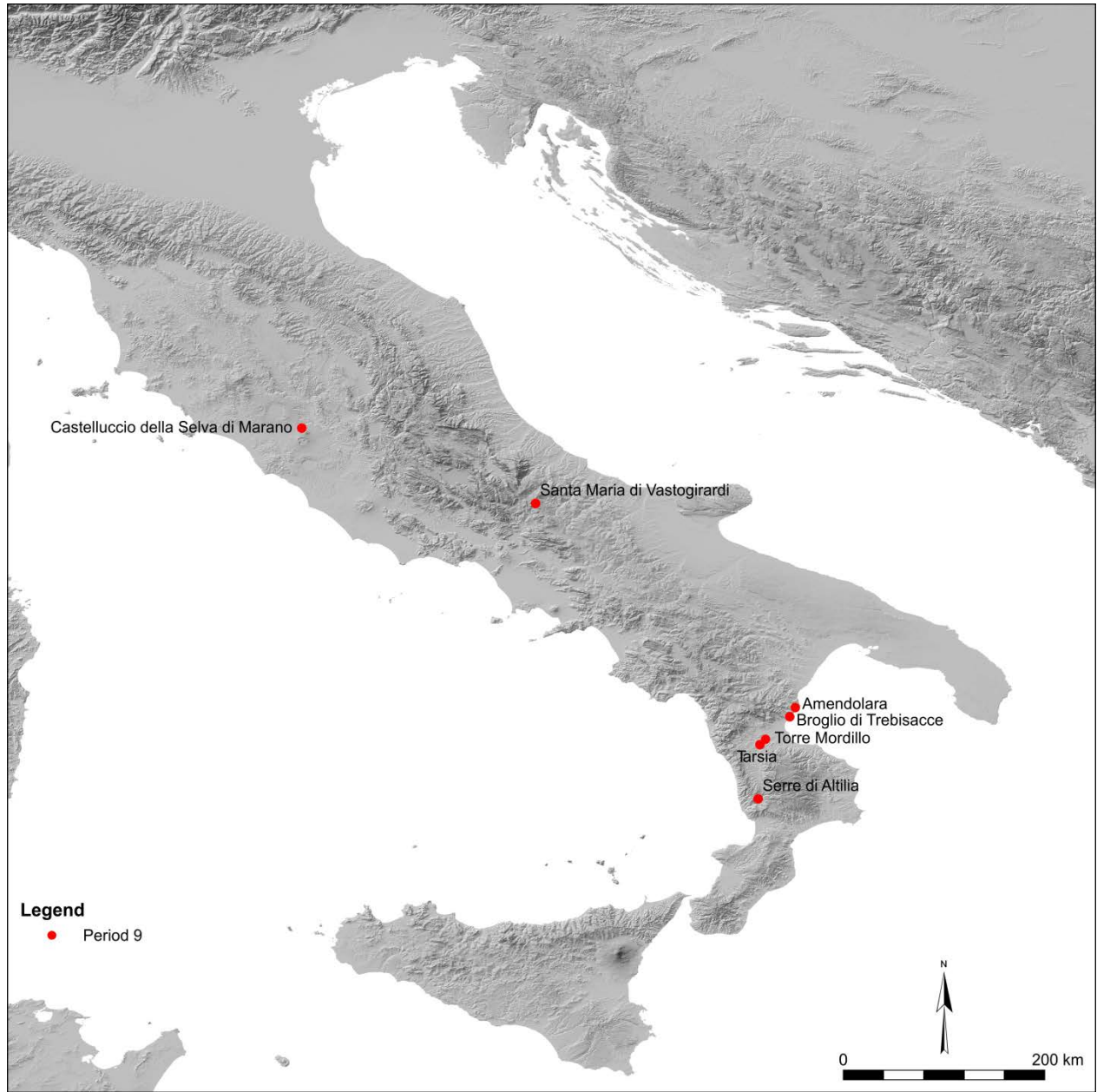


Fig. 96. Sites from the end of the FBA-EIA where parallels for impasto sherds from the RAP area were found.

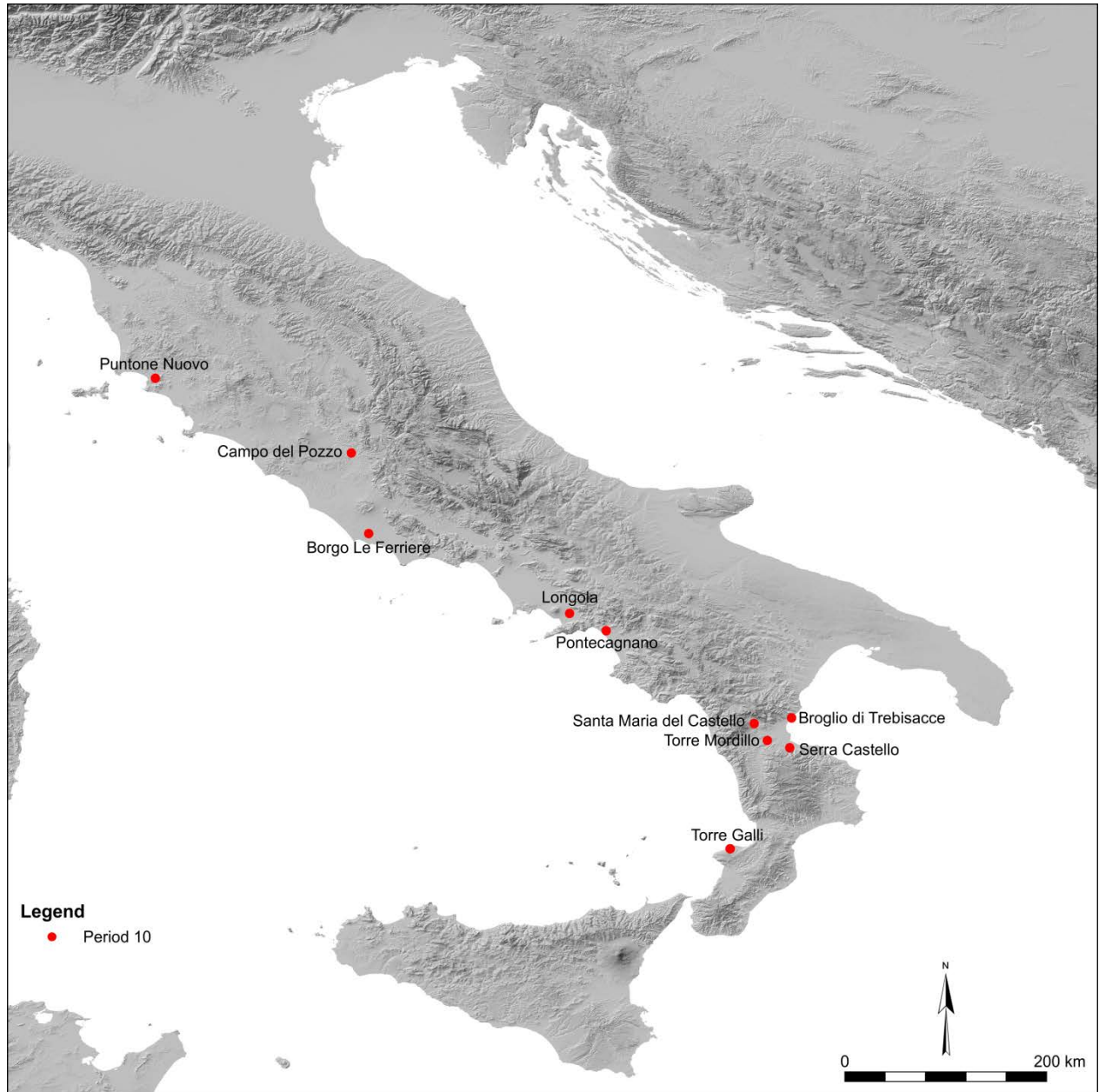


Fig. 97. Sites from the EIA where parallels for impasto sherds from the RAP area were found.

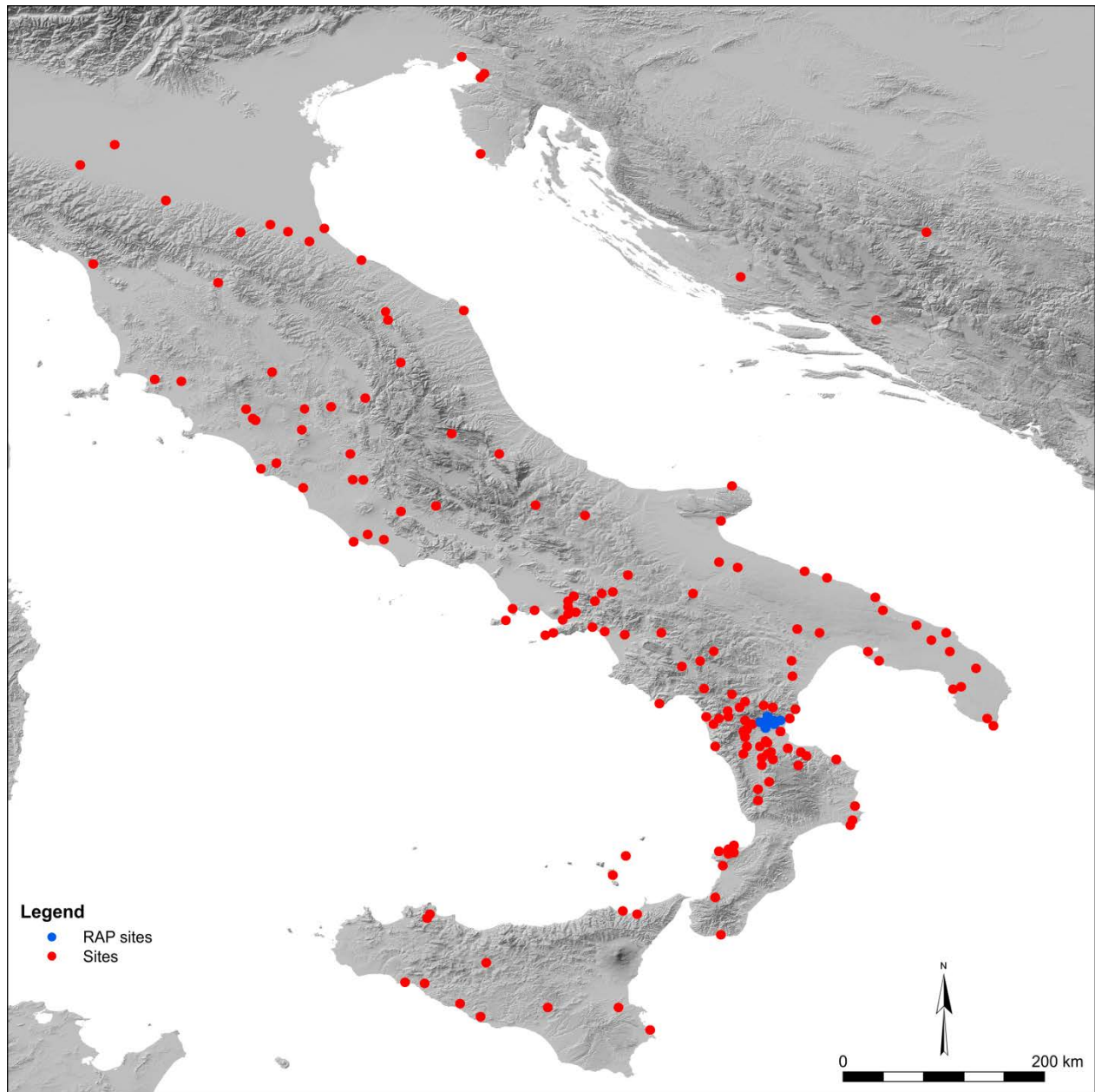
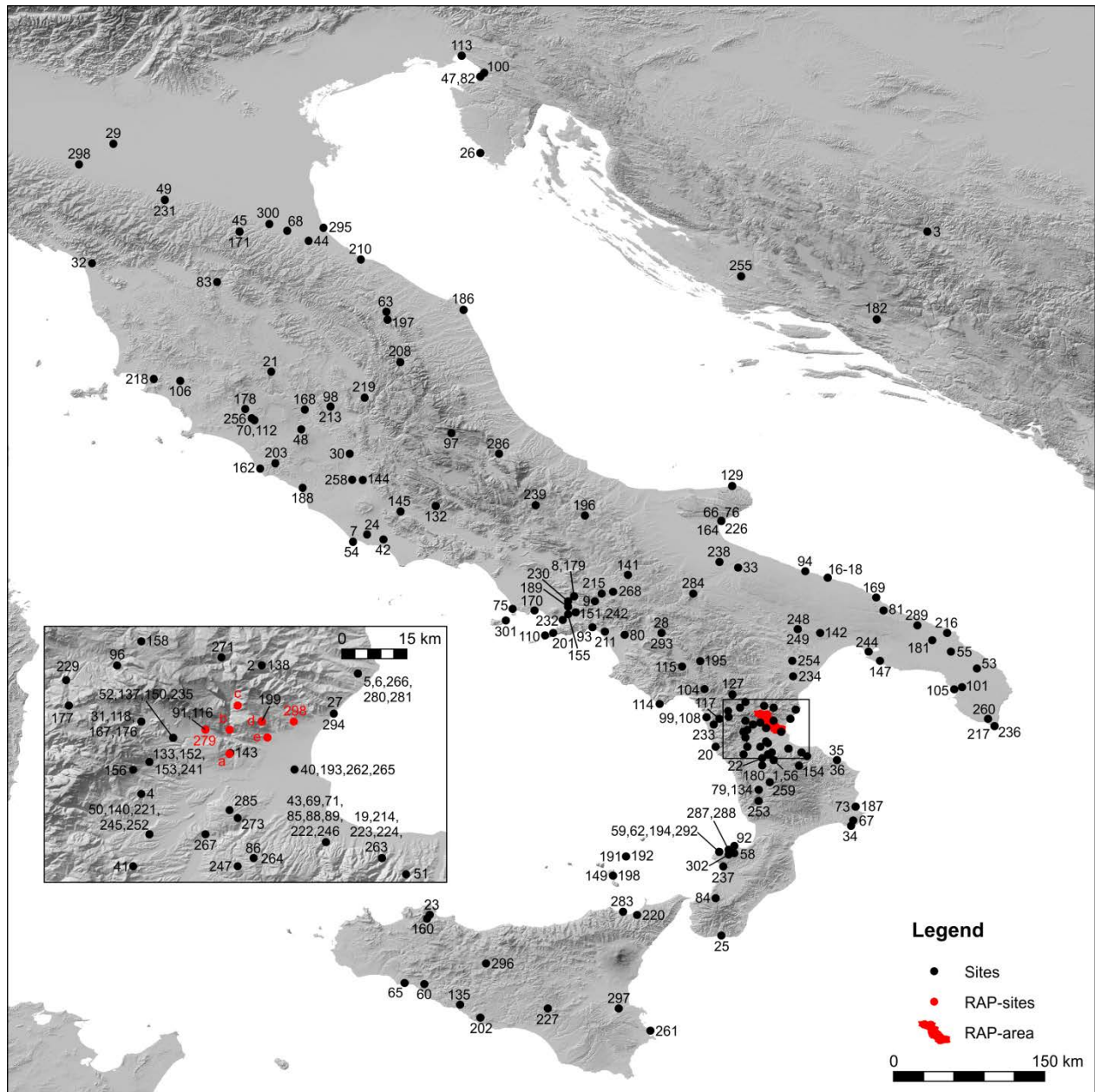


Fig. 98. Sites where parallels for impasto sherds from the RAP area were found (sites from the RAP area in blue).



- a: 46,121-124,131,172,205,240
- b: 13-15,61,78,128,130,159,173,175,183,184,206,275
- c: 74,87,102,111,119,120,126,161,163,165,166,190,207,228,243,272,276,289,290
- d: 10-12,57,64,72,77,107,109,125,136,174,200,250,251,257,269,270,282
- e: 37-39,90,95,103,157,204,209,212,225,274,277,278

Fig. 99. Sites mentioned in the text (see list p. 219 ff.).

Sites mentioned in the text and shown in Fig. 99.

N.B. The following sites are not reported in Fig. 99: sites 146, 148, 303; also sites already in Fig. 52, Chapter 3 (Fig. 52. 1-8, 10-11, 13-15, 17, 20, 22-25, 27-30) are not shown in Fig. 99. For the clusters *a, b, c, d, e* in Fig. 99, see respectively: Chapter 3.2-4, Chapter 2, Fig. 29, Chapter 2, Fig. 6, Chapter 2, Fig. 31, Chapter 2, Fig 14.

1. Acri
2. Alessandria del Carretto
3. Alihodže
4. Altomonte
5. Amendolara
6. Amendolara – Santo Cavalcatore
7. Anzio, RM
8. Avella (AV)
9. Avellino
10. Balze di Cristo
11. Balze di Cristo-Carlo Magno
12. Balze di Cristo-Spallata
13. Banco del Prete
14. Banco Grande
15. Banco ‘Ndappe
16. Bari – San Pietro
17. Bari - Santa Maria del Buon Consiglio
18. Bari - Santa Scolastica
19. Basili di Rossano
20. Belvedere (CS)
21. Belverde di Cetona
22. Bisignano
23. Boccadifalco (PA)
24. Borgo Le Ferriere, Satricum (Latina)
25. Bova Marina
26. Brioni, gradina
27. Broglio di Trebisacce
28. Buccino, Sant’ Antonio
29. Ca’ de’ Cessi, Sabbioneta, MN
30. Campo del Pozzo, Nazzano, RM
31. Campotenese
32. Candalla, Riparo Grande
33. Canosa-Pozzillo
34. Capo Piccolo
35. Cariati-Corazzo
36. Cariati-Terravecchia
37. Carnevale
38. Casa al Muro Grande
39. Casa Aperta
40. Casabianca
41. Casale Jaccino
42. Casale Nuovo (B.go Sabotino, LT)
43. Casale Rizzo
44. Case Missiroli, Cesena (FC)
45. Casola Valsenio (Ravenna)
46. Cassano allo Jonio
47. Castelliere degli Elleri
48. Castelluccio della Selva di Marano, Vitorchiano, Viterbo
49. Castelvetro (MO)
50. Castiglione di Roggiano Gravina
51. Castiglione Paludi
52. Castrovillari
53. Cavallino
54. Cavallo Morto
55. Cellino S. Marco
56. Ceraso (Acri)
57. Cerchiara di Calabria
58. Cessaniti
59. Olivadi (Tropea)
60. Ciavolaro, Ribera
61. Civita
62. Colarizzi
63. Conelle (Arcevia)
64. Contrada Damale
65. Contrada Tranchina, Sciacca (AG)
66. Coppa Nevigata
67. Corazzo-Casa Soverito, Isola di Capo Rizzuto
68. Coriano (FO)
69. Corigliano S. Croce
70. Costoletto di Lamone, Ischia di Castro (VT)
71. Cozzo Michelicchio
72. Crinale di Terra Masseta-Valle della Vite
73. Crotone
74. Cudicino
75. Cuma-NA, Acropoli
76. Cupola Beccarini
77. Damale
78. Demanio
79. Dipignano
80. Eboli
81. Egnazia
82. Elleri
83. Farneto
84. Favarella, Torrevecchia, S. Eufemia (CZ)
85. Favella della Corte
86. Fondo Cassetti
87. Fonte di Maddalena 1-5
88. Fonte Facano
89. Fonte Finocchio
90. Francavilla Marittima
91. Frascineto
92. Gallo (Briatico)
93. Gaudio
94. Giovinazzo
95. Grande Caverna di Damale
96. Grande Porta del Pollino (Viggianello)
97. Grotta a Male, Assergi (AQ)
98. Grotta Bella
99. Grotta Cardini, Praia a Mare
100. Grotta degli Zingari (Trieste)
101. Grotta dei Cappuccini (Lecce)
102. Grotta del Banco di Ferro
103. Grotta del Caprio
104. Grotta del Cervaro, Lagonegro (PZ)
105. Grotta del Fico, Nardò

106. Grotta del Fontino (Grosseto)
107. Grotta della Camastra
108. Grotta della Madonna di Praia a Mare
109. *Grotta delle Ninfe*
110. Grotta delle Noglie, Massalubrense (NA)
111. Grotta delle Volpi
112. Grotta dell'Infernetto, Ischia di Castro (VT)
113. Grotta del Mitreo
114. Grotta del Noglio, Marina di Camerota, SA
115. Grotta del Pino di Sassano
116. Grotta del Pozzo, Frascineto
117. Grotta del Romito
118. Grotta di Donna Marsilia-Sassone (Morano Calabro)
119. Grotta di Palmanocera
120. Grotta di Pietra Sant'Angelo IV
121. Grotta di Sant'Angelo I
122. Grotta di Sant'Angelo II
123. Grotta di Sant'Angelo III
124. Grotta di Sant'Angelo IV
125. *Grotta di Terra Masseta - Grotticella Costa del Ponte*
126. Grotta di Zivilella
127. Grotta 2 di Latronico
128. Grotta I Rubbert
129. Grotta Manaccore
130. *Grotta 'Ngerije Superiore*
131. Grotta Pavolella, Cassano
132. Grotta Regina Margherita
133. Grotta San Michele di Saracena
134. Grotta Sirena (Dipignano)
135. Grotta Ticchiara, near Agrigento
136. Grotte 1-3 di Terra Masseta
137. Grotte di Santo Iorio
138. Lago Forano
139. Lao Valley
140. La Prunetta
141. La Starza
142. Laterza
143. Laupoli
144. Le Caprine
145. Le Cese (Calvi dell'Umbria, TR)
146. Lemnos, Efestia
147. Leporano – Porto Perone
148. Lerna
149. Lipari
150. Località Fauciglia (Castrovillari)
151. Loc. Foce, Sarno (SA)
152. Località Mangialardo (Cittavetere di Saracena)
153. Località Pozzeria (Cittavetere di Saracena)
154. Longobucco
155. Longola, Poggiomarino (NA)
156. Lungro
157. Macchiabate
158. Madonna del Pollino
159. Madre Chiesa
160. Malpasso
161. Mandroni di Maddalena
162. Marangone
163. Masseria Armentano
164. Masseria Candelaro
165. Masseria Filardi
166. Masseria Francomano
167. Masseria Tamburi (Morano Calabro)
168. Masseto
169. Monopoli
170. Montagna spaccata
171. Monte Battaglia, Casola Valsenio, Ravenna
172. Monte San Marco di Cassano Jonio
173. Monte San Nicola
174. Monte Sellaro
175. Monte Spirito Santo
176. Morano Calabro
177. Mormanno
178. Mulino Rossi, Pitigliano (GR)
179. Mulino S. Antonio
180. Muricelle (Luzzi)
181. Muro Maurizio
182. Nečajno
183. 'Ngicchielle
184. 'Ngicchielle *or Ritaglio del piccolo Francesco Lama de Piccolo Francesco*
185. Nössing B, Bressanone, Bolzano
186. Numana (Ancona)
Olivadi see 59.
187. Olivotta-Borda (KR)
188. Palidoro (Roma)
189. Palma Campania
190. Palmanocera
191. Panarea (Capo Milazzese)
192. Panarea – Piano Quartara
193. Parco del Cavallo, Sibari
194. Passo Murato
195. Paterno
196. Petrella Tifernina
197. Pianello di Genga (AN)
198. Piano Conte
199. Piano di Bucita
200. Piano di Pedarreto
201. Piano di Sorrento, Napoli
202. Piano Vento, near Palma di Montechiaro
203. Pian Sultano
204. Pietra Catania
205. Pietra Castello di Cassano Jonio
206. Pietra della Sentinella
207. Pietra S. Angelo
208. Pieve Torina, Ancona
209. Plateau I, Timpone della Motta
210. Podere Montaletto, Misano Adriatico, Rimini
211. Pontecagnano (SA), Necropoli di S. Antonio
212. Portieri
213. Praia a Mare
214. Praticello di Rossano
215. Pratola Serra
216. Punta Le Terrare
217. Punta Meliso (LE)
218. Puntone Nuovo, Scarlino, GR
219. Rocca di Spoleto
220. Rodi
221. Roggiano Gravina
222. Rosa Russa
223. Rossano
224. Rossano Varia S. Antonio
225. Rovitti

226. Salapia (Manfredonia, FG)
 227. San Cono-Piano Notaro
 228. San Lorenzo Bellizzi
 229. San Nicola-Gada
 230. San Paolo Belsito, Montesano (NA)
 231. San Polo Canovo
 232. Sant'Abbondio at Pompei
 233. Santa Domenica Talao
 234. Santa Maria d' Anglona
 235. Santa Maria del Castello (Castrovillari)
 236. Santa Maria di Leuca
 237. Santa Maria di Montalto – Nicotera
 238. Santa Maria di Ripalta
 239. Santa Maria di Vastogirardi, Isernia
 240. Sant'Angelo caves system at Cassano allo Jonio
 241. Saracena
 242. Sarno
 243. Scala di Barile
 244. Scoglio del Tonno
 245. Serra Cagliano
 246. Serra Castello (Corigliano)
 247. Serra Cavallo d'Oro
 248. Serra d'Alto
 249. Serra d'Alto-Capanna Gravela and Diana
 250. *Serra dei Bovi*
 251. *Serra del Gufo*
 252. Serra Testi
 253. Serre di Altilia
 254. Serre di Pisticci
 255. Skarin Samograd
 256. Sorgenti della Nova, Farnese (VT)
 257. Spallata di Balze di Cristo
 258. Spallete Santa Margherita
 259. Spezzano della Sila
 260. Spigolizzi
 261. Stentinello
 262. Stombi, Sibari
 263. Strange di Rossano
 264. Superiore 1
 265. Sybaris
 266. Tarianne
 267. Tarsia
 268. Taurasi
 269. Terra Masseta
 270. Terra Masseta 1
 271. Terranova del Pollino (Garavina)
 272. Timpa di San Lorenzo
 273. Terranova di Sibari
 274. Timpa del Castello
 275. Timpa del Demanio
 276. Timpa Sant'Angelo
 277. Timpone del Castello
 278. Timpone della Motta
 279. Timpone delle Fave
 280. Timpone Golla
 281. Timpone Lacco
 282. Timpone Motta di Cerchiara
 283. Tindari
 284. Toppo Daguzzo
 285. Torre Mordillo (Spezzano Albanese)
 286. Torre de' Passeri (PE)
 287. Torre Galli, Tropea (VV)
 288. Torre Galli, Zambrone (VV)
 289. Torre S. Sabina (BR)
 290. Trizzone della Scala
 291. Trizzone della Scala (Colle della Conca)
 292. Tropea
 293. Tufariello
 294. Valle Carlodraga
 295. Valle Felici
 296. Vallelunga
 297. Valsavoia
 298. Vasca di Noceto, Torretta di Noceto, Parma
 299. Villapiana
 300. Villa Persolino, Faenza-RA
 301. Vivara, P.ta d'Alaca
 302. Zungri
 303. Wąsosz, district of Szubin, western Poland

Catalogue

<p>1 Carnevale Francavilla M.ma (CS) CVL1 – SU 1 Plate I.1</p>	<p>Rim fragment of a globular <i>dolium</i> decorated by grooves forming angular band motifs Roughly depurated impasto (small-medium size inclusions), well burnished surface Int/Ext/core 5YR6/4 light reddish brown, 2.5YR6/6 light red, 5YR7/2 pinkish grey, Ext/Int rim 5YR4/1 dark grey, Gley1-3N very dark grey H 11, W 23.3, Th 3.5, D 40 Drawing and inked drawing S. Boersma (drawings 1/2+2/2)</p>
<p>2 Carnevale Francavilla M.ma (CS) CVL4-1 – SU 4 – 4960/05 Plate I.2, Tab. 42</p>	<p>Base fragment of an omphalos bowl Roughly depurated impasto (small-medium size inclusions), polished surface Int 2.5Y6/3 pale olive, Ext Gley2-4/5PB dark bluish grey H 6, W 4.9, base Th 0.5, base+omphalos Th 1.1 1:3 fragments Drawing and inked drawing S. Boersma Par. 2 Peroni 1984, Tav. 8.2-4, Broglio di Trebisacce (CS), Settore D, strato I AIII, RBA2</p>
<p>3 Carnevale Francavilla M.ma (CS) CVL4-2 – SU 4 – 4960/05 Plate I.3, Tab. 42</p>	<p>Snail horn fragment of a pumpled handle Roughly depurated impasto (a very few small size inclusions), burnished surface Int 10YR6/3 pale brown, Ext from Gley2-3/5PB very dark bluish grey to 7.5YR4/3 brown H 3, W 2, section Th 0.7, 1.3 Drawing and inked drawing S. Boersma Par. 3 Damiani 2010, Tav. 123.1, Tipo B15-1C, Monte Battaglia, Casola Valsenio, Ravenna, RBA1-2, see also Orlando 1995, Tav. LXXXI.8, Punta Meliso (LE), Settore I-M/12-14, RBA structure</p>
<p>4 Carnevale Francavilla M.ma (CS) 4960/09 – SU 10 CV1B Plate I.4, Tab. 38</p>	<p>Fragment of a band handle with raised edges, ending with a pointed small ear Roughly depurated impasto (small-medium size inclusions), well burnished surface Int 10YR6/3 pale brown, Ext 5YR4/4 reddish brown, 2.5Y3/1 very dark grey H 6.1, W 8.1, handle Th 0.8, dec. Th 0.7 Drawing and inked drawing S. Boersma Par. 4 Bernabò Brea <i>et al.</i> 1989, Fig. 122.e, Grotta Cardini, Praia a Mare (CS), Strato Superiore - MBA3, see also Cardini 1970, fig. 14, Liv. C (Apennine period). See Par. 9 – Carnevale, Plate I.9, Tab. 41, 535 – Carnevale, Plate IV.535, Tab. 44, 106 – Timpone della Motta, Plate V.106, Tab. 20</p>
<p>5 Carnevale Francavilla M.ma (CS) 4960/09 – SU 10 CV2B+CV8B Plate II.5, Tab. 38</p>	<p>Fragment of a bowl decorated by a cord-band forming angular motifs Roughly depurated impasto (many small-medium size inclusions), well smoothed surface Int 10YR5/3 brown, Ext 2.5YR4/1 dark grey, Gley1-3N very dark grey CV2B: H 6.6, W 6, CV8B: H 4.2, W 4.7, CV2B+CV8B Th 0.8, cord Th 0.7, D 12 Drawing and inked drawing S. Boersma Par. 5 For decoration see two fragments from the Apennine site of Grotta del Noglio, Marina di Camerota, SA (Vigliardi 1975, Fig. 16. 6-7, strato C) and a fragment from Berverde di Cetona, SI (Calzoni 1962, Tav. IV.b). For shape see Bernabò Brea <i>et al.</i> 1989, Fig. 99.b (but with flattened lip) and Fig. 99.e (less deep) from Grotta Cardini, Praia a mare, CS, Strato superiore, MBA3 Fragments 2:3 (CV3B has not been drawn)</p>
<p>6 Carnevale Francavilla M.ma (CS) CV2 - SU 6 – 4960/11 Plate I.6, Tab. 41</p>	<p>Fragment of a handle with zoomorphic knobs Roughly depurated impasto (few small size inclusions), burnished surface Int 10YR6/3 pale brown, Ext Gley1-3/N very dark grey H 3.8, W 5.8, handle D 2.1, knob D 1.3 Drawing and inked drawing S. Boersma</p>

	Par. 6 Belardelli 2004, Tav. LXI. 7, Coppa Nevigata (Manfredonia, FG), collezione Boschi, Tipo 100b1, also from Coppa Nevigata-Nuovi scavi, Gruppo L (Cazzella. Moscoloni 1987, fig. 80.1), Subappenninico avanzato
7 Carnevale Francavilla M.ma (CS) CVL6 - SU 6 – 4960/11 Plate I.7	Band handle with angular profile Roughly depurated impasto (many small size inclusions, few large ones) surface: burnished outside, smoothed inside Int 7.5YR5/4 brown, Ext Gley2-2.5/5PB bluish black H 6.5, handle W 4.3, wall Th 0.6, handle Th 1.2 Drawing and inked drawing S. Boersma
8 Carnevale Francavilla M.ma (CS) CV7 - SU 6 – 4960/11 Plate I.8, Tab. 41	Fragment of a bowl with carena and with short funnel-shaped rim Roughly depurated impasto (small-medium size inclusions), burnished surface Int 10YR5/4 yellowish brown, Ext 10YR5/4 yellowish brown, Gley1-2.5/N black H 3.7, W 4, Th 0.5, D 10 Drawing and inked drawing S. Boersma
	Par. 8 Bergonzi <i>et al.</i> 1982, Tav. 38.3, Santo Cavalcatore, Amendolara (CS), parallel with Broglio di Trebisacce, Foggia B13 (Ric. 1), sett. B Ovest, liv. 3 Sup. and sett. B Ovest, liv. 2b, RBA1
9 Carnevale Francavilla M.ma (CS) CV7b- SU 6 – 4960/11 Plate I.9, Tab. 41	Fragment of strap band handle with raised edges Roughly depurated impasto (medium size inclusions), burnished surface Int 10YR7/4 very pale brown, Ext 7.5YR5/4 brown, Gley1-2.5/N black H 3.8, W 2.2, Th 0.6 Par. 4 – Carnevale, Plate I.4, Tab. 38, 535 – Carnevale, Plate IV.535, Tab. 44, 106 – Timpone della Motta, Plate V.106, Tab. 20 Drawing and inked drawing S. Boersma
10 Carnevale Francavilla M.ma (CS) CV4 – 4960/13 SU 10 Plate II.10, Tab. 39	Slightly out-turning and high cylindrical rim fragment of a bowl, rounded body shape Roughly depurated impasto (many small size inclusions), burnished surface Int 7.5YR6/4 light reddish brown, Ext 5YR6-5/4 light reddish brown-reddish brown, 5YR6/6 reddish yellow, 7.5YR3/1 very very dark grey H 6.3, W 4.9, Th 0.7 MBA3 Drawing and inked drawing S. Boersma
	Par. 10 Cocchi Genick 1995, Foggia 391, Tipo 2, MBA (Broglio di Trebisacce, Sett. B, ampl. '80, str. 4, scarpata, MBA3 and Broglio di Trebisacce, Sett. B, tr. '79, str. 4 inf., beginning of the MBA3).
11 Carnevale Francavilla M.ma (CS) CV5– 4960/13 SU 10 Plate II.11, Tab. 39	Funnel shaped rim fragment of an ovoidal bowl with band handle Roughly depurated impasto (few large size inclusions), burnished surface Int 10YR6/3 pale brown, Ext 7.5YR6/3 light brown, Gley1-4,3/N dark grey-very dark grey H 5.7, Th 0.6, D 12.5 Drawing and inked drawing S. Boersma
	Par. 11 Cocchi Genick 1995, Foggia 98, Tipo 1, Paterno (PZ), S. Maria d'Anglona (MT), MBA, phases 2B-3, Peroni, Trucco 1994, Broglio di Trebisacce, Fig. 61.102, regarding shape 76 (MBA2-3)
12 Carnevale Francavilla M.ma (CS) CV6– 4960/13 - SU 10 Plate II.12, Tab. 39	In-turning rim fragment with notched cord-band and bump Roughly depurated impasto (small-medium size inclusions, few large ones), burnished surface Int 2.5Y3/1 very dark grey, Ext 7.5YR6/6 reddish yellow H 8.8, W 8.2, wall Th 0.8, cord Th 0.4, D 15.5 Drawing and inked drawing S. Boersma
	Par. 12 Several examples of <i>orcioli con cordoni a festone</i> and small bumps are among the assemblage from the so-called Vasca di Noceto (Torretta di Noceto, Parma) after Mutti, Pizzi 2009, Tav. 13.9, 2 (US 81c), Tav. 13.1.2 (US90), Tav. 13.8.8 (US81c). For the shape see, in the same volume, Tav. 13.4.4 (US 87a), MBA3

<p>13 Carnevale Francavilla M.ma (CS) CV4b– 4960/13 SU 10 Plate II.13, Tab. 39</p>	<p>Fragment of a bowl with short funnel shaped rim and bevelled on the outside lip Roughly depurated impasto (many very small size inclusions, few medium ones), surface: burnished outside, smoothed inside Int 7.5YR6/4 light reddish brown, Ext Gley1-3/N very dark grey H 3.5, W 3, Th 0.5 Drawing and inked drawing S. Boersma Par. 13 Trucco, Vagnetti 2001, Tipo 83, fig. 64.5 (not cut to outside rim), US 235, Torre Mordillo, Cassano allo Jonio (CS), RBA1.</p>
<p>14 Carnevale Francavilla M.ma (CS) CV6b– 4960/13 SU 10 Plate II.14, Tab. 39</p>	<p>Fragment of a shallow bowl with carena, funnel-shaped and bevelled on the outside rim Roughly depurated impasto (few small-medium size white inclusions), polished surface Int 7.5YR6/3 light brown, Ext 10YR5/4 yellowish brown H 2.2, W 3.1, Th 0.5, D 8 Drawing and inked drawing S. Boersma Par. 14 Damiani 2010, Tav. 44.10. Fam. 24-60, Tipo 1, var. B, Broglio di Trebisacce (CS), Sett D, livello S, RBA. See also 15 Carnevale, Plate II.15, Tab. 39.14-15.</p>
<p>15 Carnevale Francavilla M.ma (CS) V8+CV5B CSU 10- 4960/14 Plate II.15, Tab. 39</p>	<p>Fragment of a shallow bowl with carena, funnel-shaped rim Depurated impasto, burnished surface Int Gley1-3/N very dark grey, Ext 10YR3/1 very dark grey, 5/3 very dark grey/brown H 2.6, W 6.2, Th 0.5, D 10 Par. 14 Carnevale, Plate II.14, Tab. 39.14-15 Drawing and inked drawing S. Boersma</p>
<p>16 Carnevale Francavilla M.ma (CS) CV9 – SU 10- 4960/14 Plate II.16, Tab. 39</p>	<p>Rim fragment of a neck vessel with in-turning rim and notched cord-band Roughly depurated impasto (small-medium size inclusions, few large ones), burnished surface Int 2.5Y3/1 very dark grey, Ext 7.5YR6/6 reddish yellow H 9.7, W 8.2, wall Th 1, cord Th 0.7 Drawing and inked drawing S. Boersma Par. 16 Peroni, Trucco 1994, Tav. 14.12, shape 96A, Broglio di Trebisacce (CS), Settore E, livello 3B, MBA2.</p>
<p>17 Carnevale Francavilla M.ma (CS) CV10– SU 10- 4960/14 Plate II.17</p>	<p>Fragment of a large tronco-conical bowl, slightly flaring rim Roughly depurated impasto (small-medium size inclusions), burnished surface Int 2.5YR6/8 light red, Ext 2.5YR4/4 reddish brown, 7.5YR5/1 grey H 6.9, W 7.8, Th 1, D 25 Drawing and inked drawing S. Boersma</p>
<p>18 Carnevale Francavilla M.ma (CS) CV11– SU 10- 4960/14 Plate II.18, Tab. 39</p>	<p>Fragment of an ovoidal jar with in-turning rim, flaring and outward thickened lip Roughly depurated impasto (many medium-large size inclusions), well smoothed surface Int 10YR6/2 light brownish grey, Ext 2.5YR4/3 reddish brown, 5YR4/2 dark reddish grey H 9.4, W 12.5, Th 0.8, D 22.5 Drawing and inked drawing S. Boersma Par. 18b Bernabò Brea <i>et al.</i> 1997, Fig. 164.14, Castelvetro, S. Polo Canova (MO), struttura US3, MBA1-2</p>
<p>19 Carnevale Francavilla M.ma (CS) CVL8 – SU 8 Plate III.19, Tab. 40</p>	<p>Flaring and short rim fragment of a large bowl with carena Roughly depurated impasto (few medium-large size inclusions), very well burnished surface Int 10YR6/3 pale brown, Ext Gley2-2.5/5PB bluish black H 4.4, W 9, Th 0.7, D 20 Drawing and inked drawing S. Boersma Par. 18 Cocchi Genick 1995, Fig. 50. 168, MBA3, from Vivara, Punta Capitello, saggio</p>

	B 1937, saggio E/1A 1937 (Cazzella <i>et al.</i> 1975-80, fig. 19.1). Cocchi Genick 1995, Fig. 52. 175, MBA3, from Palidoro (Roma), sett. E, str. 6 (Fugazzola Delpino 1976, fig. 18:5)
20 Carnevale Francavilla M.ma (CS) CVSP15 Plate III.20	Fragment of a strap vertical band handle Depurated impasto, polished surface Int 10YR6/3 pale brown, Ext 7.5YR5/4 brown H 5.5, W 4.3, Th 0.8 Drawing and inked drawing S. Boersma
21 Carnevale Francavilla M.ma (CS) CVSP19 Plate III.21, Tab. 43	Fragment of a bowl with carena, funnel-shaped rim and bevelled on the outside lip Roughly depurated impasto (few small-medium size and white inclusions), polished surface Int 7.5YR6/3 light brown, Ext 10YR5/4 yellowish brown H 2.2, W 3.1, Th 0.5, D 8 Drawing and inked drawing S. Boersma MBA3 Par. 21 Cocchi Genick 1995, Fig. 52. 175 from Palidoro (Roma), sett. E, str. 6 (Fugazzola Delpino 1976, fig. 18:5), for the rim shape, excluding decoration, Macchiarola 1987, Tav. 38.2, La Starza, Ariano Irpino, AV, MBA3, "provenienza indeterminata."
22 Carnevale Francavilla M.ma (CS) CVSP20 Plate III.22	In-turning rim fragment of an ovoidal bowl with flattened bump Roughly depurated impasto (many medium-large size inclusions), smoothed surface Int 10YR4/1 dark grey, Ext 7.5YR6/6 reddish yellow, 10YR5-4/1,4/2,6/6 black-dark grey, dark greyish brown, brownish yellow H 5.4, W 6, Th 1, bugna Th 0.8. Drawing and inked drawing S. Boersma
23 Carnevale Francavilla M.ma (CS) CVSP21 Plate III.23, Tab. 43	Slightly flaring rim fragment of a neck vessel with cord-band decoration Roughly depurated impasto (many small-large size inclusions), roughly polished surface, irregular surface Int Gley1-4/N dark grey, Ext 5Y6/6 olive yellow, Gley1-3/N very dark grey H 5.2, Th 0.8, cord Th 0.5, D 16 Drawing and inked drawing S. Boersma Par. 23 For the upper part, see for instance Mutti, Pizzi 2009, Tav. 13.6,1, Vasca di Noceto (Torretta di Noceto, Parma), US 81, MBA3
24 Carnevale Francavilla M.ma (CS) CVSP24 Plate III.24, Tab. 43	Fragment of a bowl with carena, short flaring rim and strap handle Roughly depurated impasto (small-large size inclusions), polished surface, handle surface is smoothed Int/Ext 7.5YR5/4 brown H 7.4, W 12, wall Th 0.7, handle Th 1, D (carena) 20 Drawing and inked drawing S. Boersma Par. 24 Damiani 2010, Tav. 41.8, Fam. 22.54, Type 2, var. B, RBA1, Mulino Rossi, Pitigliano (GR), Scavi 1982-83, Soprintendenza Archeologica della Toscana, strato I. Belardelli 2004, Fig. 10.36c, Tav. XVIII.6, Coppa Nevigata, III trincea, fra II e III battuto, RBA1. See also Cocchi Genick 2004a, Fig. 7.18, RBA1
25 Carnevale Francavilla M.ma (CS) CVSP25 Plate III.25	Fragment of conical vessel with in-turning rim and inward thickened lip Roughly depurated impasto (many medium-large size inclusions), smoothed surface Int 10YR7/2 light grey, Ext 2.5YR4/3 reddish brown, 5/6 reddish brown, red H 10.5, W 7.4, Th 1.1 Drawing and inked drawing S. Boersma
26 Carnevale Francavilla M.ma (CS) CVSP26 Plate III.26	Fragment of cylindrical and plumbed handle Roughly depurated impasto (small size inclusions), polished surface Int 10YR7/4 very pale brown, Ext Gley2-2.5/5PB bluish black H 6.2, W 3.2, section Th 2.1 Drawing and inked drawing S. Boersma Par. 26

Similar for the ending part to Damiani 2010, Tav. 123.4, Tipo B16-2A, Numana Cem, Soprintendenza Archeologica di Ancona, RBA1, see also Carnevale 24, Plate III.24, Tab. 43. Lo Porto 1963, Leporano – Porto Perone, Fig. 65.6, Scavi Quagliati, ceramica dagli strati superiori.
Drawing and inked drawing S. Boersma

<p>27 Carnevale Francavilla M.ma (CS) CVSP46 Plate III.27</p>	<p>Funnel shaped rim fragment of an ovoid jug or a small jar Roughly depurated impasto (small-medium size inclusions), polished surface Int 2.5YR6/3 light reddish brown, Ext Gley1-3/N very dark grey, 5YR4/2 dark reddish grey H 2.8, W 4.8, Th 0.6 Drawing and inked drawing S. Boersma</p>
<p>Carnevale continues at n. cat. 533-536, 654-658</p>	
<p>28 – 29 Timpone della Motta Francavilla M.ma (CS) TMZCAPF8/1A - TMZCAPF8-1B Plate V.28-29, Tab. 18 Crate 721</p>	<p>Strap handle fragment (28) with straight and pointing horned knobs (29) Roughly depurated impasto (very few small inclusions), burnished surface Ext/Int Gley1-3N very dark grey 28 = H 2.2, W 3.4, 2.9, 29 = H 2.5, D ± 2.4 Drawing S. Boersma inked drawing M. Los-Weijns Par. 28 Peroni, Trucco 1994, Tav. 37.10, Forma 46, Broglio di Trebisacce (CS), Sett. D Est, livello 1 Est, Tipo B20, 1C in Damiani 2010, Tav. 125.4 (from Broglio di Trebisacce, Sett. D Est, livello 1 Est), RBA1. See also Damiani 2010, Tav. 125.A1, B20 Tipo 1B, Conelle, inv. 9142, senza indicazione di provenienza specifica, Museo Nazionale, Ancona, RBA1</p>
<p>30 Timpone della Motta Francavilla M.ma (CS) TMZCAPF8-2 Plate V.30 Crate 721</p>	<p>Funnel-shaped rim fragment of a bowl Roughly depurated impasto (few small incl.), smoothed surface Int. Gley1-3N very dark grey, Ext. Gley1-4N dark grey H 2.1, W 3.1, Th 0.7, D ± 16 Drawing S. Boersma inked drawing M. Los-Weijns</p>
<p>31 Timpone della Motta Francavilla M.ma (CS) TM95PL1T5-1 Plate IX.31 Crate 811</p>	<p>Short flaring rim fragment of an ovoid bowl/jug Roughly depurated impasto (many small inclusions), smoothed surface outside and inside 2.5Y3/1 very dark grey, Gley1-3N very dark grey H 1.7, W 2.5, Th 0.5, D ± 10.5 drawing F. Ippolito, inked drawing M. Los-Weijns</p>
<p>32 Timpone della Motta Francavilla M.ma (CS) TM95PL1T5-2 Plate IX.32, Tab. 23 Crate 811</p>	<p>Fragment of a rounded shape bowl with short rim, outward thickened and bevelled on the inside lip Roughly depurated impasto (many small-medium inclusions), well smoothed surface outside and inside: 2.5Y4/1 dark grey, Gley1-2.5N black H 5.1, W 4.1, Th 0.7, D ± 15.2 Drawing F. Ippolito, inked drawing M. Los-Weijns Par. 32 Trucco, Vagnetti 2001, fig. 43.9, Tipo 31, Torre Mordillo, Cassano allo Jonio (CS), US 20, FBA1</p>
<p>33 Timpone della Motta Francavilla M.ma (CS) AC10115-13 Plate X.33 Crate 45</p>	<p>Inward rim of globular mug/bowl with handle attachments, pseudo-circular section handle Coarse impasto, smoothed surface outside, coarse inside Int. 2.5YR5/1 reddish grey, ext 2.5YR5/6 red, 2.5YR6/1 reddish grey H 6.1, W 5.1, Th (wall) 1.3 Drawing S. Boersma, inked drawing M. Los-Weijns</p>
<p>34 Timpone della Motta Francavilla M.ma (CS) AC3-37-44 Plate X.34, Tab. 25 Crate 45</p>	<p>In-turning rim fragment of a truncated-cone shaped bowl decorated by small bumps Roughly depurated impasto, many small-medium inclusions, polished surface Int Gley1-3+2.5/N very dark grey+black, Ext 2.5YR5/4 reddish brown H 5, W 4.1, Th 0.9, Th dec. 0.7, D ± 14 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 34 Trucco, Vagnetti 2001, Fig. 58.5, Tipo 258B, Torre Mordillo, Cassano allo</p>

	Jonio (CS), US 124, RBA2, for decoration, Cinquepalmi, Radina 1998, 9.038, Torre Santa Sabina (BR), Struttura 1, RBA2-FBA1
35 Timpone della Motta Francavilla M.ma (CS) AC4-6-9+AC4-6-3 Plate X.35, Tab. 25 Crate 45	Strap handle with little horns endings Roughly depurated impasto (few small-medium incl.), burnished surface Int 10YR5/3 brown, Ext. Gley1-2.5/N black H 8.5, W 2.1, Th ±2 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 35 Trucco, Vagnetti 2001, Fig. 40.15, Tipo 401, US 13 (EIA1, it contains older materials), Torre Mordillo, Cassano allo Jonio (CS), RBA2
36 Timpone della Motta Francavilla M.ma (CS) Ap Plate X.36 Crate 45	Hemispherical bowl with bevelled on the inside lip Roughly depurated impasto, burnished surface Int 2.5Y6/3 light yellowish brown, Ext from 5Y4/1 dark grey to Gley1-3/N very dark grey H 3.9, W 3.2, Th 0.8 Drawing S. Boersma inked drawing M. Los-Weijns Par. 36 Similar to Peroni, Trucco 1994, Tav. 83.30, Forma 38F, Broglio di Trebisacce (CS), sett. B Ovest, livello 1A, FBA1. See 491, Area Rovitti.
37 Timpone della Motta Francavilla M.ma (CS) Ap-6 Pl. X.37 Crate 45	Rounded-shaped jar with slightly flaring rim Roughly depurated impasto (middle sorted inclusions), smoothed surface Int. 10YR6/6 brownish yellow, Ext. from 2.5Y6/4 light yellowish brown to 5Y4/2 olive grey H 3.4, W 3.9, Th 0.7, D 12 Drawing S. Boersma, inked drawing M. Los-Weijns
38 Timpone della Motta Francavilla M.ma (CS) Ap-2051-3 Pl. X.38 Crate 45	In-turning rim fragment of a bowl, cut to inside, handle attachment Roughly depurated impasto (few small inclusions), polished surface Int. 2.5Y6/4 light yellowish brown, Ext. from Gley1-2.5/N black to 10YR3/2 very dark greyish brown H 3.3, W 3.1, wall Th 0.7 Drawing S. Boersma, inked drawing M. Los-Weijns
39 Timpone della Motta Francavilla M.ma (CS) Ap-2051-2 Pl. X.39 Crate 45	Rounded-shaped jar with short funnel-shaped and flaring rim Roughly depurated impasto (many small inclusions), traces of polishing Int. 10YR4/1 dark grey, Ext. from Gley1-3N very dark grey to 10YR4/1 dark grey H 2.9, W 3.5, wall Th 0.6, D. 12 Drawing S. Boersma inked drawing M. Los-Weijns
40 Timpone della Motta Francavilla M.ma (CS) Ap-2051-4 Pl. X.40 Crate 45	Barrel-shaped jar with short flaring rim, plain cord-band Coarse impasto (many inclusions), traces of polishing (not well visible surface) Int. 5YR4/4 reddish brown, Ext. 5YR4/6 yellowish red H 4.6, W 3, wall Th 0.8, cord Th 0.5 Drawing S. Boersma inked drawing M. Los-Weijns
41 Timpone della Motta Francavilla M.ma (CS) Ap-2051-1 Pl. X.41 Crate 45	Band handle fragment Roughly depurated impasto (small-medium sorted inclusions), polished surface Int. 5Y6/2-5/3 light olive grey-olive, Ext. from 5Y4/2 olive grey to Gley1-2.5/N black H 7.7, W 3.5, Th 1.1 Drawing S. Boersma inked drawing M. Los-Weijns Par. 41 Similar to Bergonzi <i>et al.</i> 1982, Tav. 17.4-5, Broglio di Trebisacce (CS), Sett. D, strato 1B, FBA1
42 Timpone della Motta Francavilla M.ma (CS) Ap-12 Pl. X.42 Crate 45	Funnel-shaped rim of a bowl with handle Coarse impasto (many small and medium inclusions), smoothed surface Int. from 5YR6/6 reddish yellow to Gley1-3N very dark grey, Ext. from Gley1-3N very dark grey to 10YR5/3 brown H 5.8, W 6.5, wall Th 0.6, handle Th 0.9, Drawing S. Boersma, inked drawing M. Los-Weijns Par. 42

<p>43 Timpone della Motta Francavilla M.ma (CS) AC-2056 Pl. X.43 Crate 45</p>	<p>Similar to Trucco, Vagnetti 2001, Tipo 79, Fig. 28. 10, settori DE11-12, superficie, Torre Mordillo, Cassano allo Jonio (CS), MBA2 Barrel-shaped jar with cord-band and slightly flaring rim Coarse impasto (many inclusions), smoothed surface, traces of polishing Int. Gley1-8N white, Ext. from Gley1-3N very dark grey to 5YR4/4 reddish brown H 4, W 3.3, wall Th 0.7, cord Th 0.3, D 15 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 43 Similar to Trucco, Vagnetti 2001, Fig. 41.18, US 19, Foggia 275, Torre Mordillo, Cassano allo Jonio (CS), Late FBA</p>
<p>44 Timpone della Motta Francavilla M.ma (CS) AC-2038 Crate 45 Pl. X.44, Tab. 25</p>	<p>Cup with cylindrical neck Grey ware, depurated impasto (few small inclusions), polished surface n.a. H 3.4, W 4.4, wall Th 0.6, D 8 Drawing S. Boersma inked drawing M. Los-Weijns Par. 44 For the shape see Pacciarelli 1999, Tav. 155.2, Type C12, Torre Galli, Tropea (VV), tomb 231, cup made of grey impasto, EIA (phase 1A).</p>
<p>45 Timpone della Motta Francavilla M.ma (CS) TMPL1-P1D217-3 Plate VIII.45, Tab. 18 Crate 122</p>	<p>Slightly flaring rim fragment Roughly depurated impasto (many small and medium inclusions), smoothed surface Int. Gley1-2.5N black, Ext. 2.5YR5/8 red H 2.1, W 3.1, Th 1.3 Drawing S. Boersma inked drawing M. Los-Weijns Par. 45 Trucco, Vagnetti 2001, Fig. 71.6, Tipo 240B. FBA2, Torre Mordillo, Cassano allo Jonio (CS), Settori E8-9, US 2, Late FBA-Early EIA</p>
<p>46 Timpone della Motta Francavilla M.ma (CS) TMPL1-P1D217-1 Crate 122 Plate VIII.46</p>	<p>Band handle with raised edges Roughly depurated impasto (small inclusions), surface: polished outside, smoothed inside Int. Gley1-4N dark grey, Ext. Gley1-3N very dark grey H3.5, W 3.4, Th 0.9 Drawing S. Boersma inked drawing M. Los-Weijns</p>
<p>47 Timpone della Motta Francavilla M.ma (CS) CAPE3-3 Plate VI.47, Tab. 18 Crate 170</p>	<p>Wall fragment with cord-band forming curvilinear decoration Roughly depurated impasto (few large inclusions, many very small inclusions), well smoothed surface Int Gley1-3N very dark grey, Ext 7.5YR4/3 brown H 5.9, W 8.9, wall Th 1.7, cord Th 0.5 drawing S. Boersma inked drawing M. Los-Weijns Par. 47 Filippi, Pacciarelli 1991, Fig. 2A.9, Le Cese (Calvi dell'Umbria, TR), MBA2</p>
<p>48 Timpone della Motta Francavilla M.ma (CS) CAPE3-1 Plate VI.48, Tab. 18 Crate 170</p>	<p>Flaring rim of a bowl Coarse impasto (many small/medium size inclusions), polished surface Int 5YR5/4 reddish brown, Ext 7.5YR3/1 very dark grey, 5YR4/3 reddish brown H 2.9, W 4.1, Th 0.6, D 26 Drawing S. Boersma inked drawing M. Los-Weijns Par. 48 Pannuti 1969, Fig. 28.2, strato 3, tagli 1-2, Grotta a Male (AQ), MBA3-RBA</p>
<p>49 Timpone della Motta Francavilla M.ma (CS) CAPE3-2 Plate VI.49 Crate 170</p>	<p>Funnel-shaped rim of a bowl Coarse impasto (many inclusions, from small to large size), traces of polishing on the surface Int Gley1-3/N very dark grey, Ext 5YR4/6 yellowish red, 5YR4/1 dark grey H 2.9, W 4.2, Th 0.6, D 18 Drawing S. Boersma inked drawing M. Los-Weijns</p>
<p>50 Timpone della Motta Francavilla M.ma (CS) CAE22-1</p>	<p>Flaring rim of a carenated bowl Roughly depurated impasto (very small inclusions), polished surface Int. Gley1-5/N grey, Ext. 2.5Y7/3 pale yellow - Gley1-5/N grey H 4.5, W 6.2, Th 0.8, D ±20</p>

Plate VIII.50, Tab. 18 Crate 170	Drawing S. Boersma inked drawing M. Los-Weijns Par. 50 Cocchi Genick 1995, Tipo 182, Fig. 55, Pian Sultano (Roma), Panarea, Capo Milazzese (ME), MBA3
51 Timpone della Motta Francavilla M.ma (CS) CA24-1 Plate VI.51, Tab. 20 Crate 170	Snail horn fragment of a pumpled handle Roughly depurated impasto (very small inclusions), well smoothed surface Int/Ext Gley1-2.5/N black H 4.5, W 6.2, Th 0.8, D \pm 20 Drawing S. Boersma inked drawing M. Los-Weijns Par. 51 Damiani 2010, Tav. 128.10, Tipo B28.4.B from Pieve Torina, Scavi 1919, Museo Nazionale di Ancona, Late RBA1
52 Timpone della Motta Francavilla M.ma (CS) CA24-2 Plate V.52 Crate 170	Rim fragment with handle attachment (of a jug) with notched cord-band Coarse impasto (many inclusions of several sizes), badly smoothed surface Int Gley1-4/N dark grey, Ext 2.5YR4/6 yellowish red H 4.5, W 6.2, Th 0.8, D \pm 20 Drawing S. Boersma inked drawing M. Los-Weijns
53 Timpone della Motta, Francavilla M.ma (CS) TMZCAPE-1 Plate VI.53 Crate 611	Jar with short neck and slightly flaring lip Roughly depurated impasto (many very small inclusions), surface: smoothed inside, traces of polishing outside Int Gley2-4/5PB dark bluish grey, Ext Gley2-4/5PB dark bluish grey, 10YR6/4 light yellowish brown H 2.4, W 3.5, Th 0.8, D \pm 16 Drawing S. Boersma inked drawing M. Los-Weijns
54 Timpone della Motta, Francavilla M.ma (CS) TMZCAPE-2 Plate VI.54 Crate 611	Barrel-shaped jar with cord-band decoration Roughly depurated impasto (few small-medium size inclusions), polished surface Int 2.5YR4/6 yellowish red, Ext 2.5YR4/4 reddish brown H 4.1, W 3.8, wall Th 1.1, cord-band Th 0.6 Drawing S. Boersma inked drawing M. Los-Weijns
55 Timpone della Motta Francavilla M.ma (CS) Cae-10-244 Plate VII.55 Crate 612	Wall fragment decorated by a sequence of circular and concave motifs in between two incised parallel and thin grooves Roughly depurated impasto (few small inclusions), polished surface Int. 10YR5/3 brown, Ext. Gley 2-3/10B very dark bluish gley H 3, W 2.5, Th 0.7 Drawing S. Boersma, inked drawing M. Los-Weijns
56 Timpone della Motta Francavilla M.ma (CS) Cae-10-601 Plate VII.56 Crate 612	Flattened rim fragment of a truncated-cone shaped bowl Roughly depurated impasto (small-medium size inclusions), badly polished surface Int 10YR7/3 very pale brown, Ext 10YR7/3-6/2 very pale brown-light brownish grey H 3, W 2.6, Th 0.8 Drawing S. Boersma, inked drawing M. Los-Weijns
57 Timpone della Motta Francavilla M.ma (CS) Cae-10-985 Plate VII.57, Tab. 20 Crate 612	Flattened rim fragment of a truncated-cone shaped bowl Roughly depurated impasto (many small size inclusions), badly polished surface Int. 2.5Y6/3 light yellowish brown, Ext. 2.5Y6/1 grey H 2, W 1.8, Th 0.8, Drawing S. Boersma, inked drawing M. Los-Weijns Par. 57 Peroni, Trucco 1994, Tav. 36.12, Forma 2, Broglio di Trebisacce (CS), Sett. E Est, livello 1 Est, RBA
58 Timpone della Motta Francavilla M.ma (CS) Cae-10-815 Plate VII.57, Tab. 20 Crate 612	Rim fragment of a truncated-cone shaped bowl Roughly depurated impasto (many several size inclusions), polished surface Int. 10YR7/4 very pale brown, Ext. 5YR5/4 reddish brown, 7.5YR5/1, 2 grey, brown H 2.2, W 2.8, Th 0.9, Drawing S. Boersma, inked drawing M. Los-Weijns Par. 58 Peroni, Trucco 1994, Tav. 93.18, Forma 38C, Broglio di Trebisacce (CS), Sett. B ovest, livelli S3+H, FBA

59 Timpone della Motta Francavilla M.ma (CS) Cae-10-763 Plate VII.59 Crate 612	Rim fragment Roughly depurated impasto (few small size inclusions) polished surface Int 7.5YR6/1 grey, Ext from 5YR5/6 yellowish red to 2.5Y4/1 dark grey, Gley1-4/N dark grey H 2.2, W 1.8, Th 0.7 Drawing S. Boersma, inked drawing M. Los-Weijns
60 Timpone della Motta, Francavilla M.ma (CS) Cae-10-464 Plate VII.60 Crate 612	Flaring rim fragment Roughly depurated impasto (many inclusions, from small to large size) polished surface Int.7.5YR3/1 very dark grey, Ext Gley1-3/N very dark grey H 1.9, W 1.8, Th 1 Drawing S. Boersma inked drawing M. Los-Weijns
61 Timpone della Motta, Francavilla M.ma (CS) Cae-10-920 Plate VII.61 Crate 612	Rim fragment of a truncated-cone shaped bowl Roughly depurated impasto (many inclusions, from small to medium size) polished surface Int.2.5YR6/3 light reddish brown, Ext Gley1-2.5/N black H 1.7, W 2.2, Th 0.5 Drawing S. Boersma, inked drawing M. Los-Weijns
62 Timpone della Motta, Francavilla M.ma (CS) Cae-10-502 Plate VII.62 Crate 612	Rim fragment, rounded lip Roughly depurated impasto (many small size inclusions), surface: polished outside, smoothed inside Int.7.5-YR-6/2 pinkish grey, Ext Gley1-3/N very dark grey H 1.8, W 1.6, Th 0.6 Drawing S. Boersma inked drawing M. Los-Weijns
63 Timpone della Motta Francavilla M.ma (CS) Cae-10-430 Plate VII.63 Crate 612	Flaring rim fragment of a bowl Roughly depurated impasto (few small size inclusions), polished surface Int.7.5Y6/4 light brown, Ext Gley1-2.5/N black, 2.5Y5/2 greyish brown H 1.1, W 2, Th 0.4, D 8 Drawing S. Boersma, inked drawing M. Los-Weijns
64 Timpone della Motta, Francavilla M.ma (CS) AC14A5-10 Plate XI.64, Tab.25 Crate 604	In-turning and slightly flaring rim of a jar with bump Roughly depurated impasto (many small size inclusions), well smoothed surface Int 2.5YR4/6 yellowish red, Gley2-3/5PB, Ext 5YR4/4 reddish brown H 5.1, W 6.2, Th 0.7, lug Th 0.7, D ±11 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 64 Colelli 2012, Tav. 38.127, Timpone della Motta di Francavilla M.ma (CS), AC 16 A. 29, end of the 8 th century BC
65 Timpone della Motta Francavilla M.ma (CS) AC14A5-3 Plate XI.64, Tab.25 Crate 604	Wall fragment with band handle attachment decorated, at the bottom, by three circular impressions Roughly depurated impasto, smoothed surface Int 5YR6/4 light light reddish brown, Ext 5YR4/1 dark grey H 7.3, W 8.8, wall Th 0.6, handle Th 1.2, dec. D ±1.6 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 65 Bianco Peroni <i>et al.</i> 2010, Pianello di Genga (AN), scavi 1965, Tav. 66B.2, Tomba 83, fase Pianello 1A, FBA1 and Tav. 49.2, tomba 53, fase Pianello 1B, Late FBA1. See also Filippi 1979, Fig. 1, p. 248, Rocca di Spoleto, surface find
66 Timpone della Motta Francavilla M.ma (CS) AC14A5-1 Plate XI.66 Crate 604	Fragment of lower and plated-shaped attachment of band handle, raised edges Grey ware, depurated impasto, burnished surface Int Gley1-5/10Y greenish black, Ext Gley1-3/N very dark grey H 2.3, W 4.9, profile Th 2.1, handle Th 1.5 Drawing S. Boersma, inked drawing M. Los-Weijns
67 Timpone della Motta Francavilla M.ma (CS) CA15-1B	Fragment of a pumpled handle with truncated horns Roughly depurated impasto (very few small size inclusions), burnished surface Int. 10YR6/2 light brownish grey, Ext. 2.5Y3/1 very dark grey H 4.1, D inf. 1.4, D sup. 2.2

Plate VI.67, Tab. 20 Crate 606	Drawing S. Boersma, inked drawing M. Los-Weijns Par. 67 Damiani 2010, Tav. 122. A 4, B14 tipo 3 from Torre Mordillo (Cassano allo Jonio, CS), Trucco, Vagnetti 2001, D12, cIII US 14, Foggia 445B, RBA1
68 Timpone della Motta Francavilla M.ma (CS) CA15-56 Plate VI.68 Crate 606	Head set on the knob of a strap handle Roughly depurated impasto (many small size inclusions), well smoothed surface Int./Ext. Gley1-2.5/N black H 3.4 , W 2.1, Th inf. 1.6, D sup.0.7 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 68 See for instance Damiani 2010, pp. 308-312, Gruppo XIV: couple of parallel bird heads set on an horizontal handle, RBA
69 Timpone della Motta Francavilla M.ma (CS) CA15-4B Plate VI.69 Crate 606	Rim fragment of a bowl Roughly depurated impasto (medium-large inclusions), smoothed surface Int 5YR4-3-2.5/1 reddish brown, black, Ext.5YR4/4 reddish brown H 4.2, W 3.6, Th 0.9 Drawing S. Boersma, inked drawing M. Los-Weijns
70 Timpone della Motta Francavilla M.ma (CS) CA15-2B Plate VI.70 Crate 606	Flaring rim fragment of a bowl Roughly depurated impasto (very few inclusions), well smoothed surface Int/Ext Gley1-3/N very dark grey H 1.8, W 3, Th 0.6 Drawing S. Boersma, inked drawing M. Los-Weijns
71 Timpone della Motta Francavilla M.ma (CS) CA15-3B Plate VI.71 Crate 606	Short funnel-shaped rim fragment of a bowl Int 10YR5/4 yellowish brown, Ext Gley1-2.5/N black H 2.3, W 2, Th 0.5 Drawing S. Boersma, inked drawing M. Los-Weijns
72 Timpone della Motta Francavilla M.ma (CS) CA15-6B Plate VI.72 Crate 606	Flaring rim fragment Roughly depurated impasto (many small inclusions), well smoothed surface Int 10YR4/1 dark grey, Ext Gley1-2.5/N black H 1.6, W 2.2, Th 1.7 Drawing S. Boersma, inked drawing M. Los-Weijns
73-77 not in catalogue	
78 Timpone della Motta Francavilla M.ma (CS) TMPE-1-4A + TMPE-1-4B Plate VII.78 Crate 730	Bucket-shaped jar with thickened lip Coarse impasto (several medium-large size inclusions), smoothed surface Int Gley2-3/10B very dark bluish grey, Ext 2.5Y5/2 greyish brown H 3.9, W 7.2, wall Th 1.1, lip Th 2, Drawing S. Boersma, inked drawing M. Los-Weijns Par. 78 Similar to Peroni, Trucco 1994, Tav. 50.21, Forma 83, Broglio di Trebisacce (CS), Sett. D Ovest, livello S, RBA2
79 Timpone della Motta Francavilla M.ma (CS) TMPE-1-2 Plate VII.79, Tab. 20 Crate 730	Wall fragment with incised spiral decoration Roughly depurated impasto (very few small size inclusions), polished surface Int/Ext Gley2-3/5PB very dark bluish grey H 2.9, W 1.6, Th 0.6 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 79 Pannuti 1969, Fig. 13.4, Grotta a Male (AQ), strato 4, MBA3
80 Timpone della Motta Francavilla M.ma (CS) TMPE-1-1 Plate VII.80, Tab. 20 Crate 730	Fragmentary little bowl Roughly depurated impasto (very few small size inclusions), polished surface Int/Ext Gley2-3/5PB very dark bluish grey H 2.2, W 1.2, Th 0.5, D 5 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 80 Damiani 2010, Tav. 45.A.8, Fam. 24.62, Tipo 3, var. C, Casale Nuovo

	(B.go Sabotino, LT), Scavi 1985-87, Area Ovest, US 112, RBA2
81 Timpone della Motta Francavilla M.ma (CS) TMPE-1-3 Plate VII.81 Crate 730	Bucket-shaped vessel with thickened rim Roughly depurated impasto (very few small size inclusions), polished surface Int Gley1-4/N dark grey, Ext 10YR6/3 pale brown H 3.4, W 2.7, wall Th 1, D ±13 Drawing S. Boersma, inked drawing M. Los-Weijns
82 Timpone della Motta Francavilla M.ma (CS) AC3-11-16R Plate XI.82 Crate 623	Bottom fragment Coarse impasto, well smoothed surface n.a. H 5.3, wall Th 1.5, D 11 Drawing S. Boersma, inked drawing M. Los-Weijns
83 Timpone della Motta Francavilla M.ma (CS) AC3-11-688 Plate XI.82 Crate 623	Jar with in-turning rim, straight lip Roughly depurated impasto (many small size inclusions), smoothed surface Int/Ext Gley1-3/N very dark grey H 3.2, W 4.6, Th 0.8 Drawing S. Boersma, inked drawing M. Los-Weijns
84 Timpone della Motta Francavilla M.ma (CS) AC3-11-17R Plate XI.84 Crate 623	Bowl with thickened and cut rim to inside Roughly depurated impasto (several small/medium size inclusions), well smoothed surface Int 2.5YR4/4 reddish brown, Ext Gley1-3/N very dark grey, 2.5YR3/1 very dark grey H 4.8, W 2.9, Th 0.8 Drawing S. Boersma, inked drawing M. Los-Weijns
85 Timpone della Motta, Francavilla M.ma (CS) AC3-11-627 Plate XI.85 Crate 623	Flaring rim of a rounded-shaped jar with cord-band Roughly depurated impasto (several small/medium size inclusions), smoothed surface Int 10R4/6 red, Ext 2.5YR4/3 reddish brown H 4, W 3.1, wall Th 0.9, cord-band Th 0.2 Drawing S. Boersma, inked Drawing M. Los-Weijns
86 Timpone della Motta Francavilla M.ma (CS) AC3-11-643 Plate XI.86 Crate 623	Funnel-shaped rim fragment Roughly depurated impasto (pochi small/medium size inclusions), polished surface Int Gley 1-4/N, 2.5YR5/6 red, Ext 2.5YR4/4 reddish brown H 3.3, W 3.6, wall Th 0.9 Drawing S. Boersma, inked drawing M. Los-Weijns
87 Timpone della Motta Francavilla M.ma (CS) AC3-11-637 Plate XI.87 Crate 623	Short flaring rim fragment of a small rounded-shaped jar Roughly depurated impasto (many small and few medium size inclusions) smoothed surface Int 5Y4/1 dark grey, Ext Gley1-5/N grey H 2.5, W 4.4, Th 0.9 Drawing S. Boersma, inked drawing M. Los-Weijns
88 Timpone della Motta Francavilla M.ma (CS) AC3-6-615 Plate XI.88 Crate 623	Flaring rim of a barrel-shaped jar with bump Roughly depurated impasto (few small size inclusions), smoothed surface Int 2.5YR4/8 red, Ext 10YR5/6 yellowish brown H 3.7, W 2.8, Th 0.7, bugna Th 0.5 Drawing S. Boersma, inked Drawing M. Los-Weijns Par. 88 Similar to Peroni, Trucco 1994, Tav. 89.19, Forma 66 (with cord-band), Broglio di Trebisacce (CS), Sett. B Ovest, livello H, Late FBA
89 Timpone della Motta Francavilla M.ma (CS) AC3-11-631 Plate XI.89, Tab. 25 Crate 623	In-turning rim of a bowl decorated by oblique grooves Roughly depurated impasto (few small-medium size inclusions), polished surface Int 2.5Y3/2 very dark greyish brown, est Gley1-2.5N black H 2.4, W 4.9, Th 1, D ±19 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 89 Pacciarelli 1999, Tav. 110, 1, Torre Galli, Tropea (VV), Tomba 161, bowl

	AC1B, EIAIA
90 Timpone della Motta Francavilla M.ma (CS) ACIII-13-3 - Crate 625	In-turning rim of a small barrel-shaped barrel jar Roughly depurated impasto (very few inclusions), surface: smoothed outside, polished inside Int 7.5YR3/1 very dark grey, Ext from 5YR4/4 reddish brown to 10YR4/1 dark grey H 3.9, W 5.1, Th 1 Drawing S. Boersma, inked drawing M. Los-Weijns
91 Timpone della Motta Francavilla M.ma (CS) ACIII-13-1 Plate XI.91, Tab. 25 Crate 625	Flaring rim fragment of an ovoid jar Roughly depurated impasto (very few inclusions), roughly polished surface Int 2.5YR5/8 red, Ext 2.5YR4/3 reddish brown H 6, W 5.1, Th 1.1 Drawing S. Boersma, inked Drawing M. Los-Weijns Par. 91 Peroni, Trucco 1994, Tav. 88.15, Forma 54A, Broglio di Trebisacce (CS), Sett. B Ovest, livello H, Late FBA
92 Timpone della Motta Francavilla M.ma (CS) ACIII-13-2 Plate XI.92 Crate 625	Band handle fragment with raised edges Depurated impasto, burnished surface Int 10YR6/3 pale brown, Ext 10YR4/1 dark grey H 2.5, W 2, Th 0.6 Drawing S. Boersma inked drawing M. Los-Weijns
93 Timpone della Motta Francavilla M.ma (CS) AC21-A (AC21 on the sherd) Plate X.93, Tab. 25 Crate 994	Cup fragment Depurated impasto, well smoothed surface Int 2.5Y6/4 light yellowish brown, Ext Gley1-3/N very dark grey H 2.5, W, Th 0.4, D 6.5 Drawing S. Boersma inked drawing M. Los-Weijns Par. 93 Trucco, Vagnetti 2001, Tipo 214, Fig. 92B, from Torre Mordillo in Peroni, Trucco 1994, Tav. 142.11, EIA1B
94 Timpone della Motta Francavilla M.ma (CS) AC21-B (AC21 sul fr.) Plate X.94, Tab. 25 Crate 994	Wall fragment with a ledge of a bowl Roughly depurated impasto (very few small-medium size inclusions), well smoothed surface Int 2.5Y6/3 light yellowish brown, Ext Gley1-3/N very dark grey H 2, W 2.8, Th 0.4 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 94 Peroni, Trucco 1994, Forma 26, Sett. B Ovest, livello H, Tav. 86.2, Tav. 86.8, Broglio di Trebisacce (CS), Late FBA. See 594.TdM
95 Timpone della Motta Francavilla M.ma (CS) AC25 Plate X.95 Crate 994	In-turning rim fragment of a jar Roughly depurated impasto (small-medium size inclusions), very well smoothed surface (traces of wheel on the upper part inside and outside) Int 10YR7/4 very pale brown, Ext 5YR5-4/4 reddish brown H 4.8, W 5.1, Th 1 Drawing S. Boersma, inked drawing M. Los-Weijns
96 Timpone della Motta Francavilla M.ma (CS) AC25-60 Plate X.96, Tab. 26 Crate 994	In-turning rim fragment, cut to inside, of a rounded-shaped bowl Roughly depurated impasto (few various size inclusions), very well smoothed surface Int 10YR6/4 light yellowish brown, Ext from 7.5YR5/3 brown to 5YR6/6 reddish yellow H 2.5, W 3.1, Th 0.5 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 96 See Peroni, Trucco 1994, shape 7, Broglio di Trebisacce (CS), Tav. 104.1, Sett. D Nord, buca nel riq. B sotto lo strato 1, Late FBA
97 Timpone della Motta Francavilla M.ma (CS) CA25-3B Plate V.97	Rounded-shaped bowl with slightly curvy wall and slightly flaring rim Roughly depurated impasto (few inclusions), polished surface Int. Gley1-2.5/N black, Ext Gley2-2.5/5PB bluish black H 3.7, W 2.9, Th 0.6, D 12.5 Drawing C. Colelli, inked drawing M. Los-Weijns

98 Timpone della Motta Francavilla M.ma (CS) CA24-4B Plate V.98 Crate 704	Funnel-shaped rim fragment Roughly depurated impasto (few small-medium size inclusions), polished surface Int. Gley1-2.5/N black, Ext Gley2-2.5/5PB bluish black H 1.9, W 2.1, Th 0.5 Drawing C. Colelli, inked drawing M. Los-Weijns
99 Timpone della Motta Francavilla M.ma (CS) CA24-3B Plate V.99 Crate 704	Fragment of a strap handle Roughly depurated impasto (many various size inclusions), polished surface Int Gley1-2.5/N black, Ext Gley1-3/N very dark grey H 4.4, W 3.5, Th 2.9, 2.1 Drawing S. Boersma, inked drawing M. Los-Weijns
100 Timpone della Motta Francavilla M.ma (CS) CA24-1B Plate V.100 Crate 704	Band handle Roughly depurated impasto (few small size inclusions), roughly polished surface Int Gley2-2.5/5PB bluish black, Ext 10YR5/2 greyish brown, 2.5YR4/4 reddish brown H 5, W 5.1, Th 1 Drawing S. Boersma inked drawing M. Los-Weijns
101 Timpone della Motta Francavilla M.ma (CS) CA24-2B Plate V.101 Crate 704	Flattened and in-turning rim fragment of a neck vessel Roughly depurated impasto (many small-medium size inclusions), smoothed surface Int 7.5YR5/6 yellowish red, Ext 10YR5/1 grey H 4.8, W 5.1, Th 0.9 Drawing S. Boersma, inked drawing M. Los-Weijns
102 Timpone della Motta Francavilla M.ma (CS) CA24-5B Plate V.102 Crate 704	Outward rim fragment of a short neck vessel Roughly depurated impasto (many small size inclusions), well smoothed surface (incised lines before firing) Int/Ext Gley1-2.5/N black H 2, W 2.2, Th 0.6 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 102 Similar to Peroni, Trucco 1994, Tav. 45.5, Forma 92, Broglio di Trebisacce (CS), Sett. D Ovest, livello 3 inferiore, RBA1
103 Timpone della Motta Francavilla M.ma (CS) CA24-6B Plate V.103 Crate 704	Rim fragment of a short neck vessel, thickened to outside Roughly depurated impasto (many small-medium size inclusions), well smoothed surface Int/Ext Gley1-3/N very dark grey H 2.1, W 2.7, Th 0.5 Drawing S. Boersma, inked drawing M. Los-Weijns
104 Timpone della Motta Francavilla M.ma (CS) CA24-9-96-1B Plate V.104 Crate 704	Fragment of a strap handle, straight cylindrical shape Roughly depurated impasto (few small size inclusions), polished surface (break) Int/Ext Gley2-3/5PB very dark bluish grey, Gley2-2.5/5PB bluish black H 3.7, W 3.3, Th 3 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 104 Trucco Vagnetti 2001, Tipo 465B, BR1 da Torre Mordillo, US 148
105 Timpone della Motta Francavilla M.ma (CS) CA25-1B Plate V.105 Crate 704	Lug Roughly depurated impasto (many small size inclusions, few large ones), smoothed surface Int Gley1-4/N dark grey, 2.5YR4/8 red, Ext 5YR5/4 reddish brown H 2.9, W 5.2, Th 2.8 Drawing S. Boersma inked drawing M. Los-Weijns
106 Timpone della Motta Francavilla M.ma (CS) CA25-2B Plate V.106, Tab. 20	Fragment of a band handle with raised edges with a small ear Roughly depurated impasto (small size inclusions), polished surface Int 10YR6/3 pale brown-2, Ext Gley1-4/N dark grey H 2, W 2.7, Th 1.6 Drawing S. Boersma, inked drawing M. Los-Weijns

Crate 704	Par. 106 9-Carnevale-Francavilla M.max CV7b-SU 6-4960/11 (MBA3)
107 Timpone della Motta Francavilla M.ma (CS) TM94PL-1PC-2 Plate VIII.107 Crate 171	Fragment of a truncated-cone shaped bowl with flattened rim Roughly depurated impasto (many small various size inclusions), well smoothed surface Int, Gley1-2.5/N black, Ext 2.5YR4/4 reddish brown, 7.5YR5/4 brown H 6.4, W 9, Th 1.4, D ±15 Drawing S. Boersma, inked drawing M. Los-Weijns
108 Timpone della Motta Francavilla M.ma (CS) TM94PL-1PC-1 Plate VIII.108 Crate 171	Fragment of a truncated-cone shaped bowl with cord-band Roughly depurated impasto (medium size inclusions), smoothed surface Int, from Gley1-6/1 greenish grey to Gley1-2.5/N black , Ext 10YR5/3 brown H 7.4, W 5.4, Th 0.9, D 25 Drawing S. Boersma, inked drawing M. Los-Weijns
109 Timpone della Motta Francavilla M.ma (CS) TM94PL-1PC-3 Plate VIII.109, Tab. 20 Crate 171	Fragment of a bowl with flattened rim Roughly depurated impasto (many small size inclusions), smoothed surface Int. 2.5YR5/8 red, Ext 5YR6/8 reddish yellow H 3, W 4.9, Th 0.8, D 20 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 109 Trucco, Vagnetti 2001, Fig. 92.F1, Torre Mordillo, EIA1B
110 Timpone della Motta Francavilla M.ma (CS) TMPL1-PBT1-1 Plate VII.110, Tab. 20 Crate 171	Fragment of a bowl with carena, flaring rim Coarse impasto (many various size inclusions), smoothed surface inside Int/Ext Gley1-3/N very dark grey H 4.2 , W , Th 0.7, D ±9 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 110 Peroni, Trucco 1994 I, Forma 19, Broglio di Trebisacce (CS), Tav. 102.23, Sett. D Nord, strato 2, FBA1
111 Timpone della Motta Francavilla M.ma (CS) TMPL1-PBT1-2 Plate VII.111, Tab. 21 Crate 171	Fragment of strap handle with snail horns endings Roughly depurated impasto, burnished surface Int Gley1-3/N very dark grey, Ext Gley1-4/N dark grey H 6.4, W 4.2, Th 1.8, edges D 2 Drawing S. Boersma inked Drawing M. Los-Weijns Par. 111 Trucco Vagnetti 2001, Fig. 36.17, Tipo 443A, Torre Mordillo, Cassano allo Jonio (CS), settori DE11-12, US 11/87, RBA1
112 Timpone della Motta, Francavilla M.ma (CS) TMPL1-T6PA-6 Plate IX.112, Tab. 23 Crate 171	Fragment of truncated-cone shaped vessel with flattened and thickened rim Roughly depurated impasto (many small size inclusions), smoothed surface Int Gley1-3/N very dark grey, Ext 5YR5/6 yellowish red H 4.8, W 6.1, rim Th 1, D 16 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 112 Bergonzi <i>et al.</i> 1982, Tav. 31.7-8, Broglio di Trebisacce (CS), Sett. B, ampliamento 80, strati H (forma 74A in Peroni, Trucco 1994) FBA
113 Timpone della Motta Francavilla M.ma (CS) TMPL1-T6PA-1 Plate IX.113, Tab. 23 Crate 171	Fragment of cup with band handle attachment, rim cut to inside, pointed bottom Roughly depurated impasto (many small size inclusions), smoothed surface Int/Ext Gley1-2.5/N black H 4.2 (with handle attachment), H 3, W 6.1, Th 0.6, Handle Th 0.5, D 6.8 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 113 Cocchi Genick 1995, Fig. 112, Tipo 350, (Cupola Beccarini, La Starza) MBA1
114 Timpone della Motta Francavilla M.ma (CS) TMPL1-T6PA-2 Plate IX.114 Crate 171	Funnel-shaped rim fragment of a bowl Roughly depurated impasto (small size inclusions, white), polished surface Int Gley1-5/N grey, Ext Gley1-3/N very dark grey H 4.1, W 8, Th 0.7, D 25 Drawing S. Boersma, inked drawing M. Los-Weijns

<p>115 Timpone della Motta Francavilla M.ma (CS) TMPL1-T6PA-3 Plate IX.115, Tab. 23 Crate 171</p>	<p>Flaring rim fragment of an ovoid jar Roughly depurated impasto (small-medium size inclusions), polished surface Int Gley1-5/10Y greenish grey, Ext Gley1-3/N very dark grey H 7.5, W 7.5, Th 1.1, D 25 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 115 Bergonzi <i>et al.</i> 1982, Tav. 3.11, Sett. B, Strati H3 scarpata, Broglio di Trebisacce (CS), shape 57b in Peroni, Trucco 1994, FBA2</p>
<p>116 Timpone della Motta Francavilla M.ma (CS) TMPL1-T6PA-5 Plate IX.116 Crate 171</p>	<p>Slightly flaring rim fragment of a truncated cone shaped and ovoid jar Roughly depurated impasto (many small size inclusions, few medium ones), smoothed surface Int 7.5YR5/4 brown, Ext 7.5YR3/1 very dark grey H 2.5, W 4, wall Th 0.8 Drawing S. Boersma, inked drawing M. Los-Weijns</p>
<p>117 Timpone della Motta Francavilla M.ma (CS) TM94PL1-PB287-1 Plate VII.117 Crate 171</p>	<p>Flat base fragment Grey ware, depurated impasto Int Gley1-7/10GY light greenish grey, Ext Gley2-5/5BG greenish black H 3.1, W 5.9, wall Th 0.3, base Th 0.8, D 7 Drawing S. Boersma, inked drawing M. Los-Weijns Temper datable to the IA (see Chapter 4, footnote 487)</p>
<p>118 Timpone della Motta Francavilla M.ma (CS) TMPL1-T6PB-2 Plate IX.118 Crate 171</p>	<p>Funnel-shaped rim fragment (overhanging) Depurated impasto (many small size inclusions, few medium ones), polished surface Int Gley 1-5/N grey, Ext Gley1-3/N very dark grey H 3, W 6.3, wall Th 0.6, D ±12 Drawing S. Boersma, inked drawing M. Los-Weijns</p>
<p>119 Timpone della Motta Francavilla M.ma (CS) TMPL1-T6PB-1 Plate IX.119 Crate 171</p>	<p>Band handle with raised edges Roughly depurated impasto (very small white inclusions), polished surface Int Gley 1-6/N grey, Ext Gley1-6/10Y greenish grey H 5.6, W 5.3, handle Th 1.1 Drawing S. Boersma, inked drawing M. Los-Weijns</p>
<p>120 Timpone della Motta Francavilla M.ma (CS) TMPL1-T3-3 Plate VIII.120 Crate 171</p>	<p>Band handle set on a rim Coarse impasto (many various size inclusions), smoothed surface Int 7.5YR6/3 light brown, Ext 2.5YR6/3 light reddish brown H 6.1, W 5.3, handle Th 1.1 Drawing S. Boersma inked drawing M. Los-Weijns</p>
<p>121 Timpone della Motta Francavilla M.ma (CS) TMPL1-T3-2 Plate VIII.121 Crate 171</p>	<p>Fragment of short neck vessel, slightly flaring Coarse impasto, polished surface Int 10YR6/3 pale brown, Ext 10YR5/4 yellowish brown H 4.2, W 4.5, Th 0.9 Drawing S. Boersma, inked drawing M. Los-Weijns</p>
<p>122 Timpone della Motta Francavilla M.ma (CS) TMPL1-T3-1 Plate VIII.122 Crate 171</p>	<p>Wall fragment Grey ware, depurated impasto, the surface has been altered by high temperatures Int Gley 2-4/5B dark bluish grey, Ext 2-4/5PB dark bluish grey H 4.8, W 4., Th 0.4 Drawing S. Boersma, inked drawing M. Los-Weijns</p>
<p>123 Timpone della Motta Francavilla M.ma (CS) TM91PL1-B4-1 Plate VIII.123, Tab. 21 Crate 944</p>	<p>Fragment of band handle with raised edges ending with a small ear Roughly depurated impasto (many small size inclusions), smoothed surface Int Gley 1-3/N very dark grey, Ext 10YR5/3 brown H 7, W 4.8, Th 2.1 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 123 Cocchi Genick 1995, Fig. 182.581, Praia a Mare, Grotta Cardini, see also MdM 200 (Mandrone di Maddalena), MBA3</p>
<p>124 Timpone della Motta</p>	<p>Fragment of horizontal and twisted handle Roughly depurated impasto (very few inclusions), smoothed surface</p>

<p>Francavilla M.ma (CS) AC660-1 Plate XII.124 Crate 660</p>	<p>Int 7.5YR6/1 grey Wall H 6.7, W 5.6, Wall Th 0.9, Handle Th 2.7 Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>125 Timpone della Motta Francavilla M.ma (CS) FMAC3-2-130996-SE (context 2) – A Plate XII.125 Crate 642</p>	<p>Fragment of a bowl with straight rim and a little bump Roughly depurated impasto (few very small size inclusions), smoothed surface Int Gley1-4N dark grey, Ext 2.5YR5/8-4/4 red-reddish brown, 2.5YR5/6 red H 3.3, W 3.4, Th 1.4 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 125 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio, CS, Fig. 34.19, Tipo 35, US 11/87, RBA2-FBA1 (See Par. 142)</p>
<p>126 Timpone della Motta Francavilla M.ma (CS) CAD 306.16 (Pl. 1, CA) Plate VII.126, Tab. 21 Crate 170</p>	<p>Fragment of horizontal twisted and tube-shaped handle Roughly depurated impasto (many small size inclusions), smoothed surface Int 2.5YR4/4 reddish brown, Ext 2.5YR4/6 yellowish red H 6.5, Th 2.6 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 126 Filippi, Pacciarelli 1991, Fig. 27.68, Tipo 4, Campo del Pozzo, Nazzano, RM, EIA</p>
<p>127 Timpone della Motta Francavilla M.ma (CS) CAD 306.34 (Pl. 1, CA) Plate VII.127 Crate 170</p>	<p>Fragment of an in-turning rim bowl Roughly depurated impasto (few small size inclusions), smoothed surface Int 10YR6/2 light brownish grey, Ext Gley1-3/N very dark grey H 2.9, W 2.2, Th 1.2, D 11 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 127 Similar to Belardelli 2004, Tav. II.1 (<i>con costolature oblique</i>), Coppa Navigata, materials from Trincea I (<i>fra 1° e 2° battuto, fino a m 0.67, scavi 1904</i>), FBA1</p>
<p>128 Timpone della Motta Francavilla M.ma (CS) CAD 306.35 (Pl. 1, CA) Plate VII.128 Crate 170</p>	<p>Fragment of in-turning rim Roughly depurated impasto (many small size inclusions), smoothed surface Int 7.5YR6/4 brown light reddish brown, Ext Gley 1-2.5/N, 7.5YR2.5/2 very dark brown H 2.5, W 2.4, Th 0.7, D 13.6 Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>129 Timpone della Motta Francavilla M.ma (CS) CAD 306.06 (Pl. 1, CA) Plate VII.129 Crate 170</p>	<p>Fragment of a funnel-shaped rim with groove outside Roughly depurated impasto (many small size inclusions), smoothed surface Int 10YR6/2 light brownish grey, Ext 10YR5/3 brown H 4.8, W 4.9, Th 1.2, D 15.6 Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>130 Timpone della Motta Francavilla M.ma (CS) CA15-170 (ContExt 15) Plate VI.130 Crate 170</p>	<p>Fragment of bowl with carena, funnel-shaped rim Roughly depurated impasto (many small size inclusions), smoothed surface Int 10YR4/2 dark greyish brown, Ext 5YR4/4 reddish brown H 3.6, W 3.8, Th 0.6, D 13 c.a., Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>131 Timpone della Motta Francavilla M.ma (CS) CA-PITE-20 Plate VI.131, Tab. 21 Crate 170</p>	<p>Fragment of a vessel with internal ledge Roughly depurated impasto (many inclusions), polished surface Int 10YR3/3 dark brown, Gley1-4/N dark grey, Ext 7.5YR5/3 brown H 9, Wall Th, 1.5 Th 3.9, D 22.5 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 131 Peroni, Trucco 1994, Broglio di Trebisacce, Forma 91, Tav. 33.33, Sett. BW, str. H, riq. R, RBA1</p>
<p>132 Timpone della Motta Francavilla M.ma (CS) AC 5-15 Plate X.132 Crate 686</p>	<p>Fragment of a truncated cone shaped bowl Roughly depurated impasto (many large size inclusions), smoothed surface Int 10YR6/3 pale brown, Ext 5YR5/4 reddish brown H 2.4, W 3, Th 0.8, D 21 c.a Drawing A. Menduni, inked drawing M. Los-Weijns</p>

<p>133 Timpone della Motta Francavilla M.ma (CS) AC 2-11-18 Plate XII.133 Crate 184</p>	<p>Fragment of a neck vessel with slightly flaring rim Roughly depurated impasto (few small-medium size inclusions), smoothed surface Int 2.5Y5/1 grey, Ext 5YR5/4, 5/6 reddish brown, yellowish red H 7, W 3.2, Th 0.9, D 13 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 133 Similar to Peroni, Trucco 1994, Fig. 60.87, Sett. B, liv. 4W, MBA3</p>
<p>134 Timpone della Motta Francavilla M.ma (CS) AC 2-11-50 Plate XII.134 Crate 184</p>	<p>Fragment of neck vessel with slightly in-turning rim Roughly depurated impasto (small size inclusions), smoothed surface Int 5Y6/3 pale olive, Ext 5YR5/3 reddish brown, 5YR3/1 very dark grey H 4, W 2.7, Th 0.7, D 9.6 Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>135 Timpone della Motta Francavilla M.ma (CS) AC 2-11-95 Plate XII.135, Tab. 26 Crate 184</p>	<p>Fragment of a short neck jar Roughly depurated impasto (few small size inclusions), smoothed surface Int 5YR5/3 reddish brown, Ext 7.5YR3/1-3/2 very dark grey-dark brown H 3.7, W 6.2, Th 0.8, D 17 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 135 Peroni, Trucco 1994, Forma 83, Tav. 26.9, Sporadico presso il Sett. E, Broglio di Trebisacce (CS), MBA3</p>
<p>136 Timpone della Motta Francavilla M.ma (CS) AC 6-13-421 Plate XII.136, Tab. 26 Crate 184</p>	<p>Fragment of a funnel-shaped rim Roughly depurated impasto (few large size inclusions), smoothed surface Int Gley1-4/N, 3/N dark grey, very dark grey, Ext 2.5Y3/1 very dark grey, 10YR5/2 greyish brown H 2.6, W 5, Th 1.2, D 23 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 136 Peroni, Trucco 1994, Tav. 3.13, Sett. B ovest, liv. 4A, Broglio di Terbisacce, CS, MBA3</p>
<p>137 Timpone della Motta Francavilla M.ma (CS) AC 6-13-500 Plate XII.137 Crate 184</p>	<p>Fragment of a neck vessel with in-turning rim Roughly depurated impasto (many small-medium size inclusions), smoothed surface Int Gley1-4/N dark grey, 2.5Y5/1 grey, Ext 7.5YR4/3 reddish brown, 10YR5/3 brown H 4.7, W 3.9, Th 1 Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>138 Timpone della Motta Francavilla M.ma (CS) P1ZCA727-1 Plate IX.138 Crate 727</p>	<p>Wall fragment with vertical band handle Roughly depurated impasto (few medium size inclusions), smoothed surface Int 2.5YR4/8 red, Ext 10R5/4 weak red, Gley1-4/N dark grey H 8.3, W 7.4, Th 1.4 Drawing A. Menduni, inked drawing M. Los-Weijns</p>
<p>139 Timpone della Motta Francavilla M.ma (CS) P1ZCA727-2 Plate IX.139, Tab. 21 Crate 727</p>	<p>Fragment of a little jar with rounded body, short out-turning rim, flattened lip Roughly depurated impasto (few small-medium size inclusions), smoothed surface Int 10YR5/3 brown, Ext 2.5YR5/4 reddish brown, Gley1-3/N very dark grey H 3.8, W 2.9, Th 0.6, D 8 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 139 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio, CS, Fig. 64.10, US 235, Tipo 300, RBA1</p>
<p>140 Timpone della Motta Francavilla M.ma (CS) P1ZCA727-3 Plate IX.140, Tab. 21 Crate 727</p>	<p>Fragment of horizontal handle, roughly squared section Depurated impasto, smoothed surface Int Gley1-2.5/N black, Ext 10YR6/2 light brownish grey H 4.4, W 9.1, Th 2.5 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 140 Filippi, Pacciarelli 1991, Fig. 24.44, Ansa tipo 2B, Campo del Pozzo (Nazzano,</p>

	RM), EIA
141 Timpone della Motta Francavilla M.ma (CS) FMAC3-2-130996-SE (context 2) – B Plate XII.141 Crate 642	Fragment of a pseudo-circular handle Depurated impasto (few small-medium size inclusions), polished surface Int 2.5YR5/3 reddish brown, 7.5YR4/1 dark grey, Ext 10R6/1-4/3 reddish grey-weak red H 7.3, Th 2.5 Drawing A. Menduni, inked drawing M. Los-Weijns
142 Timpone della Motta Francavilla M.ma (CS) CAE14B1/8 Plate VII.142 Crate 364	Fragment of a bowl with vertical rim Depurated impasto (few small size inclusions), polished surface Int 2.5Y7/4 pale yellow, Ext 10YR3/1 very dark grey, 2.5YR5/4 reddish brown H 3.7, W 2.5, Th 0.8, D 16 c.a Drawing A. Menduni, inked drawing M. Los-Weijns
143 Timpone della Motta Francavilla M.ma (CS) CAE14A1/11 Plate VII.143 Crate 364	Fragment of a flaring rim, thickened lip Roughly depurated impasto (few small size inclusions), polished surface Int 2.5Y8/4 pale yellow, Ext Gley1-2.5/N black H 1.6, W 2.5, Th 0.5, D 8.2 Drawing A. Menduni, inked drawing M. Los-Weijns
144 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-41A Plate XIV.144, Tab. 3	Short flaring rim of a bowl Roughly depurated impasto, burnished outside, well smoothed inside Ext 7.5YR6/2 pinkish grey, Int 5Y5/1 grey, core 10YR5/1 grey H 2.2, W 3.1, Th 0,4-0,5, D 10 Drawing S. Boersma Par. 144 Marino 2000, fig. 6.2, Capo Piccolo (KR), saggio 4C, taglio 4, facies di Cessaniti-Capo Piccolo, Late EBA
145 Pietra S.Angelo S.Lorenzo B. (CS) SA06-2 Plate XIV.145	Bowl fragment with in-turning rim, flattened and thickened lip to outside Roughly depurated impasto, smoothed surface 7.5YR5/3 reddish brown H 2,4, W 5.45, Th 1.9, wall Th 0.9, D ± 24 Drawing S. Boersma
146 Pietra S.Angelo S.Lorenzo B. (CS) SA05-4 Plate XIV.146, Tab. 2	Fragment of a jar with short neck, flattened lip, notched cord-band decoration Coarse impasto, trace of burnishing on the surface Ext 7.5YR7/6 reddish yellow reddish yellow reddish yellow, Int 7.5YR5/4 brown H 4.7, W 5.1, Th 1.6, Th 1.1 (wall) Drawing S. Boersma Par. 146 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Tav. 7.9, Sett. B Ovest, livello 3 A, MBA2, Cinquepalmi, Radina 1998, 5.027, Bari, S. Maria del Buon Consiglio, Capanna del Protoappenninico, D II Sud
147 Pietra S.Angelo S.Lorenzo B. (CS) SA05-18 Plate XIV.147, Tab. 2	Flaring and flattened rim of a small globular jar Roughly depurated impasto, polished surface 10YR5/2 greyish brown H 4.9, W 8.2, Th 1.1, D ±18 Drawing S. Boersma Par. 147 Piperno, Pellegrini 2000-2001, Tav. F.3, Grotta del Pino di Sassano (SA), surface find, LEBA-MBA1
148 Pietra S.Angelo S.Lorenzo B. (CS) SA06-5 Plate XIV.148	Short in-turning rim of a globular jar with cord-band decoration Roughly depurated impasto, smoothed surface 5YR6/4 light reddish brown, core 5YR6/6 reddish yellow H 4.45, W 3.9, Th 1.55, Th 1.1 (wall) Drawing S. Boersma
149 Pietra S.Angelo S.Lorenzo B. (CS) SA05-19	Wall fragment decorated by a thin knob linked to a thin cord band Roughly depurated impasto, burnished Internal surface Int 7.5YR6/4 light reddish brown, Ext n.a. H 4.75, W 7.65, Th 0.35 (decoration), Th 1 (wall), 24<D<26,

Plate XIV.149, Tab. 2	Drawing S. Boersma Par.149 Cocchi Genick 1999a, Fig. 6.2,6 (Italia Centrale), EBA2, Cocchi Genick 2002, Fig. 20.77v., MBA1A (Grotta di Belverde di Cetona, Siena).
150 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-36 Plate XIV.150	Wall fragment of a high truncated cone shaped neck vessel Roughly depurated impasto, smoothed surface Ext from 5YR6/4 light reddish brown to 5YR6/6 reddish yellow, Int 7.5YR4/1 dark grey, core 2.5YR5/1 dark reddish grey H 11, W 9, Th 1-1.2 Drawing M. D. Brescia, inked drawing S. Boersma
151 Pietra S.Angelo S.Lorenzo B. (CS) SA05-15 Plate XIV.151	Vertical band handle Coarse impasto, smoothed surface n.a. H 7.3, W 7.1, Th 4.6, Th 1.1 (wall), Th 1.5 (handle) Drawing S. Boersma
152 Pietra S.Angelo S.Lorenzo B. (CS) SA03-2 Plate XIV.152	Vertical band handle Coarse impasto, smoothed surface Ext 7.5YR5/4 brown, Int 10YR5/1 grey, core 10YR3/1 very dark grey H 8.3, W 6.3, Th 1 Drawing S. Boersma
153 Pietra S.Angelo S.Lorenzo B. (CS) SA05-1 Plate XIV.153	Wall fragment with cord band forming angular motifs Coarse impasto, smoothed surface 10YR6/3 pale brown H 7.4, W 5,7, Th 2,5 Drawing S. Boersma
154 Pietra S.Angelo S.Lorenzo B. (CS) SA05-8 Plate XV.154	Wall fragment with cord band forming angular motifs Roughly depurated impasto, burnished surface Ext 5YR6/8 reddish yellow, Int/core 10YR4/1 dark grey H 6.3, W 4.5, Th 1.6 Drawing S. Boersma
155 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-DS01- 07 Plate XV.155, Tab. 3	Emispherical bowl fragment with flattened lip Roughly depurated impasto, smoothed surface Ext/Int 10YR5/2 greyish brown H 3,7 , W 2.9, Th 0,6-0,7, D 16 Drawing M. D. Brescia, inked drawing S. Boersma Par.155 Trucco, Vagnetti 2001, Type 24, Torre Mordillo, Cassano allo Jonio (CS), MBA2-3
156 Pietra S.Angelo S.Lorenzo B. (CS) SA06-3 Plate XV.156, Tab. 3	Fragment of neck vessel with in-turning rim, rounded and slightly thickened lip Roughly depurated impasto, smoothed surface 7.5YR6/4 light reddish brown H 4.9, W 3.3, Th 0,7 Drawing S. Boersma Par.156 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Forma 92A, MBA2-3, see example in Tav. 23.15, Sett. E, liv. S
157 Pietra S.Angelo S.Lorenzo B. (CS) SA05-9 Plate XV.157	Funnel shaped rim fragment of a bowl Roughly depurated impasto, polished surface Ext 10YR3/1 very dark grey, Int 10YR5/2 greyish brown H 5.1, W 6.1, Th 0.7, D ±19 Drawing S. Boersma
158 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-27 Plate XV.158, Tab. 3	Fragment of a bowl with slightly out-curving rim Roughly depurated impasto, smoothed surface Ext 2.5YR5/8 red, Int 7.5YR7/4 pink, core 7.5YR6/3 light brown H 6, W 5.8, Th 0,8, D 14 Drawing S. Boersma Par. 158 Cocchi Genick 1995, Fig. 66, Tipo 209, Var. A-b, (Serre di Pisticci, Grotta Bella) MBA1-2

159 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-42A Plate XV.159	Wall fragment of a shallow cup with carena, straight walls Roughly depurated impasto, polished surface Ext from 5YR6/6 reddish yellow to 5YR6/1 grey, Int 5YR5/4 reddish brown, core from 7.5 YR 6/2 pinkish grey to 7.5 YR 5/1 grey H 3.7, W 5.1, Th 0.6, D 0.6 Drawing S. Boersma
160 Pietra S.Angelo S.Lorenzo B. (CS) SA06-1 Plate XV.160, Tab. 3	Fragment of cylindrical neck vessel, slightly outturning rim, flattened lip Roughly depurated impasto, smoothed surface Ext 10YR5/2 greyish brown, Int 7.5YR6/6 reddish yellow H 7.2, W 7.1, Th 1.1, D ± 24 Drawing S. Boersma Par. 160 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Sett E, Strato 2 BM3
161 Pietra S.Angelo S.Lorenzo B. (CS) SA05-6 Plate XV.161	Fragment of small globular jar with flaring rim and cord band decoration Coarse impasto, irregularly smoothed surface 7.5YR6/6 reddish yellow, core 7.5YR4/1 dark grey H 3.2, W 3.1, Th 0.6 (wall), Th 0.95 Drawing S. Boersma
162 Pietra S.Angelo S.Lorenzo B. (CS) SA03-1 Plate XV.162	Short funnel-shaped rim fragment of ovoidal jar Roughly depurated impasto, well polished surface 10YR5/2 greyish brown, core 10YR4/1 dark grey H 5.1, W 6.2, Th wall 0.8, D 27 Drawing S. Boersma Par. 162 Similar to Peroni, Trucco 1994, Broglio di Trebisacce (CS), Forma 81, MBA2
163 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-42b Plate XV.163	Short funnel-shaped rim fragment of a bowl n.a. H 4.7, W 5.6, Th wall 0.8, D 18.2 c.a. Drawing S. Boersma
164 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-24 Plate XV.164, Tab. 3	Short funnel-shaped rim fragment with internal angle of an avoidal jar Roughly depurated impasto, smoothed surface Ext 5YR5/1 grey, Int 5YR5/6 yellowish red, core 5YR6/1 grey H 3.2, W 4.1, Th 1.1 Drawing S. Boersma Par. 164 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Forma 78° MBA3
165 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-37 Plate XV.165	Inturning rim fragment of ovoidal jar, flattened and cut to inside lip, cord band decoration Roughly depurated impasto, smoothed surface Ext 2.5YR6/6 light red, Int 10R5/6 red, core 10YR5/2 greyish brown H 5, W 5.7, Th 1.1 (wall), Th 1.6 (cord), D 17 Drawing M. D. Brescia, inked drawing S. Boersma
166 Pietra S.Angelo S.Lorenzo B. (CS) PSA '06-20 Plate XVI.166	Outward rim fragment of small closed-shape vessel Coarse impasto, smoothed surface 7.5YR3/1 very dark grey, core 7.5YR5/2 greyish brown H 2.7, W 3.3, Th 1.3, D 7-8 Drawing S. Boersma
167 Pietra S.Angelo S.Lorenzo B. (CS) SA06-8 Plate XVI.167	Wall fragment of ovoidal jar with cord band decoration Roughly depurated impasto, smoothed surface 10YR5/6 yellowish brown (limestone incrustations) H 6.8, W 5.3, Th 1.5, Th 1 (wall) Drawing S. Boersma
168 Pietra S.Angelo S.Lorenzo B. (CS) SA05-3 Plate XVI.168	Vertical band handle set on a short inturning rim Coarse impasto, smoothed surface Ext 7.5YR5/4 brown, Int 5YR5/6 yellowish red H 5, W 5.9, Th 1.2 (wall), Th 0.8 (handle) Drawing S. Boersma

169 Pietra S. Angelo S. Lorenzo B. (CS) SA05-11 Plate XVI.169	Outturned rim with rounded lip of a small globular vessel Depurated impasto, well polished surface 10YR5/2 greyish brown 1.95, 1.95, Th 0.45 Drawing S. Boersma
170 Pietra S. Angelo S. Lorenzo B. (CS) SA05-17 Plate XVI.170	Rim fragment of a truncated cone shaped bowl with cord band Roughly depurated impasto, polished surface 10YR6/4 light yellowish brown H 5.4, W 6.1, Th 1.65 (wall+cord), Th 1.1 (wall) Drawing S. Boersma
171 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-DS05-10 Plate XVI.171	Roughly circular small disc with two circular holes in the middle Roughly depurated impasto, smoothed surface on one side, badly smoothed on the other side Ext 7.5YR6/4 light reddish brown, Int 10YR6/3 pale brown, core from 7.5YR6/3 light brown light brown to 10YR5/3 brown brown Th 0.7, D max 3.7, D min 3.2, D 0.2-0.5 (holes) Drawing M. D. Brescia, inked drawing S. Boersma
172 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-DS01-02 Plate XVI.172, Tab. 3	Truncated cone shaped fragment of a horn-shaped cooking (?) stand Coarse impasto, smoothed surface Ext from 2.5YR6/6 light red to 7.5YR6/2 pinkish grey, core 2.5Y5/4 grey H 3.9, W 4.8, Th 3.3-3.7 Drawing S. Boersma Par. 172 Bernabò Brea, Cavalier 1980, Tav. CCXIV fig. 7, MBA3
173 Pietra S. Angelo S. Lorenzo B. (CS) SA06-4 Plate XVI.173	Fragment of vessel with straight rim, flattened and slightly outward thickened lip, notched cord band decoration Roughly depurated impasto, polished surface Ext 7.5YR6/6 reddish yellow, Int 7.5-5YR-6/4 light brown H 4.8, W 5.15, Th 1.7, Th 1.2 (wall) Drawing S. Boersma, inked drawing M. Los-Weijns
174 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-DS05-7 Plate XVI.174	Wall fragment of a bowl with carena with parallel grooves and vertical handle attachment Roughly depurated impasto, polished surface Ext 7.5 YR 6/4 light brown, Int 7.5 YR 6/6 reddish yellow, core 10 YR 6/3 pale brown W 6.4, H 5.1, Th 0.6-0.9 Drawing S. Boersma Par. 174 Similar to Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Tipo 147, RBA1-2. See also, for the decoration, Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 33.17, US 8/87, FBA1
175 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-25 Plate XVI.175	Fragment of a globular bowl with thickened rim Coarse impasto, smoothed surface Ext 7.5YR6/3 light brown, Int 5YR5/4 reddish brown, core 7.5YR6/3 light brown H 2.1, W 2.5, Th 1.6 (rim), Th 0.6 (wall), D c.a 8 Drawing S. Boersma
176 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-28 Plate XVI.176	Fragment of an ovoid jar with inturning, thickened and bevelled on the insidierim Roughly depurated impasto, polished surface Ext 5YR6/3 light reddish brown, Int 5YR5/3 reddish brown, core from 5YR6/1 grey to 5YR6/2 pinkish grey H 4.9, W 5.5, Th 1.1 (wall), D 20 c.a Drawing S. Boersma
177 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-17 Plate XVI.177	Fragment of a barrel shaped jar with cord band, slightly flaring rim Coarse impasto, smoothed surface 5YR6/1 grey grey - 5YR6/3 light reddish brown, core 10YR5/1 grey H 6.4, W 5.6, Th 0.9, Th 1.4 (cord), D 20 Drawing M. D. Brescia, inked drawing S. Boersma

178 Pietra S. Angelo S. Lorenzo B. (CS) SA05-2 Plate XVI.178, Tab. 2	Fragment of a globular jar with short Inturning rim, flattened and slightly flaring lip Roughly depurated impasto, polished surface 10YR5/2 greyish brown, core 10YR4/1 dark grey H 2.6 , W 4.2, Th 1.1, Drawing S. Boersma Par. 178 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Tav. 47.28, Sett. D. Ovest, liv. 2B, RBA1-2
179 Pietra S. Angelo, S. Lorenzo B. (CS) SA05-16 Plate XVI.179	Fragment of a jar with outward rim and cord band decoration Roughly depurated impasto, well polished surface 10YR5/2 greyish brown 5.5, Th 1.8, Th 1.3 (wall) Drawing S. Boersma
180 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-DS01- 04 Plate XVI.180	Wall fragment with notched cord band decoration Roughly depurated impasto, smoothed surface, traces of wheel on the external surface Ext 5YR7/6 reddish yellow, Int 10YR6/3 pale brown, core 10YR6/1 grey W 7.9, H 7.8, Th wall 1.2, Th cord 1.9 Drawing S. Boersma
181 Pietra S. Angelo S. Lorenzo B. (CS) SA03-3 Plate XVI.181	Wall fragment with lug decorated by two notches Coarse impasto, irregular surface Ext 7.5YR6/6 reddish yellow, Int 10YR4/1 dark grey, core 10YR3/1 very dark grey H 4.4, W 5.7, Th 4.4 (lug) Drawing S. Boersma
182 Pietra S. Angelo S. Lorenzo B. (CS) PSA '06-DS05-9 Plate XVII.182	Mounded flat base fragment Coarse impasto, smoothed surface Ext 5YR6/4 light reddish brown, Int from 10R7/6 light red to 2.5YR5/1 dark reddish grey, core 5YR6/1 grey H 5.2, W 7.2, Th 0.9-1.2, D 20 Drawing S. Boersma
183 Pietra S. Angelo, S. Lorenzo B. (CS) PSA '06-40 Plate XVII.183	Fragment of a handle Roughly depurated impasto, smoothed Internal surface, polished external surface Ext 5YR5/3 reddish brown, Int 5YR5/1 grey, core 5YR4/1 dark grey H 3.4, W 2.5, Th 1.7-2.1 Drawing M. D. Brescia, inked drawing S. Boersma
184 Pietra S. Angelo S. Lorenzo B. (CS) SA05-5 Plate XVII.184	Inward wall fragment with cord band decoration Coarse impasto, polished surface 7.5YR5/4 brown H 6.3, W 5.7, Th 1.1 (wall), Th 1.7 (wall+cord) Drawing S. Boersma
185 Pietra S. Angelo S. Lorenzo B. (CS) SA05-10 Plate XVII.185	Wall fragment with elongated notched cord band Coarse impasto, smoothed surface Ext 7.5YR6/6 reddish yellow, Int 10YR6/2 light brownish grey W 7.1 , H 5.9, Th 1.5, Th 1.1 (wall) Drawing S. Boersma
186 Pietra S. Angelo S. Lorenzo B. (CS) SA05-14 Plate XVII.186	Wall fragment with cord band decoration Roughly depurated impasto, well polished surface 10YR5/2 greyish brown H 3, W 3.2, Th 1.1, Th wall 0.9 Drawing S. Boersma inked drawing M. Los-Weijns
187 Pietra S. Angelo S. Lorenzo B. (CS) SA06-7 Plate XVII.187	Wall fragment with cord band decoration Roughly depurated impasto, smoothed surface 10YR6/3 pale brown H 6.2, W 8.5, Th 1,1 (wall), Th 1.6 Drawing S. Boersma
188 Pietra S. Angelo	Flaring rim fragment of a jar with cord band decoration Roughly depurated impasto, smoothed surface

S.Lorenzo B. (CS) SA06-6 Plate XVII.188 189	7.5YR6/4 light reddish brown H 3.15, W 5.5, Th 1.8, Th 0.8 (rim) Drawing S. Boersma Short flaring rim fragment
Pietra S.Angelo S.Lorenzo B. (CS) SA05-12 Plate XVII.189	Roughly depurated impasto, well polished surface 10YR5/2 greyish brown H 1.3, W 2.2, Th 0.6 See also 169.SA05-11 Drawing S. Boersma
190 Pietra S.Angelo S.Lorenzo B. (CS) SA05-13 Plate XVII.190 Numbering continues at 191 after a-d and 371	Outwars rim fragment, rounded lip Roughly depurated impasto, well polished surface n.a. H 2.3 , W 3.2, Th 0.7 Drawing S. Boersma
a Pietra S.Angelo S.Lorenzo B. (CS) Plate XVII.a	Smoothing lithic tool Limestone 5.4 x 5.1 Drawing S. Boersma
b Pietra S.Angelo S.Lorenzo B. (CS) Plate XVII.b	Fragment of a grindstone Garnet schist 14, 11.5, 9.1 Drawing S. Boersma
c Pietra S.Angelo S.Lorenzo B. (CS) SA06-9 Plate XVII.c	Fragment of a grindstone Garnet schist 6.8, 7.5, 5.5, 5.1 Drawing S. Boersma
d Pietra S.Angelo S.Lorenzo B. (CS) SA06-10 Plate XVII.d	Fragment of a millstone Garnet schist 9.3, 4.2, 8 Drawing S. Boersma
191 Grotta di P. S. Angelo IV S.Lorenzo B. (CS) GC-24 Plate XXI.191, Tab. 5	Wall fragment of a deep bowl with carena Roughly depurated impasto, well polished surface Ext 10YR4/1 dark grey, Int 10YR3/1 very dark grey H 4.6, W 3.1, Th 0.5-0.7, 21<D<14. Drawing S. Boersma Par. 191 Cocchi Genick 1995, Tipo 208 Bv., Grotta dell'Infernetto, Ischia di Castro (VT) MBA2
191b Grotta di P. S. Angelo IV S.Lorenzo B. (CS) GC-24 Plate XXI.191b, Tab. 5	Fragment of a bowl with angular profile and vertical band handle attached on the rim Roughly depurated impasto, many small-medium size inclusions, burnished surface Ext front from 10YR3/1 very dark grey to 2.5YR3/1 very dark grey to 10YR2/1 black, on handle 10YR4/3 brown, back from 10YR3/1 very dark grey to 2.5Y2.5/1 black, Int 2.5Y5/1 grey H 6.6, H with handle 8, W 8.2, W handle 3.3, Th wall 0.7, Th handle 1.2 Drawing F. Ippolito, inked drawing S. Boersma Par. 191b Trucco, Vagnetti 2001, Torre Mordillo, Spezzano Albanese (CS), Foggia 66, Type 55, Sett. D12, US 243, MBA2
192 Timpone delle Fave Frascineto (CS) TdF-13F4 Plate XXI.192	Daub hut fragment, 5 impressions of branches, 1 impression of rope Coarse impasto Ext 10YR7/4 very pale brown, 2.5YR6/6 light red, 5YR6/6 reddish yellow 7.9, 4, Th 3.2 Drawing F. Ippolito

193 Grotta di P. S. Angelo IV S.Lorenzo B. (CS) GC-1 Plate XXI.193	Base fragment with flaring walls Roughly depurated impasto, very well polished surface Ext from 10YR6/3 pale brown to 10YR7/4 very pale brown, Int 7.5YR6/4 light reddish brown H 15.5, W 12.5, Th 1.2-1.5 (wall), Th 1.7 (base), D 9 Drawing P. Roncoroni, inked drawing S. Boersma
194 Grotta del Banco di Ferro S. Lorenzo B. (CS) Banco di Ferro – 1 Plate XVIII.194, Tab. 4	Complete jar with flaring rim, ovoidal body, flat base, two band handles rounded in section Roughly depurated impasto, polished surface Ext 2.5YR5/2 light red, 2.5YR2.5 black, Int 2.5YR-N5 grey, 2.5 YR N3 very dark grey H 14.5 (with handle), H 13.9 (without handle), H handle 3.8, D 15.7 (max), D 7.5 (base), Th 0.1 (wall), Th 0.3-0.5 (base) Inked drawing S. Boersma Par. 194 Cinquepalmi, Radina 1998, n. 8.054, Egnazia, Acropoli, Scavi 1965, Saggio A, parte inf., terreno del fondo della capanna 1, lato b, sett. Focolare c, MBA3
195 Grotta del Banco di Ferro S. Lorenzo B. (CS) GBF 8 Plate XVIII.195	Wall fragment with an handle circular in section Roughly depurated impasto, well smoothed surface Ext 5YR3/1 very dark grey very dark grey, Int 5YR5/6 yellowish red, 2/5YR6/3 light reddish brown 7.5YR6/6 reddish yellow, core 5YR5/6 yellowish red H 4.3, W 5.7, Th 0.8 (wall), Th 1.1 (ansa) Drawing P. Roncoroni, inked drawing S. Boersma
196 Grotta del Banco di Ferro S. Lorenzo B. (CS) GBF 30 Plate XVIII.196, Tab. 4	Fragment of an ovoid jar with outcurving rim Roughly depurated impasto, well smoothed surface Ext 7.5YR4/1 dark grey, 7.5YR5/1 grey, 7.5YR6/2 pinkish grey, 7.5YR6/6 reddish yellow, Int 7.5YR4/1 dark grey H 14, W 10.7, Th 0.7-1.1, D 21 Drawing P. Roncoroni, inked drawing S. Boersma Par. 196 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Tipo 296, Fig. 39.1, Sett. D11, US 12/87, MBA3
197 Grotta del Banco di Ferro S. Lorenzo B. (CS) GBF 22 Plate XVIII.194	Fragment of straight wall with circular lug Roughly depurated impasto, well smoothed surface Ext 5YR4/1 dark grey, 7/5YR6/6 reddish yellow, 7/5YR7/3 pink, Int 7/5YR4/1 dark grey H 4.6, L 4.5, H 1.7, L 3.2 (presa), Th 0.9 (wall), Th 2.2 (wall with lug) Drawing P. Roncoroni, inked drawing S. Boersma
198 Mandroni di Maddalena S. Lorenzo B. (CS) LM 07-4 Plate XIX.198	Inturnig rim fragment of a jar, slightly flaring and flattened lip Roughly depurated impasto, polished surface Ext/core 5YR4/1 dark grey, Int 5YR4/6 yellowish red H 5.2, W 4.8, Th 1.1, Th (cord+wall) 1.5 Drawing S. Boersma
199 Mandroni di Maddalena S. Lorenzo B. (CS) LM 07-5 Plate XI.,199, Tab. 10	Wall fragment decorated by a bump Roughly depurated impasto, polished surface 10YR4/1 dark grey H 6.1, W 5.8, Th 0.6 Drawing S. Boersma Par. 199 Trucco, Vagnetti 2001, Fig. 66.18, Torre Mordillo, Cassano allo Jonio (CS), US 245, MBA2
200 Mandroni di Maddalena S.Lorenzo B. (CS) LM 07-1 Plate XIX.200, Tab. 10	Band handle fragment with triangular hole Roughly depurated impasto, polished surface 10YR4/1 dark grey H 7.3, W 3.4, Th 0.8 Drawing S. Boersma Par. 200 Cocchi Genick 1995 Tipo 581, S. Maria d' Anglona (MT), see also TdM 297, MBA3

201 Mandroni di Maddalena S.Lorenzo B. (CS) LM 07-9 Plate XIX.201	Band handle fragment with circular hole Roughly depurated impasto, polished surface 10YR4/1 dark grey 3.6, 3.6, Th 1.1 Drawing S. Boersma
202 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 4428/9 Plate XIX.202	Band handle fragment with circular hole Roughly depurated impasto, smoothed surface 7.5YR 5/6 strong brown, core 7.5YR 3/1 very dark grey 3.5, 3.3, Th 1 Drawing S. Boersma
203 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 109/4 Plate XIX.203	Band handle fragment with raised edge Roughly depurated impasto, polished surface Ext 5YR 4/1 dark grey, Int 5YR5/3 reddish brown H 4, W 3.5, Th c.a. 1 Drawing S. Boersma
204 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 4412/7 Plate XIX.204	Band handle fragment with raised edge Roughly depurated impasto, polished surface n.a. 2.6, 3.4, Th 1.4 Drawing S. Boersma
205 Mandroni di Maddalena S.Lorenzo B. (CS) LM 05-PROF 3-2 Plate XIX.205, Tab. 9	Rim fragment of a deep bowl (traces of carena) Roughly depurated impasto, well polished surface Ext 7.5YR5/3 reddish brown, Int/core 7.5YR4/1 dark grey H 3.9, W 3.1, Th 0.4 Drawing S. Boersma Par. 205 Cocchi Genick 1995, Tipo 183, U. 3. Grotta del Fico (LE), MBA1-2
206 Mandroni di Maddalena S.Lorenzo B. (CS) LM 07-3 Plate XIX.206, Tab. 10	Flaring rim fragment of a globular bowl Roughly depurated impasto, polished surface 10YR5/1 grey H 4.7, W 3.9, Th 0.65 Drawing S. Boersma Par. 206 Cocchi Genick 1995, Tipo 103, Candalla, Riparo Grande (LU), MBA2
207 Mandroni di Maddalena S.Lorenzo B. (CS) LM 98-2 Plate XIX.207	Cylindrical neck fragment with flattened and outward thickened lip Coarse impasto, smoothed surface n.a. H 4, W 4.5, Th 1.2 Drawing S. Boersma
208 Mandroni di Maddalena S.Lorenzo B. (CS) LM 98-9 Plate XIX.208	Flattened and outward thickened lip of flaring rim fragment Roughly depurated impasto, polished surface n.a. H 3, W 3.7, Th 0.7, Th 1.1 (lip) Drawing S. Boersma
209 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 112/8 Plate XIX.209	Wall fragment with horizontal lug Roughly depurated impasto, smoothed surface Ext 5YR 6/6 reddish yellow, Int 7.5YR 6/4 light brown H 3, W 5.8, Th 0.8 (wall), section 1.2, 4.6, D 22 Drawing S. Boersma
210 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 4412/9 Plate XIX.210, Tab. 8	Flattened rim fragment of a truncated cone shaped bowl with cord-band Roughly depurated impasto, smoothed surface H 3.6, L 3.2, Th 0.8-0.6 (wall), Th 1.1 (cord) n.a. Drawing S. Boersma Par. 210 Similar to Peroni, Trucco 1994, Broglio di Trebisacce (CS), Forma 3b, RBA1 (?)
211 Mandroni di Maddalena S.Lorenzo B. (CS)	Fragment of a funnel shaped rim Roughly depurated impasto, smoothed surface n.a.

LaM 4409/8	H 4.4, W 6.4, Th 0.9 (wall), Th 0.8 (rim)
Plate XIX.211	Drawing S. Boersma
212	Inward rim fragment of a jar, slightly flaring, flattened and outward thickened lip
Mandroni di Maddalena	Roughly depurated impasto, smoothed surface
S.Lorenzo B. (CS)	5YR6/4 light reddish brown
LaM 4440/2	H 3.45, W 4.5, Th 1.1 wall, Th 1.6 rim
Plate XIX.212, tab. 8	Drawing S. Boersma Par. 212 Similar to Peroni, Trucco 1994, Forma 69 a, Broglio di Trebisacce (CS), RBA1 (?)
213	Short neck fragment of a jar, slightly flaring, flattened and outward thickened lip
Mandroni di Maddalena	Roughly depurated impasto, smoothed surface
S.Lorenzo B. (CS)	10YR3/1 very dark grey
LM 07-8	H 2.85, W 3.7, Th 0.9
Plate XIX.213	Drawing S. Boersma
214	Inturning rim fragment of a jar, thickened lip to inside, cord band decoration
Mandroni di Maddalena	Roughly depurated impasto, smoothed surface
S.Lorenzo B. (CS)	n.a.
LaM 4412/4	H 5.5, W 4.5, Th 0.7 wall, Th 1.3 cord
Plate XIX.214	Drawing S. Boersma
215	Short cylindrical neck of a jar, slightly flaring, flattened lip
Mandroni di Maddalena	Roughly depurated impasto, smoothed surface
S.Lorenzo B. (CS)	n.a.
LaM 4409/3	H 3.1, W 4.4, Th 0.8-0.9
Plate XIX.215	Drawing S. Boersma
216	Straight rim fragment of a barrel shaped jar, flattened and outward thickened lip
Mandroni di Maddalena	Roughly depurated impasto, polished surface
S.Lorenzo B. (CS)	7.5YR6/2 from pinkish grey to 7.5YR5/2 brown, core 7.5YR4/0 dark grey
LaM 4411/7	H 7.9, W 8.2, Th 1.0-1.3 (wall), Th 1.6 (rim)
Plate XIX.216, Tab. 8	Drawing S. Boersma Par. 216 Similar to Trucco, Vagnetti 2001, Torre Mordillo (CS), Tipo 244A, RBA1-2 (?)
217	Flaring rim fragment, rounded lip
Mandroni di Maddalena	Roughly depurated impasto, well burnished surface
S.Lorenzo B. (CS)	7.5YR4/1 dark grey
LM 05-PROF 2-2	H 3.2, W 2.5, Th 0.6
Plate XIX.217	Drawing S. Boersma
218	Rim fragment
Mandroni di Maddalena	Roughly depurated impasto, smoothed surface
Lorenzo B. (CS)	n.a.
LaM 4423/1	3.2, 2.7, Th wall 1, Th rim 1.1
Plate XIX.218	Drawing S. Boersma
219	Rim fragment of a truncated cone shaped jar, flattened lip, notched cord band
Mandroni di Maddalena	Coarse impasto, smoothed surface
S.Lorenzo B. (CS)	Ext 7.5YR-4/3 brown, Int 7.5YR5/2 brown, core 7.5YR4/1 dark grey
LM 05-PROF 3-3	H 5.7, W 4.1, Th 1.7, Th 1 (wall)
Plate XIX.219	Drawing S. Boersma
220	Band handle fragment
Mandroni di Maddalena	Coarse impasto, smoothed surface
S.Lorenzo B. (CS)	7.5YR6/6 reddish yellow, core 7.5YR3/1 very dark grey
LM 05-PROF 2-1	H 4.2, W 4.4, Th 1.4
Plate XIX.220	Drawing S. Boersma
221	Flaring rim of a bowl, outward lip
Mandroni di Maddalena	Roughly depurated impasto, polished surface
S.Lorenzo B. (CS)	10YR5/1 grey
LM 07-6	H 5.2, W 5.1, Th 0.7
Plate XX.221, Tab. 10	Drawing S. Boersma Par. 221

	Peroni, Trucco 1994, forma 10, Broglio di Trebisacce (CS) RBA2
222 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 112/12 Plate XX.222	Short and straight rim of a jar, flattened and thickened lip Roughly depurated impasto, smoothed surface Ext 10YR6/3 pale brown, Int 7.5YR5/4 brown H 4.9, W 6.3, Th 0.9-1.0 (wall), Th 1.0 (rim) Drawing S. Boersma
223 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 4432/1 Plate XX.223	Stright rim of a jar, flattened and outward thickened lip Roughly depurated impasto, smoothed surface 5YR6/4 light reddish brown H 2.8, W 3, Th 1 wall, Th 1.2 rim Drawing S. Boersma
224 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 4409/15 Plate XIX.224, Tab. 8	Fragment of upright and t-shaped handle Roughly depurated impasto, smoothed surface n.a. H 3.5, W 3.8, Th 0.7-0.8 Drawing S. Boersma Par. 224 Cocchi Genick 1995, see Tipo 477, Le Caprine (Roma), Grotta Regina Margherita (FR), and Tipo 479, Valle Felici, Cervia (RA), MBA1-2
225 Mandroni di Maddalena S.Lorenzo B. (CS) LaM 4423/2 Plate XX.225	Handle fragment, circular in section, handle part with thickened diameter Roughly depurated impasto, polished surface n.a. 5.2, 2.2, Th 2.2 - 1.7 Drawing S. Boersma
226 Mandroni di Maddalena S.Lorenzo B. (CS) LM 07-2 Plate XX.226	Band handle fragment with conical bump Roughly depurated impasto, smoothed surface 10YR5/1 grey H 3.6, W 3.9, Th 0.9, Th \pm 0.8 (bump) Drawing S. Boersma Par. 226 Similar to Cinquepalmi, Radina 1998, Santa Sabina, struttura 1, n. 9.046, 160, RBA2
227 Cudicino S.Lorenzo B. (CS) Cu-04-3a Plate XVIII.227, Tab. 12	Fragment of a upright band handle with raised edges, curving ear shaped endings Roughly depurated impasto (inclusions up to 1), smoothed surface 5YR6/4 light reddish brown H 4.4, W 3.1, Th 0.8 Drawing S. Boersma Par. 227 Cocchi Genick 1995, Tipo 565, Scoglio del Tonno (TA), MBA3
228 Cudicino S.Lorenzo B. (CS) Cu-04-6 Plate XX.228 Plate XVIII.228, Tab. 12	Wall fragment with conical bump Coarse impasto (inclusions up to 0.2), smoothed surface Ext 5YR6/6 reddish yellow, Int 5YR6/4 light reddish brown H 6.1, W 4, Th 0.9-1 (wall), D 1.5 (lug) Drawing P. Roncoroni, inked drawing S. Boersma Par. 228 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Tav. 110, 13, Sett. D. Nord, livello S, FBA (?)
229 Cudicino S.Lorenzo B. (CS) Cu-04-15 Plate XX.229, Tab. 12	Short and flaring rim fragment Roughly depurated impasto, smoothed surface 5YR6/4 light reddish brown H 1.7, W 2.5, Th 0.7, D 10.6 Drawing P. Roncoroni, inked drawing S. Boersma Par. 229 Peroni, Trucco 1994, Broglio di Trebisacce (CS), Tav. 102.8, forma 49 a, Sett. D Nord, strato 3, FBA1 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), forma 31, Fig. 43.9, US 20, FBA1 (?)
230	Wall fragment

Cudicino S.Lorenzo B. (CS) Cu-04-18 Plate XX.230 231 Trizzone della Scala S.Lorenzo B. (CS) TdS-01-6 Plate XX.231, tab. 7	Roughly depurated impasto, smoothed surface 5YR6/4 light reddish brown H 3, W 3.2, Th 1.5, D 25-30 Fragment of a bowl with slightly angular profile Roughly depurated impasto (few inclusions up to 0.4), well smoothed surface, traces of limestone incrustations 5YR6/4 light reddish brown H 3.7, L 2.7, Th 0.5 Drawing P. Roncoroni, inked drawing S. Boersma Par. 231 Peroni, Trucco 1994, Broglio di Trebisacce, Tav. 1.20, forma 40 a, Sett. B Ovest, livello 4A, MBA 2
232 Trizzone della Scala S.Lorenzo B. (CS) TdS-01-16 Plate XX.232, Tab. 7	Band handel fragment with circular hole Depurated impasto, polished surface 7.5YR6/2 pinkish grey, 7.5YR6/4 light reddish brown 2.5, 2.4, Th 0.5 Drawing P. Roncoroni, inked drawing S. Boersma Par. 232 Cocchi Genick 1995, Tipo 543, Vivara, P.ta d'Alaca (NA), MBA3
233 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-1 Plate XX.233 234 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-1-6.7.8.9 Plate XX.234, Tab. 7	Straight rim fragment, slightly inward, cord band decoration Sandy impasto (inclusions up to 0.2), smoothed surface 5YR 6/4 brown 3 X 3, Th wall 0.6, Th cord 0.9, D 18 Drawing P. Roncoroni, inked drawing S. Boersma Wall fragment of a neck vessel with notched cord band (reconstructed fragment) Coarse impasto (inclusions up to 0.2), smoothed (and very eroded) surface Ext 5YR4/1 dark grey, Ext/Int 10YR3/1 very dark grey H 7.2, W 10.2, Th 0.7-0.8 wall, Th 1.4 cord, D 45 Drawing P. Roncoroni, inked drawing S. Boersma Par. 234 Trucco, Vagnetti 2001, forma 331 A, Torre Mordillo, Cassano allo Jonio (CS), MBA 2
235 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-2-3 Plate XX.235, Tab. 7	Straight and short rim of a neck vessel, flattened lip Sandy impasto, smoothed surface 5YR4/4/1 reddish brown/dark grey H 2.1, W 2.9, Th 0.8, D 20-25 Drawing P. Roncoroni, inked drawing S. Boersma Par. 235 Peroni, Trucco 1994, Tav. 26.12, sporadico dall'acropoli, Forma 83, MBA2
236 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-2-5 Plate XX.236, Tab. 7	Horizontal handle fragment squared in section Sandy impasto (inclusions up to 0.4), well smoothed surface 5YR4/4/1 dark grey 4, 2.8, Th 0.8-1.2 (handle) Drawing P. Roncoroni, inked drawing S. Boersma Par. 236 Peroni, Trucco 1994, Torre Mordillo, Tav. 146.9, Forma 106 from Broglio di Trebisacce, Sett. B Ovest, livello 3B, Taglio I, riq. Q, MBA3
237 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-4/2+4 Plate XX.237, Tab. 7	Fragment of a bucket shaped jar with inward rim, flattened and thickened lip Roughly depurated impasto, well smoothed surface Ext 2.5YR4/3 reddish brown, Ext/Int 5YR4/2 dark reddish grey, 2.5YR4/1 dark reddish grey, core 2.5YR4/1 dark reddish grey H 6, W 8, Th 1, D ca. 25 Drawing P. Roncoroni, inked drawing S. Boersma Par. 237 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), forma 327, MBA3
238 Trizzone della Scala S.Lorenzo B. (CS)	Wall fragment of a bowl Roughly depurated impasto, smoothed surface, very eroded Ext 5YR5/4 reddish brown, Int 5YR3/3/1 very dark grey

TdS-04-4/8 Plate XX.238, Tab. 7	H 2.2, W 2.1, Th wall 0.8 Drawing P. Roncoroni, inked drawing S. Boersma Par. 238 Cocchi Genick 1995, Tipo 111, Petrella Tiferina, MBA3
239 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5/14 Plate XX.239	Wall fragment with carena 7.5YR6/4 light reddish brown, 5YR6/4 light reddish brown, core 5YR5-4/1 from grey to dark grey H 3.2, W 4.9, Th 0.5-0.6, D. 15-20 Drawing P. Roncoroni, inked drawing S. Boersma
240 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5/7 Plate XX.240	Wall fragment with carena Roughly depurated impasto, well smoothed surface Ext 7.5YR6/2 pinkish grey, Int 7.5-YR4/12 from dark grey to brown, core 7.5YR4/1 dark grey H 4.4, W 5.6, Th 1 (wall), Th 1.5 (carena), D 15 Drawing P. Roncoroni, inked drawing S. Boersma
241 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5/20 Plate XXI.241, Tab. 7	Fragment of shoulder of a jar with internal angle Roughly depurated impasto, smoothed surface Ext 7.5YR5/3 reddish brown, 5YR6/3 light reddish brown, Int 7.5YR4/2 brown H 2.5, W 6, Th 0.8-0.9, D 25 Par. 241 Peroni, Trucco 1994, Tav. 3.28, Forma 100, Broglio di Trebisacce (CS), sett. B ovest, livello 3B, taglio III, MBA3 Drawing P. Roncoroni, inked drawing S. Boersma
242 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5-13 Plate XXI.242	Flat base fragment Roughly depurated impasto, smoothed surface Ext 5YR4/1 dark grey, Int 5YR5/3 reddish brown, core 5YR6/4 light reddish brown H 0.9, W 4, Th 0.7 (bottom), Th 0.6 (wall), D 18 Drawing P. Roncoroni, inked drawing S. Boersma
243 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5/12 Plate XXI.243	Wall fragment of a shallow bowl Roughly depurated impasto, smoothed surface Ext 5YR6/4 light reddish brown, Int 5YR4/2 dark reddish grey, core 5YR5/4 reddish brown-1 from reddish brown to dark grey H 3, W 4, Th 0.6-0.7 Drawing/inked drawing S. Boersma
244 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5/21 Plate XXI.244	Straight wall fragment with notched cord band Roughly depurated impasto, smoothed surface Ext 5YR54/1 from grey to dark grey, 5YR6/2 pinkish grey, Int 5YR54/1 from grey to dark grey H 4.6, W 4.2, Th 0.9 (wall), Th 1.4 (cord) Drawing P. Roncoroni, inked drawing S. Boersma
245 Trizzone della Scala S.Lorenzo B. (CS) TdS-04-5/17 Plate XXI.245	Wall fragment with notched cord band Roughly depurated impasto, smoothed surface Ext 5YR6/6 reddish yellow, 5YR6/4 light reddish brown, Int 7.5YR4/1 dark grey, core 5YR4/1 dark grey H 8.4, W 6.7, Th 1.2-1.1 (wall), Th 1.5 (cord) Drawing P. Roncoroni, inked drawing S. Boersma
246 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/04 Plate XXII.246, Tab. 13	Outturned rim of a shallow bowl Roughly depurated impasto, polished surface Ext 2.5YR5/6 from red to 5YR5/1 grey, Int 2.5YR5/6 red H 2.1, W 7.5, Th 0.8-0.9 (wall), Th 0.6 (lip) Par. 246 Talamo 1992, Pratola Serra (AV), Tav. XLI, 74-75, tipo 1 A/B; Albore Livadie <i>et al.</i> 1996, Tipo 1B, Fig. 4, <i>Facies</i> di Palma Campania, LEBA Drawing L. Alessandri, inked drawing S. Boersma
247 Timpa del Castello Francavilla M.ma (CS) SIBA2003 TdC04/12 Plate XXII.247	Vertical band handle decorated by three parallel ribs Roughly depurated impasto, smoothed surface Ext 7.5YR6/6 from reddish yellow to 2.5YR4/1 dark grey, Int 2.5YR3/1 very dark grey H 8.5, W 7.6, Th 0.9-1.0 (wall), Th 0.9-1.7 (handle)

	Drawing L. Alessandri, inked drawing S. Boersma
248 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-3 Plate XXII.248	Flaring rim fragment of a bowl with carena, maximum diameter at the rim Roughly depurated impasto, polished surface Ext 10YR3/1 very dark grey, Int 10YR4/2 dark greyish brown H 4.6, W 5.9, Th 0.8 Drawing L. Alessandri, inked drawing S. Boersma
249 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-5 Plate XXII.249, Tab. 17	Thickened and slightly flaring rim fragment of an ovoidal bowl, maximum diameter at the rim Roughly depurated impasto, smoothed surface Ext 10YR5/2 greyish brown, Int 7.5YR5/4 brown H 7.6, W 6.6, Th (max) 1.0 (wall) Par. 249 Albore Livadie 1999, fig. 17B1, p. 230, San Paolo Belsito, Montesano (NA), from surveys, end of the EBA Drawing L. Alessandri, inked drawing S. Boersma
250 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/02 Plate XXII.250, Tab. 13	Band handle with small bump on the upper part Depurated impasto, polished surface Ext 5Y4/1 from dark grey to 5YR5/6 yellowish red, Int 5YR5/4 reddish brown H 6.5, W 5.5, Th 0.9-0.6 Par. 250 Lukesh 1977, Fig. 21.9, Buccino, Tufariello, lower strata, Protoapennine B, MBA1 (see also 384.TM-91-51) Drawing L. Alessandri, inked drawing S. Boersma
251 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/08 Plate XXII.251	Neck vessel rim fragment with cord band decoration forming angular motifs Depurated impasto, polished surface 7.5-YR6/4 light brown H 4.6, W 3.7, Th 0.7-0.8, Th 1.9 (decor) Drawing L. Alessandri, inked drawing S. Boersma
252 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/11 Plate XXII.252	Vertical band handle Depurated impasto, polished surface Ext 10YR5/3 from brown to 5YR6/6 reddish yellow, Int 10YR5/2 greyish brown H 8.8, W 7.3, Th 1.1 (handle), Th 1.4 (wall) Drawing L. Alessandri, inked drawing S. Boersma
253 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/06 Plate XXII.253, Tab. 13	Rim fragment with incised linear zig-zag decoration Depurated impasto, polished surface 5YR4/1 dark grey H 3.4, W 5, Th 0.7 Par. 253 For dec. Cinquepalmi, Radina 1998, Monopoli Centro Storico, Livello inferiore, 7.028 (a), 7.036 (b), MBA 2-3 Drawing/inked drawing S. Boersma
254 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/05 Plate XXII.254	Wall fragment with incised decoration. <i>Wolf theeth</i> shaped band, parallel to a plain band, both filled with small dots. Smoothed surface 10YR6/3 pale brown H 6.9, W 5.4, Th 0.8 -1 (wall), W band 0.7-1.1, W triangles 1.9 - 2.2 Par. 254 Similar, for dec., to Cinquepalmi, Radina 1998, Egnazia, Scavi 1965-Saggio A, Livello IV, 8.042, p. 143 (c), Giovinazzo Centro Storico, Piazza S. Salvatore, Livello IV, 4.019,23 p.80 (a, b) MBA3
255 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/13 Plate XXII.255	Fragment of a cylindrical neck vessel, rounded and slightly outward thickened lip Depurated impasto, polished surface Ext 2.5Y3/1 very dark grey and 7.5YR4/4 brown, Int 2.5Y4/2 olive grey H 3.4, L 3.8, Th 0.6, D 10 Par. 255 Similar to Belardelli 2004, Tav. LIV, 9, tipo 113 b, Coppa Navigata, Manfredonia, FG, out of context, Taranto magazzini, MBA 2-3

	Drawing L. Alessandri, inked drawing S. Boersma
256 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/04 Plate XXII.256	Deep cup with upright handle, oval hole at the handle base, flattened and thickened ending of the upper part of the handle Roughly depurated impasto, polished surface 2.5Y2.5/1 black H 8.7, W 8.8, D 13.3 (carena), D 10.7 (rim), Th (wall) 0.5-0.6, Th Lip 0.4, 6, 6, Th handle 1.9 (upper part), Th 2.1 (ending), hole 1.9, 1.8 Par. 256 Similar to, for the shape, Albore Livadie 1986, Fig. 9,2 (larger example, D 21 cm), Montagna Spaccata, Napoli, sondaggi esplorativi, pp. 200-203. For the lower part of the handle see Bernabò Brea <i>et al.</i> 1989, fig. 111.a, Grotta Cardini, Praia a Mare (CS), Strato Superiore, MBA3
257 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-6 Plate XXII.257	Drawing L. Alessandri, inked drawing S. Boersma Fragment of upright band handle with circular hole Depurated impasto, polished surface Ext/int from 7.5YR5/4 brown to 5/1 grey, core 10YR5/1 grey H 4.8, W 4.2, Th 1.1-1.5 (wall) Drawing/inked drawing S. Boersma
258 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-7 (V1+V2) Plate XXII.258, v1-v2	Fragment of upright vertical band handle with circular hole Depurated impasto, polished surface Ext 10YR6/3 pale brown, Int 10YR4/1 dark grey H 4.1, W 4.6, Th max, 0.8 Drawing/inked drawing S. Boersma
259 Timpa del Castello, Francavilla M.ma (CS) RAP 07 TdC 05-9 Plate XXIII.259, Tab. 17	Fragment of upright vertical band handle with triangular hole Depurated impasto, polished surface Ext 7.5YR5/4 brown, Int 10YR5/2 greyish brown, core 10YR4/1 dark grey H 4.8, W 3.8, Th (max) 1 Par. 259 Cocchi Genick 1995, Tipo 576, Fig. 181, La Starza (AV), MBA2-3 Drawing/inked drawing S. Boersma
260 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 02/02 Plate XXIII.260	Fragment of a short neck vessel with thickened rim Coarse impasto, limestone incrustations on the surface Ext 5YR8/1 white, Int 7.5YR6/2 pinkish grey H 5.2, W 4, Th 0.6-0.9 (wall), Th 1-1.2 (rim), D 25 Drawing L. Alessandri, inked drawing S. Boersma
261 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/10 Plate XXII.261, Tab. 13	Decorated ending of short upright handle Roughly depurated impasto, polished surface 5YR4/1 dark grey and 5YR5/4 reddish brown H 3.4, 1.9-2.8 (ending) Par. 261 Bailo Modesti <i>et al.</i> 1999 I, Fig. 7, p. 215 (forme vascolari di tipo Laterza in Campania), LE Drawing L. Alessandri, inked drawing S. Boersma
262 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-2 Plate XXIII.262	Vertical band handle fragment with raised edges Roughly depurated impasto, polished surface Ext 10YR6/2 light brownish grey, Int 10YR6/4 light yellowish brown H 3.1, W 3.9, Th 1.5 – 0.9 Drawing L. Alessandri, inked drawing S. Boersma
263 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/13 Plate XXIII.263	Fragment of ear-shaped ending of upright handle Roughly depurated impasto, smoothed surface 7.5-YR6/8 reddish yellow H 4.9, W 3.1, Th 0.5-0.9 Drawing L. Alessandri, inked drawing S. Boersma
264 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 02/08 Plate XXIV.264	Fragmento of short neck of a small globular jar Coarse impasto, smoothed surface Ext 7.5YR5/4 brown, Int 5YR4/1 dark grey H 2.4, W 2.8, Th 0.5-0.6 (wall) Drawing L. Alessandri, inked drawing S. Boersma
265 Timpa del Castello	Rim fragment of a jar with flaring rim and cord band decoration Roughly depurated impasto, smoothed surface

Francavilla M.ma (CS) RAP 07 TdC 05-1 Plate XXIII.265	7.5YR5/6 strong brown H 4.3, W 5.6, Th 0.8 (wall), Th 1.2 (cord) Drawing L. Alessandri, inked drawing S. Boersma
266 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 02/03 Plate XXIV.266	Fragment of a cylindrical neck vessel with flattened and outward thickened lip Roughly depurated impasto, polished surface 10YR6/3 pale brown and 10YR4/1 dark grey W 4.8, H 2.5, Th wall 1.1, Th rim 1.5 Drawing/inked drawing S. Boersma
267 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 02/06 Plate XXIII.267	Fragment of a neck vessel, slightly flaring rim, rounded lip Roughly depurated impasto, polished surface 5YR4/2 dark reddish grey H 2.1, W 2.7, Th 0.5 Drawing L. Alessandri, inked drawing S. Boersma
268 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/09 Plate XXIII.268	Fragment of a short cylindrical neck jar, slightly flaring rim, outward thickened and rounded lip Roughly depurated impasto, polished surface Ext 5YR5/6 from yellowish red to 10YR 6/2 light grey-brown, Int 10YR6/3 pale brown H 4.9, W 5.5, Th wall 0.7, Th 0.5 - 0.7, Th 0.5 (lip) Drawing L. Alessandri, inked drawing S. Boersma
269 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/11 Plate XXIII.269, Tab. 13	Fragment of a neck vessel with slightly flaring rim, flattened lip Roughly depurated impasto, polished surface Ext 7.5YR5/4 brown, Int 10YR5/2 greyish brown H 2.7, W 3.8, Th 0.6 (wall), Th 0.6 (rim) Par. 269 Peroni, Trucco 1994, Tav. 16, 3, forma 87, Broglio di Trebisacce (CS), Sett. E, strato 2, MBA3 Drawing L. Alessandri, inked drawing S. Boersma
270 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/09 Plate XXIII.270	Fragment of a neck globular jar with straight rim, flattened and thickened lip Roughly depurated impasto, polished surface Ext 10YR5/6 yellowish brown to 10YR3/1 very dark grey, Int 10YR3/2 very dark greyish brown H 3.7, W 5.3, Th 0.7-0.9 Drawing L. Alessandri, inked drawing S. Boersma
271 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/10 Plate XXIII.271	Wall fragment with incised decoration made by a false meander shaped band filled with dots Roughly depurated impasto, polished surface Ext 10YR4/2 dark greyish brown, Int 7.5YR5/4 brown H 2.2, W 4.7, Th 1.2 Par. 271 Macchiarola 1987, Motifs 96-97, Fig. 12, p. 49, MBA3 Drawing L. Alessandri, inked drawing S. Boersma
272 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/03 Plate XXIII.272, Tab. 13	Funnel shaped rim fragment Roughly depurated impasto, polished surface 7.5YR6/4 light reddish brown H 2.5, W 3.6, Th 0.6-1.0, Th 0.5 (lip) Par. 272 Peroni, Trucco 1994, Tav. 10, 13, Broglio di Trebisacce (CS), sett. D Est, buca nei riqq. Z-Z' sotto il liv. 2D' MBA 3 Drawing L. Alessandri, inked drawing S. Boersma
273 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/03 Plate XXIII.273	Broad vertical band handle fragment Roughly depurated impasto, smoothed surface Ext from 7.5YR6/6 reddish yellow to 2.5Y4/1 dark grey H 5.9, W 4.4, Th 1.3 Par. 273 Similar to Cinquepalmi, Radina 1998, Monopoli Centro Storico, Saggio C, 7.018, p. 108, MBA3 Drawing L. Alessandri, inked drawing S. Boersma
274	Broad vertical band handle set on the body of a jar

Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/01 Plate XXIV.274	Roughly depurated impasto, smoothed surface Ext 10YR6/4 from light yellowish brown to 7.5YR5/6 strong brown, Int 2.5Y5/1 grey H 11.4, W 10.5, Th wall 1.1, Th 1.5 (handle) Drawing L. Alessandri, inked drawing S. Boersma
275 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 02/11 Plate XXIV.275	Fragment of a short neck vessel with slightly flaring rim, thickened to outside and bevelled on the inside lip Roughly depurated impasto, polished surface Ext 10YR6/2 light brownish grey, Int 10YR4/1 dark grey and 10YR4/2 dark greyish brown H 5.2, W 5.1, Th 1-1.2 Drawing L. Alessandri, inked drawing S. Boersma
276 Timpa del Castello, Francavilla M.ma (CS) SIBA 2003 TdC 03/02 Plate XXIV.276	Vertical band handle with slightly angular profile Coarse impasto, smoothed surface Ext 7.5YR4/3 reddish brown, core 5YR4/4 reddish brown H 6.2, W 6.7, Th 0.9 (wall), Th 0.9 Drawing L. Alessandri, inked drawing S. Boersma
277 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/08 Plate XXIV.277	Flaring and flattened rim fragment of short neck vessel Roughly depurated impasto, smoothed surface 10YR5/2 greyish brown, core 2.5Y3/1 very dark grey H 3.4, W 3.9, Th 0.9 (wall), Th 0.7 (rim) Drawing L. Alessandri, inked drawing S. Boersma
278 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/12 Plate XXIV.278	Straight rim fragment with flattened and outward thickened lip of an ovoidal jar Roughly depurated impasto, smoothed surface 7.5YR6/4 light reddish brown H 3.2, W 4, Th 0.7-1, Th 1.0 (lip) Drawing L. Alessandri, inked drawing S. Boersma
279 Timpa del Castello Francavilla M.ma (CS) SIBA2003 TdC04/05 Plate XXIV.279	Inturned rim fragment of a globular jar Roughly depurated impasto, smoothed surface 7.5YR5/4 brown, core 2.5Y4/1 dark grey H 2.8, W 3.2, Th 1-1.1 (wall), Th 0.8 (lip) Drawing L. Alessandri, inked drawing S. Boersma
280 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC01/17 Plate XXIV.280, Tab. 14	Fragment of a snail horn ending of upright handle Roughly depurated impasto, polished surface From 10YR5/1 grey to 10YR5/3 brown H 3.3, W 2.7, section 1.1 x 1.6, D dec. 2 Par. 280 Pacciarelli, Varricchio 2004, fig. 9.10, Olivadi (Tropea, VV), survey find, pp. 374-377 RBA 1 Drawing L. Alessandri, inked drawing S. Boersma
281 Timpa del Castello Francavilla M.ma (CS) SIBA2003 TdC04/09 Plate XXIV.281	Straight and thinned rim with slightly outward thickened lip of a short neck vessel Roughly depurated impasto, polished surface Ext 7.5YR4/2 brown, Int 2.5Y2.5/1 black H 2.5, W 4, Th 1.0-1.3 (wall), Th 0.8 (lip) Drawing L. Alessandri, inked drawing S. Boersma
282 Timpa del Castello Francavilla M.ma (CS) SIBA2003 TdC04/14 Plate XXIV.282	Wall fragment with notched lug set on a notched cord band Coarse impasto, smoothed surface Ext 7.5YR5/4 from brown to 7.5YR4/1 dark grey, Int 10YR5/2 greyish brown, core 7.5YR3/1 very dark grey H 6.8, W 10, Th 1.1, Th 3 (wall+cord) Drawing L. Alessandri, inked drawing S. Boersma
283 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/16 Plate XXIV.283	Inturning wall fragment of a jar with cord band Roughly depurated impasto, polished surface Ext 7.5YR5/6 strong brown and 7.5YR4/0 dark grey, Int from 7.5YR6/2 pinkish grey to 7.5YR4/0 dark grey H 4.1, W 5.5, Th 0.8 (wall), Th 1.2 (cord) See 284.SIBA 2003 TdC04/18 Drawing L. Alessandri, inked drawing S. Boersma

284 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/18 Plate XXIV.284	Inturning wall fragment of a jar with cord band Roughly depurated impasto, polished surface Ext 10YR5/3 from brown 2.5Y5/2 to greyish brown, Int Gley1-5/N grey H 5.3, W 4.3, T. 1.1 (wall), Th 0.5 (cord) See 283.SIBA 2003 TdC04/16 Drawing L. Alessandri, inked drawing S. Boersma
285 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/10 Plate XXIV.285	Flaring rim fragment of a bowl with carena, slightly thickened to outside lip Roughly depurated impasto, polished surface 5YR4/2 from dark reddish grey to 5YR3/1 very dark grey H 3.7, W 2.5, Th 0.6-0.8 (rim), Th 0.9 (wall), D 18 Par. 285 Similar to Peroni, Trucco 1994, Tav. 81, 19 p. 457, forma 21, Broglio di Trebisacce (CS), Sett. B Ovest, livello 1B, FBA1 Drawing L. Alessandri, inked drawing S. Boersma
286 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/22 Plate XXIV.286	Flattened and slightly flaring rim fragment Roughly depurated impasto, polished surface Ext 10YR6/4 light yellowish brown, Int 10YR5/1 grey H 2.3, W 2.4, Th 0.8 (wall), Th 0.7 (rim) Par. 286 Similar to Peroni, Trucco 1994, Tav. 103.19, forma 49 a, Sett. D Nord, strato 2, FBA1-2 Drawing L. Alessandri, inked drawing S. Boersma
287 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-8 Plate XXV.287, Tab. 17	Funnel shaped rim fragment of a jar, thinned and rounded lip Coarse impasto n.a. H 4.2, W 6.45, Th max 1.5 Par. 287 Peroni, Trucco 1994, forma 50 a, Tav. 88.13, Broglio di Trebisacce, sett. B Ovest, liv. H, FBA1-2 (?) Drawing L. Alessandri, inked drawing S. Boersma
288 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-11 Plate XXV.288	Short outturned rim fragment with notched cord band Coarse impasto Ext 7.5YR5/4 brown, Int 10YR5/3 brown, core 2.5Y4/1 dark grey H 5.3, W 5.1, Th 0.9 - 1.0 (wall), Th 1.9 (wall+cord) Par. 288 Peroni, Trucco 1994, Tav. 88.23 (without cord), forma 57 a, sett. B ovest, liv. H, FBA1-2 Drawing L. Alessandri, inked drawing S. Boersma
289 Timpa del Castello Francavilla M.ma (CS) RAP 07 TdC 05-10 Plate XXV.289, Tab. 17	Flaring rim fragment of a truncated cone shaped vessel, slightly flaring and thinned lip Coarse impasto Ext 10YR4/1 dark grey, Int 10YR5/4 yellowish brown H 6, W 5.9, Th 0.7 Par. 289 Peroni, Trucco 1994, Tav. 115.2 (esempio in figulina), Broglio di Trebisacce, sett. B. Ovest, liv. S3, FBA2 (?) Drawing L. Alessandri, inked drawing S. Boersma
290 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/08 Plate XXV.290	Inturned im fragment of a jar, outturned and outward thickened lip, notched cord band Roughly depurated impasto, polished surface Ext 7.5YR6/4 light reddish brown, Int 7.5YR6/2 pinkish grey, core 10YR5/1 grey H 4.4, W 4.1, Th 0.8 (wall), Th 0.9 (cord), Th 0.55 (rim), Th 0.7 (lip), D 11 Drawing L. Alessandri, inked drawing S. Boersma
291 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/16 Plate XXV.291	Flaring rim fragment with flattened lip and cord band decoration Roughly depurated impasto, smoothed surface Ext 5YR6/6 reddish yellow, Int 7.5YR6/4 light reddish brown, core 2.5Y4/1 dark grey H 2.9, W 2.7, Th wall 0.7, Th cord 1.6 Drawing L. Alessandri, inked drawing S. Boersma

<p>292 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/24 Plate XXV.292</p>	<p>Fragment of a truncated cone shaped bowl with slightly inturning rim and flattened lip Roughly depurated impasto, polished surface Ext 2.5YR6/1 reddish grey and 7.5YR6/6 reddish yellow, Int 7.5YR6/4 light reddish brown H 4.1, W 1.7, Th 0.8 (wall), Th 0.7 (rim) Par. 292 Peroni, Trucco 1994, Tav. 103,15, forma 38 b, Broglio di Trebisacce (CS), Sett. D Nord, strato 2, FBA (?) Drawing L. Alessandri, inked drawing S. Boersma</p>
<p>293 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC04/07 Plate XXV.293, Tab. 14</p>	<p>Bowl fragment with flattened lip Depurated impasto 7.5YR6/2 pinkish grey H 3.4, W 3.5, Th 0.7, D 20 Par. 293 Colelli 2012, b3 var. 2 (with bump), Timpone della Motta, Francavilla M.ma (CS), IA, Trucco, Vagnetti 2001, fig. 75.10, Tipo 60A (with decoration), Torre Mordillo, Cassano allo J. (CS), Sett. E8-9, US 2/2, FBA1 (?) Drawing L. Alessandri, inked drawing S. Boersma</p>
<p>294 Timpa del Castello Francavilla M.ma (CS) SIBA 2003 TdC 03/23 Plate XXV.294</p>	<p>Flaring rim fragment, thinned lip Roughly depurated impasto, polished surface Int 7.5YR6/6 reddish yellow H 2.6, W 3.6, Th 0.45 (wall), Th 0.3 (lip), Drawing L. Alessandri, inked drawing S. Boersma</p>
<p>295 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR3-5 Plate XXV.295, Tab. 15</p>	<p>Bowl fragment with short funnel shaped rim Roughly depurated impasto, polished surface 7.5YR6/4 light reddish brown H 5.3, W 5.9, Th 0.7 (wall), Th 0.8-0.5 (rim) Par. 295 See Cocchi Genick 1995, Tipo 79B, Broglio di Trebisacce, MBA2 Drawing/inked drawing S. Boersma</p>
<p>296 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR3-4 Plate XXV.296, Tab. 25</p>	<p>Fragment of slightly straight rim, rounded lip Roughly depurated impasto, polished surface 7.5YR5/6 strong brown H 5.1, W 3.8, Th 1-0.5 (wall), Th 0.5 (lip) Par. 296 Peroni, Trucco 1994, Tav. 19,20, Broglio di Trebisacce (CS), sett. E, liv. S, MBA3 Drawing/inked drawing S. Boersma</p>
<p>297 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR3-6 Plate XXV.297, Tab. 15</p>	<p>Fragment of ear shaped ending of vertical upright band handle with raised edges Roughly depurated impasto, polished surface 7.5YR6/6 reddish yellow H 3.3, W 2.7, Th 0.7-1.3, Th 0.5 (edge) Par. 297 Cocchi Genick 1995, Tipo 560, Marangone (Roma), MBA3 Drawing/inked drawing S. Boersma</p>
<p>298 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR11-3 Plate XXV.298, Tab. 16</p>	<p>Fragment of short and slightly outward neck of a jar Roughly depurated impasto, polished surface 10YR2/1 black and 7.5YR5/4 brown H 4.8, W 7.8, Th 0.8 Par. 298 Trucco, Vagnetti 2001, Fig. 59.24, Torre Mordillo, Cassano allo Jonio (CS), Sett. D11-12, US 130, RBA1 (?) Drawing/inked drawing S. Boersma</p>
<p>299 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR3-3</p>	<p>Fragment of slightly inward short neck fragment of a jar, slightly flaring rim Roughly depurated impasto, polished surface Ext 7.5YR6/4 light reddish brown, Int 7.5YR5/4 brown H 2.5, W 3.5, Th 0.7-0.5 (wall), Th 0.5 (lip) Par. 299</p>

Plate XXV.299, Tab. 15	Trucco, Vagnetti 2001, Fig. 77.5, Sett. E8-9, US 203, RBA2 (?) Drawing/inked drawing S. Boersma
300 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR3-2 Plate XXV.300	Short and slightly outward neck of a jar with flattened and outward thickened lip Roughly depurated impasto, polished surface Ext Gley1-3/N very dark grey, Int 10YR6/1 grey H 2.5, W 1.1, Th 0.7-0.9 (wall), Th 0.8 (rim) Drawing/inked drawing S. Boersma
301 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR11-1 Plate XXV.301	Fragment of ovoidal jar with flaring rim, thinned lip Roughly depurated impasto, polished surface 7.5YR5/6 strong brown H 8.6, W 12, Th 0.8-0.6 (wall), Th 0.5 (rim), D 17.5 Drawing/inked drawing S. Boersma
302 Timpa del Castello Francavilla M.ma (CS) Section SIBA 05 TdC PR11-5 Plate XXV.302	Fragment of short and slightly outward rim of a globular jar Roughly depurated impasto, polished surface 10YR6/1 grey H 4.4, W 6.0, Th 0.8 (wall), Th 0.7 (rim) Drawing/inked drawing S. Boersma
303 Grotta del Caprio Francavilla M.ma (CS) Grotta del Caprio-1 Plate XIII.303	Wall fragment of a small jar (<i>orcio</i>) decorated by parallel grooves, with pseudo-cutaneous handle (see 304. Grotta del Caprio-2) Roughly depurated impasto, polished surface Gley1-2.5/N black H 13.4, L 10.8, Th 0.7 Par. 303 Bernabò Brea, Cavalier 1980, Tav. CVI, 5, Lipari, Tr. N 11-13, end of the ME Drawing P. Roncoroni, inked drawing S. Boersma
304 Grotta del Caprio Francavilla M.ma (CS) Grotta del Caprio-2 Plate XIII.304	Wall fragment decorated by parallel grooves, with pseudo-cutaneous handle (see 303. Grotta del Caprio-1) Roughly depurated impasto, polished surface Gley1-2.5/N black H 6, L 9.1, Th 0.7, Th 0.8 Drawing P. Roncoroni, inked drawing S. Boersma
305 Pietra della Sentinella Civita (CS) PdS-01-2 Plate XXVI.305, Tab. 50	Rim fragment of neck vessel with smoothed cord-band Impasto, inclusions up to 0.5 Ext 10YR6/3 pale brown, Int 5YR6/4-6 from light reddish brown to reddish yellow H 8.3, W 6.1, Th 0.8-1(wall), Th 1.1 (decoration), D 18-19 Par. 305 Cocchi Genick 1995, Tipo 425B, Giovinazzo (BA), MBA2 Drawing P. Roncoroni, inked drawing S. Boersma
306 Pietra della Sentinella Civita (CS) PdS-01-9 Plate XXVI.306, Tab. 50	Wall fragment of a jar with cord-band forming angular decoration smoothed impasto, inclusions up to 0.6 5YR6/6/1 reddish yellow/grey, 2.5YR6/N6/0 grey H 4.5, W 7, Th 0.8-1.2. (wall), Th 1.4-1.6 (decoration) Par. 306 Peroni, Trucco 1994, decorazione 130, Broglio di Trebisacce (CS), Tav. 18.10, Sett. E, strato 1, MBA2 Drawing P. Roncoroni, inked drawing S. Boersma
307 Pietra della Sentinella Civita (CS) PdS-01-26 Plate XXVI.307	Rim fragment of a little jar with out-turning and short rim, ovoidal body Impasto, inside well smoothed, outside smoothed, few inclusions up to 0.6 Ext 7.5YR7/4 pink, Int 7.5YR6/4 light reddish brown H 3.4, W 4.5, Th 1 Drawing/inked drawing S. Boersma
308 Pietra della Sentinella Civita (CS) PdS-01-12 Plate XXVI.308	Rim fragment of a tronco-conical vessel with flattened lip smoothed impasto, inclusions up to 0.6 10YR6/1 grey, 2.5YR6/N6/0 grey, 7.5YR5/N5/1 grey H 5.5, W 5.8, Th 1-1.2, D 35.4 Drawing P. Roncoroni, inked drawing S. Boersma

309 Pietra della Sentinella Civita (CS) PdS-01-39 Plate XXVI.309m Tab. 50	Wall fragment with cord-band forming curved decoration Impasto, inclusions up to 0.6 7.5YR7/4 pink, 7.5YR6/4 light reddish brown H 2.9, W 3, Th 0.6 (wall), Th 1.1 (decoration) Par. 309 Peroni, Trucco 1994, Broglio di Trebisacce, Tav. 25.15, Sett. E, Liv. S, decoration 129 A, MBA2-3 Drawing P. Roncoroni, inked drawing S. Boersma
310 Pietra della Sentinella Civita (CS) PdS-01-13 Plate XXVI.310, Tab. 50	Handle fragment with raised edges and ear shaped ending Impasto, smoothed 2.5YR6/6 light red (core) H 5.3, W 5.6, Th 1.3 Par. 310 Cocchi Genich 1995, tipo 564 (sezione), Bari, S. Pietro, MBA3 Drawing/inked drawing S. Boersma
311 Pietra della Sentinella Civita (CS) PdS-01-16 Plate XXVI.311, Tab. 50	Fragment of a band handle with raised edges Coarse impasto 7.5YR6/2 pinkish grey, 7.5YR6/4 light reddish brown H 5, W 4.7, Th 1.3-1.1 Par. 311 Cocchi Genich 1995, Tipo 548, Spallete S. Margherita (Roma), MBA2 Drawing P. Roncoroni, inked drawing S. Boersma
312 Pietra della Sentinella Civita (CS) PdS-01-7+32 Plate XXVI.312, Tab. 50	Rim fragment of a neck vessel, straight rim, convex lip bevelled on the inside smoothed impasto, inclusions up to 0.6 5YR7/6 reddish yellow, core 5YR5/5/1 grey H 5, W 8.2, Th 0.8, D 16 Par. 312 Peroni, Trucco 1994, shape 94 A, Broglio di Trebisacce, Tav. 2.9, 2.15-16, Sett. B Ovest, liv. 4A, MBA3 Drawing P. Roncoroni, inked drawing S. Boersma
313 Pietra della Sentinella Civita (CS) PdS-01-11 Plate XXVI.313	Rim fragment of a globular/biconical jar with out turning rim Well smoothed impasto 10YR4/1 dark grey, 10YR5/2 greyish brown 3.9, 8.2, Th 0.5-0.6, D 14 Drawing P. Roncoroni, inked drawing S. Boersma
314 Pietra della Sentinella Civita (CS) PdS-01-15 Plate XXVI.314, Tab. 50	Wall fragment of a jar with vertical band handle Smoothed impasto, inclusions up to 0.6 Ext 5YR6/4 light reddish brown, 5YR5/2 reddish grey, Int 5YR7/6 reddish yellow reddish yellow, 5YR6/1 grey to 10YR6/1 grey/1 grey H 10, W 10, Th 1.1 (wall), Th 1 (handle), D 17 Par. 314 Similar to Peroni, Trucco 1994, Tav. 14,5 (<i>frammento ansato attribuibile alle forme 66-67, olle a orlo rientrante</i>), Broglio di Trebisacce (CS), Sett. E, liv. 3B, MBA 3 Drawing P. Roncoroni, inked drawing S. Boersma
315 Pietra della Sentinella Civita (CS) PdS-01-41 Plate XXVI.315	Rim fragment of a bucket shaped jar, pointed lip bevelled to inside Smoothed impasto Ext 5YR7/8 reddish yellow, Int 10YR7/1 light grey H 4, W 2.6, Th 1.2, D 21 Drawing P. Roncoroni, inked drawing S. Boersma
316 Pietra della Sentinella Civita (CS) PdS-01-6 Plate XXVI.316	Flat base fragment, flaring wall Impasto, inclusions up to 0.8, outside well smoothed Ext 5YR4/4/1 reddish brown/dark grey, Int 5YR6/4-6 light reddish brown and reddish yellow H 7.5, W 6.1, Th 0.9 (wall), Th 0.8 (bottom), D 16 Drawing P. Roncoroni, inked drawing S. Boersma
317 Pietra della Sentinella Civita (CS)	Flat base fragment, spreading wall smoothed impasto, inclusions up to 0.5 Ext from 2.5YR7/2 pale red, 5-YR-7/6 reddish yellow, Int 7.5YR4/N4/0 dark

PdS-01-14 Plate XXVI.317	grey H 5.2, W 6.6, Th 1.2 (wall), Th 1.9 (bottom), D 17 Drawing P. Roncoroni, inked drawing S. Boersma
318 Madre Chiesa Civita (CS) LCM-00-1a+b Plate XXVII.318, Tab. 57	Rim fragment of a neck vessel Well smoothed impasto, inclusions up to 0.4, inside surface covered by concretion Ext 5YR6/3 light reddish brown, 5YR4/2 dark reddish grey, 5YR5/1 grey, Int 5YR4/1 dark grey, 5YR4/2 dark reddish grey H 5.3, W 4.7, Th 0.6, D 12 Peroni, Trucco 1994, Broglio di Trebisacce (CS), sett. D Est, strato 2, Tav. 11. 16, shape 85A, MBA 2 Drawing P. Roncoroni, inked drawing S. Boersma
319 Madre Chiesa Civita (CS) LCM 10 Plate XXVII.319	Base fragment of a storage jar, flat bottom with raised base Impasto, very poor sorted, handmade, surface is gone Ext/Int 5YR7/4 pink, 5YR7/6 reddish yellow H 7.3, W 5.2, Th 1.8-2.2 (wall), Th 1 (bottom) Drawing P. Roncoroni, inked drawing S. Boersma
320 Madre Chiesa Civita (CS) LCM 5 Plate XXVII.320	Rim fragment of a bowl with outturning rim, flattened lip well burnished impasto colour n.a. H 2.1, W 2.8, Th 0.6, D ± 13 Drawing P. Roncoroni, inked drawing S. Boersma
321 Madre Chiesa Civita (CS) LCM 8 Plate XXVII.321	Rounded and thickened rim fragment of a jug with ovoid body impasto, poorly sorted, well polished surface Ext/Int 5YR-6/6-8 reddish yellow H 6.6, W 3.5, Th 0.8 Drawing P. Roncoroni, inked drawing S. Boersma
322 Madre Chiesa Civita (CS) LCM 7 Plate XXVII.322	Flat base fragment Burnished impasto Ext 5YR6/2 pinkish grey, Int 5YR5/2 reddish grey H 1.3, W 2.3, Th 0.9, D ca. 9 Drawing P. Roncoroni, inked drawing S. Boersma
323 Madre Chiesa Civita (CS) MC-99-12 Plate XXVII.323, Tab. 58	Wall fragment of a cup with carena, attachment of vertical band handle Coarse impasto, well smoothed outside, smoothed inside, surface covered by concretion Ext/Int 5-YR-3/1 very dark grey H 4.6, W 4.4, Th 0.8-0.9 (wall), W 3.9 (handle), Th 0.8 (handle) Par. 323 Peroni, Trucco 1994, Broglio di Trebisacce, sett. B Ovest, liv. 3A, shape 22a, tav. 27,12, RBA Drawing/inked drawing S. Boersma
324 Madre Chiesa Civita (CS) LCM 1 Plate XXVII.324	Rim fragment of a jar with thickened and rounded lip, quite stright wall burnished and depurated impasto Ext/Int 7.5YR5/2 brown H 4.5, W 6.1, Th 0.7-1 (wall) Drawing P. Roncoroni, inked drawing S. Boersma
325 Madre Chiesa Civita (CS) MC-99-26 Plate XXVII.325	Fragment of raised upright handle with pseudocylindrical section well smoothed impasto, inclusions up to 0.5 5YR6/4 light reddish brown, 5YR4/1 dark grey H 3.8, W 4, Th 1.9 Par. 325 Similar to Trucco, Vagnetti 2001, Type 466B, US 5x/87, RBA1, Torre Mordillo, Cassano allo Jonio (CS) Drawing /inked drawing S. Boersma
326 Madre Chiesa Civita (CS) LCM 6 Plate XXVII.326, Tab. 58	Rim fragment of a spherical jar with in-turning rim and flattened lip impasto, medium sorted Ext/Int 5YR5/4 reddish brown (5/3) reddish brown H 2.6, W 6, Th 0.8, D 21 Par. 326 Bergonzi <i>et al.</i> 1982, Broglio di Trebisacce (CS), Tav. 6.6, shape 77 d, sett. D,

	strato IA III, RBA Drawing P. Roncoroni, inked drawing S. Boersma
327 Madre Chiesa Civita (CS) MC-99-15 Plate XXVII.327, Tab. 58	Rim fragment of a vessel, with very slightly outcurving rim and broken lip Depurated impasto Ext 2.5YR5/6 red, Ext/Int 2.5YR5/4-3 reddish brown H 4.2, W 3.1, Th 0.9-0.7 Par. 327 Peroni, Trucco 1994, Tav. 32.23, Broglio di Trebisacce (CS), sett, B Ovest, strato 2, RBA Drawing/inked drawing S. Boersma
328 Madre Chiesa Civita (CS) MC-99-18 Plate XXVII.328	Base fragment of a large tronco-conical vessel, flat base, spreading wall Coarse impasto, inclusions up to 0.6 Ext 7.5YR6/4 light reddish brown, 10YR6/2 light brownish grey Int 5YR7/6 reddish yellow, core 7.5YR6/0 grey H 7.5, W 6, Th 1.8, D 20 Par. 328 Similar to Peroni, Trucco 1994, Tav. 166.7, Basili di Rossano (CS), survey, site dated to the LBA-EIA. Drawing P. Roncoroni, inked drawing S. Boersma
329 Madre Chiesa Civita (CS) MC-99-10 Plate XXVII.329	Rim fragment with spreading wall and convex lip Well smoothed impasto, inclusions up to 0.3cm Ext/Int 5YR7/3 pink, 5YR6/4 light reddish brown, lip 5YR7/6 reddish yellow H 2.5, W 4, Th 0.75, D >20 Drawing/inked drawing S. Boersma
330 Madre Chiesa Civita (CS) MC-99-14 Plate XXVII.330	Rim fragment of an ovoid jar with outturning rim smoothed impasto, inclusions up to 0.3 cm Ext/Int 5YR7/6 reddish yellow H 4, W 4.4, Th 0.9 Drawing/inked drawing S. Boersma
331 Madre Chiesa Civita (CS) MC-99-1 Plate XXVIII.331	Jar rim fragment, flattened and thickened lip, slightly incurving wall, notched cord-band smoothed impasto, inclusions up to 0.4 Ext/Int 5YR6/4 light reddish brown H 3.9, W 4.4, Th 1.2. (wall), Th 1.9 (cord-band), D 25 cm Drawing/inked drawing S. Boersma
332 Madre Chiesa Civita (CS) MC-99-22 Plate XXVII.332	Rim fragment of a tronco-conical jar, flattened lip, straight rim Smoothed impasto, inclusions up to 1.2 5YR4/1 dark grey, 5YR7/2 pinkish grey H 2.8, W 4.2, Th 1.1, D >20 Drawing/inked drawing S. Boersma
333 Madre Chiesa Civita (CS) MC-99-2 Plate XXVII.333, Tab. 58	Rim fragment of a jar, roughly bevelled to inside lip, notched cord-band Smoothed impasto, inclusions up to 0.9, partly covered by concretions 5YR5/4 reddish brown, 5YR5/6 yellowish red, 5YR6/6 reddish yellow H 5.5, W 8.4, Th 1.1 (wall), Th 2.1 (cord-band), D > 20 Par. 333 Peroni, Trucco 1994, shape 64 a, Tav. 111.12, Broglio di Trebisacce (CS), sett. D Nord, liv. S, FBA Drawing P. Roncoroni, inked drawing S. Boersma
334 Madre Chiesa Civita (CS) MC-99-25 Plate XXVIII.334	Rim fragment of a neck-vessel with ovoid body and slightly incurving rim Smoothed impasto, inclusions up to 0.7 Ext 5YR6/4 light reddish brown, Int 5YR6/2 pinkish grey, lip 5YR7/6 reddish yellow H 6.3, W 3.3, Th 1.1, D 22 Par. 334 Similar to Peroni, Trucco 1994, shape 55c, Tav. 99.11, Broglio di Trebisacce (CS), sett. B Ovest, liv. S, FBA layer (MBA2 sherd?) Drawing P. Roncoroni, inked drawing S. Boersma
335 Madre Chiesa Civita (CS)	Rim fragment of an ovoid jar with slightly outcurving rim, decorated with twisted rope cord-band Smoothed impasto, inclusions up to 0.4

MC-99-20 Plate XXVIII.335	Ext 5YR4/1 dark grey, 7.5YR7/4 pink, Int 10YR7/3 very pale brown H 6, W 4.7, Th 0.9-1.1 (wall), Th 1.5 (cord-band), D 21.6 Drawing P. Roncoroni, inked drawing S. Boersma
336 Madre Chiesa Civita (CS) MC-99-27 Plate XXVIII.336, Tab. 58	Rim fragment of a tronco-conical jar, short straight rim, cord-band Coarse impasto, inclusions up to 0.6 Ext 7YR7/4 pink, Int/Ext 5YR7/6 reddish yellow, core 7.5YR4/0 dark grey H 3.3, W 5.3, Th 1.3 (wall), Th 1.9 (cord-band), D ca. 27 Par. 336 Peroni, Trucco 1994, shape 41, Tav. 87.7, Broglio di Trebisacce (CS), sett. B Ovest, liv. H, FBA
337 Madre Chiesa Civita (CS) MC-99-28 Plate XXVIII.337	Rim fragment of a jar with slightly outcurving rim, notched cord-band smoothed impasto, inclusions up to 1 Ext/Int 5YR7/6 reddish yellow, 5YR5/1 grey, 5YR3/1 very dark grey H 4.2, W 5.1, Th 1 (wall), Th 0.5 (cord-band), D 25 ca. Drawing P. Roncoroni, inked drawing S. Boersma
338 Madre Chiesa Civita (CS) LCM 2 Plate XXVIII.338	Rim fragment of a cylindrical-ovoid jar with outturning rim and lip pointed to outside, cord-band decoration impasto, surface covered by limestone concretions Ext/Int 2.5YR6/6 light red H 6.8, W 4.9, Th 0.8-1 (wall), Th 1.8 (wall and cord-band), D 30 ca. Par. 338 Similar to Peroni, Trucco 1994, Tav. 164.2, Tarsia, survey find. See also Grotta di Palmanocera, Sherd GdP-98-1 not in Cat., LFBA-EIA
339 Grotta I Ngerije Sup. Civita (CS) GNS-11 Plate XXVIII.339	Rim fragment of a jar, straight rim, cylindrical-ovoid shaped body Smoothed impasto, inclusions up to 0.7 Ext 5YR6/4 light reddish brown, Int 5YR7/6 reddish yellow, 2.5YR5/4 reddish brown, 2.5YR5/6 yellowish red H 5.4, W 4.6, Th 0.9, D 18 Drawing P. Roncoroni, inked drawing S. Boersma
340 Grotta I Ngerije Sup. Civita (CS) GNS-1 Plate XXIX.340	Wall fragment of a tronco-conical bucket with cord-band and lug Coarse impasto, inclusions up to 1, well smoothed outside, inside smoothed surface Ext 2.5YR6/4 light reddish brown, 5YR6/6 reddish yellow, 2.5YR6/6 light red, Int 5YR6/4 light reddish brown H 12.4, W 13.7, Th 0.7-1.2 (wall), Th 0.5 (cord-band), Th 1.6 (lug), D 28 (inside) Par. 340 Similar to Cinquepalmi, Radina 1998, n. 9.040, p. 159, Torre S. Sabina (BR), Struttura 1, t.3, RBA2 Drawing P. Roncoroni, inked drawing S. Boersma
341 Grotta I Ngerije Sup. Civita (CS) GNS-2 Plate XXIX.341, Tab. 51	Very slightly outcurving rim fragment of a jar with lug, ovoid shaped body Smoothed impasto, inclusions up to 0.8 Ext 5YR3/1 very dark grey, 7YR6/4 light brown, Int 5YR4/1 dark grey, 7.5YR6/4 light reddish brown H 6.4, W 7.3, Th 0.7 (wall), Th 1 (lug), D 19 Par. 341 Similar to Peroni, Trucco 1994, Broglio di Trebisacce (CS), forma 67 b, RBA2 and Tav. 51.14, sporadic find (?) Drawing P. Roncoroni, inked drawing S. Boersma
342 Banco del Prete Timpa del Demanio Civita (CS) BdP 1 Plate XXIX.342	Wall fragment of a jar decorated with cord-band Poorly sorted impasto, burnished surface Ext 7.5YR6/6 reddish yellow, 7.5YR5/3 brown, Int 10YR4/1 dark grey H 3.5, W 4.3, Th 0.8-1 Drawing P. Roncoroni, inked draw. S. Boersma
343 Banco del Prete Timpa del Demanio Civita (CS) BdP 4	Wall fragment of a bowl with in-turning profile Poorly sorted impasto, burnished surface Ext 7.5YR5/4 brown, Int 7.5YR6/1 grey, Ext/Int 5YR6/6 reddish yellow H 7.9, W 7.4, Th 0.6-0.7, D 16 Drawing P. Roncoroni, inked draw. S. Boersma

Plate XXIX.343	
344 Banco del Prete Timpa del Demanio Civita (CS) BdP2 Plate XXIX.344, Tab. 54	Outcurving rim fragment of a jar, bevelled lip and notched cord-band Poorly sorted impasto, burnished inside surface Ext 7.5YR6/4 light reddish brown, 5YR6/6 reddish yellow H 6.7, W 4.6, Th 0.7-1.3, D 30 c.a Par. 344 Peroni, Trucco 1994, Tav. 89.19, Broglio di Trebisacce, Sett. B ovest, liv. H, shape 66, FBA2 Drawing P. Roncoroni, inked draw. S. Boersma
345 Banco del Prete, Timpa del Demanio, Civita (CS) BdP 3 Plate XXIX.345	Flat base fragment Very poorly sorted impasto, coarse surface Ext 7.5YR6/6 reddish yellow, Int 10YR5/2 greyish brown H 2.25, W 4.4, Th 1.2-1.7 Drawing P. Roncoroni, inked draw. S. Boersma
346 Banco del Prete, Timpa del Demanio, Civita (CS) BdP-00-1 Plate XXX.346	Rim fragment of a jar with lug, ovoid shaped body and very slightly outcurving rim Very poor sorted impasto, inclusions up to 0.8, coarse surface Ext 5YR5/6 yellowish red, Int 5YR6/1 grey, Int/Ext 5YR6/6 reddish yellow H 4.4, W 5.1, Th 0.8-1 Drawing/inked draw. S. Boersma
347 Banco del Prete, Timpa del Demanio, Civita (CS) BdP-00-4 Plate XXX.347	Very slightly outcurving rim fragment of a jar with lug, ovoid shaped body Very poor sorted impasto, inclusions up to 0.8, coarse surface Ext 5YR4/3-6/6 reddish brown-reddish yellow, Int 5YR5/1 grey, 7.5YR7/0 reddish yellow H 5.1, W 9.1, Th 1.7 (wall), 1.8 (base), D 25 c.a Drawing/inked draw. S. Boersma
348 Banco del Prete, Timpa del Demanio, Civita (CS) BdP-00-2 Plate XXX.348, Tab. 55	Rim fragment of a short and slightly inward neck vessel, flattened lip Very poor sorted impasto, inclusions up to 0.7, smoothed internal surface Ext 5YR6/4,6 light reddish brown, reddish yellow, Int 10YR6/3 pale brown H 3.6, W 4.3, Th 0.7, D 12 c.a Similar to Peroni, Trucco 1994, Tav. 84.16,18, Sett. B W, Liv. 1A FBA1-2 Drawing P. Roncoroni, inked draw. S. Boersma
349 Timpa del Demanio Civita (CS) T.Dem. 1 Plate XXX.349	Rim fragment with slightly outturning rim, thickened and rounded lip Medium sorted impasto, burnished surface Ext/Int 7.5YR7/6 reddish yellow H 3.7, W 4.2, Th 1, D 11 Drawing P. Roncoroni, inked drawing S. Boersma
350 Timpa del Demanio Civita (CS) T.Dem. 6 Plate XXX.350	Bottom fragment Poorly sorted impasto, burnished internal surface Ext/Int 5YR6/6, 6/3 reddish yellow, light reddish brown H 2, W 6.2, Th 1.4 Drawing P. Roncoroni, inked draw. S. Boersma
351 Timpa del Demanio Civita (CS) T.Dem. 4 Plate XXX.351	Flat base fragment Poorly sorted impasto, burnished surface Ext/Int 10YR7/3, 4/1 very pale brown, dark grey H 5.8, W 4.3, Th 1.1-1.5 Drawing P. Roncoroni, inked draw. S. Boersma
352 Timpa del Demanio Civita (CS) T.Dem. 5 Plate XXX.352	Out-turning rim fragment with cord-band (broken lip) Medium sorted impasto, coarse surface Ext/Int 2.5YR6/8 light red, 7.5YR7/3 pink H 5.8, W 4.8, Th 1 Drawing P. Roncoroni, inked draw. S. Boersma
353 Timpa del Demanio Civita (CS) T.Dem. 11 Plate XXX.353	Bottom fragment Medium sorted impasto, burnished surface Ext 2.5YR6/8 light red, 5YR5/1 grey, Int 5YR6/6, 5/6 reddish yellow, yellowish red H 1.3, W 15, Th 1.3-1.5 Drawing P. Roncoroni, inked draw. S. Boersma
354	Decorated wall fragment of a jar

Timpa del Demanio Civita (CS) T.Dem. 9 Plate XXX.354, Tab. 52	Poorly sorted impasto, coarse surface 10YR6/4, 6/6 light yellowish brown, brownish yellow H 4.4, W 4.9, Th 0.9-1. 1 Drawing P. Roncoroni, inked draw. S. Boersma Par. 354 Peroni, Trucco 1994, Tav. 122,2, 68c (FBA2), Timpone Motta-Francavilla (surface find), Colelli 2012, Tav. 21,67, Timpone Motta, AC.12.16, IA
355 Timpa del Demanio Civita (CS) T.Dem. 2 Plate XXX.355, Tab. 52	Base fragment decorated with notches Medium sorted impasto, coarse/burnished surface 7.5YR5/4 brown, 6/4, 2.5Y4/1 dark grey H 2.8, W 4.4, Th 1. 5 (wall), 1.2 (base) Drawing P. Roncoroni, inked draw. S. Boersma Par. 355 For the surface treatment, Maaskant Kleibrink 1987, n. 706, Borgo Le Ferriere, Satricum, Latina, Hut II, phase 1, D 10, Th 847/257, 770-750/40 BC
356 Banco Grande Civita (CS) Tdd-BG-3 Plate XXX.356	Wall fragment of a jar with horizontal notched cord-band and vertical cord-band without decoration Very poor sorted impasto, inclusions up to 0.4, coarse/smoothed surface Ext/int 5YR7/6 reddish yellow H 3.3, W 3.6, Th 1, Th with cord 1.5 Drawing P. Roncoroni, inked draw. S. Boersma
357 Banco Grande Civita (CS) Tdd-BG-2 Plate XXX.357, Tab. 53	Wall fragment of a bowl with carena (broken lip) Very poor sorted impasto, inclusions up to 0.6, coarse/smoothed surface Ext 2.5YR6/2 pale red, Ext/Int 5YR6/4 light reddish brown H 4.2, W 5.8, Th 0.5-0.7, D 18 (carena) Drawing P. Roncoroni, inked draw. S. Boersma Par. 357 Peroni, Trucco 1994, Broglio di Trebisacce, Tav. 94.26, sett. B Ovest, liv. S3, Tav. 110.14, Sett. D Nord, liv. S, FBA2 (?)
358 Banco Grande Civita (CS) Tdd-BG-5 Plate XXX.358	Wall fragment of a bowl with lug Poorly sorted impasto, inclusions up to 0.4, smoothed surface Ext 5YR6/6, 6/4 reddish yellow, light reddish brown, Int 5YR6/3 light reddish brown H 3.5, W 4.3, Th 0.8 Drawing P. Roncoroni, inked draw. S. Boersma
359 Banco Grande Civita (CS) Tdd-BG-6 Plate XXX.359, Tab. 53	Wall fragment of a jar with cord-band (broken rim) Poor sorted impasto, inclusions up to 0.4 Ext/int 5YR7/6 reddish yellow H 4.1, W 4, wall Th 0.8, wall+cord Th 1.4, D 22.6 c.a Drawing P. Roncoroni, inked draw. S. Boersma Par. 359 Peroni, Trucco 1994, tav. 124,9,11, Castrovillari, S. Maria del Castello (surface), EIA1
360 Banco I Ndappe Civita (CS) Tdd-BN-1 Not in Plates	Wall fragment with notched cord-band Very poor sorted impasto, inclusions up to 0.9 cm, coarse/smoothed surface Int 5YR6/6 reddish yellow, Ext/Int 5YR5/4 reddish brown H 5.9, W 8.9, Th 0.9-1.2, Th with cord band 1.8 Drawing P. Roncoroni, inked draw. S. Boersma
361 Area Rovitti Francavilla M.ma (CS) R-030410-US1 (Canaletta per deflusso acque su sezione N SAS 2009) Plate XII.361, Tab. 46b	Wall fragment of close shaped vessel decorated by painted running spirals Depurated clay, very few small size inclusions Ext (front) 7.5YR7/4, (back) 5YR6/6 reddish yellow, dec. 7.5YR3/2 dark brown, 5YR4/3 reddish brown H 2.8, W 4.2, Th 1 Drawing e inked drawing S. Boersma Par. 361 (FM 46, running spiral: very common motif both at Crete and Mainland Greece, on open and close shaped, Early LHIII B-C, after Settis, Parra 2005, 307). Panichelli 1994, Tav. 71.2, Broglio di Trebisacce (CS), Sett. B Ovest, liv. 1A, FBA1, Panichelli 1994, Tav. 72. 5, Broglio di Trebisacce (CS), Sett. D Est, liv. 1 Est, RBA2. RBA2-FBA1

362 Area Rovitti Francavilla M.ma (CS) HY61US38 Plate XII.362, Tab. 46	Zoomorphic ending of upright handle fragment Roughly depurated impasto, several small size inclusions, burnished surface Ext from 7.5YR4/2 brown to Gley1-2.5N black, Int Gley1-2.5N black H 4.5, W 4, D 1.9, Th ending 1.5 x 1 Drawing and inked Drawing S. Boersma Par. 362 Damiani 2010, Tav. 114.6.A48. Foggia 4, Torre Mordillo, Cassano allo J. (CS), DE11US11/87, RBA
363 Area Rovitti Francavilla M.ma (CS) HY62-US38 Plate XII.363	Fragment of an upright handle with attachments of snail horn endings Burnished impasto, small-medium sizes inclusions Ext Gley1-3N very dark grey, 5YR5/4 reddish brown, Int Gley1-2.5N black H 4.7, W 4, Th 2.6 x 2.2, Th ending 1.6 x 1.5 Drawing and inked Drawing S. Boersma
364 Area Rovitti Francavilla M.ma (CS) HY38-F3 (HY64, US38) Plate XII.364	Fragment of a shallow bowl, straight-slightly inward rim, flattened lip Burnished impasto, a few small-medium size inclusions Ext (back) Gley1-2.5N black, Ext (front) 7.5YR3/1 very dark grey, Gley1-2.5N black, Int Gley1-2.5N black H 3.1, W 4.4, Th 1 Drawing e inked Drawing S. Boersma
365 Area Rovitti Francavilla M.ma (CS) HY 65, US 38 Not in plates	Wall fragment of an ovoid jar with vertical band handle attachment Roughly depurated impasto, several small size inclusions, smoothed/burnished surface 2.5YR2.5/1 reddish black H 9.8, Th 0.7-0.9, D max 20 c.a Drawing C. Colelli, inked drawing S. Boersma
366 Area Rovitti Francavilla M.ma (CS) HY66-US38 Plate XIII.366	Straight rim fragment of a bucket shaped jar with bump, rounded lip Smoothed impasto, several inclusions from small to large size Int Gley1-4N dark grey, outside covered by incrustations H 9.1, W 5.2, Th 1.2 Drawing C. Colelli, inked drawing S. Boersma
367 Area Rovitti Francavilla M.ma (CS) HY 116, HY 84/17 Not in plates	Outurning rim fragment of a bowl with carena Smoothed/burnished impasto, several inclusions from small to medium size 7.5YR4/2, 3/1 brown, very dark grey H 4.1, Th 0.8-0.9, D 26 Drawing C. Colelli, inked drawing S. Boersma
368 Area Rovitti Francavilla M.ma (CS) HY 117, HY 82/225 Plate XIII.368, Tab. 46	Wall fragment with carena Smoothed/burnished impasto, several inclusions from small to medium size Ext 7.5YR2.5/1 black, Int 7.5YR4/2 brown H 4.8, Th 0.8-0.9, D 18 Drawing C. Colelli, inked drawing S. Boersma Par. 368 Damiani 2010, Tav. 64.7, Tipo 88C, Broglio di Trebisacce, Sett. D, Str. 1AIII and S, RBA2
369 Area Rovitti Francavilla M.ma (CS) HY 120, HY 84/52 Plate XIII.369, Tab. 46	Snail horn ending of upright handle fragment Smoothed/burnished impasto, few inclusions from small to medium size 7.5YR2.5/1 black H 2.5, D 3.8-2.1 Drawing C. Colelli, inked drawing S. Boersma Par. 369 Damiani 2010, Tav. 120A.4, Tipo B10 var. B, Podere Montaletto, Misano, Rimini, RBA1
370 Area Rovitti Francavilla M.ma (CS) HY2-F1 (C.C. HY122-HY10/2) Plate XII.370 Rovitti continues at n. 488, Plates XLIV-XLV	Fragment of upright handle with fragmentary snail horn endings Burnished impasto, a few inclusions Int 10YR5/3-4 brown-yellowish brown, Ext Gley1-3N very dark grey H 4.1, W 3.8, Th 1.7,1.4, D horn 1.3 Drawing e inked Drawing S. Boersma
371	Wall fragment decorated with impressions

<p>Pietra Sant'Angelo S. Lorenzo Bellizzi (CS) PSA12-1 Plate XIII.371</p>	<p>Coarse impasto, several medium-large size inclusions Smoothed surface Ext 10YR4/2 dark greyish brown, 5YR5/6 yellowish red, Int 2.5Y6/1 grey-7/1 Core 2.5Y5/1 grey, 10YR5/1 grey, Gley1-4, 3, 2.5/N, dark grey-very dark grey-black, Gley1-2.5/10Y greenish black Par. 371 Natali 2009, Tav. XXII.16, Favella della Corte, Corigliano Calabro, CS (context is not specified), decoration made by "<i>strumento ad estremità sottile arcuata impressa verticalmente, con organizzazione a risparmio</i>" (Natali 2009, 234-237), Early Neolithic, <i>fase della ceramica impressa arcaica</i>, 7100-6800 BP (Pessina, Tine' 2010, p. 43). Trump 1966, Pl. 16, Jar of impressed Ripabianca ware (Ripabianca di Monterado, AN), Ancona Museum, Height 27 cms</p>
<p>372 Grotta della Camastra GdCam-96-3 Plate XXXI.372</p>	<p>Grindstone Sandstone Grey, traces of limestone 7.9 x 6.4, Th 2.4 Drawing P. Roncoroni, inked drawing S. Boersma</p>
<p>373 Grotta della Camastra Cerchiara di C. (CS) GdCam-96-4 Plate XXXI.373, Tab. 59</p>	<p>Pseudo-cutaneous handle with faint traces of ribs Impasto, inclusions up to 0.8, rounded surface, traces of red pigment Exterior 5YR5/6 yellowish red, 7.5YR7/2 pinkish grey, 7.5YR6/4 light reddish brown, Interior 19/YR6/3 pale brown H 6.9, W 7.2, Th 1 (wall), Th 0.9 (handle), D 0.5 (hole) Par. 373 Albore Livadie 1990, Tav. 8.1, p. 34 (Piano Conte facies), from Grotta delle Noglie, Massalubrense, collezione Stoop 1965. Nicoletti 2004, Fig. 2.18, p. 776, from Olivotta-Borda (KR), from survey. Drawing P. Roncoroni, inked drawing S. Boersma</p>
<p>374 Grande Caverna di Damale Cerchiara di Calabria (CS) GCdD-02-2 Plate XXXI.374, Tab. 60</p>	<p>Rim fragment of a vessel with tronco-conical neck and ovoid body Impasto, outside burnished, inside well smoothed, traces of concretions Ext 7.5YR5/4 brown, 7.5YR6/4 light reddish brown, Ext/Int 2.5Y3/N3/0 very dark grey H 5, W 5.1, Th 0.6, D 19 See also sherd 375, Plate XXXI.375, Tab. 60 Par. 374 Esposito 1990, Tav. 29.227324, <i>vaso a fiasco</i> from Piano di Sorrento, Pozzo 2/4, Middle Eneolithic Drawing P. Roncoroni, inked drawing S. Boersma</p>
<p>375 Grande Caverna di Damale Cerchiara di C. (CS) GCdD-02-1 Plate XXXI.375, Tab. 60</p>	<p>Wall fragment of a bowl with carena Burnished impasto Ext/Int 7.5YR5/4 brown, 2.5Y3/N3/0 very dark grey H 4.5, W 7.8, Th 1.7, D 22-24 See Plate XXXI.374, Tab. 60 Drawing/inked drawing S. Boersma</p>
<p>376 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-10 Plate XXXI.376</p>	<p>Stone axe Limestone W 4.2, L 7.2, Th 2.5 Par. 376 Uncertain chronology: see both Moser 2009, Favella della Corte (CS), Rep. Favella 148 (Tav. I, 4), 392, surface find, Early Neolithic and, for instance, Bernabò Brea <i>et al.</i> 1989, Fig. 183-184, Str., Sup., MBA Drawing P. Roncoroni, inked drawing S. Boersma</p>
<p>377 Terra Masseta1 Cerchiara di Calabria (CS) TMS-04-4 Plate XXXI.377, Tab. 63</p>	<p>Rim fragment of a high neck vessel, roughly straight rim, slightly thickened profile, slightly flaring lip, thinned to outside Smoothed impasto Ext 7.5YR6/4 light brown, Int 2.5YR6/4 light reddish brown, 2.5YR6/6 light red H 5.5, W 5, Th 0.8-0.9, D c.a 11 Par. 377 Holloway 1973, Buccino, S. Antonio, T.6, 12Pl. XXXII, Middle Eneolithic</p>

378 Terra Masseta1 Cerchiara di Calabria (CS) TMS-04-7a + 7b Plate XXXI.378	Drawing P. Roncoroni, inked drawing S. Boersma Rim fragment of a bowl with slightly incurving rim with notched cord-band Coarse impasto Ext/Int 5YR6/6 reddish yellow, Ext 5YR5/2 reddish grey H 6.5, W 9, Th 0.8 (wall), Th 1.1(wall+cord), D 14.2 Par. 378 Similar to Talamo 1992, Pratola Serra (BN), Tav. XLII, 91, without cord, (EV-M10 US3), 92 (DIV-P/Q15 US2), 95 (EV-I11 US2), scodella tipo 3, var. A, EBA2
379 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-43 Plate XXXI.379, Tab. 61	Drawing P. Roncoroni, inked drawing S. Boersma Rim fragment of a cup with carena, high wall, deep body, convex profile Very well smoothed impasto 10YR6/2 light brownish grey, core 2.5YR6/6 light red H 4.3, W 3.8, Th 0.45-1.1, D 8 Par. 379 Cocchi Genick 1995, 354 v., Tipo 1, variante del tipo, Torre de' Passeri (PE), MBA1-2
380 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-28 Plate XXXI.380	Drawing P. Roncoroni, inked drawing S. Boersma Fragment of internal support Coarse impasto, well smoothed surface Extr/Int 5YR5/4 reddish brown, Int 5YR3/1 very dark grey 5.1, 4.5, Th 0.9-1.2, D ca. 7 (central hole)
381 Terra Masseta Cerchiara di Calabria (CS) TM-91-13 Plate XXXII.381	Drawing P. Roncoroni, inked drawing S. Boersma Inward rim fragment of a neck jar with cord band Well smoothed impasto Ext 7.5YR5/2 brown, Int 5YR6/6 reddish yellow, 5YR5/1 grey H 4.8, W 5.5, Th 0.7, D 10
382 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-18 Plate XXXII.382	Drawing P. Roncoroni, inked drawing S. Boersma Inward rim fragment of a short neck jar Smoothed impasto 5YR6/6 reddish yellow, 5-YR-5/2 reddish grey, core 2.5YR4/1 dark grey H 2.3, W 3.2, Th 0.6-0.7, D 11
383 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-26 Plate XXXII.383	Drawing P. Roncoroni, inked drawing S. Boersma Horizontal lug with hole Burnished impasto with large inclusions 7.5YR6/4 light brown, irregular side 7.5YR3/1 very dark grey, flat side Gley 3/N3 very dark grey 5.2, 2.8, Th 0.7-0.9, D 0.7 (hole)
384 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-51 Plate XXXII.384, Tab. 61	Drawing P. Roncoroni, inked drawing S. Boersma Fragment of a handle with a fragmentary knob on the upper part Smoothed impasto 2.5YR6/8 light red, 2.5YR6/1 reddish grey H 4.1, W 4.5, Th 1.2 Par. 384 Lukesh 1977, Fig. 21.9, Buccino, Tufariello, lower strata, Protoapennine B, MBA1, see also Sherd 250-Timpa del Castello, Francavilla M.ma (CS), Plate XXII.250, Tab. 13, Cat. 250.
385 Terra Masseta, Cerchiara di Calabria (CS) BdC-05-1 Plate XXXII.385	Drawing P. Roncoroni, inked drawing S. Boersma Handle fragment. Board handle with raised edges of a jar Plain impasto Ext 2.5YR6/2 pale red, 2.5YR6/4 light reddish brown, 2.5YR6/6 light red, Int 2.5YR5/2 weak red, 2.5YR5/4 reddish brown 7.1 x 7.4, Th handle 4.8 x 1.7 (edge) 1.1, Th wall 0.7
386 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-7 Plate XXXII.386, Tab. 61	Drawing P. Roncoroni, inked drawing S. Boersma Wall fragment of a bowl with carena Coarse impasto with large inclusions up to 1-0.9, smoothed outside, burnished inside Ext 10YR6/3 pale brown, 10YR5/1 grey, Int 2.5Y3/1 very dark grey H 8, W 9, Th 0.4 - 0.8, 12 < D < 14 Par. 386

	Belardelli 2004, type 31a, Coppa Nevigata, Manfredonia (FG), scavi 1909, strati medi, MBA3 Drawing P. Roncoroni, inked drawing S. Boersma
387 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-41 Plate XXXII.387	Wall fragment of a bowl with carena Well burnished impasto Ext 5YR6/6 reddish yellow, 2.5YR6/6 light red, Int 7.5YR5/2 brown H 4.3, W 3.8, Th 0.4-0.5, D 8 (carena) Drawing P. Roncoroni, inked drawing S. Boersma
388 Terra Masseta1 Cerchiara di Calabria (CS) TMS-04-6 Plate XXXII.388, Tab. 63	Wall fragment of a neck vessel with thickened internal angle between wall and rim Well smoothed impasto, inclusions up to 0.4 Ext/Int 5YR6/1 grey, surface rim 5YR6/4 light reddish brown H 4.8, W 4.7, Th 0.6-0.7 (wall), Th 0.6 (rim), D 13 (below the rim) Par. 388 Peroni, Trucco 1994, Tav. 12.1, shape 98, Sett. D Est, liv. S, MBA 3 Drawing P. Roncoroni, inked drawing S. Boersma
389 Terra Masseta Cerchiara di Calabria (CS) TerraMasseta 1 Plate XXXII.389	Fragment of vertical band handle with angular profile H 6, W 6.2, Th 4.2, Th 1 (handle) Impasto Color n.a. Drawing GIA 1998
390 Terra Masseta Cerchiara di Calabria (CS) TerraMasseta 4 Plate XXXII.390	Wall fragment of a bowl with notched cord-band H 3.2, W 4.5, Th 0.8 (wall), Th 0.4 (cord-band) Impasto Color n.a. Drawing GIA 1998 Par. 390 Similar to Belardelli 2004, type 16 a, Coppa Nevigata, Manfredonia (FG), Scassi Genio Civile 1904, RBA
391 Terra Masseta Cerchiara di Calabria (CS) TerraMasseta 5 Plate XXXII.391	Wall fragment of a jar with cord-band Impasto Color n.a. H 5.2, W 5.8, Th 1.2 (wall), Th 0.4 (cord-band) Drawing GIA 1998
392 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-5 Plate XXXIII.392	Out-turning rim fragment of a neck vessel with ledge Very coarse impasto, badly smoothed 10YR6/2 light brownish grey, core 5YR6/6 reddish yellow H 4, W 6.5, Th 1.1 - 1.2, D 32 Drawing P. Roncoroni, inked drawing S. Boersma
393 Terra Masseta, Cerchiara di Calabria (CS) TM-91-21 Plate XXXIII.393	Band handle fragment with circular hole Impasto, outside burnished, inside smoothed Ext 10YR6/4 light yellowish brown, 2.5YR6/6 light red, Int 2.5YR4/1 dark reddish grey H 2.8, W 3.8, Th 0.75/0.9 Drawing P. Roncoroni, inked drawing S. Boersma
394 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-39 Plate XXXIII.394	Vertical band handle fragment Well burnished impasto Gley 3/1 N/3 very dark grey H 3.2, W 3.5, Th 0.7-1.1 Drawing P. Roncoroni, inked drawing S. Boersma
395 Terra Masseta1 Cerchiara di Calabria (CS) TMS-04-5 Plate XXXIII.395	Vertical band handle Smoothed impasto Exterior 5YR7/6 reddish yellow, reddish brown 5YR6/4 light reddish brown Int 5YR6/1 grey grey, 5YR6/2 pinkish grey H 6.5, W 8.2, Th 1-1.1 (handle), W 5.3 (handle), Th 1.4 (handle) Drawing P. Roncoroni, inked drawing S. Boersma
396 Terra Masseta1 Cerchiara di Calabria (CS) TMS-04-11	Fragment of an horizontal band handle Badly smoothed impasto Ext 5YR6/6 reddish yellow, Int 5YR5/1 grey H 3.2, W 4.1, Th 3.5 (handle), Th 1, D 20-30

Plate XXXIII.396	Par. 396 Similar to Cinquepalmi, Radina 1998, n. 4.030, Giovinazzo (BA), Centro Storico, saggio A1984, livello IV, t.3, MBA3 Drawing P. Roncoroni, inked drawing S. Boersma
397 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-42 Plate XXXIII.397	Wall fragment of a bowl with vertical band handle Well smoothed impasto 7.5YR6/4 light reddish brown, 7.5YR6/6 reddish yellow H 4.1, W 3.9, Th 0.7 (wall), Th 0.8 (handle), W 3.8 (handle) Par. 397 Similar to Cocchi Genick 1995, Tipo 193v.a, Grotta Misa, MBA1-2 Drawing P. Roncoroni, inked drawing S. Boersma
398 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-8 Plate XXXIII.398	Fragment of a cup with carena, straight upper wall, out-turning rim, flaring and thinned lip Very well burnished impasto, irregular surface Ext 7.5YR5/2 brown, Int 7.5YR5/1 grey H 6.4, W 5.6, Th 0.4-0.8, D 10 Par. 398 Similar to Damiani 2010, Tav. 30.6, Fam. 42, Tipo 2, var. B, RBA1 Drawing P. Roncoroni, inked drawing S. Boersma
399 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-14 Plate XXXIII.399	Wall fragment of a jar with cord-band and lug Coarse impasto, well smoothed surface Ext 7.5YR5/2 brown, Int 10YR3/1 very dark grey, 7.5YR6/4 brown, core (lug) 5YR6/6 reddish yellow H 5.8, W 7.7, Th 0.75 - 0.85 Drawing P. Roncoroni, inked drawing S. Boersma
400 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-29 Plate XXXIII.400	Vertical band handle, circular section Well burnished impasto 7.5YR6/4 light reddish brown, 7.5YR4/1 dark grey H 5.3, W 5.1, Th 0.6-0.7 (wall), Th 0.7 handle Drawing P. Roncoroni, inked drawing S. Boersma
401 Terra Masseta1 Cerchiara di Calabria (CS) TM-91-33 Plate XXXIII.401	Flat plate fragment Smoothed impasto 2.5YR6/6 light red H 3.5, W 10.5, Th 1.65 (wall), Th 1.7 (bottom), D 24 Drawing P. Roncoroni, inked drawing S. Boersma
402 Terra Masseta1 Cerchiara di Calabria (CS) TM-98-101 Plate XXXIII.402, Tab. 62	Fragment of a dish, thickened base, roughly flaring wall, thinned edge Burnished impasto 2.5YR6/6 light red, 2.5YR4/1 dark reddish grey H 2.5, W 5.7, Th 0.6 (rim), Th 0.7 (bottom), D 19 Par. 402 Cocchi Genick 1995, Tipo 3A-B, Masseto (VT), Coppa Navigata (FG), Muro Maurizio (BR), Spigolizzi (LE), MBA1 Drawing P. Roncoroni, inked drawing S. Boersma
403 Terra Masseta Cerchiara di Calabria (CS) TerraMasseta 6 Plate XXXIII.403	Vertical band handle with three ribs H 6.2, W 5.4, Th 4.7, Th 1.6 (handle) Coarse impasto Color n.a. Drawing GIA 1998
404 Terra Masseta Cerchiara di Calabria (CS) TM-91-44 Plate XXXIV.404	Wall fragment of a bowl with bump Well smoothed impasto Ext/Int 10R5/2 greyish brown, core 2.5YR6/6 light red H 3.2, W 3.1, Th 1 (wall), Th 1.6 (wall+bump) Drawing P. Roncoroni, inked drawing S. Boersma
405 Terra Masseta Cerchiara di Calabria (CS) TMS-00-6 Plate XXXIV.405	Roughly straight neck fragment, flattened and slightly bevelled on the inside lip Coarse impasto, well smoothed outside, smoothed inside, inclusions up to 0.5 Ext 5YR5/1 grey H 7.1, W 7, Th 0.6-0.8, D 31 Par. 405 Similar to Peroni, Trucco 1994, Tav. 14.7, Broglio di Trebisacce (CS), Sett. E, liv. 3B, MBA2

	Drawing A. Larocca, inked drawing S. Boersma
406 Terra Masseta Cerchiara di Calabria (CS) TM-91-9 Plate XXXIV.406	Rim fragment of a bucket shaped vessel with roughly straight walls, slightly inward rim, flattened and inward thickened lip and cord-band Well smoothed impasto Ext 5YR6/6 reddish yellow, Int 5YR6/4 light reddish brown H 6.5, W 4.3, Th 1-1.1, D 20-30 Par. 406 Similar to Peroni, Trucco 1994, Tav. 107, 19, Broglio di Trebisacce (CS), sett. D Nord, strato 1, riq. B, FBA1 (long duration shape) Drawing P. Roncoroni, inked drawing S. Boersma
407 Terra Masseta Cerchiara di Calabria (CS) TM-91-12 Plate XXXIV.407	Wall fragment of a jar with cord-band Well smoothed impasto Ext 2.5YR6/6 light red, 2.5YR6/1 reddish grey, Int 10YR7/1 light red H 3.9, W 4, Th 0.6-0.7 Drawing P. Roncoroni, inked drawing S. Boersma
408 Terra Masseta Cerchiara di Calabria (CS) TM-91-17 Plate XXXIV.408	Wall fragment with semicircular lug decorated with circular impressions Well smoothed impasto Ext 7.5YR7/6 reddish yellow, 7.5YR5/2 brown H 4.6, W 7.6, Th 0.9 (wall), Th 2.9 wall+lug Drawing P. Roncoroni, inked drawing S. Boersma
409 Terra Masseta Cerchiara di Calabria (CS) TM-91-23+47 Plate XXXIV.409	Thin wall fragment of a little ovoid vessel with cord-band Ext 5YR6/6 reddish yellow, Int 7.5YR6/4 light reddish brown, 5-YR-5/1 grey, 10YR6/3 pale brown H 4.3, W 4.2, Th 0.3-0.4, D < 12 (below cord-band) Drawing P. Roncoroni, inked drawing S. Boersma
410 Terra Masseta Cerchiara di Calabria (CS) TM-91-24 Plate XXXIV.410	Short rim fragment, flattened and outward thickened lip Well burnished impasto Ext 5YR4/1 dark grey, Int 10YR4/1 dark grey, core 5YR6/6 reddish yellow H 1.4, W 2.4, S.0.6 Par. 410 Similar to Peroni, Trucco 1994, Tav. 95.16, Broglio di Trebisacce (CS), sett. B Ovest, liv. S3 FBA Drawing P. Roncoroni, inked drawing S. Boersma
411 Terra Masseta Cerchiara di Calabria (CS) TM-91-34 Plate XXXIV.411	Rim fragment of a basket-shaped vessel with cord-band, flaring rim, outward and flattened lip Burnished impasto (irregular surface) Ext 10YR5/2 greyish brown, Int 10YR5/3 brown, core 5YR6/6 reddish yellow H 4.4, W 5.1, Th 0.8 (wall), D ± 20 Drawing P. Roncoroni, inked drawing S. Boersma
412 Terra Masseta Cerchiara di Calabria (CS) TM-91-35 Plate XXXIV.412	Bottom fragment of a jar, thickened base, flaring walls Coarse impasto, inside burnished, outside smoothed Ext 7.5YR4/1 dark grey, Int 7.5YR6/4 light reddish brown H 7.3, W 8, Th 2 (wall), Th 1.5 (bottom), D 12 Drawing P. Roncoroni, inked drawing S. Boersma
413 Terra Masseta Cerchiara di Calabria (CS) TM-91-40 Plate XXXIV.413	Flat bottom fragment, slightly thickened base Burnished impasto Ext 5YR4/1 dark grey, Int 5YR5/2 reddish grey, core 7.5YR6/6 reddish yellow H 2.9, W 3.5, Th 0.7 (wall), Th 1 (base), D 10 Drawing P. Roncoroni, inked drawing S. Boersma
414 Terra Masseta Cerchiara di Calabria (CS) TM-91-56 Plate XXXIV.414, Tab. 61	Inward rim fragment of ovoidal jar, inturning lip, notched cord bands decoration Well smoothed impasto 7.5YR6/4 light reddish brown, Gley-4/N4 dark grey Ø 20, H 5.6, W 5.9, Th wall 0.7 – 1 Par. 414 Lukesh 1977, Fig. 10.6, Buccino, Tufariello, lower strata, Protoapennine B, MBA1 Drawing P. Roncoroni, inked drawing S. Boersma
415	Flat base fragment

Terra Masseta Cerchiara di Calabria (CS) TMS-00-1 Plate XXXV.415 416	Well smoothed impasto, inclusions up to 0.4 5YR6/6 reddish yellow, core 2.5YR5/4 reddish brown H 7.2, W 10.5, Th 0.9, D 24 Drawing A. Larocca, inked drawing S. Boersma
Terra Masseta Cerchiara di Calabria (CS) TMS-00-7 Plate XXXV.416	Rim fragment of a truncated cone shaped vessel, flaring walls, flattened and slightly bevelled on the inside lip, notched cord band Smoothed impasto Ext 5YR6/3 light reddish brown, Int 5YR6/4 light reddish brown H 3.6, W 2.7, Th 10.5, Th 0.8, D 26 Par. 416 Similar to Trucco, Vagnetti 2001, Tav. 33.14, type 236A, Torre Mordillo, Cassano allo Jonio (CS), US 6/87, Late FBA Drawing A. Larocca, inked drawing S. Boersma
417 Terra Masseta Cerchiara di Calabria (CS) TMS-00-8 Plate XXXV. 417	Inward rim fragment of an ovoid jar, flattened lip, twisted-rope cord-band Well smoothed impasto, inclusions up to 0.3 Ext/Int 5YR6/6 reddish yellow, 5-YR-5/1 grey H 3.4, W 4.2, Th 1.1 Par. 417 Similar to Trucco, Vagnetti 2001, Tav. 34.2, type 256A, Torre Mordillo, Cassano allo Jonio (CS), US 8/87, FBA1 (long duration shape) Drawing A. Larocca, inked drawing S. Boersma
418 Terra Masseta Cerchiara di Calabria (CS) TMS-04-10 Plate XXXV. 418	Wall fragment with emispherical bump Coarse impasto Ext 5YR6/4 light reddish brown, Int 5YR4/4/4 reddish brown H 3.8, W 4.6, Th 0.8 (wall), Th 1.4 (bump)
419 Terra Masseta Cerchiara di Calabria (CS) TM-91-16 Plate XXXV.419, Tab. 61	Funnel shaped rim fragment of an ovoid jar, rounded lip Burnished impasto 7.5YR6/2 pinkish grey, core 5YR6/6 reddish yellow H 7.7, W 12, Th 0.9-1 (wall), Th 0.5-0.7 (rim), D c.a 15 Par. 419 Similar to Peroni, Trucco 1994, Tav. 149.4 from Torre Mordillo, Cassano allo Jonio (CS), surface find, FBA-IA. Trucco, Vagnetti 2001, Tav. 68.8, type 341C, Torre Mordillo, EF8-10, US 1, EIA1 Drawing P. Roncoroni, inked drawing S. Boersma
420 Terra Masseta Cerchiara di Calabria (CS) TM-91-30 Plate XXXV.420, Tab. 61	Slightly outward and short neck fragment of a little ovoid jar, rounded lip Burnished impasto 7.5YR6/4 light brown, core 5YR6/6 reddish yellow H 4.75, W 3.5, Th 0.55-0.65, D 11 Par. 420 Trucco, Vagnetti 2001, Tav. 36.5, F289, Torre Mordillo, Cassano allo Jonio (CS), US 11/87, Late FBA Drawing P. Roncoroni, inked drawing S. Boersma
421 Terra Masseta, Cerchiara di Calabria (CS) TM-91-32 Plate XXXV.421	Out-turning rim fragment of a jar with slightly flattened lip Burnished impasto Core 5YR6/6 reddish yellow, Int/Ext 7.5YR6/3 light brown, 7.5YR5/2 brown H 5.2, W 3.6, Th 0.8, D 15 Drawing P. Roncoroni, inked drawing S. Boersma
422 Terra Masseta, Cerchiara di Calabria (CS) TM-91-36 Plate XXXV.422, Tab. 61	Funnel-shaped rim fragment of a globular jar with cord-band Burnished impasto n.a. H 5.4, W 5, Th 0.5 - 0.65, D 11 Par. 422 Similar to Trucco, Vagnetti 2001, Tav. 72.3, type 292, Torre Mordillo, Cassano allo Jonio (CS), sett. E 8-9, US 2, FBA1-2 Drawing P. Roncoroni, inked drawing S. Boersma
423 Terra Masseta, Cerchiara di Calabria (CS) TM-91-37	Wall fragment of a bowl with out-turning rim Smoothed and sandy impasto, inclusions up to ca. 0.5-1 Ext/Int 10YR7/4 very pale brown, Int 5YR7/4 pink H 4.1, W 4.3, Th 0.9

Plate XXXV.423	Par. 423 Similar to Peroni, Trucco 1994, Tav. 86.34, shape 37, Broglio di Trebisacce (CS), sett. B Ovest, liv. H, FBA2 Drawing P. Roncoroni, inked drawing S. Boersma
424 Terra Masseta, Cerchiara di Calabria (CS) TMS-04-12 Plate XXXV.424	Wall fragment with vertical cord band Smoothed impasto Ext 5YR6/2 pinkish grey, Ext/Int 5YR6/3 light reddish brown H 4.1, W 4.5, Th 0.8 (wall), Th 0.9-1 (cord-band) Drawing P. Roncoroni, inked drawing S. Boersma
425 Terra Masseta Cerchiara di Calabria (CS) TMS-04-13 Plate XXXV.425, Tab. 63	Rim fragment of a truncated cone shaped bowl with flattened and bevelled on the outside lip Impasto, very well smoothed inside Ext 5YR5/1 grey, 5YR5/2 reddish grey, Int 5YR4/4/1 reddish brown/dark grey, 5YR6/3 light reddish brown H 4.5, W 4, Th 1 (wall), Th 0.9 (rim), D 25.6 Par. 425 Peroni, Trucco 1994, Tav. 93.13, shape 38a, Broglio di Trebisacce (CS), sett. B Ovest, livv. S3+H, FBA2 Drawing P. Roncoroni, inked drawing S. Boersma
426 Terra Masseta Cerchiara di Calabria (CS) TM-91-2 Plate XXXV.426	Straight wall fragment decorated with two horizontal and parallels bands of multiple grooves Burnished impasto with large inclusions 5YR6/6 reddish yellow H 5.1, W 4.7, Th 0.9, distance between bands 2.5 cm Drawing P. Roncoroni, inked drawing S. Boersma
Terra Masseta includes n. cat. 671	
427 Balze di Cristo Cerchiara di Calabria (CS) BdC-04-2 - Grabsample 2 Plate XXXVI.427	Base fragment Smoothed impasto Int 5YR7/1 light grey, 5YR5/1 grey, Ext 5YR7/8 reddish yellow 5.2, 3.8, H.2.2, Th wall 1.2, Th 1 Drawing P. Roncoroni, inked drawing S. Boersma
428 Balze di Cristo Cerchiara di Calabria (CS) BdC-04-8 - Grab sample 7 Plate XXXVI.428, Tab. 64	Decorated wall fragment with handle and two vertical cord bands Plain impasto Int 5YR4/4/1 reddish brown/dark grey, Int/Ext 5YR4/2 dark reddish grey, Ext 5YR6/3-4 light reddish brown H 5.8, W 7.6, Th 1.2 (wall), Th 1.3 (handle) Par. 428 For decor. Cinquepalmi, Radina 1998, 10.062, Punta le Terrare (BR), Saggio A 1969, struttura 2, MBA3 Drawing P. Roncoroni, inked drawing S. Boersma
429 Balze di Cristo Cerchiara di Calabria (CS) BdC-04-9 Plate XXXVI.429, Tab. 64	Fragment of upright band handle with circular hole Plain impasto Int/Ext 5YR6/4 light reddish brown, 5YR6/2 pinkish grey, 5YR4/2 dark reddish grey H 5.2, W 5.7, Th 1.4-0.8 (wall), D 1.5 (hole) Par. 429 Bernabò Brea <i>et al.</i> 1989, Fig. 117.c, Grotta Cardini, Praia a Mare (CS), Strato Medio, MBA2 Drawing P. Roncoroni, inked drawing S. Boersma
430 Balze di Cristo Cerchiara di Calabria (CS) BdC-11 Plate XXXVI.430	Wall fragment with board vertical band handle attachment Smoothed impasto, clay similar to BdC-18 (sherd 431) Ext 5YR7/6 reddish yellow H 3.3, W 7.4, Th 1 (wall), Th 1.1 (handle) Drawing P. Roncoroni, inked drawing S. Boersma
431 Balze di Cristo Cerchiara di Calabria (CS) BdC-18 Plate XXXVI.431	Rim fragment of a wide truncated cone shaped bowl, spreading walls, thinned and flattened lip Burnished impasto, inclusions up to 0.2 Ext 2.5YR5/4 reddish brown, 5YR4/1 dark grey, 5YR5/3-4 reddish brown, 5YR5/2 reddish grey, Int 5YR6/3-4 light reddish brown, 5YR5/1 grey,

	5YR5/2 reddish grey W 6, H 3.4, Th 1, D 42 Drawing P. Roncoroni, inked drawing S. Boersma
432 Balze di Cristo Cerchiara di Calabria (CS) BdC-22 Plate XXXVI.432	Wall fragment of a truncated cone shaped vessel with cord-band Burnished impasto, clay similar to BdC-18 Ext 5YR3/1 very dark grey, Int 5YR4/2 dark reddish grey H 4.1, W 4.8, Th 1.2 (wall), Th 0.6 (decoration) Drawing P. Roncoroni, inked drawing S. Boersma
433 Balze di Cristo Cerchiara di Calabria (CS) BdC-01-5 Plate XXXVI.433	Rim fragment of a jar with cord-band Coarse impasto, clay like BdC-18 (sherd 431), few inclusions up to 0.6, traces of sulphur 5YR6/4 light reddish brown H 4.2, W 3.5, Th 0.8 (wall), Th 0.8 (cord-band), D 21 Drawing P. Roncoroni, inked drawing S. Boersma
434 Balze di Cristo Cerchiara di Calabria (CS) BdC-9 Plate XXXVI.434	Wall fragment of a jar with cord-band decoration Smoothed impasto, clay similar to BdC-18 (sherd 431) Few inclusions up to 0.3 Ext from 5YR6/4 light reddish brown to 5YR6/6 reddish yellow H 5.4, W 5.2, Th 1.3 (wall), Th 0.9 (decoration) Drawing P. Roncoroni, inked drawing S. Boersma
435 Balze di Cristo Cerchiara di Calabria (CS) BdC-04-1 - Grabsample 2 Plate XXXVI.435	Fragment of a vertical band handle attachment Smoothed impasto Int/Ext 5YR 6/6 reddish yellow H 4.2, W 8.2, Th 0.8-1.0, Th 0.9 (handle) Drawing P. Roncoroni, inked drawing S. Boersma
436 Timpone delle Fave Frascineto (CS) TdF-99-3 Plate XXXVII.436	Rim fragment of a truncated cone shaped vessel with inward thickened lip and cord-band with imprinted decorations Coarse impasto, smoothed inside, inclusions up to 0.8 Ext 5YR5/2 reddish grey, 2.5YR5/6 red, Int 5YR6/6 reddish yellow H 4.3, W 5.3, Th (wall) 1.1, Th (cord-band) 1.9, D 27 Drawing P. Roncoroni, inked drawing S. Boersma Par. 436 For the shape similar to Peroni, Trucco 1994, Tav. 95.19, forma 43A, Broglio di Trebisacce (CS), Sett. B Ovest, Liv. S3, Late FBA
437 Timpone delle Fave Frascineto (CS) TdF-99-5 Plate XXXVII.437	Flat base fragment, flaring walls Smoothed impasto, inclusions up to 0.6 Ext 5YR6/4 light reddish brown, 7.5YR6/2 pinkish grey, Int 7.5YR5/2 brown H 5, Th (wall) 0.9-1, Th (bottom) 1.3, D 20 Drawing P. Roncoroni, inked drawing S. Boersma
438 Timpone delle Fave Frascineto (CS) TdF-99-8 Plate XXXVII.438	Wall fragment with notched cord band Coarse impasto, smoothed inside, inclusions up to 0.6 7.5YR6/4 light reddish brown H 6.3, W 7.7, Th (wall) 1.2-1.3, Th (cord-band) 1.8-2 Drawing P. Roncoroni, inked drawing S. Boersma
439 Timpone delle Fave Frascineto (CS) TdF-99-12 Plate XXXVII.439, Tab. 65	Fragment of a bowl with carena Smoothed impasto Ext 7.5YR5/2-4 brown, Int 7.5YR4-3/2 dark brown W 8, H 4.7, Th 0.6, D 26 Drawing P. Roncoroni, inked Drawing S. Boersma Par. 439 Bianco Peroni <i>et al.</i> 2010, Tav. 26.B6, Tomba 10, scavo 1965, Pianello di Genga (AN), FBA1
440 Timpone delle Fave Frascineto (CS) TdF-99-14 Plate XXXVII.440, Tab. 65	Inward neck fragment of an ovoid jar with notched cord-band, slightly thickened lip Smoothed impasto, inclusions up to 0.2 Ext 2.5YR5/6 red, Int 5YR4/2 dark reddish grey H 5, W 7, Th (wall) 0.8, Th (decoration) 1.7, D 22 Drawing P. Roncoroni, inked drawing S. Boersma Par. 440 Similar to Trucco, Vagnetti 2001, Fig. 34.2, Sett. DE11, US 8/87, FBA1

- 441**
Timpone delle Fave
Frascineto (CS)
TdF-99-20
Plate XXXVII.441, Tab. 65
- Rim fragment of truncated cone shaped vessel with flattened lip and cord-band
 Smoothed impasto, few inclusions up to 0.2
 Ext 5YR6/2 pinkish grey, 5YR7/3 pink, Int 2.5YR6/6 light red
 H 3.4, W 4.1, Th (wall) 0.9-0.8, Th (decoration) 1.1, D 22
 Drawing P. Roncoroni, inked Drawing S. Boersma
 Par. 441
 Similar to Peroni, Trucco 1994, Tav. 108.34, forma 42A, Broglio di Trebisacce (CS), Sett. D Nord, strato 1, Late FBA
- 442**
Timpone delle Fave
Frascineto (CS)
TdF-00-1
Plate XXXVII.442, Tab. 66
- Rim fragment of a short neck vessel, with rounded lip and globular body
 Coarse impasto, inclusions up to 0.5
 Ext 5YR5/2 reddish grey, Int 5YR5/3 reddish brown and 5YR5/1 grey, core 5YR4/1 dark grey
 H 3.5, W 6.2, Th 1.1, D 37
 Drawing P. Roncoroni, inked drawing S. Boersma
 Par. 442
 Trucco, Vagnetti 2001, Fig. 82.11, Tipo 319, Torre Mordillo, Cassano allo Jonio (CS), Raccolte di Superficie, Area L, RBA1
- 443**
Timpone delle Fave
Frascineto (CS)
TdF-00-2
Plate XXXVII.443, Tab. 66
- Short and funnel-shaped rim fragment of a globular jar, flattened and bevelled on the outside lip
 Impasto coarse outside, smoothed inside, inclusions up to 0.6 mm
 Int 5YR5/4 reddish brown, Int (rim) 7.5YR6/2 pinkish grey, core 5YR7/6 reddish yellow
 H 7, W 8.1, Th 1.5-1.9, D ca. 34
 Drawing A. Larocca, inked Drawing S. Boersma
 Par. 443
 Peroni, Trucco 1994, Tav. 88.10, forma 50 A, Broglio di Trebisacce (CS), Sett. B Ovest, liv. H, Late FBA
- 444**
Timpone delle Fave
Frascineto (CS)
TdF-00-3
Plate XXXVIII.444
- Rim fragment of a bowl with convex profile and flattened lip
 Coarse impasto, inclusions up to 0.4
 Ext 10YR5/2 greyish brown, Int 10YR5/1 grey grey, core 7.5YR6/6 reddish yellow
 H 3.3, W 5, Th 1.1, D ca. 30
 Drawing P. Roncoroni, inked Drawing S. Boersma
 Par. 444
 Similar to Peroni, Trucco 1994, shape 35b, Tav. 98.26, Broglio di Trebisacce (CS), Sett. B Ovest, liv. S, Late FBA
- 445**
Timpone delle Fave
Frascineto (CS)
TdF-00-4
Plate XXXVIII.445
Tab. 67
- Inward rim fragment of a barrel-shaped jar with cord-band, thickened lip
 Ext 5YR5/4 reddish brown, Int 5YR5/1 grey
 H 5.2, W 6.1, Th 1.1-0.8, D ca. 31
 Drawing S. Boersma
 Par. 445
 Trucco, Vagnetti 2001, Fig. 34.2, Torre Mordillo, Cassano allo Jonio (CS), settori DE11, us 8/87, FBA1; Trucco, Vagnetti 2001, Fig. 29.4, Torre Mordillo, Settori DE11-12, surface find, FBA1
- 446**
Timpone delle Fave
Frascineto (CS)
TdF-00-5+8
Plate XXXVIII.446
Tab. 66
- Rim fragment of a truncated cone shaped vessel, bevelled on the inside and outward thickened lip
 Medium sorted impasto
 Ext 2.5YR6/6 light red, Int 5YR5/4 reddish brown
 H 5.4, W 7.5, Th 2 (rim), Th ~1.2 (wall), D 32
 Drawing A. Larocca, inked Drawing S. Boersma
 Par. 446
 Peroni, Trucco 1994, Tav. 102.3, Sett. Nord, strato 3, FBA1
- 447**
Timpone delle Fave
Frascineto (CS)
TdF-00-6
Plate XXXVIII.447
Tab. 67
- Fragment of a bowl with carena, outward rim, thinned lip
 Impasto well smoothed inside, smoothed outside, inclusions up to 0.3
 Ext 7.5YR6/6 reddish yellow and 7.5YR5/6 strong brown, Int 7.5YR6/2 pinkish grey and 7.5YR5/2 brown
 H 4, W 4.1, Th 0.6-1, D 21 ca
 Drawing A. Larocca, inked Drawing S. Boersma
 Par. 447
 Damiani 2010, Tav. 52.7, 72. Tipo1B (Cavallo Morto, Anzio, RM, tomba 1),

RBA

448 Timpone delle Fave Frascineto (CS) TdF-00-7 Plate XXXVIII.448 Tab. 67	Rim fragment of a basket-shaped vessel with in-turning rim, thickened and bevelled on the insidelip, cord-band Roughly coarse impasto, medium smoothed outside, inclusions up to 0.4 Ext 5YR5/4 reddish brown, Ext/Int 7.5YR4/2 dark brown, Int 7.5YR5/4 brown, core 7.5YR4/N4 dark grey H 6.5, W 4.7, Th 1.1 (wall), Th 0.3 (cord-band), D 29 ca Drawing A. Larocca, inked Drawing S. Boersma Par. 448 Peroni, Trucco 1994, Tav. 105.6, forma 44, Broglio di Trebisacce (CS), Sett. N, buca nel riq. B sotto lo strato 1, FBA1
449 Timpone delle Fave Frascineto (CS) TdF-00-9 Plate XXXVIII.449	Rim fragment of a short neck vessel Well smoothed impasto, inclusions up to 0.4 Ext 10YR5/2 greyish brown, Int 2.5YR6/4 light reddish brown H 3.6, W 5.6, Th 1 (rim), Th 0.7 (wall) Drawing P. Roncoroni, inked Drawing S. Boersma
450 Timpone delle Fave Frascineto (CS) TdF-00-12 Plate XXXVIII.450	Rim fragment of a short neck vessel Smoothed impasto, inclusions up to 0.15 Ext 5YR6/6 reddish yellow, Int 2.5YR6/6 light red and 5YR7/4 pink, core 2.5YR4/N4/0 dark grey H 2.2, W 2.3, Th 0.5, D 9 ca Drawing A. Larocca, inked Drawing S. Boersma
451 Timpone delle Fave Frascineto (CS) TdF-00-13 Plate XXXVIII.451 Tab. 67	Rim fragment of a short neck vessel Smoothed impasto, inclusions up to 0.2 Ext 7.5YR5/2 brown, Int 5YR5/3 reddish brown H 1.8, W 2.7, Th 0.6, D 17 c.a Drawing P. Roncoroni, inked Drawing S. Boersma Par. 541 Panucci 1969, Fig. 18.12, Grotta a Male, Assergi, L'Aquila, Strato 3, taglio 3, RBA2-FBA1
452 Timpone delle Fave Frascineto (CS) TdF-00-17 Plate XXXVIII.452 Tab. 67	Rim fragment of a truncated cone shaped bowl with tongue-shaped lug Coarse impasto, large inclusions, up to 0.8 Ext/Int 2.5YR5/6 red, Ext 2.5YR6/6 light red, core 2.5YR4/2 weak red H 6.3, W 7.5, H 4 (lug), W 7 (lug). Th 1, D 38 Drawing A. Larocca, inked Drawing S. Boersma Par. 452 Trucco, Vagnetti 2001, Fig. 52.22, Sett. E12, US 50 base, Torre Mordillo, Cassano allo Jonio (CS), sett. E 12, FBA2-EIAIA
453 Timpone delle Fave Frascineto (CS) TdF-00-18 Plate XXXVIII.453	Wall fragment with notched cord band Smoothed impasto, inclusions up to 0.4 Ext 10YR5/6 red, Int 10YR5/1 reddish grey, core 5YR6/6 reddish yellow H 3.6, W 6.1, Th 1.5-2 Drawing/inked Drawing S. Boersma
454 Timpone delle Fave Frascineto (CS) TdF-00-36a+b Plate XXXIX.454	Wall fragment of an ovoid storage jar with notched cord band Impasto, smoothed inside, medium smoothed inside, poor sorted, inclusions up to 0.4 Ext 5YR6/6 reddish yellow outside, Int 5YR5/4 reddish brown, core 5YR4/4/1/1 reddish brown/dark grey H 6.5, W 6.7+10.8, Th (wall) 0.8-0.9, Th (band with wall) 1.8-3.4 Drawing P. Roncoroni, inked drawing S. Boersma
455 Timpone delle Fave Frascineto (CS) TdF-00-20 Plate XXXIX.455, Tab. 68	Wall fragment of a pithos decorated with horizontal and narrow incised lines Impasto, coarse outside, smoothed inside, inclusions up to 0.6 Ext 2.5YR5/6 red, Int 7.5YR5/2 brown H 4.5, W 5.2, S1.5-1.8 Drawing A. Larocca, inked drawing S. Boersma Par. 455 For the decoration see Peroni, Trucco 1994, Tav. 108.13, decoration F, Broglio di Trebisacce (CS), sett. D Nord, strato 1, riq. B FBA2
456	Rim fragment of a truncated cone shaped vessel with cord-band, bevelled on

Timpone delle Fave Frascineto (CS) TdF-00-21 Plate XXXIX.456, Tab. 68	the inside and slightly thickened lip Smoothed impasto, inclusions up to 0.4 Ext 5YR5/1 grey, Int 5YR5/2 greyish brown, core 5YR6/6 reddish yellow H 4.3, W 2.4, Th 0.8 (wall), D 11 ca. Drawing A. Larocca, inked drawing S. Boersma Par. 456 Peroni, Trucco 1994, Fig. 150. 42d, Broglio di Trebisacce (CS), Sett. B, ampl. '80, liv. S2, Cfr. Ric. 2, tav. 32.9, Late FBA
457 Timpone delle Fave Frascineto (CS) TdF-00-23 Plate XXXIX.457, Tab. 68	Handle fragment decorated by incised angular motifs Coarse impasto, inclusions up to 0.3 Ext 2.5YR6/6 light red, Int 5YR5/2 reddish grey, core 5YR6/4 light reddish brown and 2.5YR4/N4/0 dark grey W 4.5, H 3.1, Th 1.4 Drawing A. Larocca, S. Boersma inked drawing S. Boersma Par. 457 For the decoration, Peroni, Trucco 1994, Tav. 97.14, Sett. B Ovest. Liv. S3, Broglio di Trebisacce (CS), Late FBA. Bernabò Brea, Cavalier 1968 III, Tav. CCLVI, 1 b,d (decoration), Tav. CCLVII, 4 b (decoration)
458 Timpone delle Fave Frascineto (CS) TdF-00-25 Plate XXXIX.458	Handle fragment with circular section Impasto, coarse inside, smoothed outside, inclusions up to maggiori di 0.25 2.5YR6/6 light red, 2.5YR4/N4/0 dark grey H 7.3, D max 2 Drawing J. Hayward, inked drawing S. Boersma
459 Timpone delle Fave Frascineto (CS) TdF-00-28 Plate XXXIX.459	Flat bottom fragment, thickened base, flaring walls Coarse impasto, inclusions up to 0.5 Ext 2.5YR5/6 red, Int 5YR5/4 reddish brown H 6.8, W 9.9, Th 1.6-1.3 (wall), Th 1.6 (bottom), D 20 Drawing A. Larocca, inked drawing S. Boersma
460 Timpone delle Fave Frascineto (CS) TdF-00-31 Plate XXXIX.460	Wall fragment with strip-shaped lug Coarse impasto, inclusions up to 0.4 Ext 2.5YR5/6 red, Int 5YR6/6 reddish yellow and 7.5YR5/2 brown H 4.7, W 6.3, Th 1 (wall) Drawing and inked drawing S. Boersma
461 Timpone delle Fave Frascineto (CS) TdF-00-32 Plate XXXIX.461, Tab. 68	Wall fragment with notched strip-shaped lug Coarse impasto, inclusions up to 0.3 Ext 5YR6/6 reddish yellow, Int 2.5YR5/6 red H 4.5, Th 0.8 (wall), D 20.3 Drawing and inked drawing S. Boersma Par. 461 Cinquelpalmi, Radina 1998, n. 9.055, p. 161, Torre Santa Sabina (BR), Struttura 2, t. 3, RBA2-FBA1
462 Timpone delle Fave Frascineto (CS) TdF-00-34 Plate XXXIX.462	Wall fragment with notched cord-band Impasto, very coarse outside, smoothed inside, inclusions up to 0.6 Ext 2.5YR5/4 reddish brown, Int 5YR4/3 reddish brown, core 2.5YR4/N4/0 dark grey H 6, W 4.6, Th 0.7 (wall), Th 1.7 (wall+cord-band) Drawing A. Larocca, inked drawing S. Boersma
463 Timpone delle Fave Frascineto (CS) TdF-00-37 Plate XXXIX.463	Flat base fragment, flaring walls Coarse impasto, medium sorted, inclusions up to 0.25 Ext 2.5YR5/6 red, Int 5YR6/4 light reddish brown H 3, Th (wall) 1.1, Th (bottom) 1.5, D 8.4 Drawing A. Larocca, inked drawing S. Boersma
464 Timpone delle Fave Frascineto (CS) TdF-00-38 Plate XXXIX.464	Rim fragment of a bowl with carena, flaring rim, bevelled on the outside lip Impasto, well smoothed outside, medium smoothed inside, poor sorted, inclusions up to 0.3 Ext/Int 2.5YR5/4 reddish brown, Int 5YR6/2 pinkish grey H 3.8, Th 0.6-0.7, D 20 Drawing P. Roncoroni, inked drawing S. Boersma Par. 478
465	Slightly straight rim fragment of a jar, flaring and flattened lip

466 Timpone delle Fave Frascineto (CS) TdF-00-39 Plate XL.465	H 6.4, W 8.2, Th 1.3, D 50 c.a Smoothed impasto, very poor sorted, inclusions up to 0.7 Ext/Int 7.5YR6/4 light brown, core 7.5YR5/N5/0 grey Drawing A. Larocca, inked drawing S. Boersma
467 Timpone delle Fave Frascineto (CS) TdF-00-40 Plate XL.466, Tab. 68	Rim fragment of a basket with lug on cord band Impasto, coarse inside, roughly smoothed outside, poorly sorted, inclusions up to 0.4 Ext 5YR6/6 reddish yellow, Int 2.5YR5/6 red H 4.5, W 6, Th (wall) 0.8, D 28 Drawing P. Roncoroni, inked drawing S. Boersma Par. 466 Trucco, Vagnetti 2001, Torre mordillo, Cassano allo Jonio (CS), Fig. 74.21, Sett. E 8-9, Us 2/1, FBA2
467 Timpone delle Fave Frascineto (CS) TdF-00-42 Plate XL.647, Tab. 68	Rim fragment of an ovoid jar with in-turning rim, flaring and bevelled on the outside lip, cord-band with oblique notches Smoothed impasto, poor sorted, inclusions up to 0.4 Ext 5YR5/4 reddish brown, Int 7.5YR6/4 light brown H 3.6, W 4, Th (wall) 0.8, D. 20.6 Drawing P. Roncoroni, inked drawing S. Boersma Par. 467 Similar to Peroni, Trucco 1994, Tav. 103.22, forma 53, Sett. D. Nord, strato 2, Broglio di Trebisacce (CS), FBA1, for the rim see Trucco, Vagnetti 2001, Fig. 78.8, Trincea 13/66, area F, starto 8, Torre Mordillo, Cassano allo Jonio (CS), Late FBA
468 Timpone delle Fave Frascineto (CS) TdF-00-43 Plate XL.468	Fragment of a deep bowl with incurving rim and cord-band, bevelled on the insidelip Impasto, medium smoothed outside, smoothed inside, poorly sorted, inclusions up to 0.3 Ext/Int 5YR6/6 reddish yellow, Ext 5-YR-3/3/1/1 very dark grey, Int 2.5YR5/6 red H 9, W 11.5, Th (wall) 0.8-0.6, D 23 Drawing P. Roncoroni, inked drawing S. Boersma
469 Timpone delle Fave Frascineto (CS) TdF-00-45 Plate XL.469	In-turning rim fragment of a barrel-shaped jar, rounded lip and cord-band under the rim H 3.9, W 3.9, Th 1, D 15.6 Smoothed impasto, very poor sorted, inclusions up to 1.2 Ext 5YR6/4 light reddish brown, Int 2.5YR6/4 light reddish brown Drawing P. Roncoroni, inked drawing S. Boersma Par. 469 Similar to type 264 in Trucco, Vagnetti 2001, Fig. 71.15, Sett. E8-9, US 2, Torre Mordillo, Cassano allo Jonio (CS), FBA2
470 Timpone delle Fave Frascineto (CS) TdF-00-47 Plate XL.470, Tab. 69	Flaring rim fragment of a short neck jar Smoothed impasto, poor sorted, inclusions up to 0.3 Ext 5-YR-5/3 reddish brown, Int 5YR6/4 light reddish brown Drawing P. Roncoroni, inked drawing S. Boersma H 5.4, W 6.1, Th 1.1, D 32 ca Par. 470 Peroni, Trucco 1994, Tav. 88.21, Sett. B Ovest, liv. H, Broglio di Trebisacce (CS), FBA
471 Timpone delle Fave Frascineto (CS) TdF-00-49 Plate XL. 471, Tab. 69	Fragment of an upright handle with bump 5.1, 3.4, Th 1.8, W (handle) 2.3 Smoothed impasto, poor sorted, inclusions up to 0.4 7.5YR5/4 brown Drawing A. Larocca, inked Drawing S. Boersma Par. 471 Damiani 2010, Tav. 112.C9 (Cuma-NA, Acropoli)-10 (Villa Persolino, Faenza-RA), Tipo A44, Foggia 1, "Barca solare formata da coppia di protomi ornitomorfe opposte e da appendici angolari" RBA1-2
472	Wall fragment with smoothed cord band

Timpone delle Fave Frascineto (CS) TdF-00-51 Plate XL.472 473	Coarse impasto, smoothed inside, inclusions up to 0.5 Ext 2.5YR5/6 red, Int 5-YR-5/1 grey H 4.3, W 7, Th (wall) 1.3 Drawing A. Larocca, inked Drawing S. Boersma
Timpone delle Fave Frascineto (CS) TdF-00-52 Not in Plates	Rim fragment of a barrel-shaped jar with notched lug on cord-band Smoothed impasto, poor sorted, inclusions up to 0.3 Ext 2.5YR6/6 light red, Int 10YR3/1 very dark grey H 5.3, 7.2, Th (wall) 0.9-1.2, D 12.5 Drawing A. Larocca, inked drawing S. Boersma Par. 473 Similar to Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 32.14, Sett. DE11-12, US3B/87, FBA2
474 Timpone delle Fave Frascineto (CS) TdF-00-54 Plate XLI.474, Tab. 69	Fragment of a shallow bowl with thickened carena and attachment of handle with oval section Impasto, well smoothed outside, smoothed inside, poor sorted, inclusions up to 0.2 Ext 5YR5/4 reddish brown and 7.5YR2/0/N2 black, Int 5YR4/1 dark grey H 3.3, W 7.6, Th (wall) 0.5-0.7, W (handle) 2.1, Th (handle) 1.6, D (carena) 22 ca. Drawing/inked drawing S. Boersma Par. 474 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 89 A 149, Sett. E8-9, us 2, FBA1, Fig. 89 B 199, sett. E12, us 54, FBA
475 Timpone delle Fave Frascineto (CS) TdF-00-56 Plate XLI.475, Tab. 70	Slightly inward rim fragment of a jar with cord band, outward thickened and bevelled on the inside lip H 3.8, W 2.8, Th (wall) 0.8, D 18 Impasto, poor sorted, inclusions up to 0.2, smoothed Ext 2.5YR5/6 red, Int 5YR6/4 light reddish brown Drawing P. Roncoroni, inked drawing S. Boersma Par. 475 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 41.18, Sett. D 12, US 19, FBA2
476 Timpone delle Fave Frascineto (CS) TdF-00-57 Plate XLI.476	Wall fragment with notched cord band H 3.8, W 4.2, Th (wall) 0.7 Coarse impasto, inclusions up to 0.4 Int/Ext 7.5YR6/2 pinkish grey, Ext 2.5YR5/6 red Drawing A. Larocca, inked drawing S. Boersma
477 Timpone delle Fave Frascineto (CS) TdF-00-58 Plate XLI.477, Tab. 70	Roughly straight rim fragment with outward thickened lip of a cylindrical jar with cord band H 6.4, W 6.1, Th (wall) 1.3, D 34 Smoothed impasto, poor sorted, inclusions up to 0.7 Ext 7.5YR6/2 pinkish grey, 7.5YR5/2 brown, Int 5YR6/4 light reddish brown Drawing P. Roncoroni, inked drawing S. Boersma Par. 477 Trucco, Vagnetti 2001, Fig. 53.11, Sett. E12, US50, Tipo 245C, FBA3-EIA1A Colelli 2012, Timpone della Motta, Francavilla M.ma (CS), Tav. 12.35, AC4.30, EIA1A
478 Timpone delle Fave Frascineto (CS) TdF-00-59 Plate XLI.478	Fragment of a shallow bowl with carena, short flaring rim, bevelled on the outside lip H 3.1, W 5.5, Th 0.7, D 16 Impasto, poor sorted, inclusions up to 0.4 Ext/Int 2.5YR5/6-8 red, 2.5YR6/8 light red, core 2.5YR5/N5/0 grey, 2.5YR6/8 light red Drawing P. Roncoroni, inked drawing S. Boersma
479 Timpone delle Fave Frascineto (CS) TdF-00-60 Plate XLI.479, Tab. 70	Slightly inward and short neck fragment of an ovoidal jar H 3.1, W 3.6, Th 0.7, D 19 Smoothed impasto, poor sorted, inclusions up to 0.5 Ext/Int 5YR5/2 reddish grey, Ext 5YR6/6 reddish yellow, Int 5YR5/3 reddish brown reddish brown

	Drawing P. Roncoroni, inked drawing S. Boersma Par. 479 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 61.9, Sett. D11-12, US 145, RBA1, Fig. 82. 9, Area L, <i>raccolte di superficie</i> , RBA1
480 Timpone delle Fave Frascineto (C) TdF-00-62 Plate XLI.480	Fragment of a truncated cone shaped bowl with flattened lip H 7, W 7.2, Th 0.7, D 20 Smoothed impasto, poor sorted, inclusions up to 0.25 Ext/Int 5YR6/4 light reddish brown, Ext 5YR3/3/1/1 vrey dark grey, Int 2.5YR5/4 reddish brown brown Drawing P. Roncoroni, inked drawing S. Boersma
481 Timpone delle Fave Frascineto (CS) TdF-00-65 Plate XLI.481, Tab. 71	Inward rim fragment with slightly flaring lip of an ovoidal jar with notched cord band H 2.6, W 3, Th (wall) 0.5, D 10, Impasto, coarse outside, smoothed inside, poor sorted, inclusions up to 0.4 Ext 2.5YR6/6 light red, Int 2.5YR6/4 light reddish brown Drawing P. Roncoroni, inked drawing S. Boersma Par. 481 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 29.13, Sett. DE11-12, surface find, Tipo 297, also in sector D 11 dIV Us 11/87 (not ill.), containing RBA-FBA materials. Colelli 2012, Tav. 69.282, AC25.1, Timpone della Motta, <i>contesto sconvolto</i> , type of vessel also found at Area Rovitti (HY56), US 38, dated to the 7th century BC, but including RBA-FBA impasto pottery (Colelli 2012, Schema 2.38). See also Damiani 2010, Tav. 92.8, tipo 131, foggia 4, Coriano (FO), RBA1
482 Timpone delle Fave Frascineto (CS) TdF-00-66 Plate XLII.482, Tab. 70	Fragment of a cooking stand H 11, 13, Th (wall) 1.7, Th (base) 1.3, D (grill) 18 Impasto, smoothed outside, coarse inside, poorly sorted, inclusions up to 0.5 Ext 2.5YR5/4 reddish brown, Int 7.5YR6/4 light brown, core 7.5YR3/N3/0 very dark grey Drawing P. Roncoroni, inked drawing S. Boersma Par. 482 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 46.11, Sett D 12, US 25, RBA2
483 Timpone delle Fave Frascineto (CS) TdF-00-67 Plate XLII.483	Fragment of an handle D (upper part) 4.3, base 7.1 x 7.6, H 5.2 Coarse impasto, inclusions up to 0.9 5YR6/6 reddish yellow Drawing P. Roncoroni, inked drawing S. Boersma
484 Timpone delle Fave Frascineto (CS) TdF-00-68 Plate XLII.484, Tab. 71	Slightly inward rim fragment of a shallow jar with lug on cord band H 6.3, W 6.2, Th (wall) 1, D 21.4 Smoothed impasto, poor sorted, inclusions up to 0.3 Ext/Int 5YR5/4 reddish brown, 5YR6/6 reddish yellow (lug) Drawing A. Larocca, inked drawing S. Boersma Par. 484 Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig. 81.15, Area F6b, surface find, jar type 253A, FBA1, without bump on cord band, also in US 20, Sett D12 eIII, fig. 44.7, containing FBA1 materials
485 Timpone delle Fave Frascineto (CS) TdF-00-71 Plate XLII.485	Short and in-turning rim fragment of an ovoidal jar with notched cord band under the rim, flattened lip Impasto, smoothed outside, coarse inside, poor sorted, inclusions up to 0.5 Ext 7.5YR6/4 light brown, Int 7.5YR4/N4/0 dark grey H 4.2, W 4.5, Th (wall) 1 Drawing A. Larocca, inked drawing S. Boersma
486 Timpone delle Fave Frascineto (CS) TdF-00-73 Plate XLII.486	Wall fragment of a corded dolium with wide horizontal and parallel grooves Coarse impasto, inclusions up to 0.7 Ext 5YR5/4 reddish brown, Int 5YR4/2 dark reddish grey H 6.2, W 5.4, Th (wall) 1.7-2 Drawing and inked drawing S. Boersma Par. 486 Similar to Trucco, Vagnetti 2001, Torre Mordillo, Cassano allo Jonio (CS), Fig.

	73.22, Sett. E8-9, US 2, FBA3-EIA1A
487 Timpone delle Fave Frascineto (CS) TdF-00-72 Plate XLII.487 TdF continues at n. 659 and includes n. 192	Fragment of a sieve Coarse impasto, inclusions up to 0.3 5YR5/4 reddish brown 1.5 x 1.6, Th 0.7 Drawing and inked drawing S. Boersma
488 Area Rovitti Francavilla M.ma (CS) HY87-4 Plate XLV.488, Tab. 48	Fragment of an ovoidal jar with short outturning rim, pointed to outside lip Coarse impasto, medium sorted, many inclusions, from small to large size, burnished surface Ext 2.5YR4/4 reddish brown, Int 2.5YR6/6 light red H 7.4, W 6.3, Th (wall) 1, D 20 c.a Drawing and inked drawing S. Boersma Cf 488 Colelli 2012, Tav. 113.HY102, Area Rovitti, Francavilla M.ma, Struttura A, piano di frequentazione, US 92, first half 8th century BC, EIAIB. See also Peroni, Trucco 1994, Tav. 88.8, Broglio di T., Sett. B Ovest, Liv. H, shape 49b, Late FBA and Peroni, Trucco 1994, shape 50 A, EIA1 (not in tab. 48).
489 Area Rovitti Francavilla M.ma (CS) HY87-1 Plate XLIV.489, Tab. 46	Fragment of a jar with inturning rim and slightly thickened lip Smoothed impasto, very poorly sorted, inclusions from medium to large size Ext 7.5YR4/3 brown, Int Gley 1-2.5/N black H 4.2, W 3.7, Th 0.7, Th wall+cord 1.1 Drawing and inked drawing S. Boersma Par. 489 Trucco, Vagnetti 2001, Fig. 82.14, Tipo 261 A, Torre Mordillo, Spezzano Albanese, Scavi Soprintendenza Archeologica della Calabria 1990, Muro Est, US 2. For the shape, Peroni, Trucco 1994, Tav. 160.10, Castiglione, Roggiano Gravina, survey find, RBA
490 Area Rovitti Francavilla M.ma (CS) HY59-F1 Plate XLVI.490	Rim fragment of an emispherical bowl with outward thickened lip, slightly concave upper part of the lip Well smoothed impasto, several inclusions from small to large size Int/Ext 2.5YR4/4 reddish brown H 5.6, W 4.6, Th (wall) 1.3 Drawing and inked drawing S. Boersma
491 Area Rovitti Francavilla M.ma (CS) HY59-10 Plate XLIV.491, Tab. 48b	Rim fragment of a shallow bowl, bevelled on the insidelip Burnished impasto, poorly sorted, many inclusions, several sizes Ext (front) 5YR4/4 reddish brown, Ext (back) 5YR3/1 very dark grey, Int 7.5YR4-3/1 dark grey-very dark grey H 4.3, W 4.2, Th (wall) 1.1 Drawing and inked drawing S. Boersma Par. 491 Schiappelli 2008, 111.5, Castelluccio della Selva di Marano, Vitorchiano (VT), (Survey 1996-97), LBA. Mieli, Cosentino 2006, Fig. 3.10, Santa Maria di Vastogirardi (IS), Settore C, Capanna rettangolare, US 16, EIA. See 36.TdM
492 Area Rovitti Francavilla M.ma (CS) HY87-3 Plate XLIV.492, Tab. 47	Inward rim fragment of a jar with outward thickened lip and cord band Burnished impasto, many inclusions, several sizes Ext 7.5YR5/4 brown, Int Gley1-4N dark grey H 5.2, W 5.6, Th wall 0.8, Th wall+cord 1.2, D 16 Drawing and inked drawing S. Boersma Par. 492 Trucco, Vagnetti 2001, Fig. 72.8, Torre Mordillo, Spezzano Albanese (CS), Sett. E8-9, US 2, tipo 314, FBA
493 Area Rovitti Francavilla M.ma (CS) HY87-18 Plate XLVII.493	Small truncated cone shaped fragmentary object, with a partly visible hole at the smallest diameter and vertical band handle from the upper to the lower edges Burnished impasto, many inclusions, several sizes Ext 10YR4/1 dark grey, Gley1-2.5N black, Int Gley 1-5N grey H 4.4, W 4.5, Th wall 0.7, Th handle 0.8, D 3 Drawing and inked drawing S. Boersma

494 Area Rovitti Francavilla M.ma (CS) HY91-22 Plate XLVII.494	Fragment of an handle with sub-circular section H 6, Th 2 Burnished impasto, many inclusions, several sizes Gley1-3N very dark grey Drawing and inked drawing S. Boersma
495 Area Rovitti Francavilla M.ma (CS) HY5-154 Plate XLVI.495	Fragment of a bowl with carena, inward rim, bevelled on the inside and slightly inward thickened lip Burnished impasto, many small inclusions, few middle size inclusions Ext Gley1-2.5N black, Int Gley1-3N very dark grey H 4, W 5.9, Th (wall) 0.7, D 22 c.a Drawing and inked drawing S. Boersma
496 Area Rovitti Francavilla M.ma (CS) HY5-152 Plate XLVI.496	Fragment of a small bowl, thickened angular profile, straight lower part of the body, slightly flaring rim, outward thickened and rounded lip Burnished impasto, many small-medium size inclusions Ext/Int Gley1-2.5N black H 3.1, W 4.2, Th (wall) 0.6, D 9.5 Drawing and inked drawing S. Boersma
497 Area Rovitti Francavilla M.ma (CS) HY67-F1 Plate XLVI.497	Short and straight neck fragment of a globular jar, flattened lip Roughly sorted impasto, burnished surface Ext 5YR5/6 yellowish red, Int Gley1-4N dark grey H 2.2, W 6.5, Th (wall) 1.9 Drawing/inked drawing S. Boersma
498 Area Rovitti Francavilla M.ma (CS) HY2-F4 Plate XLVI.498	Fragment of a small and shallow bowl Burnished impasto, many small size inclusions Gley1-2.5N black H 1.9, W 2.3, Th 0.5 Drawing and inked drawing S. Boersma
499 Area Rovitti Francavilla M.ma (CS) HY90-20 Plate XLV.499, Tab. 49	Fragment of a jar with in-turning rim, slightly out-curving to outside lip, tongue-shaped lug H 4.9, W 3.7, Th wall 0.7 Smoothed impasto, a few medium size inclusions Ext 2.5YR5/6 red, Int Gley1-4N dark grey Drawing and inked drawing S. Boersma Par. 499 Colelli 2012, Tav. 84.368, Timpone della Motta, Francavilla M.ma (CS), AC 27.5, EIA 1 (Chronology based on Kleibrink <i>et al.</i> 2012, Tab. 2, p. 192-216).
500 Area Rovitti Francavilla M.ma (CS) HYUS38-F1 Plate XLVII.500	Fragment of an horizontal handle, pseudo-squared in section Burnished impasto, many small-medium size inclusions Ext 5YR4/4 reddish brown, Int 5YR4/6 yellowish red H 3.9, W 8.1, Th (wall) 1.1, Th handle 2.4 x 2.7 Drawing and inked drawing S. Boersma
501 Area Rovitti Francavilla M.ma (CS) HY18-21 Plate XLVII.501	Fragment of an handle, pseudo-circular section Burnished impasto, a few small-medium size inclusions Gley1-2.5N black H 4.5, W 2.2, 2.1 Drawing and inked drawing S. Boersma
501b Area Rovitti Francavilla M.ma (CS) HY12-F2 Plate XLVII.501b	Fragment of an handle, sub-circular section Burnished impasto, many small size inclusions Ext/int 7.5YR3/0 very dark grey H 3, W 2.5, Th 2.1, 1.7 Drawing and inked drawing S. Boersma
502 Area Rovitti Francavilla M.ma (CS) HY92-19 Plate XLIV.502, Tab. 46	Fragment of a jar with short and straight neck H 4.8, W 4, Th 0.7 Smoothed impasto, many several size inclusions Gley1-4N dark grey Drawing and inked drawing S. Boersma Par. 502 Trucco, Vagnetti 2001, Fig. 61.9, Torre Mordillo, Spezzano Albanese, CS, US 145, RBA
503	Rim fragment of a small vessel, outturned rim, flattened lip

Area Rovitti Francavilla M.ma (CS) HY92-33 Plate XLVI.503 504	Burnished impasto, several size inclusions Ext Gley1-2.5N black, Int. Gley1-3N very dark grey H 1.6 , L 2.5, Th 0.5 Drawing and inked drawing S. Boersma
Area Rovitti Francavilla M.ma (CS) HY92-F1 Plate XLV.504, Tab. 49	Fragment of an handle with oblique grooves, pseudo-circular in section Burnished impasto, small-medium size inclusions Ext Gley1-2.5N black, Int. Gley1-3N very dark grey H 2.7, W 1.4, Th 1.4 x 1.2 Drawing and inked drawing S. Boersma Par. 504 Bergonzi <i>et al.</i> 1982, Tav. 35.13, Broglio di Trebisacce (CS), Settore B, ampl. '80, strato S1, EIA1B
505 Area Rovitti Francavilla M.ma (CS) HY92-31 Plate XLIV.505, Tab. 47	Fragment of an inturning rim of a jar with cord-band Burnished impasto, several inclusions, several sizes Ext 2.5YR4/4 reddish brown, Int 2.5YR4/4 reddish brown H 4.9, W 8.2, Th 0.9. Th + cord 1.6 Drawing and inked drawing S. Boersma Par. 505 Poggiani, Keller 1979, 346-381, Fig. 5.6, Costoletto di Lamone, Ischia di Castro (VT), Tomba 5, Tumulo III, FBA
506 Area Rovitti Francavilla M.ma (CS) HY92-F3 Plate XLVV.506	Decorated wall fragment with handle attachment, decoration made by a thin undulating cord band and small incised circles Burnished impasto, several inclusions, several sizes Ext (front) Gley1-3N very dark grey, Ext (back) 10YR4/2 dark greyish brown, Int Gley1-2.5N black H 3.7, W 4.8, Th wall (inf.) 1.3. Th wall (sup.) 0.7 Drawing and inked drawing S. Boersma
507 Area Rovitti Francavilla M.ma (CS) HY92-F2 Plate XLIV.507, Tab. 48	Slightly outward neck vessel fragment, outward thickened lip Well burnished impasto, several inclusions, small-medium sizes H 3.7, W 4.8, Th wall (lower) 1.3, Th wall (upper) 0.7 2.5YR4/2 dark reddish grey Drawing and inked drawing S. Boersma Par. 507 See Peroni, Trucco 1994, Tav. 86.36, Broglio di Trebisacce (CS), Sett. B Ovest, Livello H, shape 37, FBA (shape FBA-EIA)
508 Area Rovitti Francavilla M.ma (CS) HY-AN-F1 Plate XLIV.508	Flaring rim fragment of truncated cone shaped vessel, slightly flaring rim, notched cord band Well smoothed impasto, several inclusions, small-medium sizes Int 2.5YR5/8 red, Ext (front) 5YR5/1 grey, Ext (back) 2.5YR4/4 reddish brown H 5.9, W 7.2, Th 0.6. D 28 Drawing and inked drawing S. Boersma Par. 508 Similar to Trucco, Vagnetti 2001, Torre Mordillo, Spezzano Albanese (CS), Fig. 73.1, Sett. E8-9, US2, FBA. For the shape: Peroni, Trucco 1994, Tav. 162.1, Castiglione, Roggiano Gravina, surface find, FBA
509 Area Rovitti Francavilla M.ma (CS) HY-AN-F2 Plate XLVII.509	Base fragment of a globular jar Burnished impasto, many inclusions, several sizes Int 2.5YR4/6 yellowish red, Gley1-2.5N black, Ext (front) 5YR2.5/1, Ext (back) Gley1-2.5N black H 2.3, W 5.7, Th wall 0.8 Drawing and inked drawing S. Boersma
510 Area Rovitti Francavilla M.ma (CS) HY09-US1-F3 Plate XLV.510, Tab. 49	Fragment of a jar with flaring rim, slightly outward and rounded lip, bump Burnished impasto, many large-medium size inclusions Int Gley1-3N very dark grey, Ext (front) 2.5YR4/3 reddish brown, Ext (back) 7.5YR4/1-2 dark grey-brown H 4.7, W 6.5, Th wall 1, Th lug 1.6, D 17 Drawing and inked drawing S. Boersma Par. 510 Cinquegrana 2013, US 13-54, p. 82, Scarlino (GR), Puntone Nuovo, Campo da Gioco, US13 (massicciata), EIA1

511 Area Rovitti Francavilla M.ma (CS) HY09-US1-F4 Plate XLVI.511	Truncated cone shaped vessel, flattened lip, cord band Smoothed impasto, several large-medium size inclusions Int. 7.5YR4/3-1 brown-dark grey, Ext 7.5YR6/3 light brown H 3.8, W 4.7, Th wall 1.1, Th wall+cord 2.1, D 16 Drawing and inked drawing S. Boersma
512 Area Rovitti Francavilla M.ma (CS) HY09-US1-F5 Plate XLIV.512, Tab. 47	Fragment of a cooking stand Smoothed impasto inside, burnished outside, many small-medium size inclusions Int. 2.5YR5/6 red, Ext 10YR5-4/1 grey-dark grey, Ext (back) 7.5YR5/2 brown, core 10YR5/1 grey, 2.5YR5/6 red H 4.5, W 5.4, Th wall 1.5, Th max 2, D 18 Drawing and inked drawing S. Boersma Par. 512 Dolfini 2002, Tav. 43.361, Sorgenti della Nova, Farnese (VT), Abitazione 2, Strato 4b, Late FBA
513 Area Rovitti Francavilla M.ma (CS) HY60-2 Plate XLV.513, Tab. 49	Rim fragment of a spout of an askos Burnished impasto, a few small size inclusions Gley1-3N very dark grey, 10YR5/3 brown H 1.7, Th wall 0.9, D 5 Drawing and inked drawing S. Boersma Par. 513 Pacciarelli 1999, Tav. 14.B.3, Torre Galli, Tropea (VV), Tomba 8, Fase 1 B, 900-870 c.a, beginning of the EIA1
514 Area Rovitti Francavilla M.ma (CS) HY83-17 Plate XLVI.514	Outward rim fragment of a jar Burnished impasto, many several sizes inclusions Ext (back) 10R4/4 weak red, Ext (front) 7.5YR4/1 dark grey H 3.1, W 6.4, Th 1.1 Drawing and inked drawing S. Boersma
515 Area Rovitti Francavilla M.ma (CS) HY83-12 Plate XLIV.515, Tab. 46	Fragment of a short neck jar Burnished impasto, small size inclusions Ext 7.5YR3/1 very dark grey, Int 7.5YR3/3 dark brown, Gley1-3N very dark grey H 2.7, W 2.2, Th 0.5, D 9 Drawing and inked drawing S. Boersma Par. 515 Peroni, Trucco 1994, Tav. 160.11, Castiglione, Roggiano Gravina, surface find, RBA
516 Area Rovitti Francavilla M.ma (CS) HY83-16 Plate XLVI.516	Rim fragment, rounded lip Burnished impasto, small size inclusions Gley1-3N very dark grey H 1.7, W 2.4, Th wall 0.8 Drawing and inked drawing S. Boersma
517 Area Rovitti Francavilla M.ma (CS) HY79-F1 Plate XLVII.517	Fragment of an upright handle with attachment of snail horn endings Burnished impasto (crusted), many several size inclusions Gley1-3N very dark grey H 3.3, W 3.3, Th 2.7, 1.1, Th horn 1.6, 1.2 Drawing and inked drawing S. Boersma
518 Area Rovitti Francavilla M.ma (CS) HY79-F2 Plate XLVII.518	Fragment of an handle, circular in section Burnished impasto, many several size inclusions Gley1-3N very dark grey H 2.1, Th 1.2 x 1 Drawing and inked drawing S. Boersma
519 Area Rovitti Francavilla M.ma (CS) HY2-F2 Plate XLV.519, Tab. 48	Wall fragment of a pithos with cord-bands H 6.3, W 3.3, Th 3, Diameter at the point indicated by the arrow is c.a 35 cm Roughly deperated clay Int 2.5YR5/8 red, Ext (back) 2.5YR6/6 light red, Ext (front) 7.5YR6/4 light reddish brown Drawing and inked drawing S. Boersma Par. 519 Capriglione <i>et al.</i> 2012, Fig. 9.3,6, Tipo 4, varietà C, Serre di Altilia (KR),

	FBA-EIA
520 Area Rovitti Francavilla M.ma (CS) HY2-F3 Plate XLIV.520, Tab. 47	Rim fragment with internal angular profile Grey ware, many small size inclusions Int 7.5YR6/4 light reddish brown, Ext 7.5YR6/1 grey H 1.5, W 2.7, Th 0.5, D 21 Drawing and inked drawing S. Boersma Par. 520 Dolfini 2002, Tav. 70.681, Sorgenti della Nova, Farnese (VT), Abitazione 1, sporadici, Late FBA
521 Area Rovitti Francavilla M.ma (CS) HY42-116 Plate XLVI.521	Flaring rim fragment, outward lip Badly burnished impasto, several inclusions several sizes Int Gley1-3N very dark grey, Ext 2.5YR4/4 reddish brown H 3.5, W 3, Th 0.8, D 14 Drawing and inked drawing S. Boersma
522 Area Rovitti Francavilla M.ma (CS) HY42-89 Plate XLIV.522, Tab. 47	Fragment of a deep bowl with inturned rim, inward thickened lip Badly burnished impasto, many inclusions from small to large sizes Int/Ext Gley1-2.5N black, Ext Gley1-2.5N black, 10YR4/3 brown H 4.5, W 4.3, Th 0.8, D 11 Drawing and inked drawing S. Boersma Par. 522 Peroni, Trucco 1994, Tav. 147.7, but less deep and not dated, from Torre Mordillo, Spezzano Albanese, surface find. Dolfini 2002, Tav. 39.325, Sorgenti della Nova, Farnese (VT), Abitazione 2, strato 4b, Late FBA
523 Area Rovitti Francavilla M.ma (CS) HY38-44X Plate XLIV.523, Tab. 48	Fragment of a small jug with roughly high neck, out-turning rim, thickened band between rim and body Burnished impasto, few small size inclusions Int Gley1-6N grey, Ext Gley1-5N grey H 3.8, W 4.3, Th 0.4, D 6.5 Drawing and inked drawing S. Boersma Par. 523 Avv. a Bergonzi <i>et al.</i> 1982, Tav. 38.4, Amendolara (CS), Santo Cavalcatore (surface find), also in Belardelli 1994, Fig. 104.5 and footnote 99, FBA-IA . See also, for the upper part, Belardelli 1994, Fig. 124.13, Timpone della Motta di Francavilla, surface find (LBA)
524 Area Rovitti Francavilla M.ma (CS) HY38-H5X Plate XLVII.524	Band handle fragment, raised edges, thinned upward band Grey ware, depurated and well smoothed impasto Int 10YR6/4 light yellowish brown, Ext Gley1-5.4N grey, dark grey H 5.4, W 3, Th 0.9 Drawing and inked drawing S. Boersma Similar to Peroni, Trucco 1994, Tav. 134.4 and Tav. 135.3, Colelli 2012, Tav. 130.HG_G17. First half of the 8 th century BC
525 Area Rovitti Francavilla M.ma (CS) HY90-15 Plate XLVI.525	Fragment of a flaring rim with flattened lip and attachment of pseudo-circular in section handle Burnished impasto, a few small-medium sizes inclusions Ext Gley1-3N very dark grey, Int Gley1-4N dark grey H 3.1, W 4, Th handle 1.8, 1.4, D 27 Drawing and inked drawing S. Boersma
526 Area Rovitti Francavilla M.ma (CS) HY38-14 Plate XLV.526, Tab. 49	Rim fragment of an ovoidal jar, outward thickened and bevelled on the inside lip Roughly burnished impasto, small size inclusions, a few large size inclusions Ext 10YR4/6 dark yellowish brown, Int 10YR3/2,3 very dark greyish brown, dark brown H 7.7, W 7.4, Th 0.8 Drawing and inked drawing S. Boersma Par. 526 Mieli, Cosentino 2006, Fig. 5.3, Santa Maria di Vastogirardi (IS), Settore C, Capanna rettangolare, US 56, EIA
527 Area Rovitti Francavilla M.ma (CS)	Rim fragment of a large ovoidal jar, bevelled on the inside lip Burnished impasto, many inclusions, several sizes Ext 10YR4/4 dark yellowish brown, Int Gley1-4N dark grey

HY90-24 Plate XLV.527, Tab. 48b	H 3.9, W 5, Th 1.2, D 27 Drawing and inked drawing S. Boersma Par. 527 Trucco, Vagnetti 2001, Torre Mordillo, Fig. 32.11, sett. DE11-12, US 3B/87, late FBA. Colelli 2012, Tav. 9.27, Timpone della Motta, Francavilla M.ma (CS), AC 4.30, Edificio Vb, 8th century BC
528 Area Rovitti Francavilla M.ma (CS) HYUS38-F2 Plate XLVI.528	Rim fragment of a deep ovoidal bowl, slightly outward thickened and bevelled on the inside lip Well smoothed impasto, many small size inclusions Ext 5YR5/2, 4/3 reddish grey, reddish brown, Int from Gley 1.3N very dark grey to 5YR4/6 yellowish red H 5.3, W 4.4, Th 0.9, D 20 Drawing and inked drawing S. Boersma
529 Area Rovitti Francavilla M.ma (CS) HY12-F1 Plate XLVII.529	Fragment of a pseudo-circular in section handle Polished impasto, many medium size inclusions, a few large size inclusions Ext 5YR2.5/1 black, Int 7.5YR4/0 dark grey H 5.3, Th 2.6, 2.1 Drawing and inked drawing S. Boersma
530 Area Rovitti Francavilla M.ma (CS) HY55-10 Plate XLVII.530	Wall fragment with painted decoration Roughly depurated clay, inside coarse, smoothed outside, many several sizes inclusions, roughly polished painted decoration Ext 5YR6/6 reddish yellow, Int 2.5YR6/6 light red, dec. from 2.5YR2.5/1 reddish black to 2.5YR4/4 reddish brown; brownish red painting H 4 W 4.5, Th 0.9, D 23 Drawing and inked drawing S. Boersma
531 Area Rovitti Francavilla M.ma (CS) HY09-US1-F1 Plate XLVI.531	Short neck fragment of a bowl/jug, slightly outward rim, rounded body Polished impasto, many medium size inclusions Ext 2.5YR5/3 reddish brown, Int 2.5YR2.5/3 dark reddish brown H 5.6, W 4.2, Th 0.7, D 13 Drawing and inked drawing S. Boersma
532 Area Rovitti Francavilla M.ma (CS) HY09-US1-F2 Plate XLV.532, Tab. 48	Fragment of a cylindrical bucket, slightly outward and angular to inside rim, thinned and flattened lip, lug attachment Well polished impasto, several inclusions, several sizes Ext 2.5YR4/3 reddish brown, Int Gley 1-2.5N black H 7.5, W 6, Th wall 1.2, D 25 Drawing and inked drawing S. Boersma Par. 532 Peroni, Trucco 1994, Tav. 164.2, Tarsia, surface find, EIA even if long duration shape from the FBA
533 Carnevale Francavilla M.ma (CS) CVSP-F27B Plate IV.533, Tab. 44	Fragment of an upright handle with snail horn knobs Polished impasto, many inclusions, from small to large size Gley 1-2.5N black H 5.4, W 4.3, Th 2.2, 1.8, Th horn 1.5 x 1.7 Drawing and inked drawing S. Boersma Par. 533 Damiani 2010, Tav. 117, Gruppo II, B2, Tipo 2, Var. G, similar to Tav. 117.14, Lipari, Acropoli, out of context, RBA1
534 Carnevale Francavilla M.ma (CS) CVSP-F28B Plate IV.534	Broad band handle fragment Well smoothed impasto (many inclusions, several sizes) Ext 2.5YR4/2 dark reddish grey, Int Gley 1-3N very dark grey H 4.8, W 7.4, Th 4.4, Th handle 1.2, W handle 6.1 Drawing and inked drawing S. Boersma
535 Carnevale Francavilla M.ma (CS) CVSP-F29B Plate IV.535, Tab. 44	Fragment of a straight and pointed small ear of a band handle Polished impasto, a few inclusions, several sizes Int 10YR6/3 pale brown, Ext 5YR4/4 reddish brown H 3.5, W 3.4, Th 0.8, 2.7 Drawing and inked drawing S. Boersma Par. 535 See Par. 4 – Carnevale, Plate I.4, Tab. 38, 9 – Carnevale, Plate I.9, Tab. 41, 106 – Timpone della Motta, Plate V.106, Tab. 20.

- 536**
Carnevale
Francavilla M.ma (CS)
CVSP-F30B
Plate IV.536, Tab. 44
- Fragment of apophyses of horn belonging to an upright handle
 Polished impasto (large size inclusions)
 Int 2.5YR6/8 light red, 10YR6/3 pale brown, Ext Gley1-2.5/N black, 2.5YR4/3 reddish brown, 10YR6/3 pale brown
 H 2.9, W 3.7, Th 2.8 Ø
 Drawing and inked drawing S. Boersma
 Par. 536
 Damiani 2010, Tav. 125, A3, Gruppo VIII, B20, Tipo 1, var. C, Case Missiroli (US1), Cesena (FC), RBA1
- 537**
Grotta di S. Angelo IV
Cassano allo Jonio (CS)
GdA01-7
Plate XLVIII.537
- Slightly outward lip of a jar with short cylindrical neck, surface *à la barbotine* with plain bands under a notched band
 Coarse impasto, many several sizes inclusions (concretions)
 Core 5YR4/6 yellowish red+2.5/1, Ext. (concr.) 10YR6/1 grey, Ext. 5YR4/6 yellowish red
 H 5.1, W 6.5, Th 1.8,
 Drawing S. Boersma, inked drawing M. Los-Weijns
 Par. 537
 See, for instance, Grandinetti *et al.* 2004, Fig. 8, (2) from Gallo, Facies of Gallo-Colarizzi; Pacciarelli 2011, Fig. 12, (6), ME phase 2 (3050-2800). See also Bernabò Brea *et al.* 1989, Fig. 21,a, Grotta Cardini, Praia a Mare (CS), Strato Inferiore, ME phase 2-LE/trans. EBA
- 538**
Grotta di S. Angelo IV
Cassano allo Jonio (CS)
GdA01-18
Plate L.538
- Fragment of an inward rim of a deep bowl, outward thickened and bevelled on the insidelip
 Coarse impasto, many several sizes inclusions, smoothed (concretions)
 10YR3/1 very dark grey, core 7.5YR6/1 grey
 H 4.9, W 6.2, wall Th 0.7
 Drawing S. Boersma, inked drawing M. Los-Weijns
 Par. 539
- 539**
Grotta di S. Angelo IV
Cassano allo Jonio (CS)
GdA01-27
Plate XLVIII.539
Tab. 82b
- Straight and short neck fragment of a jar, bevelled on the inside lip
 Roughly depurated impasto (a few inclusions), well smoothed surface, ext. surf. covered by chalky concretions
 From Gley1-2.5N black to Gley 1-3N very dark grey
 H 5.7, W 7.6, Th 0.7, D ±24
 Drawing M. Veneziano, inked drawing M. Los-Weijns
 Par. 539
 Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, taglio 2, ceramica del gruppo II, Fig. 36.218, LE-EBA
- 540**
Grotta di S. Angelo IV
Cassano allo Jonio (CS)
GdA01-29
Plate XLVIII.540
Tab. 82a
- Short and straight rim fragment of a globular vessel
 Coarse impasto, many several sizes inclusions, well smoothed, slightly burnished
 5Y6/1+7.5YR4/4 reddish brown, Int 7.5YR3/1, 2.5/1 very dark grey, black
 H 5.4, W 5, Th 0.9
 Drawing S. Boersma, inked drawing M. Los-Weijns
 Par. 540
 See Bernabò Brea *et al.* 1989, Fig. 25, g, j, Grotta Cardini, Praia a Mare, Strato Inferiore
 Grandinetti *et al.* 2004, Colarizzi, Fig. 2.1, ME phase2 (3050-2800)
- 541**
Grotta di S. Angelo IV
Cassano allo Jonio (CS)
GdA01-82
Plate XLVIII.541
Tab. 82a
- Fragment of an emispherical bowl with slightly out-turning rim, outward thickened and notched lip
 Roughly depurated impasto, small sizes inclusions
 2.5Y6/2 light brownish grey, core Gley1-4N dark grey
 H 5.4, W 5, Th 0.9
 Drawing S. Boersma, inked drawing M. Los-Weijns
 Par. 541
 For the rim Tinè, Natali 2004, Fig. 2B2, Grotta S. Michele di Saracena, Saggio beta, materiali eneolitici, facies Piano Conte (EE). See sherd n. 542
- 542**
Grotta di S. Angelo IV
Cassano allo Jonio (CS)
GdA01-85
Plate LI.542
- Fragment of a bowl with thickened band on the rim, scraped wall
 Coarse impasto, many several sizes inclusions
 10YR4/1 dark grey, core and wall 10YR6/2 light brownish grey
 H 4.4, W 4.3, Th 0.8
 Drawing S. Boersma, inked drawing M. Los-Weijns

Par. 542

Similar to 548.GdA01-44, Montagnari Kokelj, Crismani 1997, Grotta del Mitreo, Duino, Trieste, Fig. 16.135 for decor., Settore A, Strato 4, ceramica del gruppo III. See also Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, Taglio 2, Gruppo II, for thickened rim, Fig. 37.231-232 (LE-Trans. EBA). Similar thickened rim also in Grandinetti *et al.* 2004, Fig.7.6, Fig. 4,5, Gallo (Briatico). See also ovoidal vessels (jars) with thickened and plain band on the rim from Grotta della Madonna- Praia a Mare, tagli 21-17, Pacciarelli 2011, p. 259 (EE phase coinciding with Taurasi and Piano Conte phases). See also fragment 541, this catalogue.

543 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA35 Plate L.543	Fragment of rounded bowl with outward thickened lip Coarse impasto, many inclusions from small to large size, badly smoothed surface Ext (front) 5YR5/2 weak red, (back) 2.5YR4/6 yellowish red, core 5YR4/3 reddish brown H 5.8, W 4.3, Th 1 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 543 Similar to Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, taglio 2, ceramica del gruppo I, Fig. 36.207
544 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA37 Plate LI.544	Emispherical bowl fragment, thinned lip Roughly depurated impasto, medium-large size inclusions, smoothed surface (concretions on the Internal surface) Ext 5YR6/4 light reddish brown, core 5YR4/1 dark grey H 6.5, W 7.9, Th 0.7 Drawing A. Menduni, inked drawing M. Los-Weijns
545 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA43 Plate L.545	Shallow bowl fragment, thin walls Roughly depurated impasto, a few inclusions, roughly smoothed surface Ext 2.5YR4/6, 4/4, 4/1 yellowish red, reddish brown, dark reddish grey, core 10YR5/1, 4/1 grey, dark grey H 3.1, W 4.1, Th 0.5 Drawing A. Menduni, inked drawing M. Los-Weijns
546 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA01-37 Plate LI.546	Fragment of a S-shaped profile deep bowl, outward rim Roughly depurated impasto, well smoothed 2.5Y7/1-2 light grey, 2.5Y6/1 grey, core Gley2-3/5PB very dark bluish grey H 6.9, Th 0.6, D 11.5 Drawing S. Boersma, inked drawing M. Los-Weijns
547 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA01-55 Plate XLVIII.547 Tab. 82a	Rim fragment of a large ovoidal vessel with decoration <i>à la barbotine</i> Coarse impasto, many several sizes inclusions, concretions, smoothed internal surface Int. 2.5YR4/4-6 reddish brown-red H 9, W 11.9, Th 1.4 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 547 Grandinetti <i>et al.</i> 2004, Fig. 7.16, Gallo (Briatico), ME Phase 2
548 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA01-44 Plate XLIX.548 Tab. 82a	Fragment of an ovoidal jar with flaring rim, notched cord band under the rim, bump below max diameter (GdA01-44 attaches to GdA01-43 9 not drawn) Coarse impasto, many several size inclusions, smoothed surface (concretions) 2.5YR5/6 red, core 7.5YR5/1 grey, 5YR4/4 reddish brown H 17.8, W 13.4, wall Th 1.2 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 548 Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, Taglio 2, Ambito Lubiana, probably also Campaniforme, E-EBA, Fig. 37.221, Gruppo II (208-251), LE-EBA). See also 549.GdA33
549 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA33	Flaring rim fragment of a slightly ovoidal and wide vessel, out-turning lip, notched cord-band under the rim, pointed to outside lip Coarse impasto, many inclusions, small size, smoothed surface (with clay shaper)

Plate LII.549	Ext. 10YR4/3-4/4 brown-dark yellowish brown, core 2.5YR4/5 reddish brown H 10.1, W 13.6, Th 1.1, D 32.2 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 549 See 548.GdA01-44
550 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA17 Plate LI.550	Inward rim fragment of a jar, slightly flaring lip, notched cord-band under the lip Coarse impasto, many inclusions, small size, smoothed surface (with clay shaper) Ext. 2.5YR5/4 reddish brown, core 2.5YR5/6, 4/6 red H 7.2, Th 0.9, D 15.6 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 550 See 548.GdA-01-44
551 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA12 Plate XLIX.551 Tab. 82b	Fragment of a globular jar with outturned rim, notched cord-band under the lip Coarse impasto, medium-large size inclusions, smoothed surface Ext./int 2.5YR5/4 reddish brown H 11.1, W 15, Th 1.4, D 31.6 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 551 For the shape, Gilli, Montagnari Kokelj 1996, Grotta degli Zingari, Sgonico, Trieste, taglio 2, ceramica del gruppo II, Fig. 37.230. See also 548.GdA01-44
552 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA7 Plate LI.552	Fragment of a jar, flaring rim, flattened lip, notched cord-band under the lip Coarse impasto, small-medium size inclusions, smoothed surface (with chalky concretions) Ext 7.5YR3/3 dark brown, 10R4/6 red, concretions 2.5YR7/1 light reddish grey, core 2.5YR4/4 reddish brown H 2.6, Th 1.5, D 14.4 Drawing A. Menduni, inked drawing M. Los-Weijns See Par. 551.GA12
553 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA23 Plate XLVIII.553 Tab. 82a	Fragment of a bowl with slightly in-turning rim Coarse impasto, smoothed surface (partly covered by chalky concretions) Ext. 5YR7/6 reddish yellow, core Gley1-3/1 very dark greenish grey H 5.8, W 5.2, Th 0.6, D 17.6 Drawing A. Menduni, inked drawing M. Los-Weijns Par. 533 Grandinetti <i>et al.</i> 2004, Fig. 4.10, Gallo (Briatico), ME, Phase 2
554 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA99-1a Plate L.554	Straight rim fragment Roughly depurated impasto (few small inclusions) Well smoothed/burnished surface Ext/int 2.5YR5/4-3 reddish brown H 5, W 8.5, Th 1.1 Drawing M. Veneziano, inked drawing M. Los-Weijns
555 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA58 Plate L.555	Fragment of a high flaring neck bowl Roughly depurated impasto, inclusions up to 0.3, burnished surface Ext.Gley2-3/1 very dark greenish grey, Int. 7.5YR6/6 reddish yellow H 6.1, W 7.5, Th 0.7, D 10 Drawing S. Boersma inked Drawing M. Los-Weijns
556 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA01-87 Plate XLIX.556 Tab. 82a	Wall fragment of a large vessel with notched cord-bands decoration Coarse impasto, many large inclusions, well smoothed Ext. 2.5YR5/6 red, 4/4. Int. 2.5YR4/1 dark grey, core 7.5YR2.5/1 black+Gley1-3N very dark grey H 15.8, W 14.6, wall Th 1.4, Wall+cord Th 2 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 556 Cocchi Genick 1996, Fig. 10.8, Gruppo A (emiliano-romagnolo) + D (senese) + E (laziale) EBA
557 Grotta di S. Angelo IV	Truncated cone shaped bowl, slightly inward rim Roughly depurated impasto, inclusions up to 0.2, well smoothed surface

Cassano allo Jonio (CS) GA55 Plate XLIX.557	Ext 5YR5/4 reddish brown, Ext/Int. 10YR6/6 brownish yellow, Int 7.5YR3/3/1 dark brown/very dark grey, 5YR4/4/1 reddish brown/dark grey H 8.8, W 15.3, Th 0.5, D 17 Drawing S. Boersma, inked Drawing M. Los-Weijns
558 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA53 Plate L.558, Fig. 56	Fragment of a double-ring handle Roughly depurated impasto (covered by chalk), burnished surface Gley2-4/1 dark greenish grey H 4.2, W 2.9, Th 0.5, handle 0.8 x 0.8 Drawing S. Boersma inked drawing M. Los-Weijns Par. 559
559 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA51 Plate L.559, Fig. 57	Fragment of a bowl with short funnel-shaped rim and double-ring handle Roughly depurated impasto (inclusions up to 0.6), burnished surface 10YR3/3 dark brown/1/1, 2.5YR5/3 reddish brown, 7.5YR5/2 brown H 8.6, W 8.2, Th 0.7, vertical handle 3.3, 0.7, horizontal handle 1.2, 0.8, D 13 Drawing S. Boersma inked drawing M. Los-Weijns Par. 559 Tinè 1964, Fig. 10.1, Grotta di Sant'Angelo III, str. 1, see also Cocchi Genick 1995, Tipo 464A, phase MBA2B-3; Bartoli, Di Renzoni 2004, Fig. 2.10, Broglio di Trebisacce, sett. 10, fasi MBA1B1-2. See also 558.GA53
560 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA54 (GA-52+GA-54) Plate L.560, Fig. 58	Fragment of a shallow bowl with carena, flaring rim, axe-handle, traces of omphalos on the bottom Roughly depurated impasto, inclusions up to 0.3, (covered by some chalky incrustations), burnished surface Gley1-3/N very dark grey, 5YR7/6 reddish yellow H 8.9, W 8.8, W with handle 13.8, Th 0.4-0.6, handle 0.7-0.8, 2.5, axe Th 3.6 x 0.75, D ±10 Drawing S. Boersma inked drawing M. Los-Weijns Par. 560 Procelli 2004, Fig. 1.2, RTV type materials (EBA2+MBA1), Valsavoia (Lentini, Siracusa); Cocchi Genick 1995, Type 474a and u. 1 for the upper and ending part of the handle (MBA1-2); Cocchi Genick 1996, Fig. 9.5, EBA; see also examples in Scarani 1962, Fig. 6, Farneto, S. Lazzaro di Savena (BO). LEBA+MBA1
561 Grotta di S. Angelo IV Cassano allo Jonio (CS) GA50 Plate XLVIII.561, Fig. 54	Truncated cone shaped bowl with rim extending upwards to form a flat handle with an oval shaped hole Roughly depurated impasto, inclusions up to 0.4, well smoothed surface, partly covered by chalky incrustations Ext. 2.5YR4/1 dark grey, Ext/Int. 10YR6/2 light brownish grey, Gley2/3/1 very dark greenish grey H 10.3, W 13.9, Th 0.8, handle 2.5, 0.9, D ±13 Drawing S. Boersma inked drawing M. Los-Weijns Par. 561 Similar to Bernabò Brea, Cavalier 1968, Tav. VII, 3, Piano Quartara, Panarea, Inv. 1891 (H 11.5, D 12.2), LE
562 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA99-50B (GA60) Plate LI.562, Fig. 55	(Reconstructed) jar with slightly flaring rim, 2 band-handles and 2 lugs, diametrically opposite Roughly depurated impasto, inclusions up to 0.3, well smoothed surface (covered by some chalky incrustations) Ext. 2.5YR6/6 light red, Int. Gley2-4/1 dark greenish grey H 31, W 1-1.6, handle 1.1, 4.5, D 28, D base ±20 Drawing S. Boersma, inked drawing M. Los-Weijns Par. 562 Marino, Pacciarelli 1996, Fig. 4.B1 (Tomba 1), 3, (Tomba 2), Santa Maria di Montalto, Nicotera (parallel context: Tomba 21 Rodi', EBA(2)-Capo Graziano 1-Palma Campania)
563 Grotta di S. Angelo IV Cassano allo Jonio (CS) GdA13-1 Plate LII.563, Tab. 81	Fragment of a jug with inward rim, vertical band handle, decoration motifs: small bumps and thin arch shaped cord bands Roughly depurated impasto, many small size inclusions, burnished inside, mostly burnished-well smoothed outside (chalky incrustations outside) Ext. (front) 5YR5/4 reddish brown, 4/6, 2.5/1, 7.5YR5/3, 3/1 brown, very dark

	grey, Ext (back) 2.5YR3/4,2.5/4, dark reddish brown, Int. 2.5Y4/6, Gley1-3N very dark grey H 12.1, W 14.8, Th 0.6-7, D 14 Drawing M. Crudo, inked drawing S. Boersma Par. 563 Decoration: Čović 1983, Tav. XXXV.3, Srednje bronzano doba u Istri, Istra III, Brioni, gradina, BRC1. Baumgärtel 1953, Fig. 6.2, Manaccora, Stratum III. Lonza 1981, Tav. 23.5,8, Elleri. MBA2
564 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-1 Plate LIII.564, Tab. 78	Fragment of a bowl with carena and band handle attachment Burnished-well polished impasto, many inclusions, several sizes Ext 5YR4/1/2 dark grey/dark reddish grey, Int 5YR4/4 reddish brown H 9.6, W 12.2, Th (wall) 1, Th (handle) 1.9, W (handle) 5, D (carena) 16 Drawing and inked drawing S. Boersma Par. 564 Salerno, Vanzetti 2004, Fig. 2, Grotta di S. Angelo II, Cassano allo Jonio, Tinè S. 1992, Tav. IIc, Grotta di S. Angelo II, Cassano allo Jonio
565 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-2 Plate LIII.565, Tab. 79	Fragment of a bowl with carena and band handle attachment Burnished-well smoothed impasto, few small inclusions Ext from 7.5YR4/0 dark grey to 10YR4/4 dark yellowish brown, Int from 5YR3/4 dark reddish brown to 2.5YR3/0 very dark grey H 5.5, W 7.5, Th (wall) 0.6 (carena)-0.4, Th (handle) 0.8, W (handle) c.a 3.9, D (carena)10 Drawing and inked drawing S. Boersma Par. 565 Marzocchella A. 1986, Pl. XVII.14, Loc. Foce, Sarno (SA), Saggio 1, Strati 20-17, EBA, facies di Palma Campania. Marino 2000, Fig. 7.2, Capo Piccolo, Saggio 4C, taglio 3, EBA, facies di Palma Campania
566 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-3 Plate LIII.566	Rim fragment of a deep bowl, outturned rim, outward lip, convex wall profile Well smoothed impasto, several inclusions, from small to large sizes Ext 5YR5/4 reddish brown, Int 7.5YR3/0 very dark grey H 4.4, W 3.6, Th (wall) 0.8 Drawing and inked drawing S. Boersma
567 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-8 Plate LII.567	Fragmentary miniaturistic vessel with small handle on the rim, slightly outturning rim with nicked decoration Burnished impasto outside, smoothed inside, many inclusions, from small to large size Ext 5YR4/3 reddish brown, Int 7.5YR4/0 dark grey H 3.8, H with handle 4.3, W 4.6, Th (wall) 0.6, Th handle 1.1 x 0.8, D c.a 5 Drawing and inked drawing S. Boersma Par. For the nicked rim see Par. 574, LE
568 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-4 Plate LII.568, Tab. 79	Fragment of a short neck bowl with rounded lip and globular profile Well smoothed impasto, a few inclusions, from medium to large size (concretions) Ext/int 2.5YR3/0 black H 5, W 4, Th 0.7, D 9 Drawing and inked drawing S. Boersma Par. 568 Ardesia 2011, Fig. 13a. Boccadifalco (PA), abitato, EBA (RTV)
569 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-5 Plate LII.569, Tab. 78	Wall fragment with parallel notched cord-bands Smoothed impasto, many inclusions, from small to large size Int 10YR5/1 grey, Ext (back) 10YR5/1 grey, Ext (front) 10YR4/4 dark yellowish brown H 5.4, W 7.4, Th (wall) 1, Th (wall+cord) 1.5 Drawing and inked drawing S. Boersma Par. 569 For the dec. Mieli <i>et al.</i> 2011, Fig. 3.13, Grotta del Cervaro, Lagonegro (PZ), scavi De Lorenzo, LE. See also Čović 1983, T. XXI. 2, Rano bronzano doba, prelazna zona, Debelo brdo and T. XXIX,1, Cetinska kultura, Skarin Samograd (LE/transBA)

<p>570 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-6 Plate LIII.570, Tab. 79</p>	<p>Fragment of a globular jar with flaring rim and notched decoration on an arch shaped cord band Smoothed impasto, many inclusions, from small to medium size Ext 5YR6/6 reddish yellow, Int 7.5YR3/0 very dark grey H 10, W 12, Th (wall) 0.9-0.8, Th (decoration) 0.3, D 18 Drawing and inked drawing S. Boersma Par. 570 For the dec.: Bernabò Brea <i>et al.</i> 2000, Grotta del Santuario della Madonna (Praia a Mare, CS), Fig. 74. P, Tagli 13-12, Protoapennine B, corresponding to Grotta Cardini-Strato Medio, EBA-MBA1 For the shape: Bernabò Brea <i>et al.</i> 1989, Fig. 51.b, Grotta Cardini, Praia a Mare (CS), Strato Medio, EBA-MBA1</p>
<p>571 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-7 Plate LII.563, Tab. 81</p>	<p>Fragment of a globular high neck vessel Burnished impasto, many small inclusions Ext from 10YR5/6 yellowish brown to 10YR3/1 very dark grey, Int 7.5YR4/0 dark grey H 9.1, W 13, Th (wall) 0.9, D (neck) 10, D (max) 18 Drawing and inked drawing S. Boersma Par. 571 Similar to Bernabò Brea <i>et al.</i> 1989, Fig. 27.b, Grotta Cardini, (Praia a Mare, CS), Strato Medio, EBA2-MBA1</p>
<p>572 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-9 Plate LII.572</p>	<p>Fragment of a bowl with straight short rim, flattened lip Burnished impasto, many small-medium size inclusions Ext 5YR5/4 reddish brown, Int 2.5YR6-3/0 grey-black H 5, W 4.7, Th (wall) 0.5, D (rim) c.a 11, D (max) 13 Drawing and inked drawing S. Boersma Par. 572 Similar to Gilli, Montagnari Kokelj 1996, Fig. 36, Grotta degli Zingari, Sgonico (Trieste), Taglio 2, ceramica del Gruppo II, E-EBA. Baioni, Seragnoli 1996, Fig. 3.5, Castelberforte (Mantova), Sito BR1, surface find, EBA2</p>
<p>573 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-10 Plate LIV.573, Tab. 77</p>	<p>Wall fragment with carena of a biconical vessel Burnished impasto, many small size inclusions, a few large ones Ext 5YR4/3 reddish brown, Int 7.5YR4/0 dark grey H 6.3, W 7.5, Th (wall) 0.7, D (carena) 15 Drawing and inked drawing S. Boersma Par. 573 Similar to McConnell 1999, Fig. 2.3, Contrada Tranchina, Sciacca (AG), San Cono-Piano Notaro, EE. See also Lo Porto 1962-63, Fig. 13, Tomba (cella B) di Cellino San Marco (BR), Masseria Veli, Foglio catastale n. 30, particella 116, H orcio 9.5 cm. LE, 2600-2350. E</p>
<p>574 Sant'Angelo Cassano allo Jonio (CS) FAV4AT5-11 Plate LIV.574, Tab. 77</p>	<p>Rim fragment of a jug with notches and band handle Burnished/well smoothed impasto, many small-medium size inclusions (incrustations) Ext 7.5YR5/2 brown, Int 7.5YR4/6 yellowish red H 7.7, W 7.6, Th (wall) 0.7, W (handle) 3.9, Th (handle) 1.4 Drawing and inked drawing S. Boersma Par. 574 For the shape Vigliardi 1996, Fig. 2.6, Grotta del Fontino (Grosseto), ceramiche dal deposito rimosso, BA iniziale. Example of nicked rim after Nicoletti <i>et al.</i> 2011, Fig. 3.11, Favarella, Torrevecchia, S. Eufemia (CZ), LME (<i>Gallo-Colarizzi aspect</i>)</p>
<p>575 Sant'Angelo II Cassano allo Jonio (CS) FAV4AT5-11 Plate LIV.575, Tab. 78</p>	<p>Fragmentary bracelet (?), plano-convex in section Bronze 5YR5/3 reddish brown, Int. section 7.5-YR-5/0 D 4.9, Th 0.5, Th (Int. section) 0.4 Drawing and inked drawing S. Boersma Gimbutas 1965, Fig. 27.25, find from the hoard of Wąsosz, district of Szubin, western Poland, classical Ünětice, EBA</p>
<p>576 Timpone della Motta</p>	<p>Rim fragment of an hemispherical bowl with a slightly vertical and curving cord-band, bevelled on the inside lip</p>

<p>Francavilla M.ma (CS) SM14-F1 Plate LIV.576, Tab. 32</p>	<p>Coarse impasto, several inclusions, from small to large size, smoothed surface (incrustations) Ext/Int 10R4/6 red H 5.5, W 3.7, Th (wall) 0.8 Drawing and inked drawing S. Boersma Par. 576 For the shape Bergonzi <i>et al.</i> 1982, 2, Tav. 31.5, Broglio di Trebisacce, Sett. B, ampl. 80, strato H, FBA3. See dec. Tav. 30.14, Sett. B, ampl. 80, H-3 scarpata, FBA3</p>
<p>577 Timpone della Motta Francavilla M.ma (CS) SM-US2-F2 Plate LIV.577, Tab. 29</p>	<p>Fragment of a neck bowl, out-turning rim, bevelled on the outside lip Smoothed impasto, medium sorted, few inclusions, small size Int 10R5/8 red, Ext 10R4/3 weak red H 3.2, W 3.7, Th 0.7, D 9.5 Drawing and inked drawing S. Boersma Par. 577 Pacciarelli 1999, Torre Galli, Zambrone (VV), Tav. 105.B.2, tomba 154, EIA1A</p>
<p>578 Timpone della Motta Francavilla M.ma (CS) SM-US2-F3 Plate LIV.578</p>	<p>Fragment of a bowl with carena, outward rim, rounded lip Burnished impasto (incrustations), few small size inclusions Int/Ext 5YR6/6 reddish yellow, Ext Gley1-2.5/N black H 2.8, W 5, Th (wall) 0.6, D. 7 c.a Drawing and inked drawing S. Boersma</p>
<p>579 Timpone della Motta Francavilla M.ma (CS) SM-US2-F6 Plate LV.579</p>	<p>Fragment of a small jar with waded cord band decoration Smoothed impasto, several large inclusions Ext 2.5YR4/4 reddish brown, Int 2.5YR5/8 red H 9, W 7.6, Th (wall) 1, D 16 Drawing and inked drawing S. Boersma</p>
<p>580 Timpone della Motta Francavilla M.ma (CS) SM-US2-F5 Plate LIV.580, Tab. 30</p>	<p>Fragment of a shallow and large bowl, with high carena, in-turning rim, rounded lip Burnished impasto, few inclusions, from small to large sizes Ext 7.5YR5/4 brown, Int Gley1-4N dark grey H 4.8, L 9.5, Th wall 0.8, D 31 c.a Drawing and inked drawing S. Boersma Par. 580 Cicirelli, Livadie 2012, Longola, Poggiomarino (NA), Fig. 522.S22, MAF10-23, EIA2A-2B, De Natale 1992, Fig. 78.6, Pontecagnano, Salerno, T3211, Fase IIA</p>
<p>581 Timpone della Motta Francavilla M.ma (CS) SM-US2-F8 Plate LV.581</p>	<p>Rim fragment of a high neck vessel, slightly outward rim Burnished outside impasto, smoothed inside, several inclusions, medium sizes Ext 2.5YR5/6 red, Int 10R4/6 red H 6.6, W 10, Th (wall) 1.1, D 19 Drawing and inked drawing S. Boersma</p>
<p>582 Timpone della Motta Francavilla M.ma (CS) SM-US2-F9 Plate LV.582</p>	<p>Large twisted handle fragment Burnished impasto, several inclusions, medium-large sizes Ext 5YR4/4 reddish brown, Int Gley 1-2.5N black H 6.5, L 3.1 x 2.87 Drawing and inked drawing S. Boersma</p>
<p>583 Timpone della Motta Francavilla M.ma (CS) SM-US2-F7 Plate LV.583</p>	<p>Handle fragment, pseudo-circular in section, curving with an angular projection Burnished impasto, many inclusions, small-medium sizes Int/Ext Gley1-2.5N black, Ext 10YR3/2 very dark greyish brown H 6.2, Th 2.1 x 1.9, 2.5 x 2 Drawing and inked drawing S. Boersma</p>
<p>584 Timpone della Motta Francavilla M.ma (CS) MS1-TT1-US1 Plate LIV.584, Tab. 34</p>	<p>Rim of a truncated cone shaped vessel with cord-band Burnished impasto (incrustations), many several size inclusions Ext/Int 2.5YR4/0 red H 5.8, L 6.2, Th (wall) 1.1 Drawing and inked drawing S. Boersma Par. 584 Peroni, Trucco 1994, Tav. 110.25, Broglio di Trebisacce, sett. D Nord, livello S, end of the FBA</p>

<p>585 Timpone della Motta Francavilla M.ma (CS) SM-US-C0 (56) Plate LIV.585, Tab. 35</p>	<p>Fragmanet of a jug with slightly out-turning rim and plastic decoration Well burnished impasto, several different size inclusions Ext/Int 2.5YR5/4 reddish brown H 4.8, Th (wall) 0.7, D 11 Drawing and inked drawing S. Boersma Par. 585 Dec. similar to Bernabò Brea <i>et al.</i> 1997, 195.16, Ca' de' Cessi, Sabbioneta, MN, US 7, 96 <i>e dal livello di incendio e crollo, inizio della sequenza insediativa: BR1</i>. Bergonzi <i>et al.</i> 1982, 2, Tav. 1.14, Broglio di Trebisacce, Sett. B, ampl. 80, strato 4 scarpata LBA</p>
<p>586 Timpone della Motta Francavilla M.ma (CS) SM-US1 Plate LIV.586, Tab. 28</p>	<p>Fragment of a bowl with carena, straight rim, slightly out-turning lip, cut to inside Burnished impasto, very few small size inclusions Ext 2.5YR2.5/0 black, Int 2.5YR5/0 grey H 3.8, Th (wall) 0.6, D 8 Drawing/inked Drawing S. Boersma Par. 586 Similar to De Juliis 1979, Fig. 5.c., p. 525, <i>Vasi di impasto da Salapia</i> (Manfredonia, FG), FBA. See also Trucco, Vagnetti 2001, Torre Mordillo, Spezzano A. (CS), Fig. 73.12 (without rim), Sett. E8-9, US2, in grey ware, US2 FBA</p>
<p>587 Timpone della Motta Francavilla M.ma (CS) MS1TT2-F1 Plate LIV.587</p>	<p>Band handle fragment, raised edges Grey ware, very few small size inclusions Ext 2.5YR4/0 red, Int 2.5YR5/2 weak red H 1.9, W 2.3, Th 0.5 Drawing and inked drawing S. Boersma Similar to Peroni, Trucco 1994, Tav. 156.10, Tomb XXVI, Torre Mordillo, EIAIIA</p>
<p>588 Timpone della Motta Francavilla M.ma (CS) SM08US2-F2 Plate LV.588</p>	<p>Rim fragment of a small ovoidal vessel, notched cord band, flattened lip Smoothed impasto, several different size inclusions Est 10YR5-4/3 yellowish brown-brown, Int Gley1-5N grey H 2.3, W 3.1, Th wall 0.6, D 12 c.a Drawing and inked drawing S. Boersma</p>
<p>589 Timpone della Motta Francavilla M.ma (CS) SM08US2-F1 Plate LV.589</p>	<p>Wall fragment of a jar with notched lug Burnished outside impasto, smoothed inside, many medium size inclusions Ext 7.5YR5/3 brown, Int Gley1-2.5N black H 3.6, W 7.8, Th (wall) 0.9, Th wall+lug 3 Drawing and inked drawing S. Boersma</p>
<p>590 Timpone della Motta Francavilla M.ma (CS) SM08US2-F4 Plate LV.590</p>	<p>Outward rim fragment of a bowl/mug Depurated grey ware, burnished surface Ext Gley1-2.5N black, Int Gley1-4N dark grey H 2.8, W 2.8, Th 0.6, D 13 Drawing and inked drawing S. Boersma</p>
<p>591 Timpone della Motta Francavilla M.ma (CS) SM-US37-153 Plate LV.591</p>	<p>Bottom fragment, thickened base Grey ware, depurated, smoothed surface Ext/Int Gley1-4N dark grey H 2.7, L 5.2, Th wall 0.5, Th base 0.7, D 4 Drawing and inked drawing S. Boersma</p>
<p>592 Timpone della Motta Francavilla M.ma (CS) SM08US2-F3 Plate LV.592</p>	<p>Bottom fragment of a rounded vessel, thin disc foot Grey ware, burnished surface Ext Gley1-3N very dark grey, Int Gley1-5N grey H 3.5, L 4.2, Th wall 0.5, Th fondo 0.7, D 4 c.a Drawing and inked drawing S. Boersma</p>
<p>593 Timpone della Motta Francavilla M.ma (CS) SM-US37-F1 Plate LV.593</p>	<p>Inward rim fragment of an ovoidal jar, outward and outward thickened lip Smoothed impasto, many several size and large inclusions Ext 2.5YR4/6 yellowish red, Int 2.5YR5/1 grey reddish grey+10YR5/2 greyish brown H 4.3, W 5.8, Th 1.2, D 28 c.a Drawing and inked drawing S. Boersma</p>

594 Timpone della Motta Francavilla M.ma (CS) SM40-F1 Plate LIV.594, Tab. 33	Fragment of a bowl with S-shaped profile, thin groove between wall and rim Burnished impasto, many small size inclusions, few middle size inclusions Ext Gley1-2.5N black, Int 10YR7/2 light grey H 4.7, W 5.8, Th 0.7, D 18 c.a (External max diameter) Drawing and inked drawing S. Boersma Par. 594 Dolfini 2002, Tav. 40.335, Abitazione 2, Strato 4b, FBA3. Dolfini 2002, Tav. 27.177, Abitazione 2, strato 4A, FBA3. See 94.TdM
595 Timpone della Motta Francavilla M.ma (CS) SM-US2-F1 Plate LV.595	Snail horn fragment of an upright handle Burnished impasto, several small-medium size inclusions Ext 5YR5/2 reddish grey, Gley1-3N very dark grey, Int Gley1-5N grey H 2.9, W 1.9. D (Sez.) 1.4 Drawing and inked drawing S. Boersma
596 Timpone della Motta Francavilla M.ma (CS) MS12/12 Plate LIV.596, Tab. 31	Fragment of a bowl with carena, out-turning rim, handle attachment on the rim Burnished impasto, few inclusions, several sizes Ext from 10YR6/4 light yellowish brown to 7.5YR4/0 dark grey, Int 7.5YR4/0 dark grey H 6.9, W 7.3, Th wall 0.7. Th handle 1.5, D 18 (max) Drawing and inked drawing S. Boersma Par. 596 Similar to Bettelli <i>et al.</i> 1998, in Peroni, Vanzetti (eds.), Broglio di Trebisacce, Tav. 8.54A, Sett. D Nord, livello S, FBA1
597 Timpone della Motta Francavilla M.ma (CS) L/SM1-F8 Plate LVI.597	Handle fragment, ovoidal section Burnished impasto, a few inclusions, small sizes Ext. 7.5YR4/2 brown, Int. 7.5YR4/3 brown H 4.1, W 2.1, Th 1.9 x 1.4 Drawing and inked drawing S. Boersma
598 Timpone della Motta Francavilla M.ma (CS) L-SM1-F9 Plate LVI.598	Short funnel shaped rim fragment of a small globular jar Grey ware, well sorted impasto, roughly burnished surface Int Gley 1-4N black, Ext Gley1-3N very dark grey H 2.5, W 3.1, Th 0.6 Drawing and inked drawing S. Boersma
599 Timpone della Motta Francavilla M.ma (CS) L-SM1-F11 Plate LVI.599, Tab. 27	Fragment of a jar with short funnel-shaped rim, flattened lip Smoothed impasto, several inclusions, small-medium sizes Int 7.5YR3/3 dark brown, Ext 10R4/3 weak red, Gley1-3N very dark grey H 2.4, W 3.6, Th wall 0.6, D 13 Drawing and inked drawing S. Boersma Par. 599 Similar to Cinquegrana 2013, 35.8, p. 107, Puntone Nuovo, Scarlino, GR, EIA
600 Timpone della Motta Francavilla M.ma (CS) L-SM1-F10 Plate LVI.600	Fragment of an ovoidal jar with slightly flaring to outside rim, flattened and slightly outward thickened lip, cord band Roughly burnished impasto, many medium size inclusions Int 10R4/4 weak red, Gley1-2.5/1 greenish black, Ext 5YR3/2 dark reddish brown H 4.1, W 4.3, Th lip 1.5, D 23 Drawing and inked drawing S. Boersma
601 Timpone della Motta Francavilla M.ma (CS) L-SM1-F4 Plate LVI.601	Mug fragment with band handle, flaring lip Smoothed impasto, a lot of inclusions, several sizes Int 2.5YR4/8 red, Ext 10R4/3 weak red H 5.3, H (with handle) 5.9, W 6.2, Th wall 0.7, Th handle 2.3,1.2, D 8 c.a Drawing and inked drawing S. Boersma
602 Timpone della Motta Francavilla M.ma (CS) L-SM1-F5 Plate LVI.602	Handle fragment, squared in section Burnished impasto, several medium-large size inclusions Ext/int Gley1-2.5N black H 5.5, W 2.3, Th 2 x 2 Drawing and inked drawing S. Boersma
603 Timpone della Motta Francavilla M.ma (CS) L-SM1-F6	Handle fragment, rounded in section, angular profile Burnished impasto (crustated), many small size inclusions Int 2.5YR4/6 yellowish red, Ext 2.5YR4/2 dark reddish grey H 4, W 3.4, Th 1.8 x 1.6

Plate LVI.603	Drawing and inked drawing S. Boersma
604	Upright handle fragment with horned shaped endings attachment
Timpone della Motta	Burnished impasto, few inclusions, small sizes
Francavilla M.ma (CS)	Ext/int Gley1-3N very dark grey
L-SM1-F7	H 4.5, W 3.3, Th 2.3 x 1.9
Plate LVI.604	Drawing and inked drawing S. Boersma
605	Fragment of a cup with slightly out-turning rim, vertical band handle, decorated by a pointed bump
Timpone della Motta	Grey ware, depurated impasto, burnished surface, incrustated surface
Francavilla M.ma (CS)	Ext Gley1-3N very dark grey, Int Gley1-4N dark grey
L/SM-US1-F1+F2	H 4.1, H with handle 5.5, W 4.5+4.2, Th wall 0.6, Th handle 1.9,0.8, Th handle with bump 1.3 (bump),1.6 (W), D 7
Plate LVI.605, Tab. 27	Drawing and inked drawing S. Boersma
	Par. 605
	De Natale 1992, Pontecagnano (SA), Necropoli di S. Antonio, Fig. 89.4, T 3275, PF2A. Kleibrink 2006, Fig. 33.15.1.7.24, Timpone della Motta, Francavilla M.ma, Plateau I, Casa al Muro Grande, EIA2
606	Rim fragment
Timpone della Motta	Grey ware, depurated impasto, smoothed surface, crustated
Francavilla M.ma (CS)	Ext Gley1-3N very dark grey, Int Gley1-5/10Y greenish black
L/SM-US1-F3	H 2.6, W 2.6, Th wall 0.6
Plate LVI.606	Drawing and inked drawing S. Boersma
	Similar rim in Danile 2011, Fig. 17, Lemnos, Efestia, Area 17, wall F. Late Geometric Period
607	Globular bowl fragment, outward rim
Timpone della Motta	Grey ware, burnished surface
Francavilla M.ma (CS)	Ext/int Gley1-3N very dark grey
LSO-08-F1	H 4.2, W 3.6, Th 0.6, D 12
Plate LVI.607	Drawing and inked drawing S. Boersma
608	Bottom fragment, thickened and concave base
Timpone della Motta	Burnished impasto, few inclusions, from small to large size
Francavilla M.ma (CS)	Ext/int 2.5YR4/4 reddish brown
LSO-US1-F3	H 5, Th base 1.7 (in the middle), D base 6.5
Plate LVI.608	Drawing and inked drawing S. Boersma
609	Fragment of a bowl with flaring rim, rounded <i>carena</i>
Timpone della Motta	Burnished impasto, worn, a very few inclusions, very small in size
Francavilla M.ma (CS)	Ext/int 7.5YR5/4 brown
LSO-US1-F1	H 2.7, Th 0.7, D 6
Plate LVI.609	Drawing and inked drawing S. Boersma
	Par. 609
	Similar to De Natale 1992, Fig. 83.7, T 3231, Fase II. Pontecagnano (SA), Necropoli di S. Antonio, EIAII
610	Lid fragment
Timpone della Motta	Burnished impasto (crustated), very few inclusions
Francavilla M.ma (CS)	Ext/int 2.5YR5/4 reddish brown
L-SO-US1-F2	H 4.4, Th 1.3, D 14
Plate LVI.610	Drawing and inked drawing S. Boersma
611	Stright rim fragment of a high narrow neck with slightly thinned lip
Timpone della Motta	Burnished impasto, several inclusions, medium sizes
Francavilla M.ma (CS)	Ext/int Gley1-2.5N black
L-SO-08-F2	H 3.4, W 2.5, Th 1.4, D 4.5
Plate LVI.611	Drawing and inked drawing S. Boersma
612	Fragment of a straight rim
Timpone della Motta	Burnished impasto, many inclusions from small to large sizes
Francavilla M.ma (CS)	Int 7.5YR5/3 brown, Ext 10R4/3 weak red
L-SO-08-F3	H 4.7, W 4, Th 0.9
Plate LVI.612, Tab. 35	Drawing and inked drawing S. Boersma
	Par. 612
	Bergonzi <i>et al.</i> 1982, 1, Tav. 6.6, Broglio di Trebisacce (CS), Sett. B Ovest, Strato 3W (non distinto), RBA

613 Timpone della Motta Francavilla M.ma (CS) TdMW10 Plate LVII.613	Fragment of a cylindrical vessel with short flaring rim, outward thickened lip, bump Smoothed impasto, coarse inside, many inclusions Int 10R4/3 weak red, Ext 10R4/3-4 weak red H 9.8, W 14.2, Th 1.4, D 6.5 Drawing and inked drawing S. Boersma
614 Timpone della Motta Francavilla M.ma (CS) TdMW9 Plate LVIII.614, Tab. 50	Fragment of a cylindrical vessel with short flaring rim, bump Impasto from well smoothed to burnished, many several sizes inclusions Int 2.5YR4/8 red, Ext 2.5YR5/6 red H 8, W 7.3, Th wall 1.2, Th bump 0.4, D 38 Drawing and inked drawing S. Boersma Par. 614 For the shape, Bergonzi <i>et al.</i> 1982, 2, Tav. 41.2, Serra Castello (Corigliano), survey, EIAI
615 Timpone della Motta Francavilla M.ma (CS) TdMW2 Plate LVIII.615	Raised edges band handle fragment Burnished impasto, several inclusions, several sizes Ext Gley1/4-3N dark grey-very dark grey, Int Gley1-2.5N black H 3.6, W 2.7, Th handle 0.9 Drawing and inked drawing S. Boersma
616 Timpone della Motta Francavilla M.ma (CS) TdMW7 Plate LVII.616, Tab. 50	Funnel-shaped rim Burnished impasto, few inclusions, small-medium size Ext/int Gley1-2.5N black H 2.3, W 4.4, Th 0.9, D 16 Drawing and inked drawing S. Boersma Par. 616 For the rim, an example in <i>figulina</i> ware after Bergonzi <i>et al.</i> 1982, 1, Tav. 36.2, ceramica figulina dal livello H, Sett. B Ovest, Broglio di Trebisacce (CS), FBA3 (-EIA)
617 Timpone della Motta Francavilla M.ma (CS) TdMW3 Plate LVII.617	Small rim fragment, cut to outside lip Burnished impasto, a few small size inclusions H 2, W 2.4, Th 0.6 Ext 5YR3/3, 3/2 dark reddish brown, Int Gley1-3N very dark grey Drawing and inked drawing S. Boersma
618 Timpone della Motta Francavilla M.ma (CS) TdMW5 Plate LVII.618, Tab. 50	Globular jar with in-turning rim Well smoothed impasto, coarse, many several size inclusions Ext 5YR4/4 reddish brown, Int 5Y2.5/1 black H 3.2, W 5, Th 0.9, D 12 Drawing and inked drawing S. Boersma Par. 618 Dolfini 2002, Sorgenti della Nova, Farnese (VT), Tav. 68.670, Abitazione 1, sporadici, FBA2-3
619 Timpone della Motta Francavilla M.ma (CS) TdMW4 Plate LVII.619	Outward rim fragment of a deep bowl, bevelled to outside lip Burnished impasto, medium sorted, a few small size inclusions Ext Gley1-3N very dark grey, Int Gley1-2.5N black H 3.7, W 3.7, Th 0.7, D 11 Drawing and inked drawing S. Boersma
620 Timpone della Motta Francavilla M.ma (CS) TdMW8 Plate LVIII.620	Wall fragment of a large vessel, fragmentary circular lug with three circular impressions Smoothed impasto, coarse, many large inclusions and several sizes inclusions Ext 2.5YR6/8 light red, Int 2.5YR4/8 red H 11.7, W 12.2, Th 2.4, D 70 c.a (at point indicated by arrow) Drawing and inked drawing S. Boersma
621 Timpone della Motta Francavilla M.ma (CS) TdMW13 Plate LVII.621	Straight rim fragment, slightly outward lip, bump Smoothed impasto, many small-medium size inclusions Ext 2.5Y4/1 dark grey, Int 5YR5/4 reddish brown, core Gley1/3-10Y very dark greenish black H 5.8, W 4.5, Th 1 Drawing and inked drawing S. Boersma
622 Timpone della Motta	Very short neck of a globular jar, groove between neck and wall Smoothed impasto, many inclusions

<p>Francavilla M.ma (CS) TdMW11 Plate LVII.622</p>	<p>Ext/int 2.5YR5/4-6 reddish brown-red H 4.1, W 4.2, Th 0.8, D 18 Drawing and inked drawing S. Boersma</p>
<p>623 Timpone della Motta Francavilla M.ma (CS) TdMW1 Plate LVII.623</p>	<p>Fragment of a band handle with raised edges, ending with a pointed small ear, triangular hole on the band Well smoothed impasto, partially burnished, many inclusions, several sizes Ext 7.5YR7/4,6 pink, reddish yellow, Int 7.5YR5-4/1 brown-dark grey, core 5YR6/8 reddish yellow H 6.4, W 10.4, Th handle 3.4, Th ending 2.9 , 1.3 Drawing and inked drawing S. Boersma Par. 623 Peroni, Trucco 1994, <i>Apice ad orecchiette appuntita</i> 50F, examples from Sett. E, liv. S and Sett. B, ampl. 80, strato S2', <i>gruppo C foro triangolare con vertice del triangolo in basso</i>, Sett. B Ovest, liv. 3B, taglio 3*, MBA3. Cocchi Genick 1995, Tipo 559, S. Maria di Ripalta (FG), Broglio di Trebisacce. See also 559</p>
<p>624 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV11 Plate LVIII.624, Fig. 51</p>	<p>Wall fragment (2 fragments) of closed shape with painted decoration (red bands) Depurated impasto, well smoothed surface Ext 7.5YR7/4 red, Int 2.5YR6/4 light reddish brown, dec. 2.5YR4/4, 6, 8 reddish brown, red H 10.7, W 10.2, Th 0.5 Drawing and inked drawing S. Boersma Par. 524 Decoration in, for example, Tinè S. 1964, Tav. II.g, strato IV, <i>Passo di Corvo tipico</i> Middle Neolithic</p>
<p>625 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV12 Plate LVIII.625</p>	<p>Wall fragment (3 fragments) of flask vessel with painted decoration (red bands) Depurated impasto, well smoothed surface Ext 10YR7/3-4 very pale brown, Int 5YR6/6 reddish yellow, dec. 5YR5/3 reddish brown H 11.8, W 15.2, Th 0.8 Par. 625 See, for the shape, Cassano, Manfredini 2004, Fig. 6.19,1, Struttura Q, Strato 4; for decoration see 624 – SAIGV11 Middle Neolithic</p>
<p>626 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV29 Plate LVIII.626</p>	<p>Painted wall fragment Depurated impasto, well smoothed surface Ext 10YR7/2 light grey, Int 7.5YR6/4 light reddish brown, sup. dec. 10R5/2 weak red, inf. dec. 10R4/2 weak red, Gley1-3N very dark grey H 7.8, W 9.8, Th 0.7 Drawing S. Boersma Par. 626 Cassano, Manfredini 2004, Tav. I.3,4, Tav. 3.8, Middle Neolithic</p>
<p>627 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV2 Plate LVIII.627</p>	<p>Ring foot fragment Coarse impasto, irregularly smoothed surface Ext 10R4/4 weak red, Ext/Int 10R5/6 red, Int 10R5/3 weak red H 4.7, D (base) 9.7, Th (wall) 1.4 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 627 Montagnari Kokelj, Crismani 1997, Grotta del Mitreo, Friuli, Fig. 33.340, Middle Neolithic (Danilo and Kokanj 1 cultures).</p>
<p>628 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV4 Plate LIX.628</p>	<p>Ring foot fragment Coarse impasto, polished surface Ext 10R4/1 dark reddish grey, 5YR3/3 dark reddish brown, Int 10R5/1 reddish grey H 6, D (base) 5.3, Th (wall) 2 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 628 See 627 – SAIGV2, Middle Neolithic</p>

<p>629 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV23 Plate LIX.629</p>	<p>Inturned rim fragment of a small globular jar with cylindrical lug Roughly deperated impasto, smoothed surface Ext Gley1-3N very dark grey, 10YR6/3-5/3 pale brown-brown, Int/core Gley1-3N very dark grey H 6.8, W 7.3, Th 1.1, D 17 Drawing S. Boersma Par. 629 Natoli 2009, Tav. III.3 (for lug), Favella della Corte, Corigliano C. (CS) Recent Neolithic 1 (Capanna Gravela di Serra d'Alto)</p>
<p>630 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV27 Plate LIX.630</p>	<p>Inturned rim fragment of a globular bowl Coarse impasto, polished surface Ext/Int Gley1-3N very dark grey, core Gley1-2.5N black H 5.8, W 4.3, Th 0.6 Drawing S. Boersma Par. 630 Ingravallo, Orlando 1996, Grotta dei Cappuccini, Lecce, Fig. 3.4 Beginning of the EBA</p>
<p>631 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV14 Plate LIX.631</p>	<p>Outturned rim fragment of a truncated cone shaped vessel, notched cord-band Coarse impasto, smoothed surface Ext Gley1-4N dark grey, 2.5Y4/1 dark grey, 10YR4/1-2 dark grey-dark greyish brown, 10YR8/3 very pale brown, Int Gley1-5N, 2.5Y6/2 light brownish grey H 10.3, W 9, Th 1.6, D 21 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 631 Gilli, Montagnari Kokelj 1996, Fig. 37.225, Grotta degli Zingari, Sgonico, Trieste. For the shape, see also Talamo 1992, XLIII, 107 (without cord-band), Pratola Serra (AV), beginning of the EBA</p>
<p>632 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV18 Plate LIX.632</p>	<p>Fragment of a bowl/jug with handle and thickened rim Coarse impasto, smoothed internal surface, irregularly smoothed external surface Ext 5YR4/3 reddish brown, 10R4/2, 7.5YR5/1 grey, Int 2.5YR4/4 reddish brown, 5YR5/3 reddish brown H 12.2, W 10.3, handle Th 1.6, wall Th 0.9 Drawing A. Menduni, inked drawing S. Boersma Par. 632 Montagnari Kokelj, Crismani 1997, Grotta del Mitreo, Friuli, fig. 20.175 Beginning of the EBA</p>
<p>633 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV20 Plate LIX.633</p>	<p>Rim fragment of an emyspherical bowl Coarse impasto, smoothed surface Ext 2.5YR5/4-6 reddish brown-red, Int Gley1-6/1,5/1 greenish grey, core Gley1-4N dark grey H 7.5, W 6, Th 1.2 Drawing S. Boersma Par. 633 Cocchi Genick 1996, Fig. 6.2, Gruppo B (della Toscana Meridionale) + E (laziale), EBA</p>
<p>634 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV22 Plate LIX.634</p>	<p>Rim fragment of a emyspherical bowl Coarse impasto, smoothed surface Ext 2.5YR5/4-6 reddish brown-red, Int Gley1-6/1,5/1 greenish grey, core Gley1-4N dark grey H 7.5, W 6, Th 1.2 Drawing S. Boersma Par. 634 See 633 – SAIGV20, EBA</p>
<p>635 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV7 Plate LX.635</p>	<p>Slightly straight rim fragment with slightly flaring lip of a neck vessel Roughly deperated impasto, smoothed surface Ext 2.5YR5,3/1 reddish grey, dark reddish grey, Int 2.5Y5/2 greyish brown H 8.1, W 8.8, Th 0.8, D 31 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 635</p>

	Gilli, Motagnari Kokelj 1996, Grotta degli Zingeri, Trieste, Fig. 40.279 (bowl), Beginning of the EBA
636 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV25 Plate LIX.636	Inturning rim fragment of a bowl Roughly depurated impasto, smoothed internal surface, polished external surface Ext 10YR6/3 pale brown, Int 5Y6/1 grey, core Gley1-5N grey H 5, W 4.8, Th 0.9 Drawing S. Boersma Par. 636 Cocchi Genick 1996, Fig. 5.28, Gruppo B (della Toscana Meridionale) + D (senese), EBA
637 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV21 Plate LIX.637	Outward rim fragment with slightly flaring lip of an emispherical bowl Coarse impasto, irregularly smoothed surface Ext/Int 5YR5/3-4/3 reddish brown, Int Gley1-3N very dark grey, core 5YR4/4 reddish brown H 5.8, W 6.7, Th 0.9 Drawing S. Boersma Par. 637 Cocchi Genick 1996, fig. 2.16, Gruppo C (grossetano); Talamo 1992, Tav. XL.61-62, Pratola Serra (AV), EBA
638 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV10 Plate LX.638, Tab. 75	Fragmentary ovoid cup with <i>carena</i> and slightly flaring lip Roughly depurated impasto, smoothed internal surface, burnished external surface Ext 7.5YR4/2 brown, Gley1-3,4N dark grey, very dark grey, Int 10YR5,6/2 greyish brown, light brownish grey H 11.2, Th 0.9, D. 9.8 (rim), D 3 (bottom) Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 638 Tinè S. 1987, Grotta S. Angelo II, Fig. 48-55, also after Salerno, Vanzetti 2004, Fig. 2, Grotta Sant'Angelo II, Cassano allo Jonio (CS), Late EBA
639 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV16 Plate LX.639	Fragment of an emispherical cup with <i>carena</i> Roughly depurated impasto, irregularly burnished surface Ext Gley1-3,4N dark grey, very dark grey, Int 5Y4/1 dark grey H 6, W 8.5, Th 0.9 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 639 Marino 2000, Fig. 6.2, Capo Piccolo (Isola C.po Rizzuto, KR), Saggio 4C, 2A livello, taglio 3, Late EBA
640 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV30 Plate LX.640, Tab. 74	Jug with handle Coarse impasto, smoothed surface Ext/Int 2.5YR4/3-4/4 reddish brown, Gley1-3N very dark grey, core Gley1-3N very dark grey H 11.1, W 10, Th 1.7, D 15 Drawing S. Boersma Par. 640 Carboni, Ragni 1986, Tav. 3.2, Mulino S. Antonio, Avella (AV), sezione stratigrafica, LE/EBA
641 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV9 Plate LX.641, Tab. 74	Short outturned rim fragment of a jar with decoration Roughly depurated impasto, burnished surface Ext 2.5Y4/1 dark grey, 7.5YR5/3 brown, Gley1-4N dark grey, Int 10YR5/1 grey H 9.5, W 8, Th 1.6 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 641 Bernabò Brea <i>et al.</i> 1989, Fig. 42-43, Grotta Cardini, Praia a Mare, CS, Str. Inf., zona A-B, Taglio 7, opposite to the wall. For dec. Rizzi, Tecchiati 1996, 530-531, Nössing B, Bressanone, Bolzano, terreno di sbancamento. See also Talamo 1992, Tav. XLV.135, Pratola Serra (AV) and for dec. Marino, Pacciarelli 1996, fig.3.6, Cessaniti Cave, Tropea (VV) LE/EBA

- 642**
Grotta di Sant'Angelo II
Galleria dei Vasi
SAIGV15
Plate LX.642
Rim fragment of a truncated cone shaped bowl with notched cord band
Coarse impasto, smoothed surface
Ext 2.5Y5,6/1 grey, Int Gley1-2.5N black
H 3.6, W 4.2, Th 0.9, D 18
Drawing. A. Menduni, inked drawing M. Los-Weijns
Par. 642
Bernabò Brea *et al.* 1989, fig. 48.f., Grotta Cardini, Praia a M. (CS), Strato Medio, Protoapennine period
- 643**
Grotta di Sant'Angelo II
Galleria dei Vasi
SAIGV6
Plate LX.643
Outward rim fragment of a bowl with carena
Coarse impasto, polished surface
Ext 5YR4/4 reddish brown, Gley1-3N very dark grey, Int 7.5Y6,7/2 light brownish grey/light grey, Gley1-2.5N black
H 4.7, W 6.2, Th 1, D 16
Drawing. A. Menduni, inked drawing M. Los-Weijns
Par. 643
Lo Porto 1967, Fig. 24.3, Giovinazzo (BA), Dolmen *a* Protoapennine period
- 644**
Grotta di Sant'Angelo II
Galleria dei Vasi
SAIGV24
Plate LXI.644
Outward thickened and flattened rim of a cylindrical neck vessel
Coarse impasto, smoothed internal surface, polished external surface
Ext 2.5Y5/1-2, 4/1-2 grey-greyish brown, dark grey-dark greyish brown, Int Gley 1-4N dark grey, core Gley1-4N dark grey
H 5.5, W 7.3, Th 1.5 (wall)
Drawing S. Boersma
Par. 644
Talamo 1992, Tav. XLIV.114-115, Pratola Serra (AV), Protoapennine 1
- 645**
Grotta di Sant'Angelo II
Galleria dei Vasi
SAIGV8
Plate LXI.645
Fragment of a flaring rim with thinned lip
Coarse impasto, smoothed surface
Ext 2.5YR6/6 light red, 7.5YR5/3 brown, Int 2.5YR5/6 red
H 7, Th 1.1, D 21
Drawing. A. Menduni, inked drawing M. Los-Weijns
Par. 645
Piperno, Pellegrino 2000, Tav. F.4, Grotta del Pino, Sassano (SA) Sett. II; Bernabò Brea *et al.* 1989, fig. 50.c., Grotta Cardini, Praia a Mare (CS), Cocchi Genick 1995, Tipo 436, Toppo Daguzzo (PZ), Protoapennine 1
- 646**
Grotta di Sant'Angelo II
Galleria dei Vasi
SAIGV19
Plate LXII.646, Tab. 76
Vertical band handle surmounted by a semi-circular lug and decorated by notched impressions which continue on a cord band surrounding the rim of a neck vessel.
From coarse to roughly depurated impasto, smoothed surface
Ext 2.5YR5/4 reddish brown, Int 10R5/8, Gley1-4N dark grey
H 10.2, W 14, Th (handle) 1.2, Th (wall) 1.4, D 30
Drawing. A. Menduni, S. Boersma, inked drawing S. Boersma
Par. 646
Cazzella, Moscoloni 1995, Tav. XVII.3, Coppa Navigata, Manfredonia (FG), Gruppo B. Also after Recchia 2002, fig.2.9. See also Baumgärtel 1953, Fig. 7.8, Grotta Manaccore, Peschici (FG), Čovic 1983, Tav. XXI,5, Alihodže, Bosnia, Covic 1989, Tav. I.6, Nečajno, Urban 1993, Tav. 1.2, Castelliere degli Elleri, SU13, Ingravallo 1985, fig. 2.3, Grotta n. 2 di Latronico (PZ), Lonza 1981, e.g. Tav. 21.5., Elleri. Protoapennine 1
- 647**
Grotta di Sant'Angelo II
Galleria dei Vasi
SAIGV17
Plate LXII.647
Fragment of a biconical jar with short flaring rim and sticking out decoration on the maximum diameter of the body vessel
Coarse impasto, smoothed surface
Ext 10R5/1, 5/2, reddish grey, weak red 7.5YR4/1, 2 dark grey, brown, Gley1-3N very dark grey, Int 7.5YR4/1 dark grey, Gley1-4N dark grey
H 17, W 14.2, Th 1.4
Drawing. A. Menduni, inked drawing M. Los-Weijns
Par. 647
See, for decoration, 649 - SAIGV3/1+SAIGV3/2
- 648**
Grotta di Sant'Angelo II
Galleria dei Vasi
Fragment of a deep bowl with handle and short flaring rim
Coarse impasto, polished surface (partly covered by limestone incrustations)
Ext 10R3/1 dark reddish grey, Gley1-4,3N dark grey, very dark grey, Int

<p>SAIGV13 Plate LXIII.648, Tab. 76</p>	<p>Gley1-2.5N black H 12.2, W 13, Th 1.1 (wall), Th 1.5 (handle), D 15 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 648 Radina, Recchia 2010, fig. 5.11, Coppa Nevigata, Manfredonia, FG, <i>Struttura tardo protoappenninica adiacente alla fronte esterna delle prime mura di fortificazione dell'abitato</i>, CN97C4DT3II. MBA1</p>
<p>649 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV3/1+SAIGV3/2 Plate LXIII.649, Tab. 76</p>	<p>Fragment (3 fragments) of a biconical jug with handle, notched cord band and sticking out decoration on the maximum diameter of the body vessel Coarse impasto, smoothed surface Ext 7.5YR3/1 very dark grey, 2.5Y4/1, 3/1 dark grey, very dark grey, Gley1-3N very dark grey, Int 7.5YR3/1 very dark grey, 10YR5/1 grey H 7.5, W 13.5+13.6, Th 1.4, D 15 Drawing. A. Menduni, inked drawing S. Boersma Par. 649 Radina, Recchia 2010, fig. 5.39, Coppa Nevigata, Manfredonia, FG, context as 648, CN97/98C4DT3II,D4AQ2f. Examples from Pompei, Sant'Abbondio necropolis, information by P. Talamo MBA1</p>
<p>650 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV5 Plate LXIII.650</p>	<p>Inturned wall fragment with short straight rim of a globular jar Roughly depurated impasto, polished surface Ext 2.5YR4/2 dark reddish grey, Gley1-3N very dark grey, Int Gley1-2.5N black H 11.7, W 15.5, Th 1, D 21 Drawing. A. Menduni, inked drawing M. Los-Weijns Par. 650 Bernabò Brea <i>et al.</i> 1989, Fig. 25.d, Grotta Cardini, Paraia a mare, CS, Str. Inf., example related to the Protapennine B period</p>
<p>651 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV26 Plate LXIII.650</p>	<p>Inturned rim fragment of a globular bowl Coarse impasto, many small-medium size inclusions, roughly polished surface Ext 2.5Y3/1 very dark grey, Int 5YR4/4 reddish brown, core 10YR3/2 very dark greyish brown H 4.6, W 6.2, Th 0.8 Drawing S. Boersma</p>
<p>652 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV28 Plate LXI.652</p>	<p>Fragment of a globular bowl with short straight rim, traces of decoration Coarse impasto, many small-medium size inclusions, badly polished surface Ext Gley2-3/5BP very dark bluish grey, Int 5YR5/2 reddish grey, core 5YR5/3-3/3 reddish brown H 7, W 7.2, Th 0.6, D 12 Drawing S. Boersma</p>
<p>653 Grotta di Sant'Angelo II Galleria dei Vasi SAIGV1 Plate LXI.653</p>	<p>Flaring rim fragment with slightly outward thickened and flattened lip of a large cylindrical neck vessel with notched cord band Coarse impasto, many inclusions, from small to very large size, smoothed external surface, roughly polished internal surface Ext 7.5YR5/1 grey, Gley 1-2.5N, 5YR4/2 dark reddish grey, 7.5R5.1, Int 7.5R4/4, Gley1-4N dark grey H 7.5, W 10.4, Th 1.2 Drawing. A. Menduni, inked drawing M. Los-Weijns</p>
<p>654 Carnevale Francavilla M.ma (CS) CVSP66 Plate IV.654</p>	<p>Fragment of a bowl with a not so marked carena, high upper wall, band handle attachments (the upper break very clearly shows that an external clay layer covers a more internal layer) Polished impasto, several inclusions, small-medium size Ext Gley1-3N very dark grey, 2.5Y4/1 dark grey, Int Gley1-3N very dark grey H 7.5, W 11.1, Th 0.8, D 20 c.a Drawing and inked drawing S. Boersma</p>
<p>655 Carnevale Francavilla M.ma (CS) CVSP54 Plate IV.655</p>	<p>Pseudo-circular and roughly flat fragment (stopper?) Polished impasto, coarse (many inclusions, small-medium size) Ext 2.5Y4/1 dark grey, Int Gley1-4/3N dark grey, very dark grey 5 x 4.5, Th 0.8-1 Drawing and inked drawing S. Boersma</p>

656 Carnevale Francavilla M.ma (CS) CVSP55 Plate IV.656	Bowl fragment with flaring rim Polished impasto, compact temper (a very few small inclusions) Ext 7.5YR6/1, 4, 6/3, 6/2 grey, brown, light brown, pinkish grey, Int Gley1-6/1 greenish grey H 4.7, W 5.3, Th 0.5, D 15 Drawing and inked drawing S. Boersma
657 Carnevale Francavilla M.ma (CS) CVSP56 Plate IV.657	Jar fragment with short neck rim, slightly flaring lip Polished impasto (a very few small inclusions) Ext from Gley 1-2.5-3N black, very dark grey to 7.5YR4/4 reddish brown, Int Gley1-2.5N black H 4.7, W 5.3, Th 0.9, D 22 Drawing and inked drawing S. Boersma
658 Carnevale Francavilla M.ma (CS) CVSP57 Plate IV.658	Jar fragment with short neck rim, flaring rim, flattened lip, groove Polished impasto (many small-medium size inclusions) Ext/Int Gley 1-2.5N black H 3.8, W 4.6, Th 1 Drawing and inked drawing S. Boersma
659 Timpone delle Fave Frascineto (CS) TdF-13F1 Plate XLIII.659, Tab. 72	Fragment of a twisted handle, circular in section Coarse impasto, many inclusions, from small to large size, well smoothed surface, traces of polishing Ext 5YR8/4 pink, 7.5YR5/4 brown, Int 5YR4/4 reddish brown H 9.7, W 4.7, Th 3.1 Drawing/inked drawing S. Boersma Par. 659 Tenaglia 1994, Tav. 69.9, Sett. D Nord, sporadici, da m. 16 a Sud di D Est, Forma 4, Broglio di Trebisacce (CS), FBA
660 Timpone delle Fave Frascineto (CS) TdF-13F2 Plate XLIII.660, Tab. 72	Fragment of an horizontal handle of a large storage vessel, roughly squared in section Coarse impasto, many inclusions, from small to large size, well smoothed surface Ext 5YR6/6 reddish yellow, 2.5Y5/3, Int Gley1-3N very dark grey H 3.5, W 6.2, Th 2.4 , 2.7 Drawing/inked drawing S. Boersma Par. 660 Tenaglia 1994, Tav. 59.11, Sett. B Ovest, liv. 1B, ansa 12, Broglio di Trebisacce (CS), FBA1
661 Timpone delle Fave Frascineto (CS) TdF-13F5 Plate XLIII.661, Tab. 73	Outward rim fragment of a pithos, straight and slightly moulded lip Depurated and compact impasto, very porous, few inclusions, from small to large size, smoothed surface Ext 7.5YR7/4 pink, 5YR5/6 yellowish red, Int 5YR5/4 reddish brown H 3.7, W 9.3, Th 3.1-1.9, D 40 Drawing/inked drawing S. Boersma Par. 661 Capriglione <i>et al.</i> 2012, Fig. 4.4, Tipo 1, Tropea (VV), FBA; Tenaglia 1994, Tav. 58.5, Sett. B Ovest, Liv. 1B, Broglio di Trebisacce (CS) FBA1
662 Timpone delle Fave Frascineto (CS) TdF-13F14 Plate XLIII.662	Wall fragment with pseudo-cutaneous handle Coarse impasto, smoothed surface, many inclusions from small to large size H 5.5, W 4.8, Th wall 1.3, Th wall+handle 2 Ext 2.5YR5/8 red, Int 5Y3/1 very dark grey Drawing/inked drawing S. Boersma
663 Timpone delle Fave Frascineto (CS) TdF-13F6 Plate XLIII.663, Tab. 73	Fragment of a pithos, shoulder fragment delimited by two cord bands Roughly depurated impasto, many inclusions from small to large size, smoothed surface Ext 10YR6/1-2-3 grey-light brownish grey, pale brown, Int 10YR4/3 brown H 8.6, W 10.5, Th (wall) 2.2, D 30 Drawing/inked drawing S. Boersma Par. 663 Peroni 1984, Tav. 41.4, Sett. D, strato 1 B a contatto con il battuto, see also Tenaglia 1994, Tav. 62.1, sett. B Ovest, liv. H, less angular. Late FBA.

664 Timpone delle Fave Frascineto (CS) TdF-13F7 Plate XLIII.664	Fragment of a vertical handle, pseudo-circular in section Smoothed impasto, many small and few medium-large inclusions Ext Gley1-4N dark grey, 2.5Y5/1 grey, Int Gley1-3N very dark grey H 5.1, W 2.2, D 1.3 x 1.5 Drawing/inked drawing S. Boersma
665 Timpone delle Fave Frascineto (CS) TdF-13F9 Plate XLIII.665, Tab. 73	Wall fragment of a corded pithos with parallel thin cord bands Roughly depurated and dense impasto, many inclusions, from small to large size, smoothed Ext 7.5YR5/2 brown, Int 7.5YR5/1 grey H 5.5, W 9.6, Th 1.7-1.8 Drawing/inked drawing S. Boersma Par. 665 See Tenaglia 1994, Tav. 58.8, Sett. B Ovest, liv. 3A*, riq. W, dec. 18, Broglio di Trebisacce (CS), FBA
666 Timpone delle Fave Frascineto (CS) TdF-13F8 Plate XLIII.666, Tab. 73	Wall fragment of a corded pithos with two parallel thin cord bands Roughly depurated and compact impasto, many inclusions, from small to large size, smoothed H 8.4, W 9.4, Th 1.8-2 Ext 10YR4/2 dark greyish brown, 5/4, Int 10YR5/2, 4/2 greyish brown, dark greyish brown Drawing/inked drawing S. Boersma Par. 666 Tenaglia 1994, Tav. 61.5, Sett. B Ovest, sporadici, liv. H, dec. 18, riq. P, Broglio di Trebisacce (CS), FBA
667a+b Timpone delle Fave Frascineto (CS) TdF-13F10+11 Plate XLIII.667, Tab. 73	Fragment of an emispherical bowl with bevelled on the inside lip and cord band Smoothed impasto, several inclusions, several sizes Ext 5YR5/6 yellowish red, Int 5YR6/6 reddish yellow a: H 7.5, W 6.3, Th wall 1.1, D 24, b: H 7.2, W 9 Drawing/inked drawing S. Boersma (drawing of TdF-13F10, TdF-13F11 not drawn) Par. 667 Peroni, Trucco 1994, Tav. 148.16, Torre Mordillo, surface, shape 43B, Late FBA.
668 SAIIL-1 Plate LXI.668	Side scraper Blackish translucent flint Gley1-2.5N black H 1, W 1.2, Th 0.2 Drawing S. Boersma
669 SAIIL-2 Plate LXI.669	End scraper on blade Blonde flint, compact texture with few white inclusions 7.5YR5/6-8 yellowish red-strong brown H 2.5, W 1.2, Th 0.4 Drawing S. Boersma
670 SAIIL-3 Plate LXI.670	End scraper on blade Blackish translucent flint blade Gley1-2.5N black H 2.1, W 1, Th 0.25 Drawing S. Boersma
671 Terra Masseta Cerchiara di Calabria (CS) TerraMasseta 1 Plate XXXII.668	Retouched flake Flint c. n.a. 1.8 x 2, section n.a. Drawing/inked drawing S. Boersma

References

AA.VV. 2012, *Quadro storico-ambientale della provincia di Cosenza in età feudale (XVI – XIX secolo)*, web.provincia.cs.it/ptcp/struttura_ambiente/sist_ris_stor_cult/relazione1.pdf (8 ottobre 2012).

Albore Livadie C. 1986, *Considérations sur l'homme préhistorique et son environnement dans le territoire phlégréen*, in AA.VV., *Tremblements de terre, éruptions volcaniques et vie des hommes dans la Campanie antique*, Napoli, pp. 189-205.

Albore Livadie C. (ed.) 1990, *Archeologia a Piano di Sorrento. Ricerche di preistoria e di protostoria nella penisola sorrentina*, Napoli.

Albore Livadie C. Bailo Modesti G., Salerno A., Talamo P. 1996, *Articolazioni culturali e cronologiche. Campania*, in Cocchi Genick (ed.), *Atti Congresso L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 119-134.

Albore Livadie C. 1999, *Territorio e insediamenti nell'agro nolano durante il Bronzo Antico: nota preliminare*, in Albore Livadie C. (ed.), *L'eruzione vesuviana delle "Pomici di Avellino" e la facies di Palma Campania (Bronzo Antico)*, Atti Sem. Int. Ravello, 1994, Bari, pp. 203-245.

Albore Livadie C., Carboni G., Esposito E. 1999, *Un insediamento pluristratificato ad Avella in Località Fusaro*, in Albore Livadie C. (ed.), *L'eruzione vesuviana delle "Pomici di Avellino" e la facies di Palma Campania (Bronzo Antico)*, Atti Sem. Int. Ravello, 1994, Bari, pp. 259-271.

Alessandri L., Cassetta I., Gatti D. 2004, *Il Bronzo Finale nella Calabria settentrionale*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 393-402.

Alvisi G. 1969, *La ricerca aerofotografica: contributo alla impostazione della problematica di Sibari e del suo territorio*, in Candido M. (ed.), *Atti del Congresso Internazionale Esperienze di lavoro nella piana di Sibari*, Corigliano Calabro, 28-30 settembre 1968, Venezia, pp. 9-25.

Andaloro E., Belfiore C.M., De Francesco A.M., Jacobsen J.K., Mittica G.P. 2011, *A preliminary archaeometric study of pottery remains from the archaeological site of Timpone della Motta, in the Sibaritide area (Calabria – southern Italy)*, *Applied Clay Science* 53 (2011), journal homepage www.elsevier.com/locate/clay, pp. 445-453.

Andaloro E., De Francesco A.M., 2013, *Le paste: osservazione macroscopica e analisi archeometriche*, in Colelli, Jacobsen Kindberg, pp. 291-319.

Angiò E. 1979, *Grotta di Pietra S. Angelo IV*, *Bollettino G.S. Sparviere*, Alessandria del Carretto, p. 12.

Arancio M.L., Buffa V., Damiani I., Trucco F., Vagnetti L. 1995, *L'abitato di Torre Mordillo nel quadro dello sviluppo dell'insediamento protostorico nell'Alto Jonio (Sibaritide)*, in Christie N. (ed.), *Settlement and economy in Italy, 1500 BC - AD 1500, Papers of the Fifth Conference of Italian Archaeology*, Oxford, pp. 227-238.

Ardesia V. 2011, *Il villaggio di Boccadifalco (PA): studio del materiale vascolare inedito ed inquadramento culturale nel quadro del bronzo antico siciliano*, *Ipotesi di Preistoria*, Vol. 4, 2011.2, pp. 25-45. ISSN on line: 1974-7985.

Ardesia V., Cattani M. 2012, *Tipologia ceramica e caratteristiche culturali della facies RTV*, in Atti della XLI Riunione Scientifica IIPP, Firenze, pp. 775-789.

Attema P.A.J. 1996, *Inside and outside the landscape. Perceptions of the Pontine Region in Central Italy*, *Archaeological Dialogues*, Vol. 3, no. 2, pp. 176-195.

Attema P.A.J. 2001, *Early urban and colonized regions of central and south Italy: a case study in comparative landscape archaeology*, in Darvill T., Gojda M. (eds.), *One Land, Many Landscapes*, Oxford, pp. 147-156.

- Attema P.A.J. 2002, *Two challenges for Landscape Archaeology*, in Attema P.A.J., Burgers G.-J., Joolen van E., Leusen van M., Mater B. (eds.), *New developments in Italian Landscape Archaeology*, BAR 1091, Oxford, pp. 18-27.
- Attema P.A.J. 2006, *Sulla contestualizzazione dei "luoghi naturali" nell'archeologia del paesaggio italiana*, in Studi in onore di Renato Peroni, Firenze, pp. 522-527.
- Attema P.A.J. 2012, *Investigating Indigenous and Greek Space in the Sibaritide (S. Italy)*, in Bergermann J. (ed.), *Griechen in Übersee und der historische Raum*, Internationales Kolloquium Universität Göttingen, Archäologisches Institut, 13-16 Oktober 2010, Rahden/Westf., pp. 189-205.
- Attema P.A.J., Burgers G. J., van Leusen P. M. 2010, *Regional Pathways to complexity. Settlement and land-use dynamics in early Italy from the bronze age to the republican period*, Amsterdam.
- Attema P.A.J., Delvigne J., Drost E., Kleibrink M. 2000, *Habitation on Plateau I of the hill Timpone della Motta (Francavilla Marittima, Italy): a preliminary report based on surveys, test pits and test trenches* in *Palaeohistoria* 39/40 (1977/1998), Rotterdam, pp. 375-411.
- Attema P.A.J., Ippolito F. forthcoming, *Il Progetto Archeologico Raganello (RAP) – Sviluppo insediativo di lunga durata nell'hinterland della Sibaritide protostorica*, Atti del Convegno "Centri fortificati indigeni della Calabria dalla protostoria all'età ellenistica," Collana Archeologie. Temi e metodi, Università degli Studi di Napoli Federico II, Centro Interdipartimentale di Studi per la Magna Grecia, Napoli.
- Bailo Modesti G., Salerno A., Talamo P. 1999 I, *L'Eneolitico in Campania: criteri per una definizione tipologica e terminologica del repertorio vascolare*, in Cocchi Genick D. a (ed.), pp. 207-215.
- Bailo Modesti G., Ferranti F., Gatti D., Guglielmino R., Incerti S., Levi S.T., Lo Zupone M., Mancusi M., Orlando M.A., Tunzi Sisto A.M., Vanzetti A. 1999 II, *Strutture morfologiche e funzionali delle classi vascolari del Bronzo Finale e della prima età del Ferro in Italia Meridionale*, in Cocchi Genick D. a (ed.), pp. 441-467.
- Baioni M., L. Seragnoli 1996, *Il territorio tra Roverbella e Castel d'Ario*, in Cocchi Genick (ed.), *Atti Congresso L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 415-422.
- Barfield L.H. 1996, *The Chalcolithic in Italy: considerations of metal typology and cultural interaction* in B. Bagolini, F. Lo Schiavo (ed.), *The Copper Age in the Near East and Europe*, XIX Colloquium of the XIII UISPP Congress Abaco, Forlì (1996), pp. 65-74.
- Bartoli C., A. Di Renzoni 2004, *Aspetti culturali del bronzo medio nella Calabria ionica settentrionale*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 349-359.
- Baumgärtel E. 1953, *The cave of Manaccora, Monte Gargano. Part II: the Contents of the Three Archaeological Strata*, in *PBSR XXI*, pp. 1-31.
- Belardelli C. 1994, *La ceramica grigia*, in Peroni, Trucco (eds.), pp. 265-346.
- Belardelli C. 2004, *Coppa Nevigata: materiali da scavi e rinvenimenti 1903-1909*, Grandi contesti e problemi della protostoria italiana, 8, Firenze.
- Belardelli C., Capoferri B. 2004, *L'età del Bronzo ad Amendolara*, Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 813-817.
- Belardelli C., Castagna M.A., Damiani I., De Guoi A., Di Renzoni A., Levi S.T., Peroni R., Schiappelli A., Vanzetti a. 2005, *L'impatto miceneo sulle coste dello Jonio e dell'Adriatico e l'"alta congiuntura" del Bronzo Recente Italiano*, in Laffineur R., Greco E. (eds.), *Emporia. Aegeans in the Central Mediterranean*, Proceedings of the 10th International Aegean Conference, Athens, 14-18 April 2004, pp. 507-513.
- Bellotti P., Caputo C., Dell'Aglio P.L., Davoli L., Ferrari K. 2009, *Insediamenti umani in un paesaggio in evoluzione: interazione uomo-ambiente nella Piana di Sibari (Calabria Ionica)*, *Il Quaternario, Italian Journal of Quaternary Sciences*, 22 (1), pp. 61-72.

- Bergonzi G., Cardarelli A., Guzzo P. G., Peroni R., Vagnetti L. 1982, *Ricerche sulla Protostoria della Sibaritide 1-2, Cahiers du Centre J. Bérard VII-VIII*, Napoli.
- Bernabò Brea L., Cavalier M. 2000, *La grotta del santuario della Madonna (Praia a Mare – Cosenza). Livelli Olocenici*, Memorie dell'Istituto Italiano di Paleontologia Umana, Vol. VI, Roma.
- Bernabò Brea L., Cavalier M., 1960, I, Meligunìs Lipára, Vol. I, *La stazione preistorica della contrada Diana e la necropoli preistorica di Lipari*, Palermo.
- Bernabò Brea L., Cavalier M., 1968, III, Meligunìs Lipára, Vol. III, *Stazioni preistoriche delle isole Panarea, Salina e Stromboli*, Palermo.
- Bernabò Brea L., Cavalier M., 1980, Meligunìs Lipára, Vol. IV, *L'Acropoli di Lipari nella preistoria*, Palermo.
- Bernabò Brea L., Biddittu I., Cassoli P.F., Cavalier M., Scali S., Tagliacozzo A., Vagnetti L. 1989, *La Grotta Cardini (Praia a Mare – Cosenza); giacimento del Bronzo*, Memorie dell'Istituto Italiano di paleontologia Umana, n.s. 4, Roma.
- Bernabò Brea M., Cardarelli A., Cremaschi m. (eds.) 1997, *Le Terramare. La più antica civiltà padana*, Milano.
- Bernasconi M.P., Stanley J.-D., Caruso C. 2010, *Sybaris–Thuri–Copia Deltaic Settings in Calabria, Italy: Molluscs, Associated Biogenic Components, and Ecobiostratigraphy Applied to Archaeology*, Journal of Coastal Research, Volume 26, Issue 2, Washington, pp. 377-390.
- Bettelli M. 2008, *Le ceramiche figuline dell'età del bronzo: importazioni, imitazioni e derivazioni locali*, in Bettelli M., De Faveri C., Osanna M., *Prima delle colonie*, Atti delle Giornate di Studio, Matera, 20-21 Novembre 2007, Venosa, pp. 17-35.
- Bettelli 2009, *Handmade Burnished Ware e ceramica grigia tornita in Egeo nella tarda età del bronzo*, SMEA 51 (2009), pp. 95-121.
- Bettelli M. 2011, *Interaction and acculturation: The Aegean and Central Mediterranean in the Late Bronze Age*, in Matthäus H., Oettinger N., Schröder S., *Der Orient und die Anfänge Europas*, Wiesbaden, pp. 109-126.
- Bettelli M., De Angelis D. 1998, *Produzioni specializzate a differente livello tecnologico: le tazze e le ciotole carenate d'impasto e di ceramica grigia dell'età del bronzo recente*, in Peroni, Vanzetti (eds.), pp. 133-156.
- Bettelli, M., Jones, R.E., Levi, S.T., Vagnetti, L. 2010, *Ceramiche egee e di tipo egeo lungo il versante adriatico pugliese: centri di produzione, livelli di circolazione, contesti d'uso*, in Radina, Recchia, (eds.), pp. 109-118.
- Bettelli M., Cardarelli A., Di Gennaro F., Levi S.T., Marino D., Pacciarelli M., Peroni R., Vagnetti L., Vanzetti A. 2004, *L'età del bronzo media e tarda in Calabria*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 330-332.
- Bianco Peroni V., Peroni R., Vanzetti A. 2010, *La necropoli del bronzo finale di Pianello di Genga*, Firenze.
- Bietti Sestieri A.M. 2008, *L'età del Bronzo Finale nella penisola italiana*, Bollettino Centro Polesano di Studi Storici Archeologici ed Etnografici Rovigo Padusa, Anno XLIV NS 2008, Pisa-Roma, pp. 7-54.
- Bietti Sestieri A.M. 2010, *L'Italia nell'età del Bronzo e del Ferro. Dalle palafitte a Romolo (2200-700)*, Roma.
- Bintliff J. 2002, *Settlement Pattern Analysis and Demographic Modeling*, in Attema P.A.J., Burgers G.-J., Van Joolen E., Van Leusen M., Mater B. (eds.), *New Developments in Italian Landscape Archaeology: Theory and Methodology of Field Survey, Land Evaluation and Landscape Perception, Pottery Production and Distribution* (Proceedings of a three-day conference held at the University of Groningen, April 13–15, 2000) (British Archaeological Reports International series 1091), Oxford, pp. 28-35.
- Bintliff J., Kuna M., Venklová N. (eds.) 2000, *The future of surface artefact survey in Europe*, Sheffield Archaeological Monographs, Sheffield.

- Blake E. 2014, *Social networks and regional identity in Bronze Age Italy*, Cambridge.
- Block A. 1969, *South Italian Agro-Towns*, in *Comparative Studies in Society and History*, Vol. 11, No. 2, Cambridge, pp. 121-135.
- Bonifay M. 2004, *Études sur la céramique romaine tardive d'Afrique*, BAR International Series 1301, Oxford.
- Borgna E. 2009, *Patterns of Bronze Circulation and Deposition in the Northern Adriatic at the close of the Late Bronze Age*, in Borgna E., Càssola Guida P. (eds), *From the Aegean to the Adriatic: social organizations, Modes of exchange and interaction in Postpalatial times (12th-11th B.C.)*, Roma, pp. 289-309.
- Borgna E. 2013, *Di periferia in periferia. Italia, Egeo e Mediterraneo Orientale ai tempi della koinè metallurgica*, RSP LXIII 2013, Firenze, pp. 125-153.
- Bradley R. 2000, *An archaeology of natural places*, Routledge, London.
- Bremmer J.N. 2005, *Greek Religion. Further considerations*, in *Encyclopedia of Religion*, vol. 6, 2005, NY, Macmillan, p. 3677.
- Buffa V. 1994, *Materiali del bronzo finale e della prima età del ferro*, in Peroni, Trucco (eds.), pp. 455-569.
- Burgers G. J., Recchia G. (eds.) 2009, *Ricognizioni archeologiche sull'altopiano delle Murge. La carta archeologica del territorio di Cisternino*, Foggia.
- Calcagnile L., Tinè V., Quarta G., D'Elia M., Fiorentino G., Scarciglia F., Robustelli G., Abate M., La Russa M.F., Pezzino A. 2010, *Chronostratigraphic sequence of Santuario della Madonna Cave (Calabria, Southern Italy): AMS radiocarbon data from a new excavation area*, in *Radiocarbon*, Vol. 52, Nr 2-3, 408-414.
- Cambi F. 2011, *Manuale di archeologia dei paesaggi*, Roma.
- Calzoni U. 1962, *Le stazioni preistoriche della montagna di Cetona: Belvedere. La ceramica. 2. Quaderni di studi etruschi*, Firenze.
- Capriglione C., de Bonis A., De Tommaso G., Guarino V., Iuliano M., Marino D., Morra V., Pacciarelli M. 2012, *Grandi dolii protostorici d'impasto dalla Calabria centromeridionale. Contributo allo studio cronotipologico, tecnologico e funzionale*, RVS, LXII, Firenze, pp. 331-362.
- Carancini G.L. 1979, *I ripostigli dell'età del bronzo finale*, in *Atti XXI Riun. Sc. IIPP*, Firenze, pp. 631-641.
- Carancini G., Guerzoni R.P. 1987, *Gli scavi nella grotta Pavolella presso Cassano allo Jonio (CS)*, *Atti XXVI Riunione Scientifica IIPP "Il Neolitico in Italia"* (Firenze, 7-10 novembre 1985), vol. II, pp. 783-792.
- Carboni G., Ragni E. 1986, *Ricerche di preistoria e protostoria nel comprensorio del Partenio (1982-85)*, in *I Convegno dei Gruppi Archeologici dell'Italia Meridionale*, Prata Sannita, 25-27 aprile 1986, pp. 67-88.
- Cardini L. 1970, *Praia a Mare, relazione degli scavi 1957-1970 dell'Istituto Italiano di Paleontologia Umana*, BPI, 79, n.s. XXI, pp. 31-59.
- Cassano S.M., Manfredini A. 2004, *Masseria Candelaro, Vita quotidiana e mondo ideologico in una comunità neolitica del Tavoliere*, Foggia.
- Castagna M.A., Schiappelli A. 2004, *La sequenza stratigrafica di Acri – Colle Dogna (CS) tra Eneolitico e Bronzo antico*, in *Atti della XXXVII Riunione Scientifica IIPP*, Firenze, pp. 295-307.
- Castellana G., Mallegni F., Tinè V. 1997, *La Grotta Ticchiara ed il castellucciano agrigentino*, Palermo.
- Catasto delle Grotte della Calabria 2010, Centro Regionale di Speleologia "Enzo dei Medici", Roseto Capo Spulico (CS), http://enzodeimedici.herobo.com/grotte_calabria/grotte_calabria.php.

- Cazzella A. 1987, *I materiali dell'età del bronzo di Coppa Nevigata*, in Cassano S.M., Manfredini A., Moscoloni M., (eds.), *Coppa Nevigata e il suo territorio*, Roma, pp. 146-188.
- Cazzella A. 2010, *Introduzione*, in Radina, Recchia (eds.), pp. 29-31.
- Cazzella A., Damiani I., di Gennaro F., Marazzi M., Pacciarelli M., Petitti P., Saltini A., Tusa S. 1975-80, *Vivara. Terza Campagna di ricerche sull'isola*, B.P.I., 82, pp. 167-216.
- Cazzella A., Moscoloni M. 1995, *Coppa Nevigata nel contesto adriatico dell'età del Bronzo*, in Taras XV, (2), pp. 129-142.
- Cazzella A., Recchia G. 2006, *Altri modelli di società*, in *Studi di Protostoria in onore di Renato Peroni*, Firenze, pp. 754-763.
- Cazzella A., Recchia G. 2010, *The "Mycenaeans" in the Central Mediterranean: a comparison between the Adriatic and the Tyrrhenian seaways*, *Pasiphae*, III (2009), Pisa – Roma, pp. 27-40.
- Cicirelli C, Livadie C.A. 2012 (eds.), *L'Abitato protostorico di Poggiomarino: Località Longola, Campagne di scavo 2000-2004* (Studi Della Soprintendenza Archeologica Di Pompei), Roma.
- Cinquegrana M.R. 2013, *Lo scarico di olle del Puntone Nuovo di Scarlino e la produzione del sale nell'età del Ferro*, Tesi di Laurea Magistrale, Università Federico II di Napoli, a.a. 2011-2012.
- Cinquepalmi A., Radina F. (eds.) 1998, *Documenti dell'Età del Bronzo, Ricerche lungo il versante adriatico pugliese*, Fasano di Brindisi.
- Cocchi Genick D. 1995 (ed.), *Aspetti culturali della media età del bronzo nell'Italia centromeridionale*, Firenze.
- Cocchi Genick D. 1996, *Articolazioni culturali e cronologiche. L'Italia centrale*, in Cocchi Genick (ed.), *Atti Congresso L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 79-111.
- Cocchi Genick 1998, *L'antica età del bronzo nell'Italia centrale. Profilo di un'epoca e di un'appropriata strategia metodologica*, Firenze.
- Cocchi Genick D. 1999a, *Criteri di nomenclatura e di terminologia inerente alla definizione delle forme vascolari del neolitico-eneolitico e del bronzo-ferro*, vol. I-II, Firenze.
- Cocchi Genick D. 1999b, *La funzione delle grotte e il significato delle acque nelle manifestazioni di culto di epoca protostorica dell'Italia medio-tirrenica*, in Cocchi Genick (ed.), *Atti dell'Incontro di Studi "Acque, Grotte e Dei. Culti in grotta e delle acque dall'Eneolitico all'età ellenistica"*, OCNUS, 7, 1999, pp. 167-177.
- Cocchi Genick D. 2002, *Classificazione tipologica e processi storici. Le ceramiche della facies di Grotta Nuova*, Viareggio.
- Cocchi Genick D. 2004a, *L'età del Bronzo Recente in Italia*, *Atti del Congresso Nazionale di Lido di Camaiore*, 26-29 ottobre 2000, Viareggio.
- Cocchi Genick D. 2004b, *Le evidenze del Campaniforme in Calabria nell'ambito dei processi della comunicazione culturale dal tardo eneolitico al bronzo antico nell'Italia meridionale*, in *Atti della XXXVII Riunione Scientifica IIPP*, Firenze, pp. 309-320.
- Cocchi Genick D. 2007, *Considerazioni sulle presenze Laterza nei siti tirrenici*, in *Atti della XL Riunione Scientifica IIPP*, Firenze, pp. 437-459.
- Colelli C. 2012, *Ceramica d'impasto da Francavilla Marittima. Ceramica grigia e altre produzioni ceramiche*. PhD thesis, University of Groningen, Groningen.
- Colelli C. 2013, *Appendice*, in Colelli, Jacobsen Kindberg, pp. 333-341.

- Colelli C. 2015a, *Topografia e viabilità dell'insediamento del Timpone della Motta*, in Brocato P. (ed.), *Note di archeologia calabrese*, Cosenza, pp. 59-70.
- Colelli C. 2015b, *Riflessioni sulla Calabria settentrionale nell'età del Ferro*, in Brocato P. (ed.), *Note di archeologia calabrese*, Cosenza, pp. 83-105.
- Colelli C., Jacobsen Kindberg J. 2013, *Excavation on the Timpone della Motta. Francavilla Marittima (1991-2004). II. Iron Age Impasto Pottery*, Bari.
- Costa E., Dominici R., Lugli S. 2010, *Tectonic Evolution of the Salt-Bearing Crotone Basin (Southern Italy)*, Search and Discovery Article #30115 (2010), AAPG International Conference and Exhibition, Rio de Janeiro, November 15-18, 2009.
- Coubray S. 2001, *Étude anthracologique et carpologique*, in Trucco, Vagnetti (eds.), pp. 419-431.
- Čović B. 1983, *Regionalne Grupe Ranog Bronzanog doba*, in Drechsler-Bizic R. (ed.), *Praistorija Jugoslavenskih Zemalja*, IV. Bronzano Doba, pp. 114-190.
- Čović B. 1989, *Posuska Kultura*, in *Glasnik Zemaljskog Muzeja Bosne i Hercegovine*, Arheologija, 44, Sarajevo, pp. 61-127.
- Cremonesi R.G. 1999, *Alcune osservazioni sui culti delle acque e sulla frequentazione delle grotte dal Neolitico all'Età del Rame*, in Cocchi Genick (ed.), *Atti dell'Incontro di Studi "Acque, Grotte e Dei. Culti in grotta e delle acque dall'Eneolitico all'età ellenistica"*, OCNUS, 7, 1999, pp. 159-165.
- Cremonesi, G., Vigliardi A. 1989, *L'Età del Rame nell'Italia peninsulare: problemi generali*. *Rassegna di Archeologia*, 7, Firenze, pp. 307-314.
- Crudo M. 2012, *Analisi dei contesti della prima età del Ferro dal giacimento archeologico dell'Area Rovitti di Timpone della Motta (Cs)*. Tesi di Laurea Magistrale, Università La Sapienza di Roma, a.a. 2012.
- Damiani I. 2010, *L'età del bronzo Recente nell'Italia centro-meridionale*, Firenze.
- D'Angelo S., Oràzie Vallino F. C. 1994, *La Sibaritide. Lineamenti geografico-ambientali ed insediamento umano*, in Peroni R., Trucco F. (eds.) 1994, pp. 785-829.
- Danile L. 2008, *La cultura materiale tra la fine dell'Età del Bronzo e gli inizi dell'Età del Ferro*, in Greco E., Papi E. (eds.), *Hephaestia 2000-2006. Ricerche e scavi della Scuola Archeologica Italiana di Atene in collaborazione con il Dipartimento di Archeologia e Storia delle Arti dell'Università di Siena* (Atti del seminario, Siena – Certosa di Pontignano, 28-29 maggio 2007), (Tekmeria 6), Paestum-Atene, pp. 39-53.
- Danile I. 2011, *La ceramica grigia di Efestia dagli inizi dell'Età del Ferro all'Età Alto-Arcaica*, Roma.
- De Haas T. 2001, *Over scherven, samples en sites. Beoordeling en analyse van vondstpatronen van diverse surveys in the Sibaritide*. Internal report, RUG, Groningen.
- De Franciscis A. 1956, *Scoperte Preistoriche in Calabria*, BPI, 65, n.s. X, Roma, pp. 213-215.
- De Juliis E. 1979, *Il Bronzo finale nella Puglia settentrionale*, in *Il Bronzo Finale in Italia*, Atti della XXI Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria (Firenze, 21-23 ottobre 1977), Firenze 1979, pp. 515-529.
- Della Casa P. 1995, *The Cetina group and the transition from Copper to Bronze Age in Dalmatia*, *Antiquity* 69, Cambridge, pp. 565-576.
- Delplace C. 1969, *Chronique des fouilles en Calabre de 1956 à 1967*, in *L'antiquité classique*, Tome 38, fasc. 2, 1969, pp. 522-540.
- De Natale S. 1992, *Pontecagnano. II. La necropoli di S. Antonio: Propr. ECI 2. Tombe della Prima Età del Ferro*, Napoli.

- De Neef W. forthcoming, *Rural life in Protohistoric Italy: Relating subsurface remains to archaeological survey data*, Phd Thesis, University of Groningen, Groningen.
- De Neef W., van Leusen M., Armstrong K, Noorda N., Wubs J. 2014, *Terra Masseta. Verlaten land*. Paleo-Aktueel 25, Groningen, pp. 19-27.
- De Santis T. 1960, *Sibaritide a ritroso nel tempo*, Cosenza.
- Dickinson O., 1986 *Early Mycenaean Greece and the Mediterranean*, in Marazzi M., Tusa S., Vagnetti L. (eds.), *Traffici micenei nel Mediterraneo*, Taranto, pp. 271-276.
- di Gennaro F. 1982, *Organizzazione del Territorio nell'Etruria Meridionale protostorica: applicazione di un modello grafico*, in Dialoghi di Archeologia, n.s. 4,2, Roma 1982, pp. 102-112.
- di Gennaro F. 1986, *Forme di insediamento tra Tevere e Fiora dal Bronzo Finale al principio dell'età del Ferro*, Firenze.
- Di Vasto F. 1995, *Storia e archeologia di Castrovillari. Profilo del Centro in relazione alle vicende della Sibaritide*, Castrovillari, pp. 37-43.
- Dolfini A. 2002, *Le abitazioni a pianta ellittica del settore III*, Sorgenti della Nova, I materiali del Bronzo Finale, Milano.
- Doneus, M., Briese C. 2006, *Digital terrain modelling for archaeological interpretation within forested areas using full-waveform laser scanning*, Proc. 7th International Symposium on Virtual Reality, Archaeology and Cultural Heritage, Vast.
- Elevelt S.C. 2002, *De Dolia van Francavilla Marittima, Zuid-Italië*, Paleo-Aktueel 13, Groninger Instituut voor Archeologie, Rijksuniversiteit Groningen, Groningen 2002, pp. 74-77.
- Esposito E. 1990, *La ceramica*, in Albore Livadie (ed.), pp. 53-79.
- Esposito E., Mollo G. 1999, *Insedimenti collinari della facies di Palma Campania nel territorio di Lauro*, in Albore Livadie C. (ed.), *L'eruzione vesuviana delle "Pomici di Avellino" e la facies di Palma Campania (Bronzo Antico)*, Atti Sem. Int. Ravello, 1994, Bari, pp. 247-258.
- Fairclough G. 2008, *History, time and change: managing landscape and perception*, in Berlan-Darqué M., Luginbühl Y., Terrasson D. (eds.), *Landscape: from knowledge to action*, Versailles Cedex, pp. 147-159.
- Farinetti E. 2012, *I paesaggi in archeologia: analisi e interpretazione*, Roma.
- Fasanella Masci M. forthcoming, *La produzione della ceramica geometrica enotria nella Sibaritide. Studio comparativo sulle tecnologie di foggatura*. Phd Thesis, University of Groningen, Groningen.
- Feiken H. 2014, *Dealing with biases. Three geo-archaeological approaches to the hidden landscapes of Italy*, PhD Thesis, University of Groningen, Groningen.
- Feiken H., Van Beek R., Van Asch T., Van Leusen M. 2011, *CALEROS: an erosion-deposition model for landscape archaeology*, in Van Leusen M., Pizziolo G., Sarti L. (eds.), *Hidden Landscapes of Mediterranean Europe*, Proceedings of the international meeting, Siena, Italy, May 25-27, 2007, Oxford, pp. 13-16.
- Filippi G. 1979, *Discussione*, in Atti XXI Riun. Sc. IIPP, Firenze, p. 248.
- Filippi G., Pacciarelli M. 1991, *Materiali protostorici dalla Sabina Tiberina. L'età del bronzo e la prima età del ferro tra il Farfa e il Nera*, Magliano Sabina.
- Forni G. 2001-2002, *Come l'agricoltura all'aratro s'inserì nel nostro Paese: l'età dei metalli*, in Forni G., Marcone A. (eds.), *Storia dell'Agricoltura Italiana*, I, Età Antica, 1. Presistoria, Accademia dei Georgofili, Firenze, pp. 102-110.

- Fournel J.-L., Zancarini J.-C. 1996, *Le guerre d'Italia 1494-1559*, Firenze.
- Foxhall L. Lazrus P., Michelaki K., Robb J., van Hove D., Yoon D. 2007, *The changing landscapes of Bova Marina, Calabria*, in Fitzjohn M. (ed.), *Understanding the Uplands: interdisciplinary investigations of Sicily and southern Italy*, Accordia Research Centre, University of London, pp. 19-34.
- Fugazzola Delpino M.A. 1976, *Testimonianze di cultura appenninica nel Lazio*, Firenze.
- Garaffa V., Vullo M. 2009, *Il vasellame in impasto*, in Osanna M., Colangelo L., Carollo G. (eds.), *Lo spazio del potere. La residenza ad abside, l'anakoron, l'episcopio a Torre di Satriano*, Atti del secondo convegno di studi su Torre di Satriano (Tito, 27-28 settembre 2008), Venosa (PZ), pp. 33-40.
- Gasparo F. 1979, *Nota preliminare sulle ricerche della Commissione Grotte "E. Boegan" nel comune di Cassano allo Jonio (Cosenza)*, in Atti e Memorie della Commissione Grotte "Eugenio Boegan", Vol. XVIII, 1978, Trieste, pp. 121-124.
- Giardino C. 1994, *Materiali dell'età del Bronzo Recente*, in Peroni, Trucco (eds.), pp. 185-264.
- Gimbutas M. 1965, *Bronze Age Cultures in Central and Eastern Europe*, The Hague.
- Gilli E., Montagnari Kokelj E. 1996, *La Grotta degli Zingari nel Carso Triestino (materiali degli scavi 1961-1965)*, AttiSocFriuli IX, pp. 63-126.
- Girella L. 2009, *Patterns of exchange and mobility: The case of the Grey Ware in Middle and Late Minoan Crete*, SMEA 51 (2009), pp. 279-314.
- Gnesotto F. 2006, *Lo stadio "protourbano": aspetti mediotirrenici, confronti e considerazioni*, in *Studi di Protostoria in onore di Renato Peroni*, Firenze, pp. 743-753.
- Grandinetti G., Lo Torto A., Pacciarelli M., Rombolà C., Rombolà F., Staropoli F., Varricchio M.R. 2004, *Gli insediamenti di Gallo e Colarizzi (Promontorio di Tropea): primi dati su un nuovo aspetto ceramico dell'età del Rame*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 275-294.
- Guerzoni R.P. 2004, *La facies di Piano Conte nella Grotta Pavolella: la sequenza cronologica sulla base della ceramica vascolare*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, 235-249.
- Guerzoni R.P., Amodio F. 2011, *Nuove testimonianze insediative del Neolitico finale e delle prime età dei metalli nella Sibaritide meridionale*, in Atti della XLIII Riunione Scientifica IIPP, Firenze, pp. 669-674.
- Guggisberg M.A., Colombi C., Spichtig N. 2013, *Gli scavi dell'Università di Basilea nella necropoli Enotria di Francavilla Marittima*, Bollettino d'Arte, 15, luglio-settembre 2012, Serie VII, Tivoli (RM), pp. 1-18.
- Guidi A. 1991/92, *Recenti ritrovamenti in grotta nel Lazio: un riesame critico del problema dell'utilizzazione delle cavità naturali*, in AA.VV., *L'età del bronzo in Italia nei secoli dal XVI al XIV a.C.*, Atti del Congresso (Viareggio 1989), Rassegna di Archeologia, 10, pp. 427-437.
- Guidi A. 2008, *Archeologia dell'Early State: il caso di studio italiano*, in OCNUS, 16 – 2008, Quaderni della Scuola di Specializzazione in Beni Archeologici, Alma Mater Studiorum - Università di Bologna, Bologna, pp. 175-192.
- Guidi A., Nomi F. forthcoming, *Centri d'altura della medie età del bronzo nel Vallo di Diano e nelle aree limitrofe*, in Pacciarelli M. (ed.), *Centri fortificati della Calabria dalla protostoria all'età ellenistica (Napoli, 16-17/1/2014)*.
- Haagsma B.J. 1996, *Survey in de Sibaritide, Calabrië. Een preliminair verslag van drie campagnes*, TMA 17, Eelde, pp. 47-52.
- Harding A.F. 2013, *Salt in Prehistoric Europe*, Leiden.
- Hayes J.W. 1972, *Late Roman pottery*, London.

Holloway R.R. 1973, *Buccino – The eneolithic necropolis of S. Antonio and other prehistoric discoveries made in 1968 and 1969 by Brown University*, Roma.

Horden P., Purcell N. 2000, *The Corrupting Sea. A study of Mediterranean History*, Oxford.

Horeis B, Jung R., Pavúk P. 2010, *Analysing Pottery. Processing – Classification – Publication*, Bomenius University in Bratislava, Bratislava.

Ingravallo E. 1985, *La grotta n. 2 di Latronico (Potenza)*, in *Rivista di Scienze Preistoriche*, XI, 1-2, pp. 255-315.

Ingravallo E., Orlando M.A. 1996, *Puglia*, in Cocchi Genick (ed.), *Atti Congresso L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 135-145.

Ippolito F. 2013, *De Galleria dei Vasi in de Grotta di S. Angelo II. Nieuwe gegevens over de Proto-Apennijnse periode in de Sibaritide (Zuid-Italië) en haar relaties met de Adriatische kust*, TMA 49, Eelde, Nederland, pp. 28-33.

Ippolito F., forthcoming (a), *La Galleria dei Vasi della Grotta di S. Angelo II. Nuovi dati sul protoappenninico della Sibaritide e sulle sue relazioni con le sponde adriatiche*, Atti XLVII Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria, Ostuni, Ottobre 2012.

Ippolito F. forthcoming (b), *Contextualization of funerary evidence from the cave Sant'Angelo IV, Northeastern Calabria, Italy*, *Palaeohistoria*, University of Groningen, Groningen.

Ippolito F., P.A.J. Attema forthcoming, *Nuovi dati sulla diffusione dei dolii protostorici d'impasto nell'hinterland della Sibaritide*, Volume in Memoria di Renato Peroni.

Ippolito F., Attema P.A.J., Crudo M., Jacobsen J.K. forthcoming, *The Area Carnevale*, in Jacobsen J.K., Mittica G.P., *Excavation in the Timpone della Motta. Francavilla Marittima. Volume III. The Greek Style Pottery*, Bibliotheca Archeologica, Bari.

Jacobsen J.K. 2007, *Greek pottery on the Timpone della Motta and in the Sibaritide from c. 780 to 620 B.C. Reception, distribution and evaluation of Greek pottery as a source material for the study of Greek influence before and after the founding of ancient Sybaris*, PhD Thesis, University of Groningen, Groningen.

Jacobsen J.K., Handberg S., Mittica G. 2009, *An early Euboean workshop in the Sibaritide*, in *AION (archeol)*, n.s. 15-16, 2008-2009, Napoli, pp. 89-100.

Jacobsen J.K., Handberg S. 2010, *Excavation on the Timpone della Motta. Francavilla Marittima (1992-1994). I. Greek pottery*, Biblioteca Archeologica, Bari.

Jacobsen J.K., Handberg S. 2012, *A Greek enclave at the Iron Age settlement at Timpone della Motta*, in *Atti del Cinquantesimo Convegno di Studi sulla Magna Grecia*, Taranto 1-4 Ottobre 2010, pp. 683-718.

Jasink A.M., Tucci G., Bombardieri L. (eds.) 2011, *MUSINT. Le Collezioni archeologiche egee e cipriote in Toscana. Ricerche ed esperienze di museologia interattiva*, Firenze.

Jones R.J., Levi S.T., Bettelli M. 2005, *Mycenaean pottery in the central Mediterranean: imports, imitations and derivatives*, in Laffineur R., Greco E. (eds.), *Emporia. Aegeans in the Central Mediterranean*, Proceedings of the 10th International Aegean Conference, Athens, 14-18 April 2004, pp. 539-545.

Jones R.J., Levi S.T., Bettelli M., Vagnetti L. 2014, *Italo-Mycenaean pottery: the archaeological and archaeometric dimensions*, *Incunabula Braeca CIII*, CNR – Istituto di Studi sul Mediterraneo antico, Rome.

Kleibrink M. 2002, *The Sacred Landscape of the Sibaritide: veneration of ancestors, nymphs and deities*, in Attema P., Burgers G.-J., Joolen van E., Leusen van M., Mater B., *New Developments in Italian Landscape Archaeology*, BAR 1091, pp. 213-219.

- Kleibrink M. 2005, *The Early Athenaiion at Lagaria (Francavilla Marittima) near Sybaris, an overview of its early geometric II and its mid 7th century BC Phases*, in BAR International Series, 1452 (II), Papers in Italian Archaeology VI, Oxford, pp. 754-772.
- Kleibrink M. 2006, *Oenotrians at Lagaria near Sybaris, a native proto-urban centralised settlement. A preliminary report on the excavation of the timber dwellings on the Timpone della Motta near Francavilla Marittima, Southern Italy*, London.
- Kleibrink M., Barresi L., Fasanella Masci M. 2012, *Excavations at Francavilla Marittima 1991-2004 Matt-Painted Pottery from the Timpone della Motta. Volume 1: The Undulating Bands Style*, BAR International Series 2423, Oxford.
- Kleibrink M., Jacobsen J.K. 2005, *Scavi archeologici 2004 a Francavilla Marittima*, in AttiGioArchF, III, pp. 1-20.
- Kleibrink M., Jacobsen J.K., Handberg S. 2004, *Water for Athena: votive gifts at Lagaria (Timpone della Motta, Francavilla Marittima, Calabria)*, in R. Osborne (ed.), *The objects of dedication*, in WorldA, 36, London, pp. 43-68.
- Kleine E., H. Woldring, R.T.J. Cappers, P.A.J. Attema, J.J. Delvigne 2003, *Il carotaggio del Lago Forano presso Alessandria del Carretto (Calabria, Italia). Nuovi dati sulla vegetazione olocenica e sulla storia dell'uso del suolo nella Sibaritide interna*, in Preistoria e Protostoria della Calabria, scavi e ricerche, Atti delle giornate di studio, Pellaro-Reggio Calabria, 25-26 Ottobre 2003, pp. 81-91.
- Kleine E., H. Woldring, R.T.J. Cappers, P.A.J. Attema 2005, *Holocene vegetatiegeschiedenis van de Sibaritide (Calabrië, Italië): analyse van het pollenmateriaal uit Lago Forano*, Paleo-Aktueel 14/15, Groningen, pp. 68-73.
- Knappet C. 2011, *An Archaeology of Interaction. Network Perspectives on Material Culture & Society*, Oxford.
- Larocca A. 1994, *La grotta Llubertit*, Katundi yne (Civita, CS), anno XXV, 86, pp. 11-12.
- Larocca F. 1986, *Grotte della Calabria: la Grotta delle Volpi*, Notiziario interno G.S. Sparviere nov/dic 1986, Alessandria del Carretto, pp. 28-32.
- Larocca F. 1991, *Le Grotte della Calabria. Guida alle maggiori cavità carsiche della regione*, Martina Franca.
- Larocca F. 2015, *Le Grotte del Monte Sellaro in Calabria. Uno straordinario patrimonio speleo-archeologico*, in De Nitto L., Francesco M., Parise M. (eds.), *Condividere i dati*, Atti XXII Congresso Nazionale di Speleologia, 30 maggio – 2 giugno 2015, Pertosa – Auletta (SA), MIIS, Serie II, vol. XXIX, 2015, pp. 441-446.
- Leonini V., Sarti L. 2006, *Sepulture e rituali funerari nell'Eneolitico e al passaggio all'età del Bronzo in Italia*, in Martini F. (ed.), *La cultura del morire nelle società preistoriche e protostoriche italiane*, Origines, IIPP, Progetti 3, Firenze, pp. 129-160.
- Levi S.T., Bianco S., Castagna M.A., Gatti D., Jones R.E., Lazzarini L., Le Pera E., Odoguardi L., Peroni R., Schiappelli A., Sonnino M., Vagnetti L., Vanzetti A. 1999, *Produzione e circolazione della ceramica nella Sibaritide protostorica. I. Impasto e dolii*, Firenze.
- Levi S.T., Schiappelli A. 2004, *I pithoi di ispirazione egea del Tardo Bronzo nell'Italia meridionale: tecnologia, contenuto, immagazzinamento, circolazione*, in De Sena E. C., Dessales H., *Archaeological methods and approaches: industry and commerce in Ancient Italy*, BAR 1262, Oxford, pp. 96-104.
- Lonza B. 1981, *La ceramica del castelliere degli Elleri*, Società per la Preistoria e Protostoria della Regione Friuli-Venezia Giulia, Quaderno n. 4, Trieste.
- Lo Porto F. G. 1962-63, *La tomba di Cellino San Marco e l'inizio della civiltà del bronzo in Puglia*, BPI 71-72, XIV, pp. 191-225.
- Lo Porto F. G. 1963, *Leporano (Taranto). La stazione protostorica di Porto Perone*, Not.Scavi Ant., Roma, pp. 280-380.

- Lo Porto F. G. 1967, *Il dolmen a galleria di Giovinzazzo*, in *Bullettino di Paleontologia Italiana*, 76, pp. 137-173.
- Lo Porto F. G. 2004, *Le tombe recenti del sepolcreto del Pozzillo (Canosa, Bari)*, in Cocchi Genick D. a (ed.), *L'età del Bronzo Recente in Italia*, Atti del Congresso, Viareggio, pp. 159-165.
- Lukesh S.S. 1977, *The protoappennine ceramic tradition of Buccino, the early Bronze Age village of Tufariello*, Brown University, Providence.
- Maaskant-Kleibrink M. (ed.) 1987, *Settlement excavations at Borgo le Ferriere, Satricum*, vol. I, Groningen.
- Mac Donald A. 1995, *All or Nothing at all? Criteria for the Analysis of Pottery from Surface Survey*, in Christie N. (ed.), *Settlement and economy in Italy, 1500 BC - AD 1500, Papers of the Fifth Conference of Italian Archaeology*, Oxford, pp. 25-29.
- Macchiarella I. 1987, *La ceramica appenninica decorata*, Roma.
- Mallory J.P. (ed.) 1984-1987 - *Lagnano da Piede I. An Early Neolithic Village in the Tavoliere*, *Origini*, XIII, pp. 193-290.
- Marino D.A. 2000, *L'insediamento dell'Età del Bronzo di Capo Piccolo: antica metallurgia e primi contatti egeo-micenei nella Calabria ionica*, *Sicilia Archeologica*, XXXIII, pp. 145-158.
- Marino D., Pacciarelli M. 1996, *Calabria*, in Cocchi Genick (ed.), *Atti Congresso L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 147-162.
- Martinelli M.C. 1998, *L'attrezzatura da lavoro in pietra*, in Cinquepalmi, Radina (eds.), pp. 253-264.
- Mater B., Annis M.B. 2002, *Some reflections on the meaning of pottery within landscape and settlement archaeology*, in Attema P.A.J., Burgers G.-J., Van Joolen E., Van Leusen M., Mater B. (eds.), *New Developments in Italian Landscape Archaeology: Theory and Methodology of Field Survey, Land Evaluation and Landscape Perception, Pottery Production and Distribution* (Proceedings of a three-day conference held at the University of Groningen, April 13-15, 2000) (British Archaeological Reports International series 1091), Oxford, pp. 155-168.
- Marzocchella A. 1986, *L'età preistorica a Sarno. Le testimonianze archeologiche di Foce e San Giovanni*, in AA.VV. 1986, *Tremblements de terre, éruptions volcaniques et vie des hommes dans la Campanie antique*, Napoli pp. 35-53.
- McConnel B. E. 1999, *Il primo Eneolitico in Sicilia*, in Cocchi Genick D. a (ed.), pp. 233-240.
- Mieli G.F. 1993, *Il problema dei depositi in grotta dell'età del Bronzo nell'estremo sud italiano*, Tesi di laurea, Università la Sapienza, Roma.
- Mieli G., Cosentino S. 2006, *L'insediamento protostorico di masseria Patete-Santa Maria di Vastogirardi (Isernia)*, in *Studi in Onore di Renato Peroni*, Firenze, pp. 110-116.
- Mieli G., Cosentino S., Capano A. 2011, *Rilettura della grotta del Cervaro di Lagonegro (Potenza)*, in *Atti XLIII Riunione Scientifica IIPP, L'età del Rame in Italia*, Firenze, pp. 657-662.
- Mieli G.F., Trucco F. 1999, *La problematica dei depositi in grotta dell'età del Bronzo dell'Italia meridionale*, *OCNUS*, 7, Bologna, pp. 223-234.
- Mollo F. 2012, *Torre Mordillo*, in Nenci G., Vallet G. (eds.), *Bibliografia Topografica della Colonizzazione Greca in Italia e nelle Isole Tirreniche*, XXI, Pisa-Roma-Napoli, pp. 66-73.
- Montagnari Kokelj E., Crismani A. 1997, *La grotta del Mitreo nel Carso triestino*, in *Atti della Società per la Preistoria e Protostoria derlla Regione Friuli-Venezia Giulia*, X, 1996, Trieste, pp. 7-98.
- Morelli U. 2011, *Mente e paesaggio. Una teoria della vivibilità*, Torino.

Munsell soil color chart 1975, Baltimore, MD.

Munsell soil color chart 2000, New Windsor NY.

Mutti A., Pizzi C. 2009, *I materiali: la ceramica*, in Bernabò Brea M., Cremaschi M. (eds.), *Acqua e civiltà nelle Terramare. La vasca votiva di Noceto*, Milano, pp. 175-186.

Natali E. 2009, *Le ceramiche Impresse Arcaiche*, in Tinè V. (ed.) *Favella. Un villaggio neolitico nella Sibaritide*, Studi di Paleontologia III, Collana del Bollettino di Paleontologia Italiana, Roma, pp. 227-311.

Natoli R. 2009, *Ceramiche del Neolitico recente e finale*, in Tinè V. (ed.), *Favella. Un villaggio neolitico nella Sibaritide*, Studi di Paleontologia III, Collana del Bollettino di Paleontologia Italiana, Roma, pp. 541-551.

Negrone Catachio N., Cardosa M., Pitone M.R.P. 2012, *Rappresentazioni e pratiche del sacro*, in Nuzzo, La Rocca (eds.), *Antropologia e archeologia a confronto: rappresentazioni e pratiche del sacro*, Atti dell'Incontro Internazionale di studi, Roma, pp. 595-604.

Nicoletti G. 1991, *Corazzo-Casa Soverito (isola di Capo Rizzuto-CZ). Testimonianza di una sequenza paleontologica*, in Annali Fac. Lettere e Filos. Univ. Bari, XIV, pp. 5-64.

Nicoletti G. 2004, *L'insediamento neolitico di Ceraso (Acri-CS)*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 737-742.

Nicoletti G., Spanò A. 2011, *Aspetti dell'Età del Rame intorno all'Istmo di S. Eufemia (Catanzaro)*, in Atti XLIII Riunione Scientifica IIPP, *L'età del Rame in Italia*, Firenze, pp. 433-439.

Nijboer, A. J., van der Plicht, J. 2008, *The Iron Age in the Mediterranean: recent radiocarbon research at the University of Groningen*, in Brandherm D., Trachsel M. (eds.), *Proceedings of the XV World Congress (Lisbon, 4-9 September 2006)*, Oxford, pp. 103 - 118.

Orlando M.A. 1995, *Punta Meliso e il Basso Salento nel quadro dell'età del Bronzo Recente e Finale*, Taras XV, 2, Taranto.

Orofino F. 1965, *Primo elenco catastale delle grotte della Calabria*. Not. Cassa per il Mezzogiorno, Roma, pp. 1-85.

Orton C.R. 1987, *The "Envelope": un nouvel outil pour l'étude morphologique des céramiques*, in Chapelot J. et al., *La céramique (Ve-XIXe S.), Fabrication, Commercialisation, Utilisation*, Caen, pp. 33-41.

Osanna M. 2014, *The Iron Age in South Italy: settlement, mobility and culture contact*, in Bernard Knapp A., Van Dommelen P., *The Cambridge Prehistory of the Bronze and Iron Age Mediterranean*, Cambridge, pp. 230-248.

Pace R., Verger S. 2012, *Les plus anciens objets en bronze dans les sanctuaires de la Grande-Grèce et de la Sicile: les cas du Timpono Motta en Sybaritide et de Bitalemi à Gela*, in *Bronzes grecs et romains, recherches récentes, Hommage à Claude Rolley*, INHA (Actes de colloques), <http://inha.revues.org/38899>, pp. 1-32.

Pacciarelli M. 1999, *Torre Galli. La necropoli della prima età del ferro (scavi Paolo Orsi 1922-23)*, Soveria Mannelli.

Pacciarelli M. 2001, *Dal villaggio alla città*, Firenze.

Pacciarelli M. 2004, *La prima età del Ferro in Calabria*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 447-475.

Pacciarelli M. 2010, *Verso i centri protourbani. Situazioni a confronto da Etruria meridionale, Campania e Calabria*, Scienze dell'Antichità, 15 (2009), Roma, pp. 371-416.

- Pacciarelli M. 2011, *L'Eneolitico della Calabria tirrenica: nuovi dati sull'articolazione cronoculturale*, Origini XXXIII, Nuova Serie V, pp. 249-302.
- Pacciarelli M. 2012, *La multiforme realtà delle pratiche funerarie del Bronzo nel Sud Italia. Esempi Dauni e non*, Atti 32° Convegno Nazionale sulla Preistoria, Protostoria, Storia della Daunia, San Severo 12-13 novembre 2011, pp. 217-234.
- Pacciarelli M., Talamo P. 2008, *Sull'articolazione dell'età del Rame nell'Italia meridionale tirrenica* in Atti della XLIII Riunione Scientifica IIPP, Bologna, pp. 87-94.
- Pacciarelli M., M.R. Varricchio 2004, *Fasi e facies del bronzo medio e recente nella Calabria meridionale tirrenica*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 359-379.
- Paladino A., Troiano G. 1989, *Calabria Citeriore. Archeologia della provincia di Cosenza*, Trebisacce.
- Pamuk O. 2005, *Istanbul: memories of a city*, London.
- Panichelli S. 1994, *Ceramica egea importata e di produzione locale, Catalogo*, in Peroni, Trucco (eds.), pp. 373-393.
- Passariello I., Albore Livadie C., Talamo P., Lubritto C., D'Onofrio A., Terrasi F. 2009, *14C Chronology of Avellino Pumices Eruption and timing of human reoccupation of the devastated region*, Radiocarbon, Vol 51, Nr 2, 2009, pp. 1-14.
- Passariello I., Talamo P., D'Onofrio A., Barta P., Lubritto C., Terrasi F. 2010, *Contribution of radiocarbon dating to the chronology of Eneolithic in Campania (Italy)*, in Geochronometria 35 (2010), pp. 25-33.
- Pavúk P. 2007, *What Can Troia Tell Us about the Middle Helladic Period in the Southern Aegean?*, in Felten F., Gauss W., Smetana R. (eds.), *Middle Helladic Pottery and Synchronisms*, Proceedings of the International Workshop held at Salzburg, October 31st, 2004, Wien, pp. 295-308.
- Pannuti S. 1969, *Gli scavi di Grotta a Male presso l'Aquila*, Bullettino di Paleontologia Italiana, N.S. XX, 78, Roma.
- Peroni R. 1984, *Nuove ricerche sulla protostoria della Sibaritide*, Roma.
- Peroni R. 1987, *La protostoria*, in Settis S. (ed.), *Storia della Calabria, I. La Calabria Antica*, Roma, pp. 65-136.
- Peroni R. 1994, *Le comunità enotrie della Sibaritide ed i loro rapporti con i navigatori egei*, in Peroni, Trucco (eds.), pp. 832-879.
- Peroni R. 1994b, *Introduzione alla protostoria italiana*, Bari.
- Peroni R., Trucco F. (eds.) 1994, I-II, *Enotri e Micenei nella Sibaritide, Broglio di Trebisacce*, Taranto.
- Peroni R., Vanzetti A. (eds.) 1998, *Broglio di Trebisacce 1990-1994. Elementi e problemi nuovi dalle recenti campagne di scavo*, Soveria Mannelli.
- Peroni R., Vanzetti A. 2005, *Broglio di Trebisacce (CS). Campagna di scavi 2003*, in Preistoria e Protostoria della Calabria, Scavi e ricerche, Atti delle Giornate di Studio, 25-26 Ottobre 2003, Pellaro-Reggio Calabria, pp. 41-51.
- Pessina A., Tinè V. 2008, *Archeologia del Neolitico: l'Italia tra il VI e IV millennio a.C.*, Roma.
- Piperno M., Pellegrini E. 2000-2001, *Risultati delle ricerche alla grotta del Pino (Sassano, Salerno): 1997-1998*, in BPI 91-92, n.s. IX-X, Roma, pp. 121-206.
- Peo E.A., *The mystery of Marie Roget*, Text-B, Tales, 1845, pp. 151-199.

- Poggiani Keller R., Figura P. 1979, *I tumuli e l'abitato di Costoletto di Lamone*, in Atti della XXI Riunione Scientifica IIPP, Il Bronzo Finale in Italia, Firenze 1979, pp. 346-381.
- Procelli E. 2004, *Una facies a cavallo dello stretto, Rodi-Tindari-Vallelunga e i rapporti tra Sicilia e Calabria nell'età del Bronzo*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 382-392.
- Quilici L., Quilici Gigli S. 2001, *Carta Archeologica della Valle del Sinni*, Vol. 6, Roma.
- Quilici L., Quilici Gigli S., Pala C., De Rosi G.M. 1968-69, *Carta Archeologica della piana di Sibari*, Atti e Memorie della Società Magna Grecia IX-X, pp. 92-155.
- Quondam F. 2008, *La necropoli di Francavilla Marittima: tra mondo indigeno e colonizzazione greca*, in Bettelli M., De Faveri C., Osanna M., *Prima delle colonie*, Atti delle Giornate di Studio, Matera, 20-21 Novembre 2007, Venosa, pp. 139-178.
- Radina F., Recchia G. (ed.) 2010, *Ambra per Agamennone. Indigeni e Micenei tra Adriatico, Ionio ed Egeo*, Catalogo della mostra (Bari, 28 maggio-16 ottobre 2010), Bari.
- Rainey G., Leric M. (eds.) 1967, *The search for Sybaris, 1960-1965*, Roma.
- Recchia G. 2002, *I siti costieri garganici e i loro rapporti transmarini tra Eneolitico ed età del Bronzo*, in Negroni Catacchio N. (ed.), *Atti del V Incontro di Studi "Preistoria e Protostoria in Etruria"*, Milano, pp. 331-342.
- Recchia G. 2010, *Le comunità dell'entroterra nei processi di trasformazione socio-economica durante l'età del bronzo nell'Italia meridionale*, SA, 15 (2009), Università La Sapienza, Roma, 311-325.
- Recchia G. 2012, *Burial mounds and "specchie" in Apulia during the Bronze Age. Local developments and transadriatic connections*, in Borgna E., Müller Celka S. (ed.), *Ancestral Landscapes. Burial mounds in the Copper and the Bronze Ages*, Lyon, pp. 475-484.
- Ritchie W.A., MacNeish R.S 1949, *The Pre-Iroquoian Pottery of New York State*, American Antiquity, Vol. 15, No. 2, Menasha, pp. 97-124.
- Rizzi G., Tecchiati U. 1996, *L'insediamento di Nossing "B" nel quadro del popolamento preistorico della conca di Bressanone (Bolzano)*, in Cocchi Genick (ed.), *Atti Congresso L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 530-531.
- Roma G., Lena G. 2003, *Modificazioni ambientali fra le confluenze dei fiumi Esaro-Coscile e Coscile-Crati (Calabria settentrionale). Relazione preliminare*, in *La Storia del Clima e dell'Ambiente dall'Antichità ad oggi*, III seminario Internazionale (Ravello, 7-9 giugno 1996), Bari, pp. 365-368.
- Roovers T. 2011, *Supervised research project (Specialization 1 and 2)*, University of Groningen, unpublished.
- Ross Holloway R. 1973, *Buccino. The eneolithic necropolis of S. Antonio and other prehistoric discoveries made in 1968 and 1969 by Brown University*, Roma.
- Rosenberg E.A. van 2012, *Cultural landscapes, social networks and historical trajectories: a data synthesis of Early Bronze Age networks (c. 2200-1700 BC) in Abruzzo and Lazio (Central Italy)*, PhD thesis, University of Leiden, Leiden.
- Rossi Osmida G. 1070, *La voragine San Marco nella zona di Cerchiara. Preliminari morfologici e speleogenetici in rapporto al sistema idrotermale della Grotta dei Bagni (Antro delle Ninfe)*, Ricerche speleologiche effettuate sul Massiccio del Pollino, Quaderno n. 1, Associazione Ritorno a Sibari, Venezia, pp. 9-15.
- Salerno A., Pessina A. 2004, *Le asce in pietra levigata della Calabria nelle Collezioni del Museo Pigorini*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 767-770.

- Salerno A., Vanzetti A. 2004, *L'Eneolitico e il Bronzo Antico in Calabria*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 207-234.
- Saponara M. 2013, *La "Capanna 3" del Neolitico Medio del sito di Balsignano (Modugno, Bari): analisi degli aspetti ceramici*, Thesis, Scuola di Specializzazione in Archeologia, Università degli Studi di Bari "A Moro", a.a. 2012/2013.
- Scarani R. 1962, *Gli scavi nella Tanaccia di Brisighella*, in AA.VV., *Preistoria dell'Emilia e Romagna*, I, Bologna, pp. 253-285.
- Schiappelli A. 2008, *Sviluppo storico della Teverina nell'età del Bronzo e nella prima età del Ferro*, Firenze.
- Settis S., Parra M.C. 2005 (eds.), *Magna Graecia, archeologia di un sapere*, Milano.
- Sevink J., van Bergen M.J., van der Plicht J., Feiken H., Anastasia A., Huizinga A. 2011, *Robust date for the Bronze Age Avellino eruption (Somma-Vesuvius): 3945 ± 10 calBP (1995 ± 10 calBC)*, *Quaternary Science Reviews* 30, www.elsevier.com/locate/quascirev, pp. 1035-1046.
- Skeates R., Whitehouse R. (eds.) 1994, *Radiocarbon Dating and Italian Prehistory*, Archaeological Monograph of the British School at Rome, 8, Rome.
- Talamo P. 1992, *L'insediamento preistorico di Pratola Serra*, in Peduto P. (ed.), *S. Giovanni di Pratola Serra: archeologia e storia nel ducato longobardo di Benevento*, Salerno, pp. 99-165.
- Talamo P., Passariello I., Lubritto C., Terrasi F. 2011, *Evoluzione culturale in Campania: indagine cronologica sistematica tramite datazioni radiocarboniche*, in Atti della XLIII Riunione Scientifica IIPP, Bologna 2008, Firenze, pp. 34-39.
- Taliano Grasso A. 2005, *Il Parco Archeologico di Cariati e Terravecchia, Storia e archeologia di un territorio*, Catanzaro.
- Tenaglia P. 1994, *I dolii cordonati*, in Peroni, Trucco (eds.), pp. 347-371.
- Tegani U. 1927, *Una miniera millenaria: il salemma di Lungro*, in *Le vie d'Italia*, n. 10, T.C.I., Milano.
- Tinè S. 1962, *Successione delle culture preistoriche in Calabria alla luce dei recenti scavi in provincia di Cosenza*, *Klearchos* 13-14, pp. 38-48.
- Tinè S. 1964, *La grotta di S. Angelo III a Cassano Jonio*, Atti e Memorie della Società Magna Grecia, n.s.V, pp. 11-55.
- Tinè S. 1983 (ed.), *Passo di Corvo e la civiltà neolitica del Tavoliere*, Genova.
- Tinè S. 1987, *Il Neolitico*, in S. Settis (ed.), *Storia della Calabria Antica*, I, Reggio Calabria-Roma, pp. 39-63.
- Tinè S., Tinè V., Traverso A. 2003, *La piana del Crati nella preistoria recente: ambiente, risorse, insediamento*, in Albore Livadie C., Ortolani F. (eds.), *Variazioni climatico-ambientali e impatto sull'uomo nel quadro della preistoria siciliana e mediterranea durante l'Olocene*, Bari, pp. 407-418.
- Tinè S. 1992, *Italia meridionale, Sicilia e Malta tra il XVI ed il XIII sec. a.C.*, in AA. VV., *La Sardegna nel Mediterraneo tra il Bronzo medio e il Bronzo recente, XVI-XIII secolo a.C.*, Atti del 3° Convegno di studi *Un millennio di relazioni fra la Sardegna e i paesi del Mediterraneo*: Selargius, Cagliari, 19-22 novembre 1987, Cagliari, pp. 305-329.
- Tinè V. 2000, *Il Neolitico nella Calabria settentrionale*, in La Torre G.F., Colicelli A. (ed.), *Nella terra degli Enotri*, Atti del Convegno, Tortora 1998, Salerno, pp. 29-37.
- Tinè V. 2002, *Le facies a ceramica impressa dell'Italia meridionale e della Sicilia*, in Fugazzola Delpino M.A., Pessina A., Tine V. (eds.), *Le ceramiche impresse del Neolitico Antico, Italia e Mediterraneo*, Studi di Paleontologia, I, Roma, pp. 131-165.

- Tinè V. 2004, *Il Neolitico in Calabria*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze 2002, pp. 115-143.
- Tinè V. (ed.) 2009, *Favella. Un villaggio neolitico nella Sibaritide*, Studi di Paletnologia III. Collana del BPI, Roma.
- Tinè V., Natali E. 2004, *La grotta di S. Michele di Saracena (CS): una sequenza stratigrafica dal neolitico antico al bronzo medio*, in Atti della XXXVII Riunione Scientifica IIPP, Firenze, pp. 693-702.
- Tinè V., Natali E. 2007, *Le campagne di scavo 2004 e 2005 nella Grotta di San Michele di Saracena (Cosenza)*, in Atti del Convegno "Preistoria e Protostoria della Calabria", II (Pellaro, 2005), Pellaro, pp. 46-61.
- Tinè V., Vanzetti A. 2014, *La Calabria dal Neolitico all'età del ferro*, in Cerzoso M., Vanzetti A. (a cura di), Museo dei Bretti e degli Enotri, Catalogo dell'esposizione, Soveria Mannelli, pp. 41-44.
- Topa D. 1927, *Le civiltà primitive della Brettia*, Palmi (RC).
- Trucco F. 1994, *Cronologia*, in Peroni, Trucco (eds.), pp. 171-183.
- Trucco F., Vagnetti L. (eds.) 2001, *Torre Mordillo 1987-1990. Le relazioni egee di una comunità protostorica della Sibaritide*, Incunabula Graeca, CI, ed. CNR – Istituto per gli Studi micenei ed egeo-anatolici, Roma.
- Trump. D.H. 1966, *Central and Southern Italy. Before Rome*, London.
- Urban T. 1993, *Studien zur mittleren Bronzezeit in Norditalien*, Vol. 2, Universitätsforschungen zur Prähistorischen Archäologie, Bd. 14, Bonn.
- Vagnetti L., Jones R.E., Levi S.T., Bettelli M., Alberti L. 2009, *Ceramiche egee e di tipo egeo lungo i versanti adriatico e ionico della penisola italiana: situazioni a confronto*, in *Dall'Egeo all'Adriatico: organizzazioni sociali, modi di scambio e interazione in età post-palaziale (XII-XI sec. a.C.)*, Atti del Seminario internazionale (Udine, 1-2 dicembre 2006), Roma, pp. 171-183.
- Valente G. (ed.) 1968, *Leandro Alberti in Calabria*, Cosenza.
- van Leusen P.M. *et alii* forthcoming, *RAP Site Catalogue*.
- van Leusen P.M. 2002, *Pattern to process. Methodological investigations into the formation and interpretation of spatial patterns in archaeological landscapes*, PhD Thesis, University of Groningen, Groningen.
- van Leusen P.M. 2008, *Raganello Archaeological Project: Preliminary report on the field walking campaign 2008*, Groningen Institute of Archaeology, Groningen.
- van Leusen P.M. 2012, *The Rural Life Project Autumn 2012 field campaign (RL2012-2): preliminary report*, Groningen.
- van Leusen P.M. 2013, *The Rural Life Project: preliminary report on the Spring 2013 field campaign (RL2013-1)*, Groningen Institute of Archaeology, 19 April 2013, p. 1.
- van Leusen, P.M. 2015, *Predicting and detecting protohistoric remains in the Raganello Basin: methodological studies 2006-2015*, in G. Pizziolo & L. Sarti (eds), *Predicting Prehistory. Predictive models and field research methods for detecting prehistoric contexts. Proceedings of the International Workshop Grosseto (Italy), September 19-20, 2013* (MILLENNI Studi di archeologia preistorica 11), Museo e Istituto Fiorentino di Preistoria, Firenze pp. 123-132.
- van Leusen M., Attema P.A.J. 2001-2002, *Regional archaeological patterns in the Sibaritide. Preliminary results of the RPC field survey campaign 2000*, *Palaeohistoria* 42/43, Groningen, pp. 1-23.
- van Leusen, P.M., P.A.J. Attema 2003, *Regional archaeological patterns in the Sibaritide; preliminary results of the RPC field survey campaign 2000*, *Palaeohistoria* 43/44 (2001/2002), pp. 397-416.

- van Leusen, P.M, Pizziolo G., Sarti L. (eds.) 2011, *Hidden Landscapes of Mediterranean Europe. Cultural and methodological biases in pre- and protohistoric landscape studies*, BAR International Series 2320, Oxford.
- Vanzetti A. 2008, *Notazioni sulla fine dell'età del ferro precoloniale nella Piana di Sibari* in Bettelli M., De Faveri C., Osanna M., *Prima delle colonie*, Atti delle Giornate di Studio, Matera, 20-21 Novembre 2007, Venosa, pp. 179-202.
- Vanzetti A. 2013, *Sibari Protostorica*, in Delia G., Masneri T. (eds.), *Sibari, Archeologia, storia, metafora*, Castrovillari, pp. 11-33.
- Vanzetti A., Ferranti F. Quondam F. 2014, *L'età del ferro del Cosentino nelle collezioni del Museo*, in Cerzoso M., Vanzetti A. (eds.), Museo dei Bretti e degli Enotri, Catalogo dell'esposizione, Soveria Mannelli, pp. 45-48.
- Vanzetti A., Righini D. 2002, *Nota su un reperto protostorico da Muricelle di Luzzi*, in A. La Marca (ed.), *Archeologia nel territorio di Luzzi: stato della ricerca e prospettive*, Atti della Giornata di Studio, maggio 1998, Soveria Mannelli, pp. 157-161.
- Veenman F. 2002, *Reconstructing the Pasture. A reconstruction of pastoral landuse in Italy in the first millennium BC*, PhD thesis, Vrije Universiteit Amsterdam, Amsterdam.
- Vigliardi A. 1975, *Il Bronzo "appenninico" della Grotta del Noglio (Marina di Camerota, Salerno)*, Rivista di Scienze Preistoriche XXX, 1-2, pp. 279-346.
- Vigliardi A. 1996, *Ceramiche del Bronzo Antico dalla grotta del Fontino (Grosseto)*, in Cocchi Genick (ed.), Atti Congresso *L'antica età del bronzo*, Viareggio 1995, Firenze, pp. 113-118.
- Vita Finzi C., Higgs E.S. 1970, *Prehistoric Economy in the M.te Carmel Area of Palestine: Site Catchment Analysis*, in Proceedings of the Prehistoric Society, 36, pp. 1-37.
- Vletter W.F. 2015, *A workflow for (Semi) automatic extraction of roads and paths in forested areas from Airborne Laser Scan data*, AARGnews50, Dublin, pp. 33-40.
- Voutsaki S., Dietz S., Nijboer A.J. 2010, *Radiocarbon analysis and the history of the East Cemetery, Asine*, Opuscola. Annual of the Swedish Institutes in Athens and Rome, pp. 31-52.
- Wijngaarden van G.J.M. 2002, *Use and appreciation of Mycenaean pottery in the Levant, Cyprus and Italy (1600-1200 BC)*, Amsterdam.
- Weg van der, J.F. 2014, *Scraping the surface. A synthesizing research to investigate the application of survey archaeology for the analysis of experiences of the past landscape*, in Raemaekers D.C.M. (ed.), *Past Landscapes. Questioning function and meaning*, Groningen, pp. 7-12.
- Whallon R. 1972, *A new approach to pottery typology*, American Antiquity, 37, pp. 13-33.
- Wilson D.E., Day P.M. 1994, *Ceramic regionalism in Prepalatial central Crete: the Mesara imports at EM I to EM IIA Knossos*, The Annual of the British School at Athens, Vol. 89, 1994, pp. 1-87.
- Woldring H., Boekema Y., Attema P.A.J., Delvigne J.J. 2006, *Vegetatieontwikkeling en landgebruik in de Monte Sparviere (Calabrië, Italië)*, Paleo-Aktueel 17, Groningen, pp. 82-89.
- Zancani Montuoro P. 1966, *Scavi a Francavilla Marittima. Le premesse di un intervento sistematico e i primi risultati*, in ASMG VI-VIII 1965-66, pp. 9-13.

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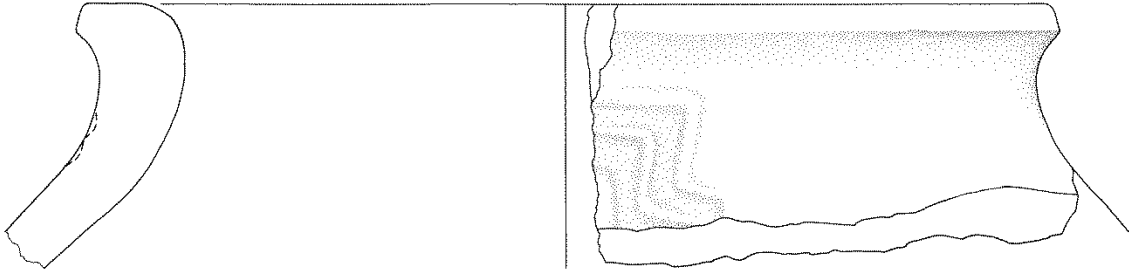
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Before the Iron Age
The oldest settlements in the hinterland of the Sibaritide
(Calabria, Italy)

Francesca Ippolito

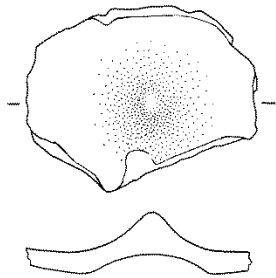
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I - LXIII

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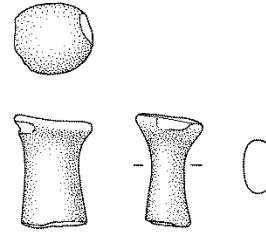


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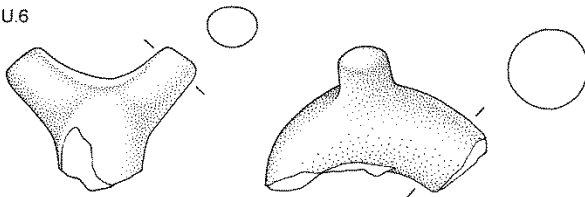


2

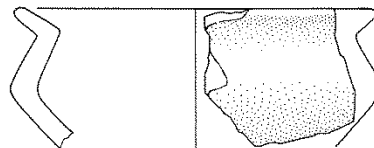


3

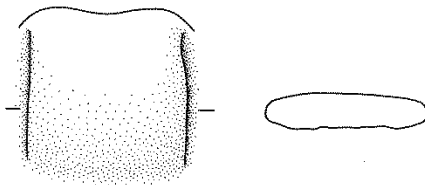
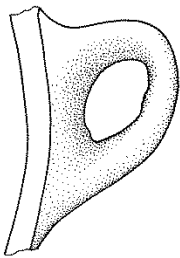
S.U.6



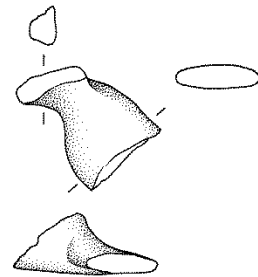
6



8

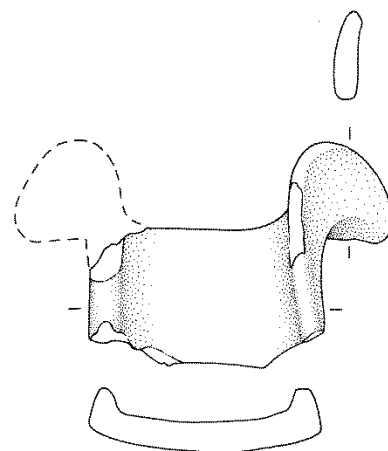
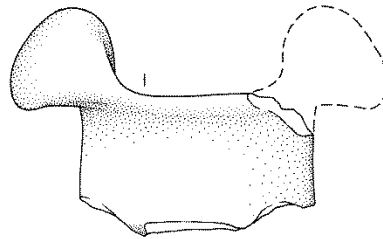
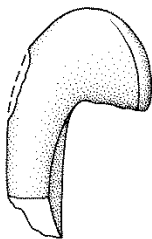
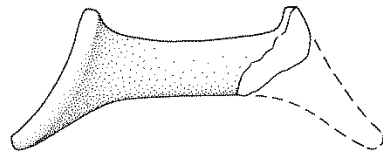


7



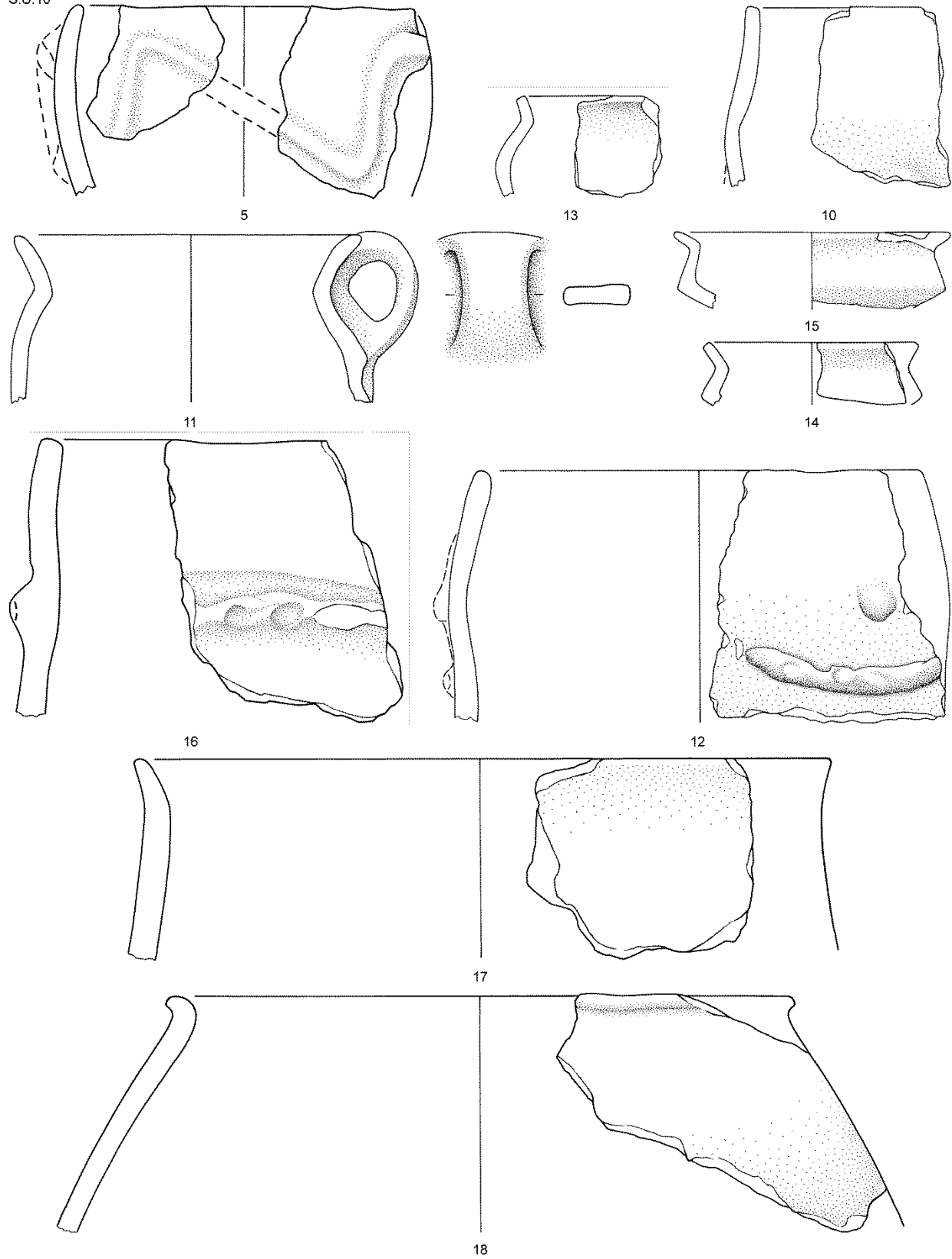
9

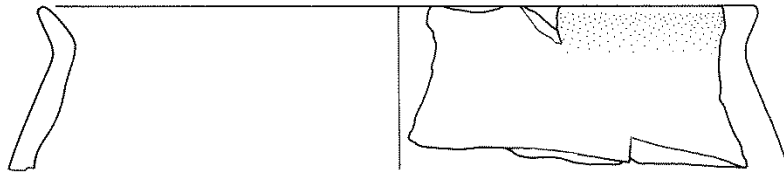
S.U.10



4

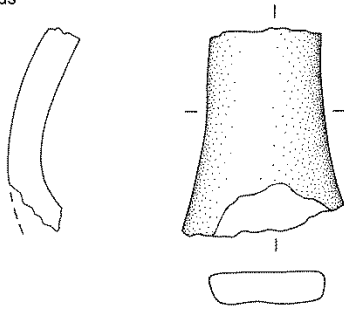
S.U.10



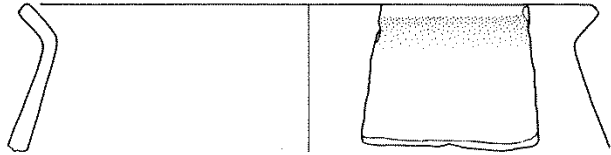


19

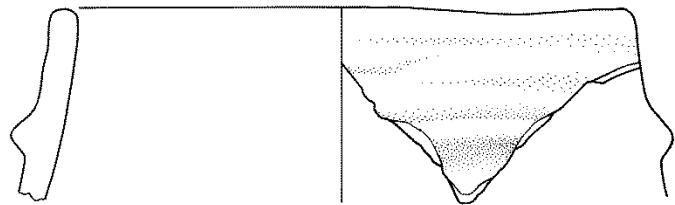
Sporadic finds



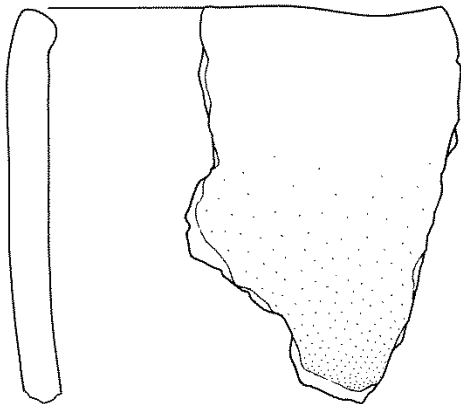
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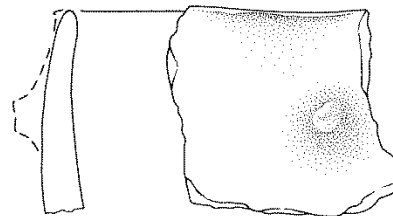
21



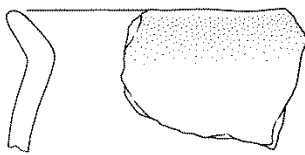
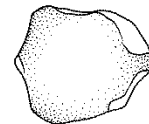
23



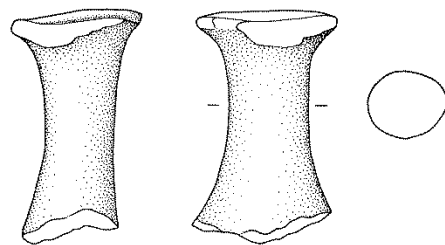
25



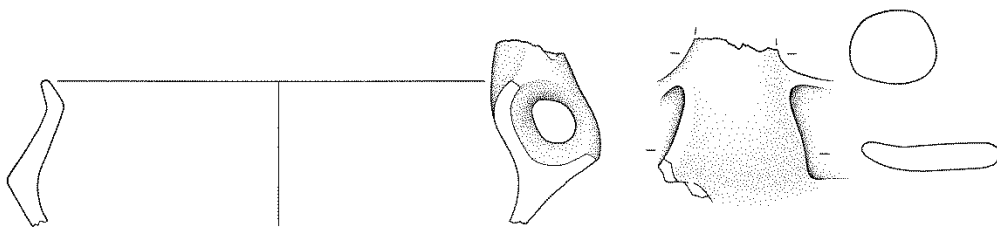
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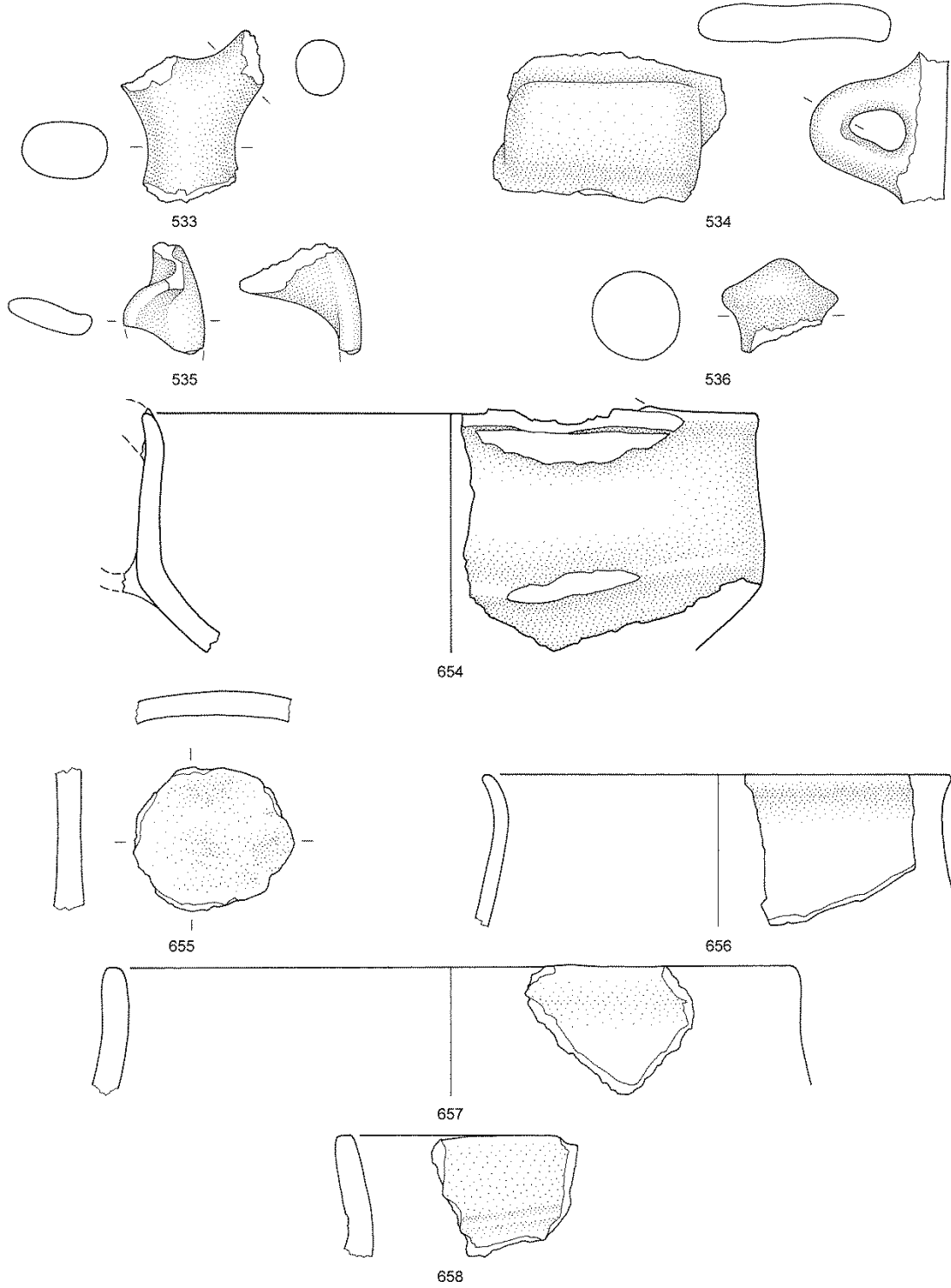
27

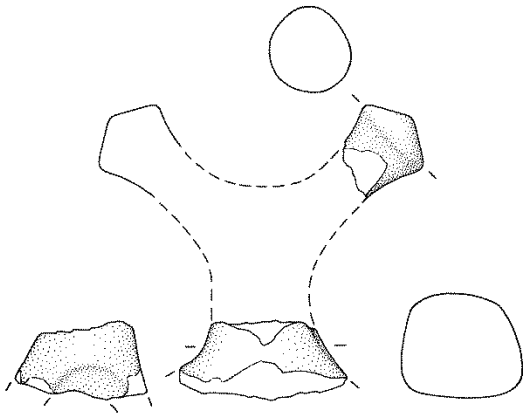


26

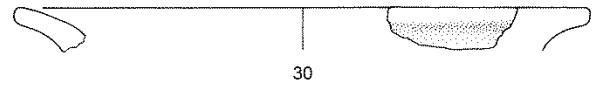


24



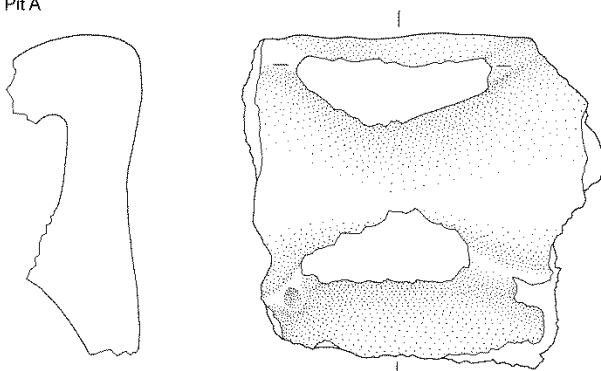


28 - 29

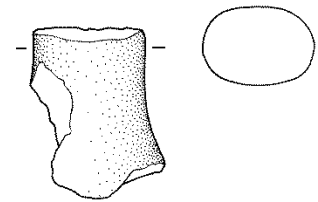


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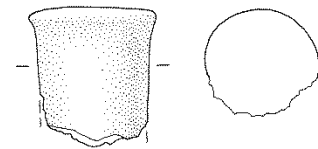
Pit A



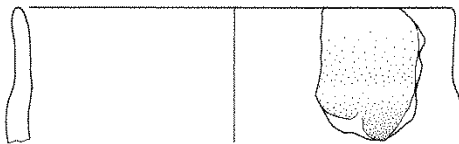
52



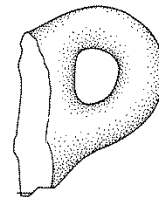
99



104



97



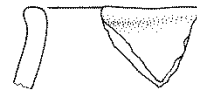
100



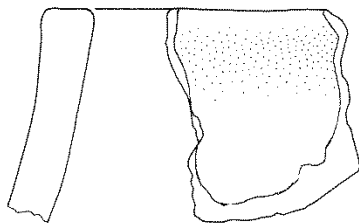
98



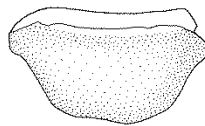
102



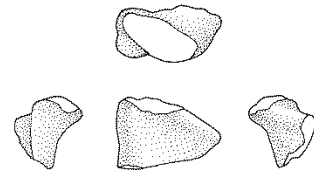
103



101

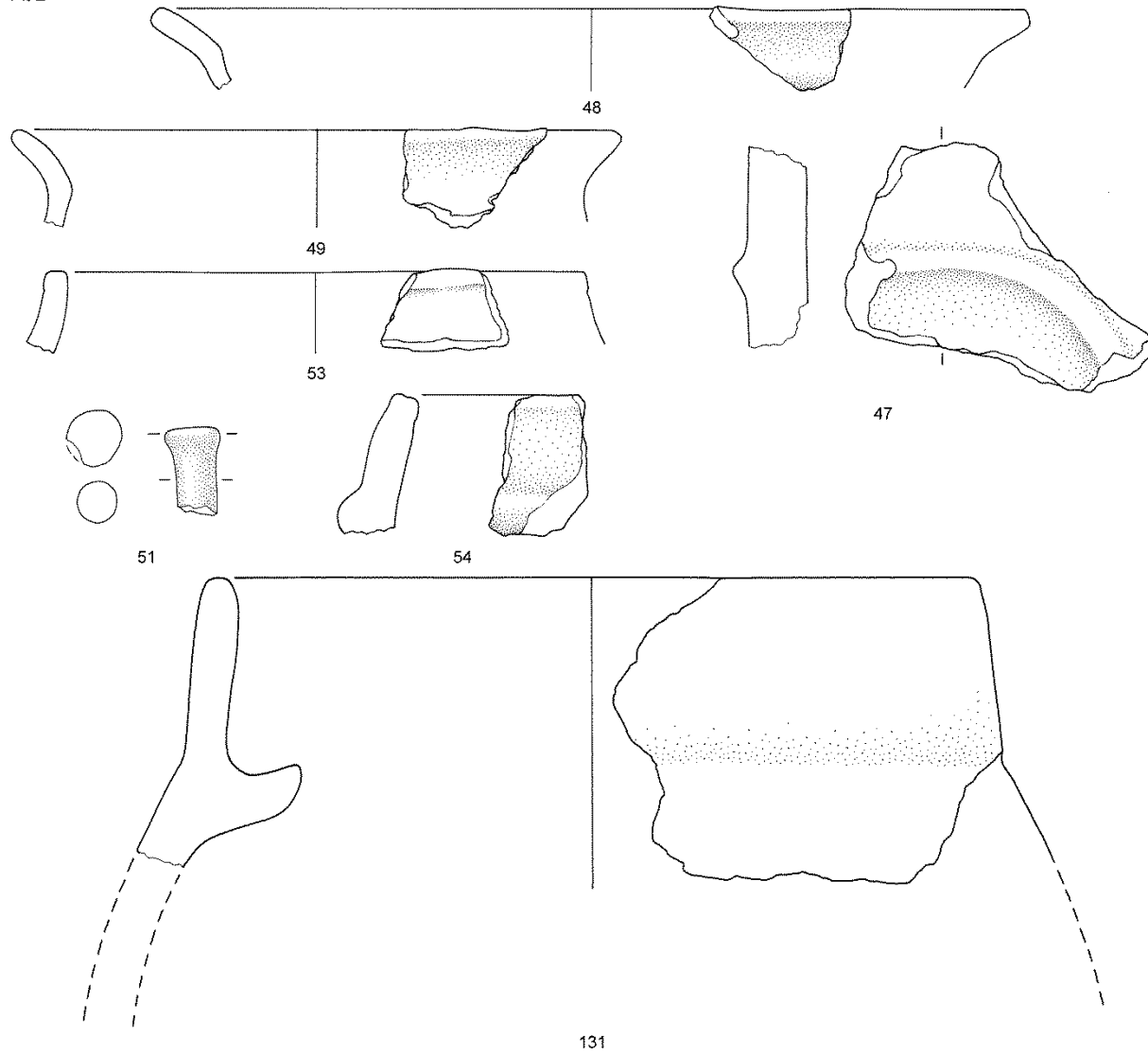


105

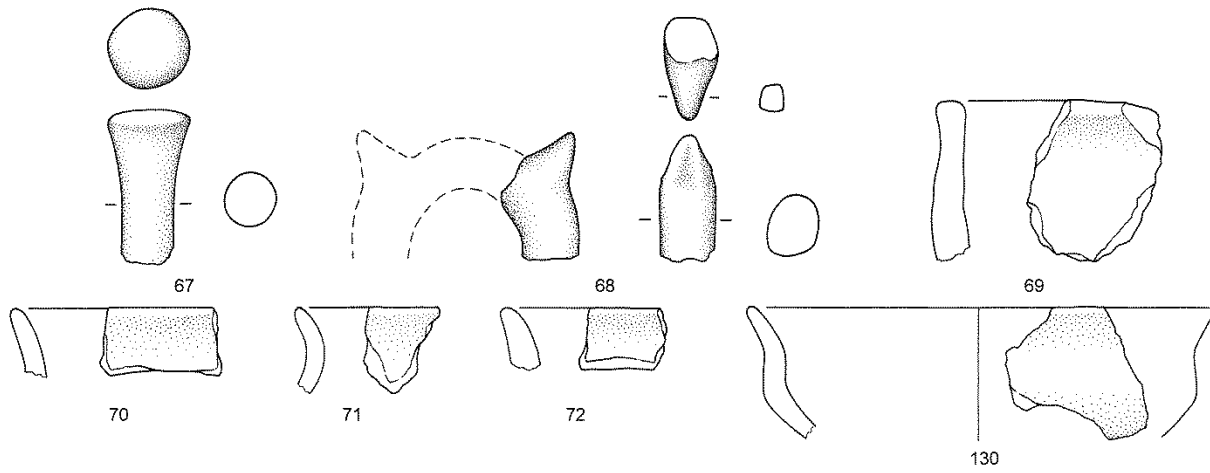


106

Pit E



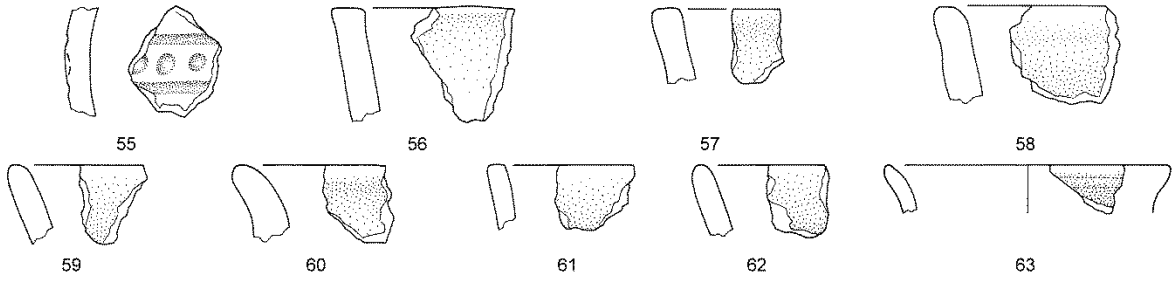
Pit E - context 15



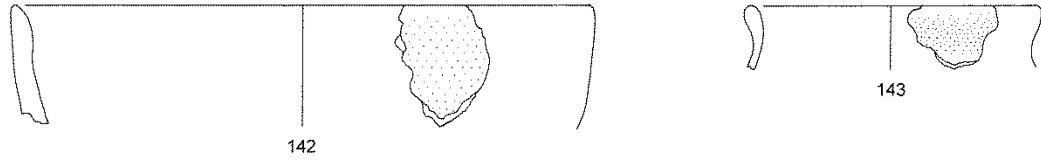
Timpone della Motta - Francavilla M.ma (CS) Plateau I, Zona Casa Aperta (SE area) cont.

Plate VII

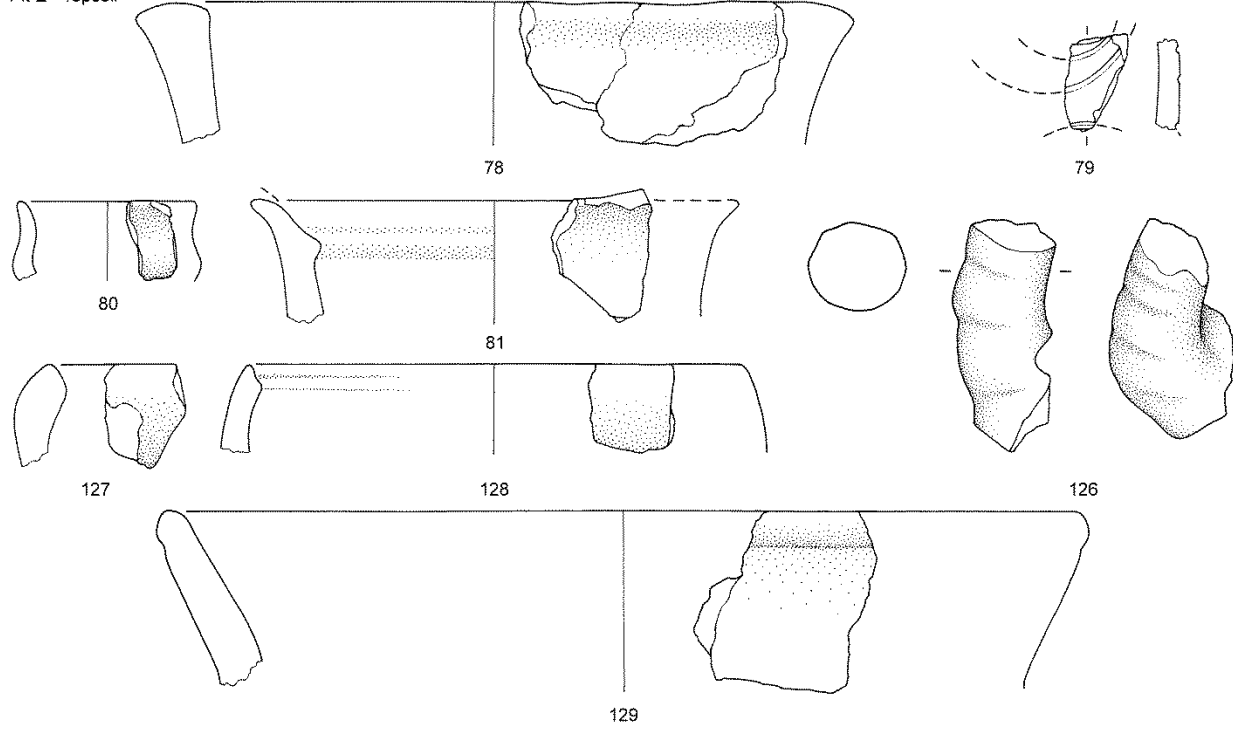
Pit E - context 10



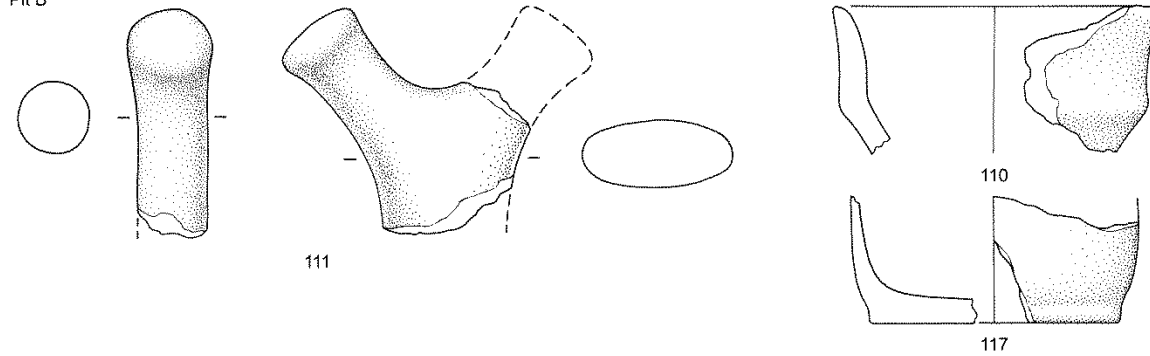
Pit E - context 14



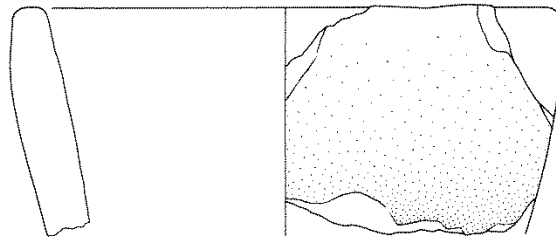
Pit E - Topsoil



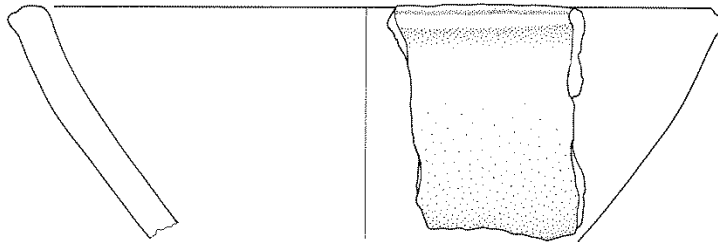
Pit B



Pit C



107

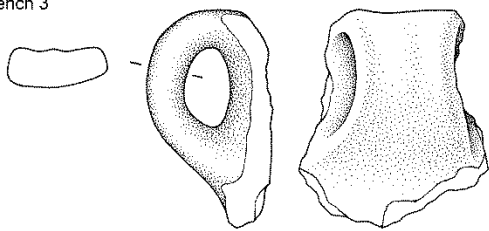


108

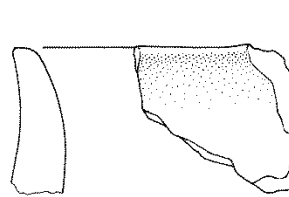


109

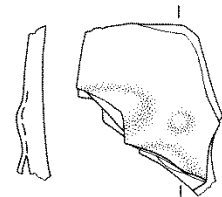
Trench 3



120

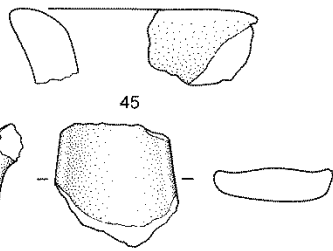


121



122

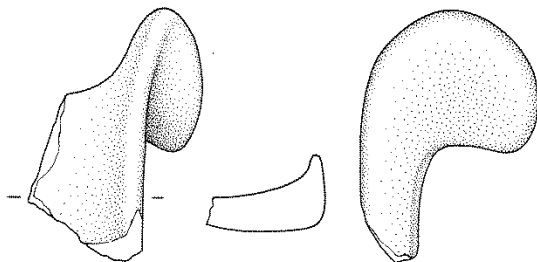
D217 (6th Century house fill)



45

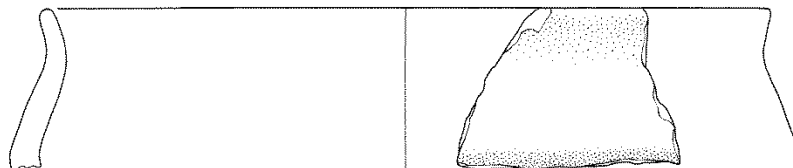
46

B4



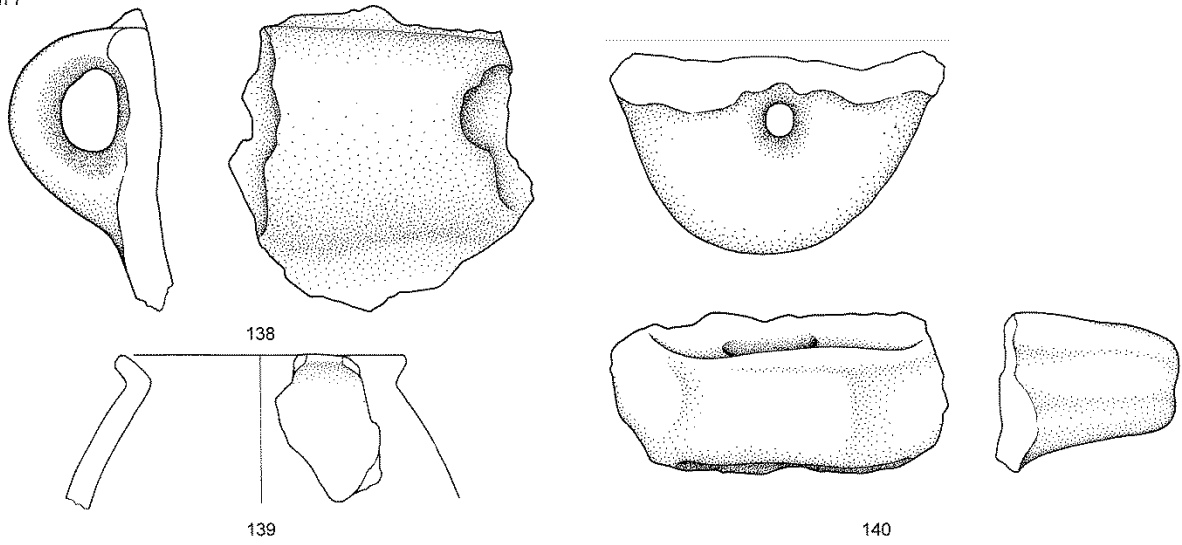
123

Geometric Dump



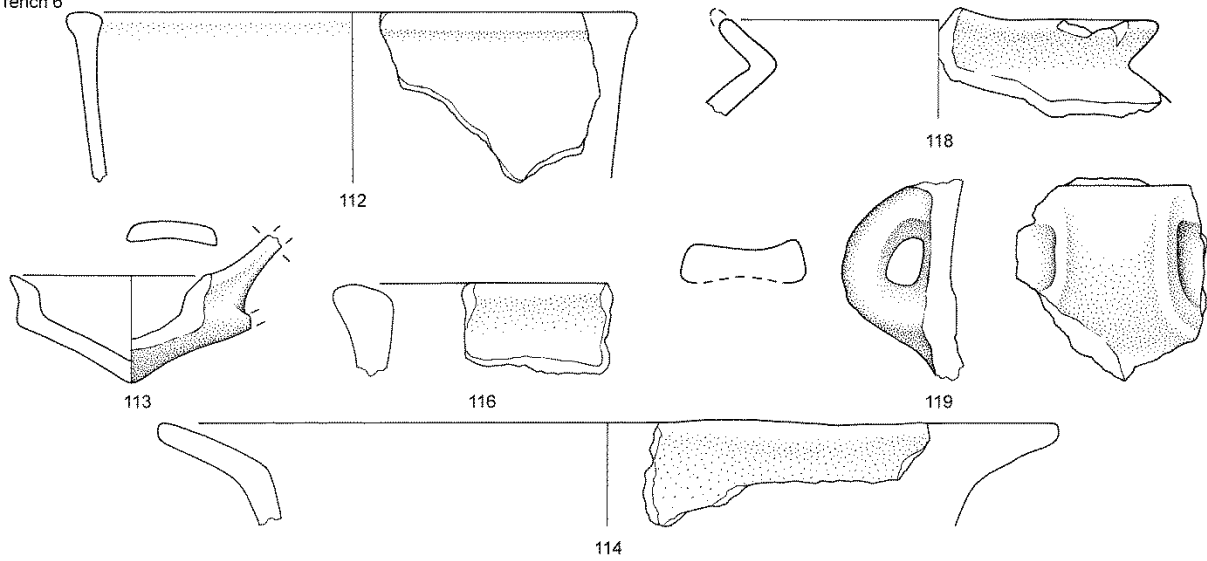
50

Trench 7

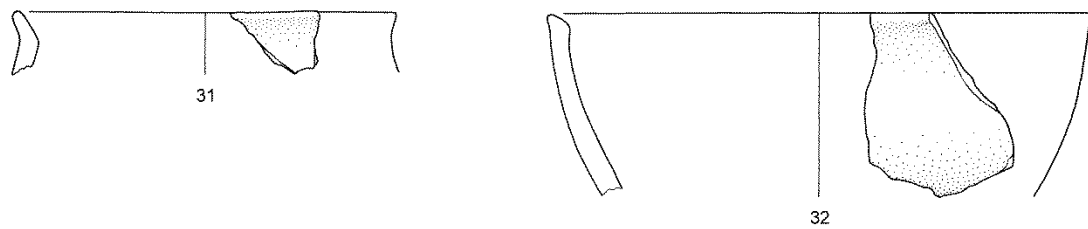


Timpone della Motta - Francavilla M.ma (CS) Plateau I, Zona Casa al Muro Grande (SW area)

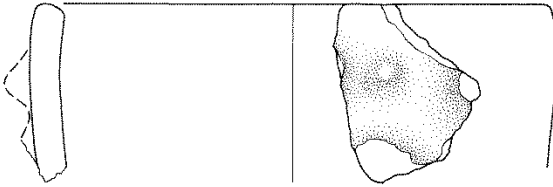
Trench 6



Trench 5



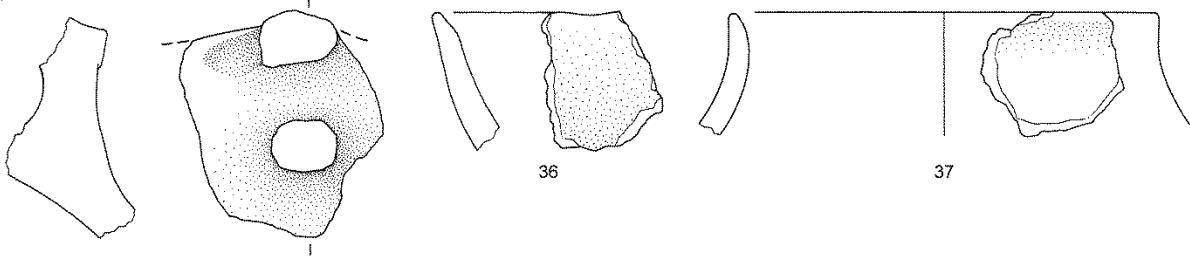
Acropoli - AC-37



34

35

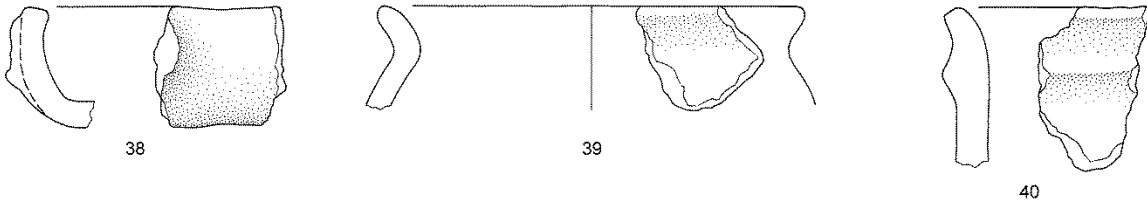
Acropoli - Area Pozzo



33

36

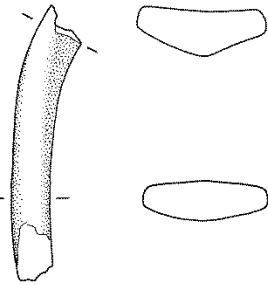
37



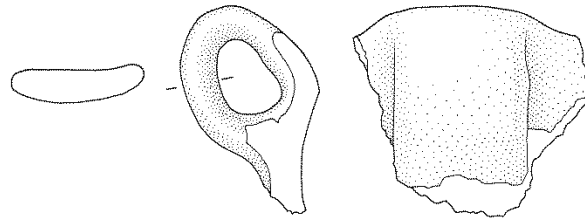
38

39

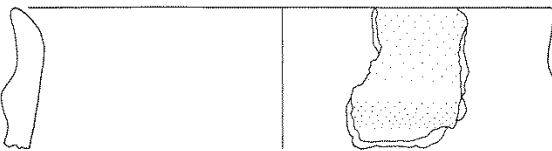
40



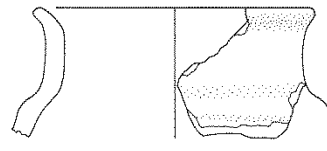
41



42

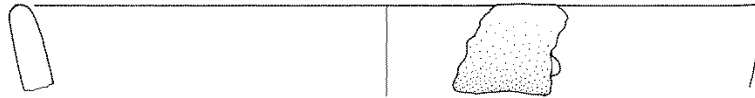


43



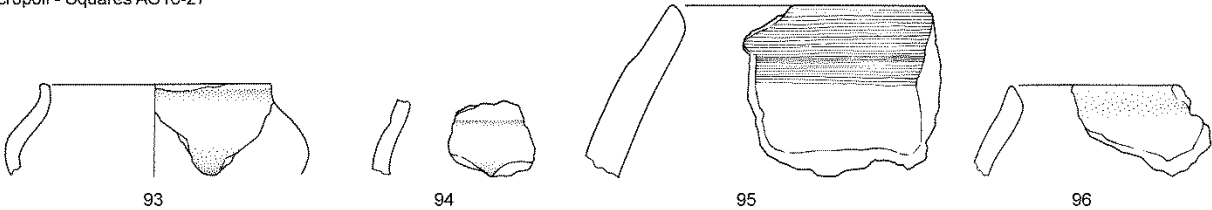
44

Context 15



132

Acropoli - Squares AC16-27



93

94

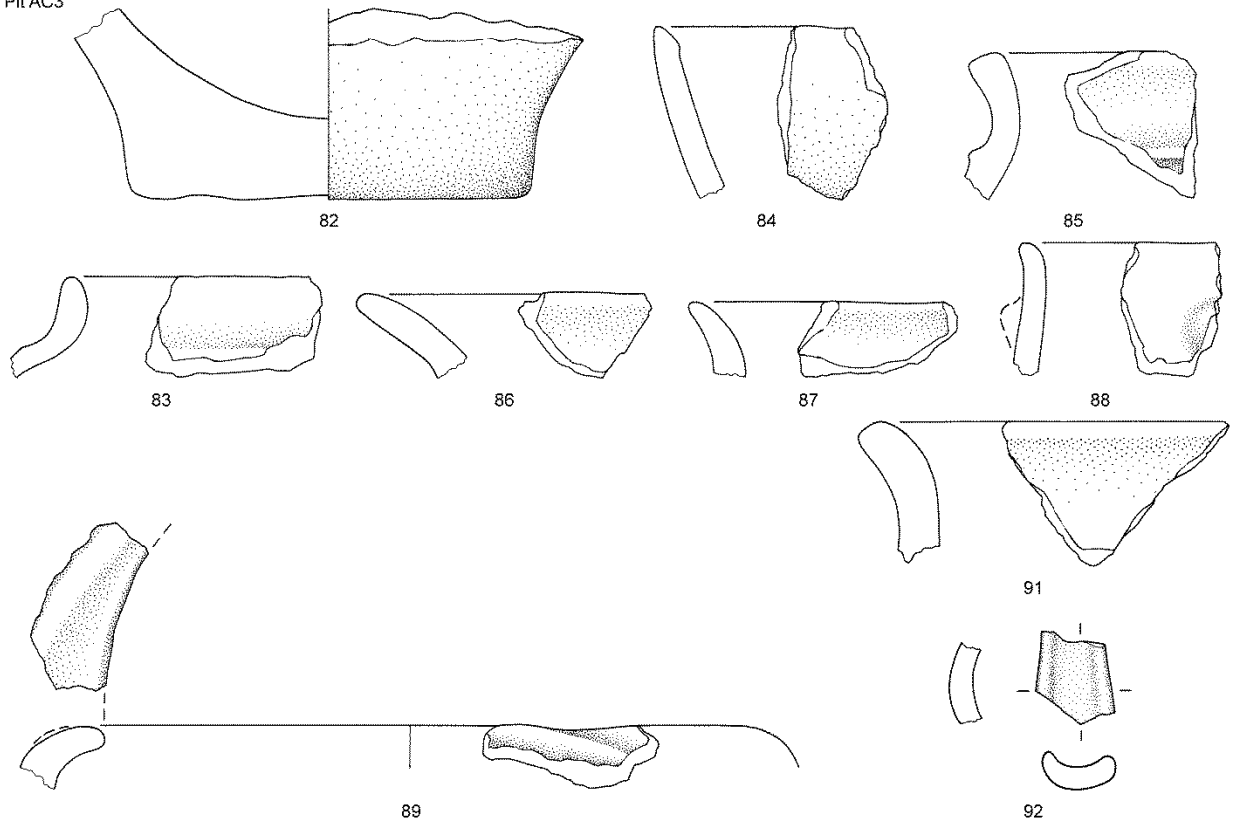
95

96

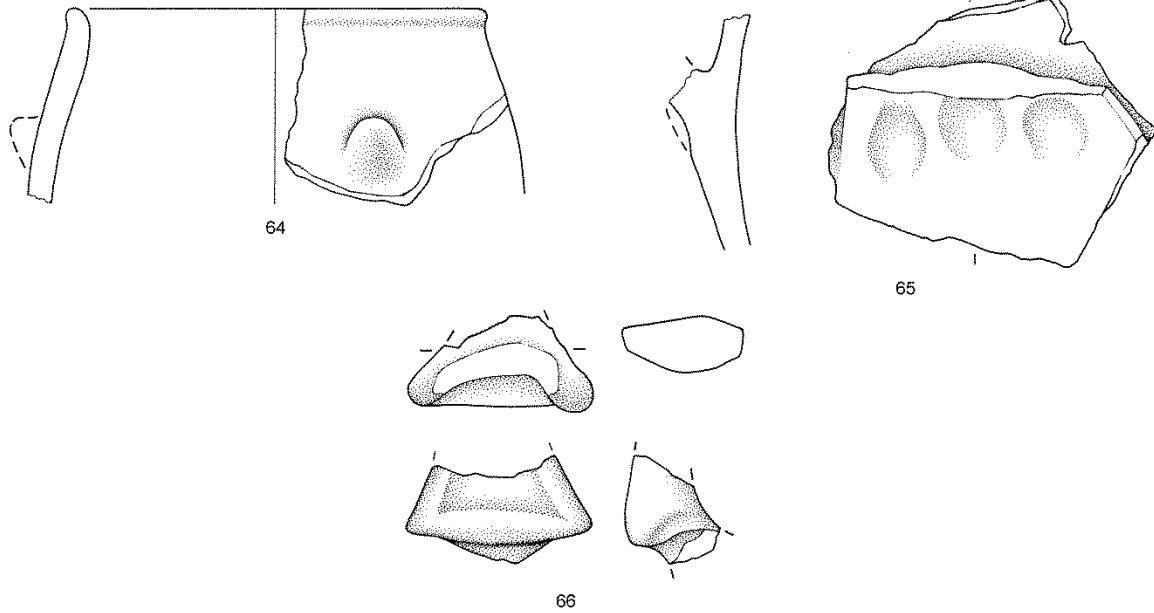
Timpone della Motta - Francavilla M.ma (CS)

Plate XI

Pit AC3

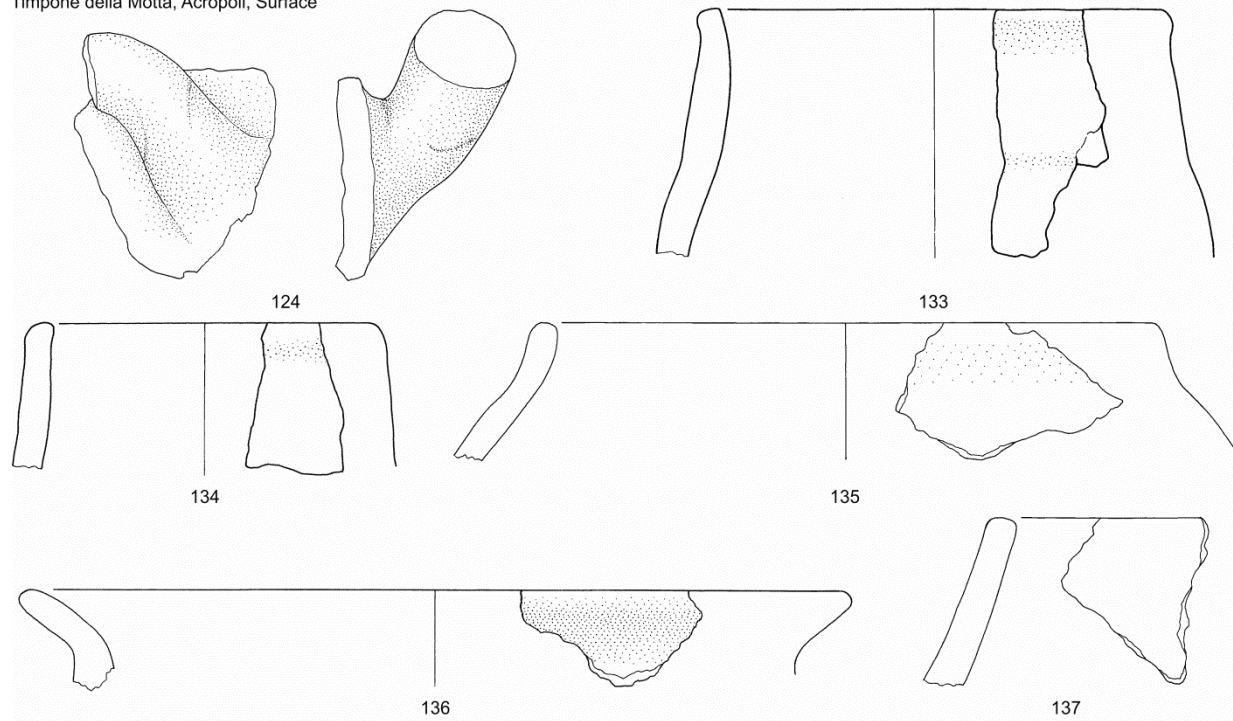


Acropoli - Context 14

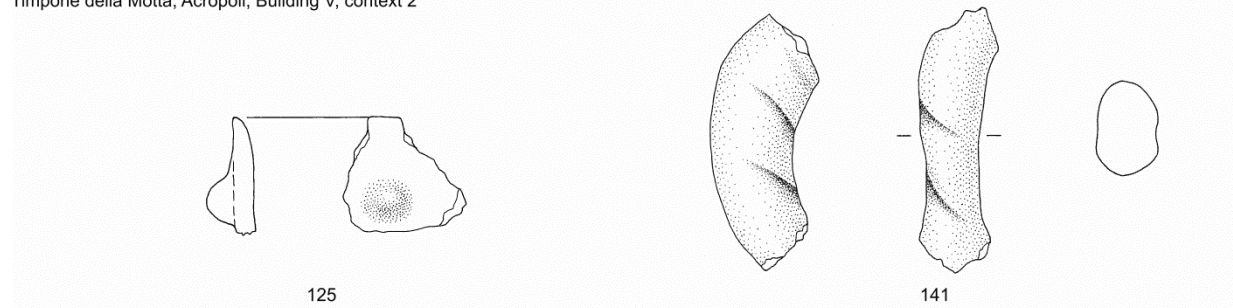


Timpone della Motta - Area Rovitti M.ma (CS)

Timpone della Motta, Acropoli, Surface



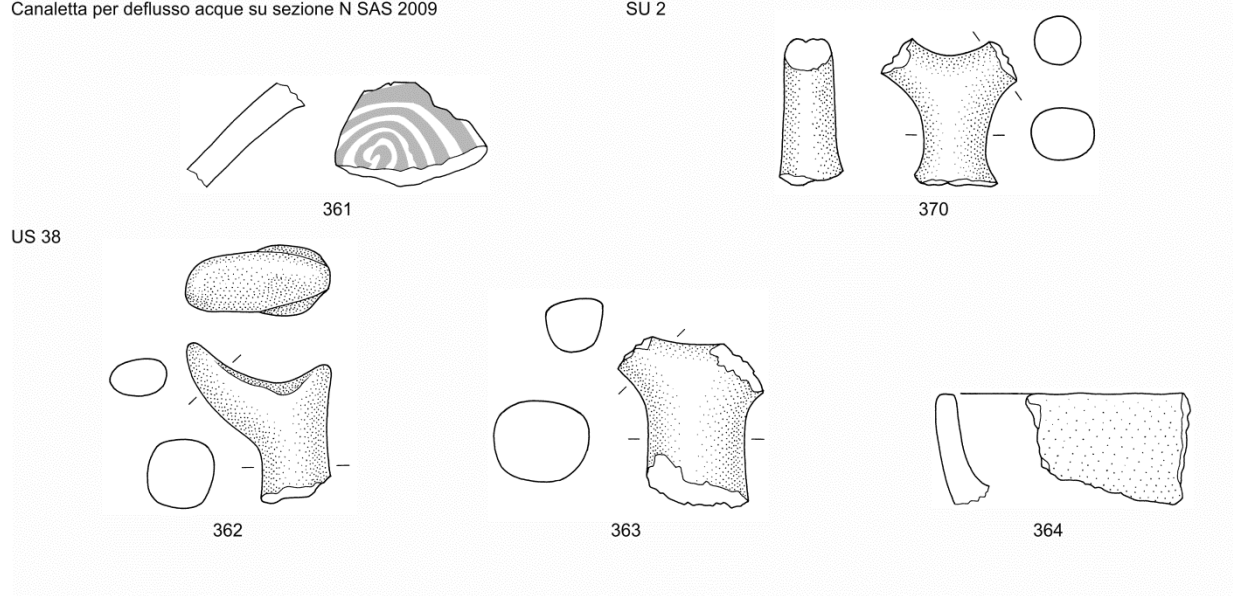
Timpone della Motta, Acropoli, Building V, context 2



Area Rovitti, Francavilla M.ma (CS)

Canaletta per deflusso acque su sezione N SAS 2009

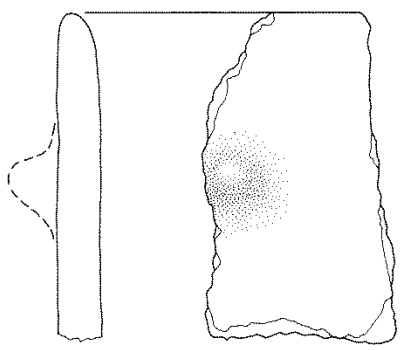
SU 2



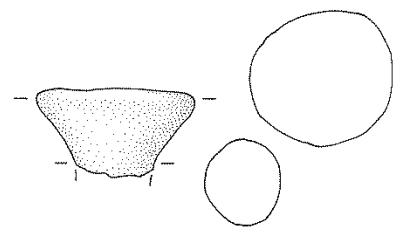
Area Rovitti, Francavilla M.ma (CS) cont.
SU 38

Plate XIII

SU 84

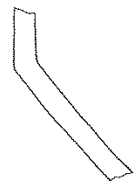


366

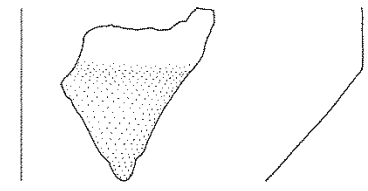


369

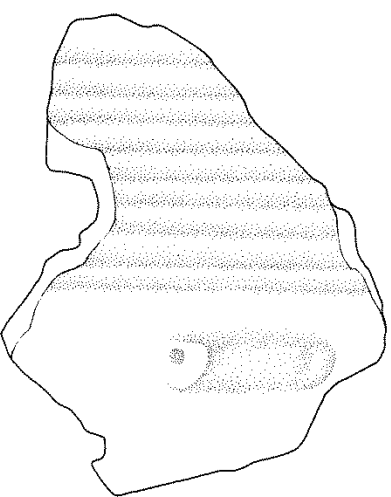
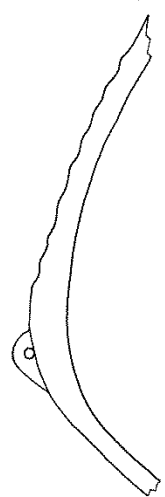
SU 82



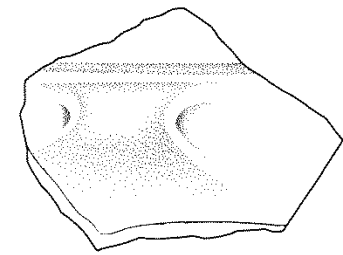
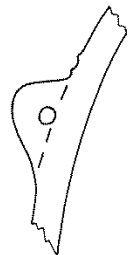
368



Site Grotta del Caprio

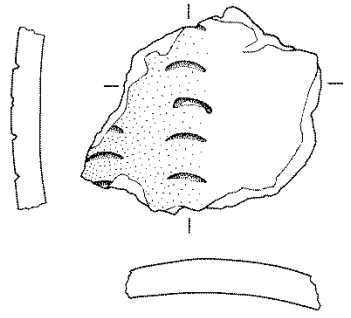


303

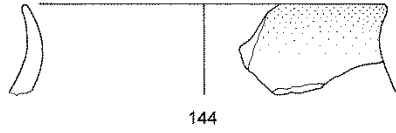


304

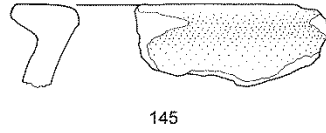
Pietra S. Angelo, San Lorenzo Belizzi (CS) (survey materials)



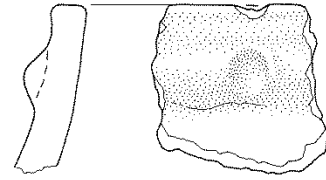
371



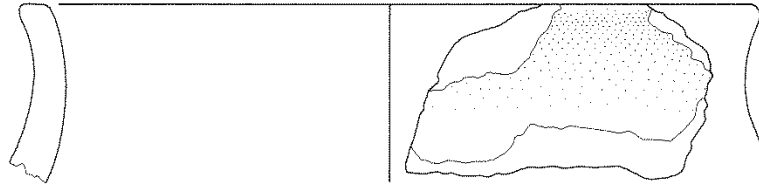
144



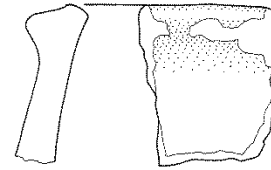
145



146



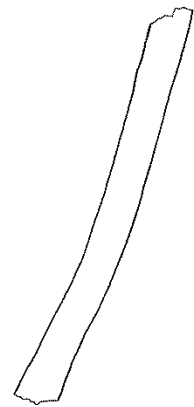
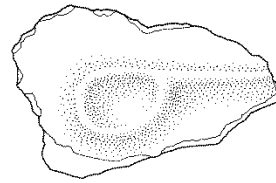
147



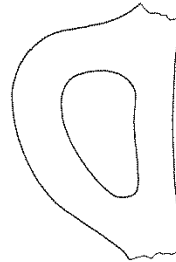
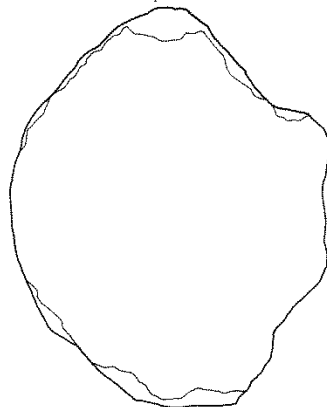
148



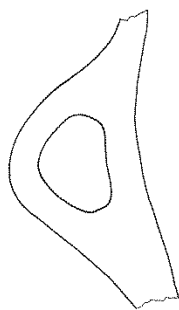
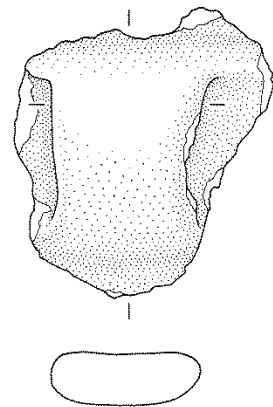
149



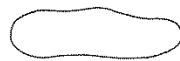
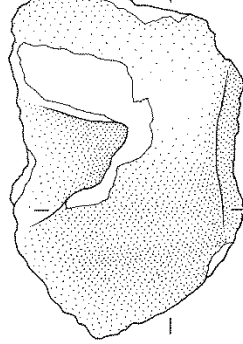
150



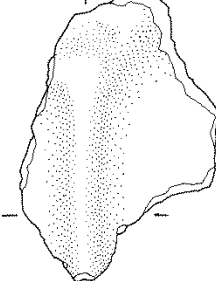
151

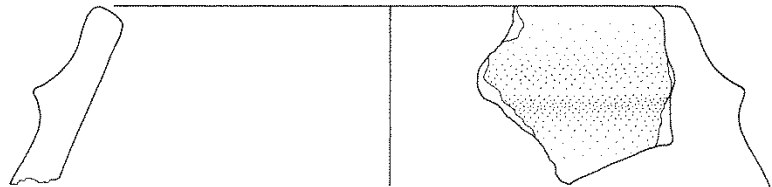
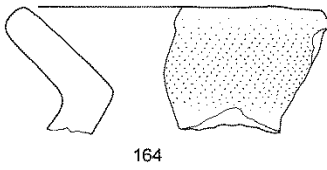
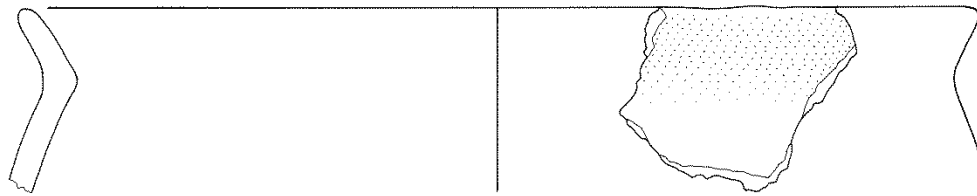
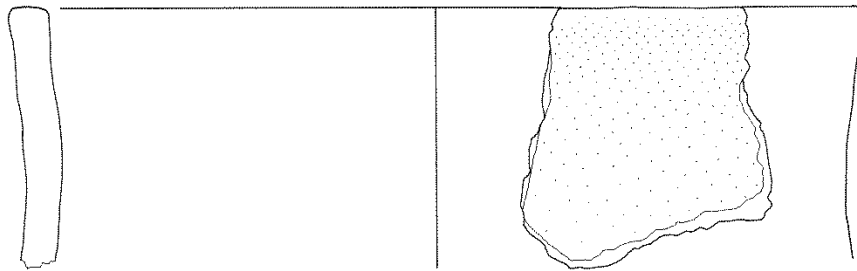
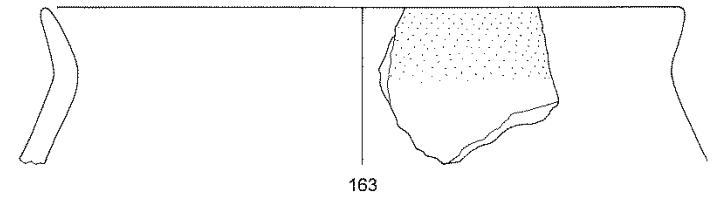
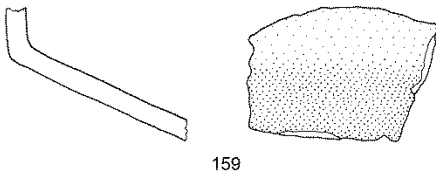
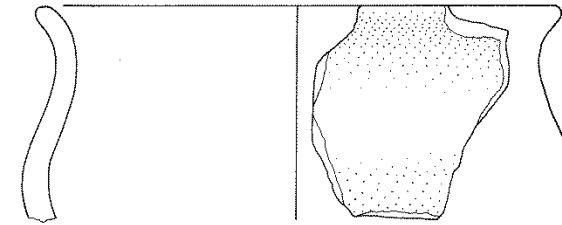
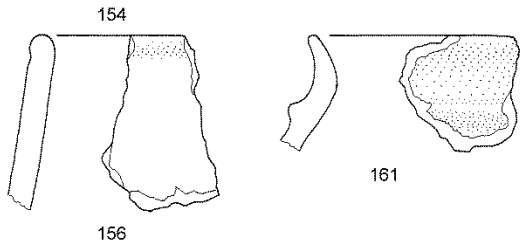
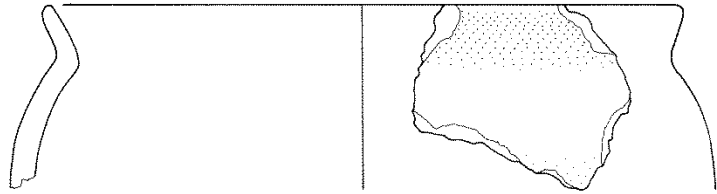
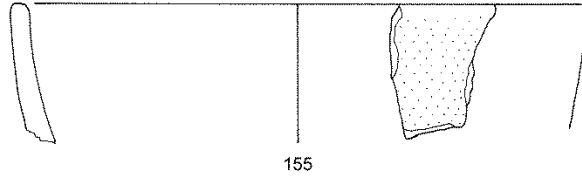
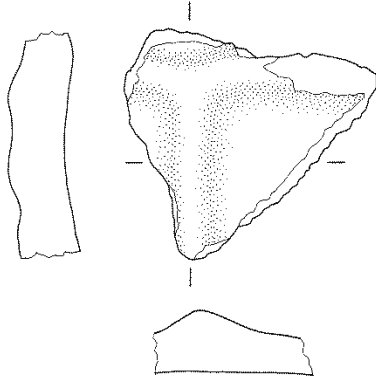


152



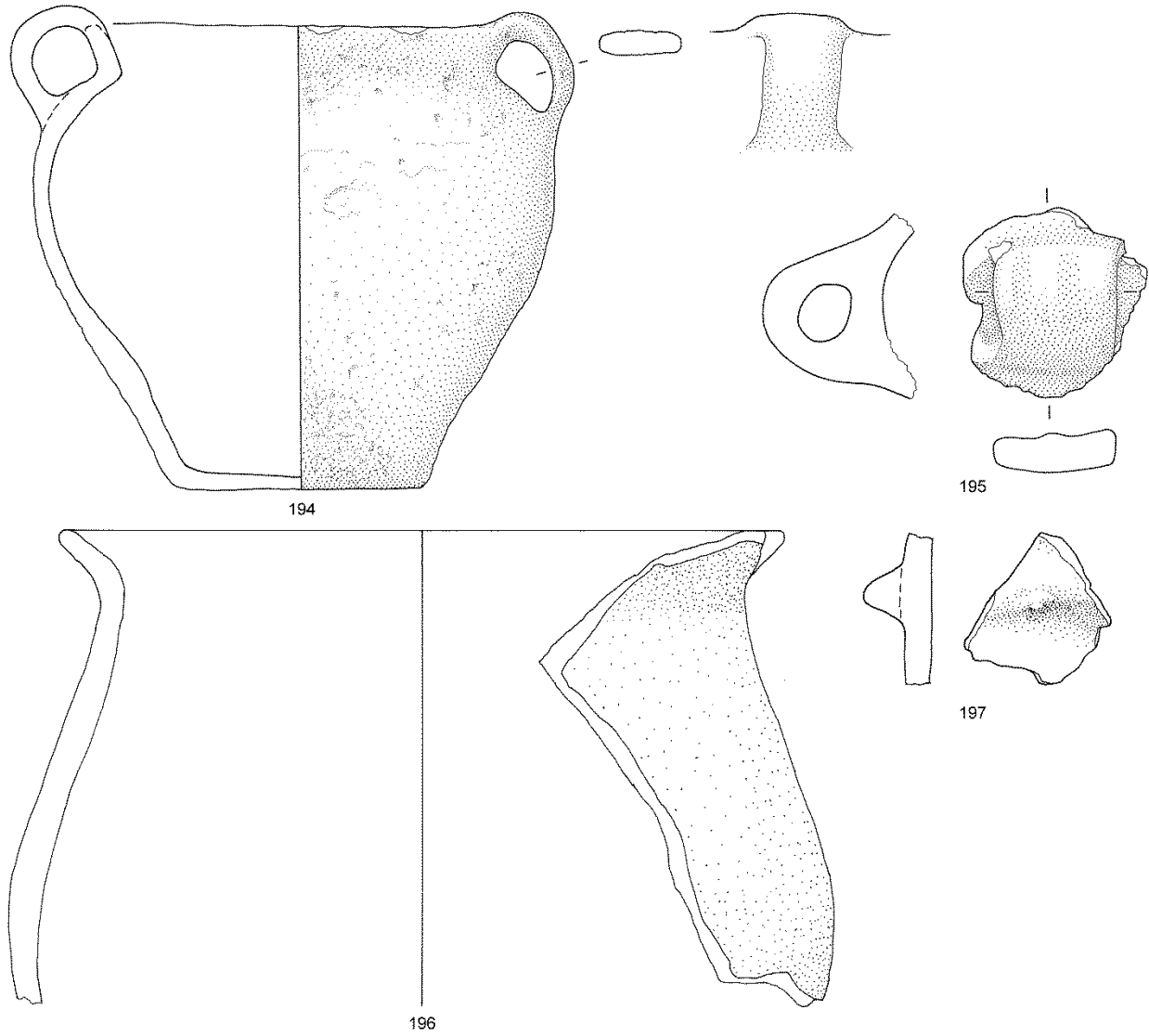
153



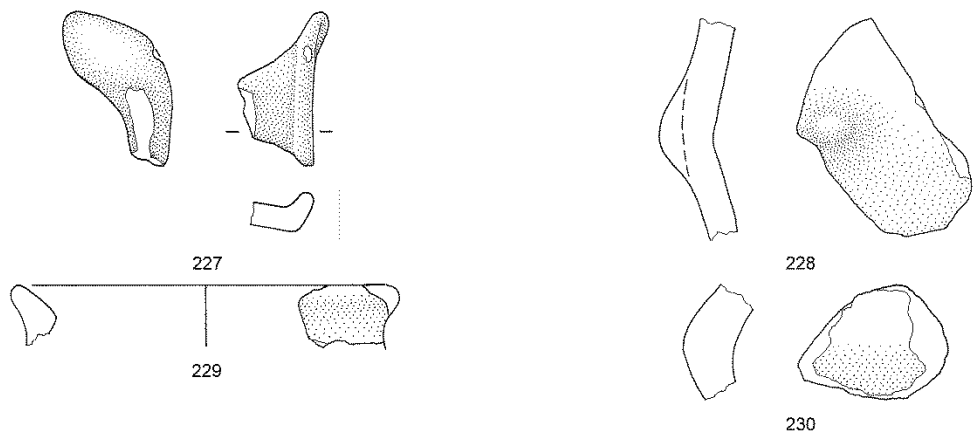


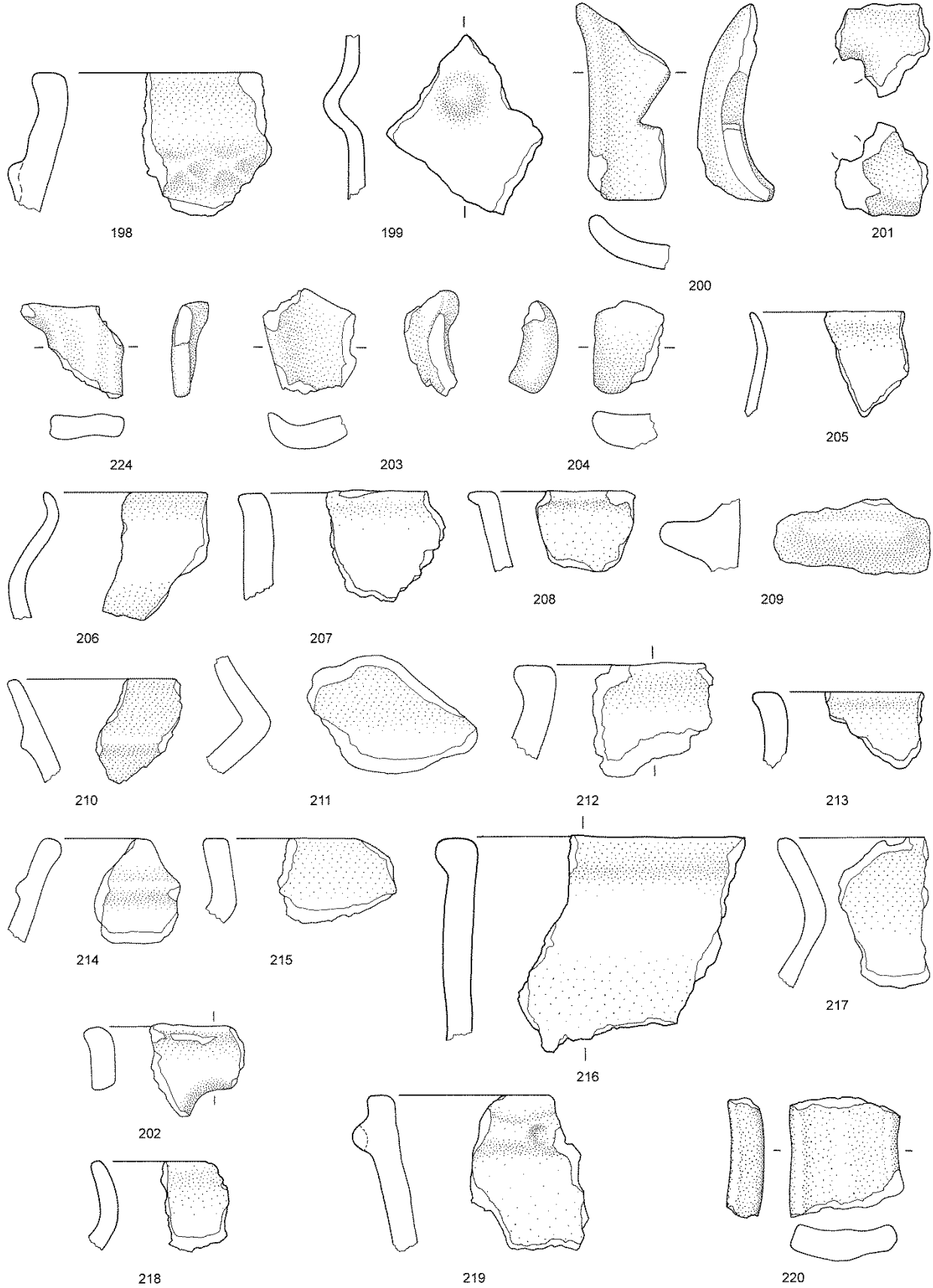


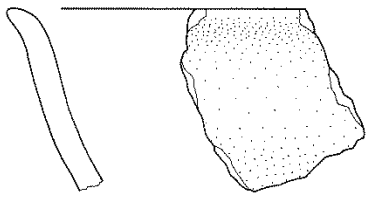




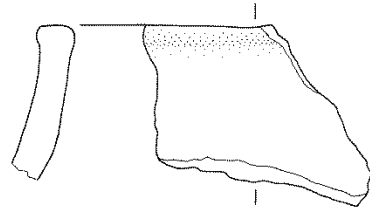
Site Località Cudicino



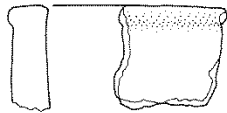




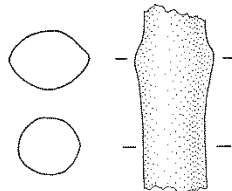
221



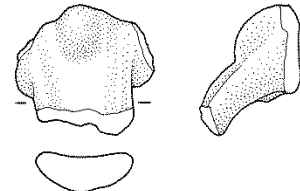
222



223

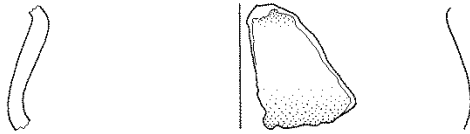


225



226

Site Trizzone della Scala



231



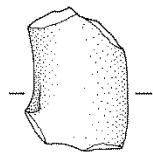
233



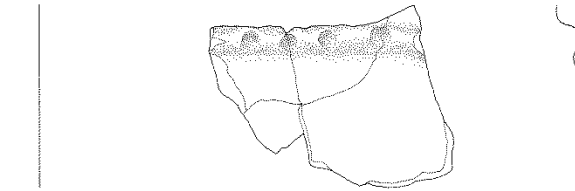
232



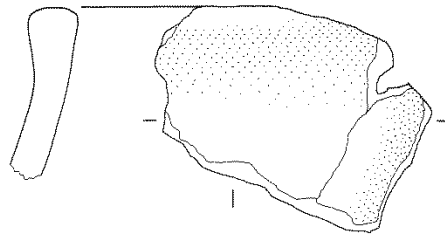
235



236



234 (1:3)



237



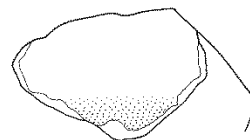
238



239

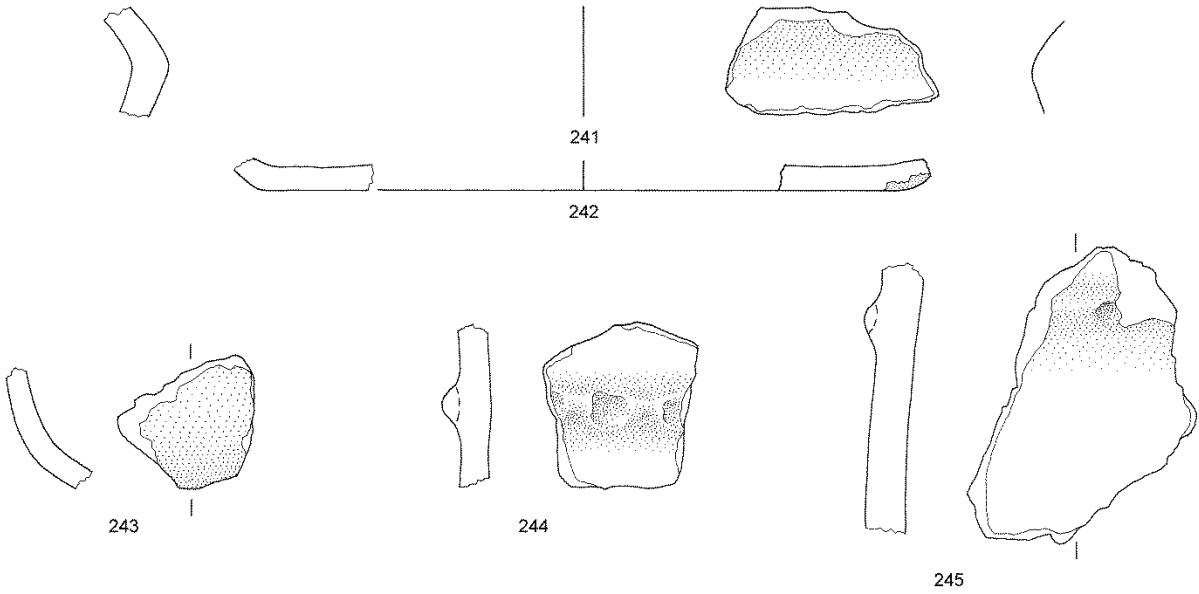


240

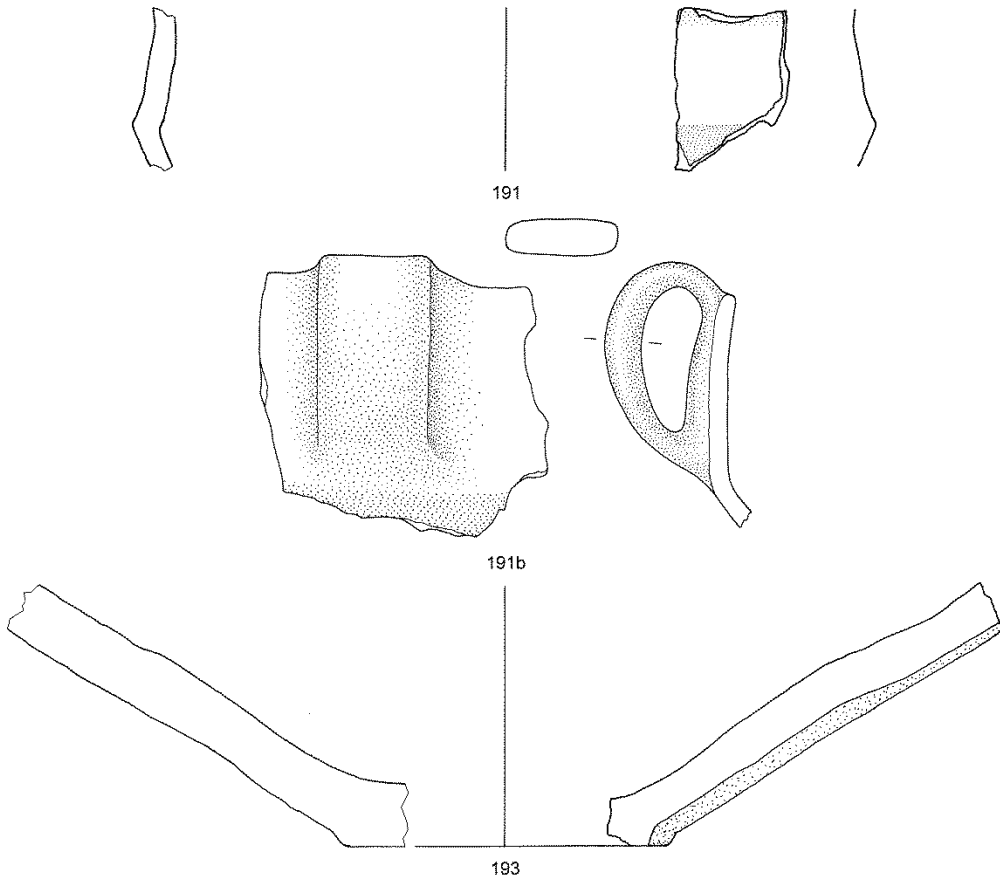


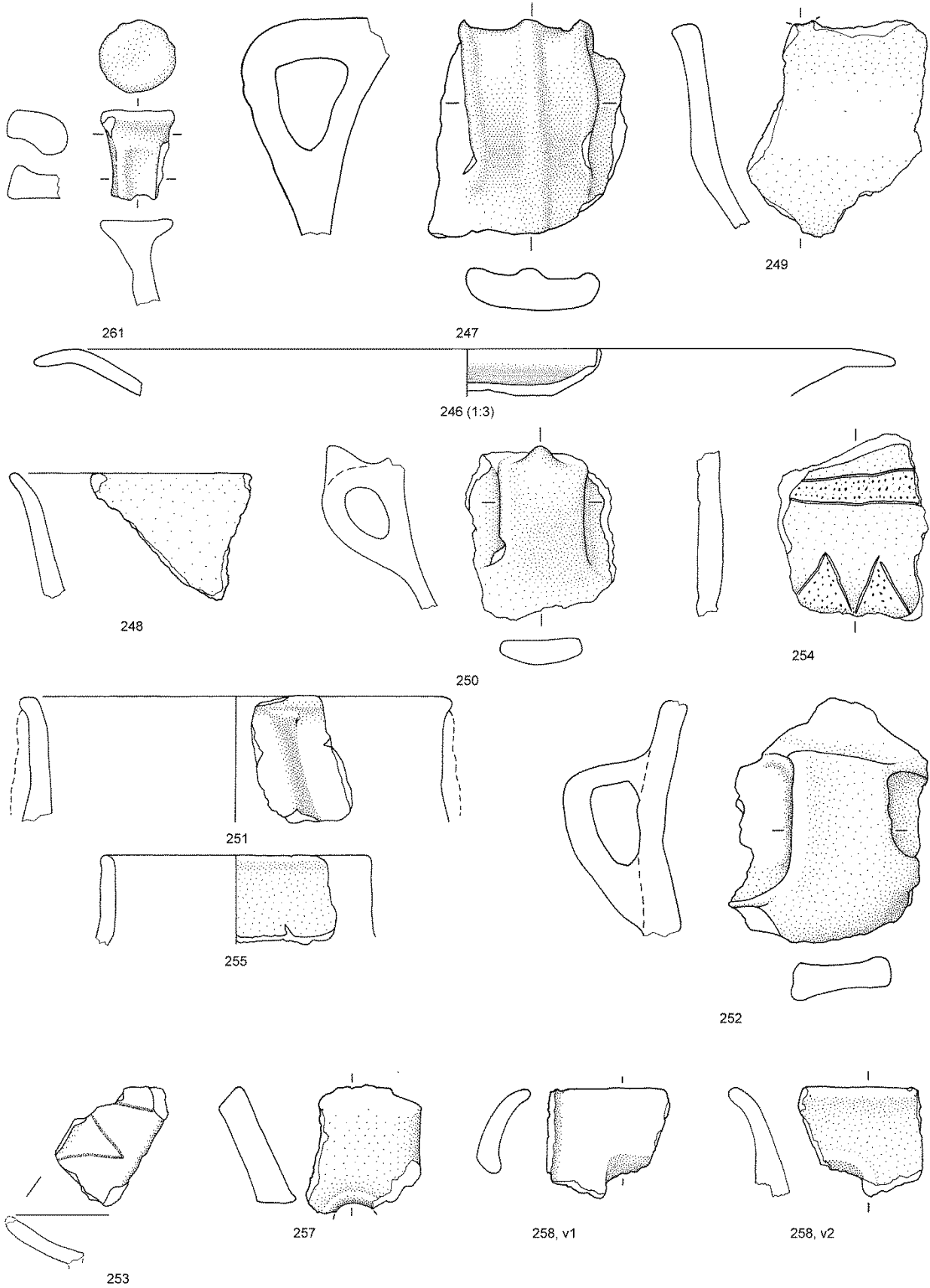
Site Trizzone della Scala cont.

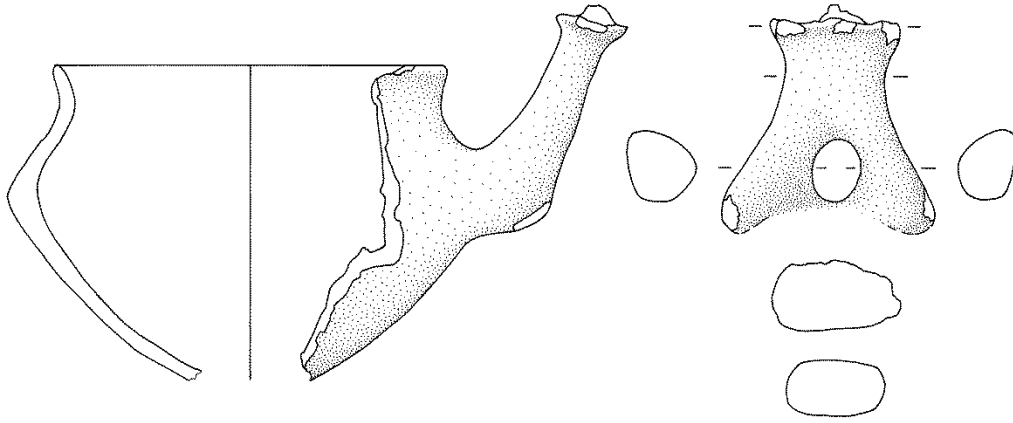
Plate XXI



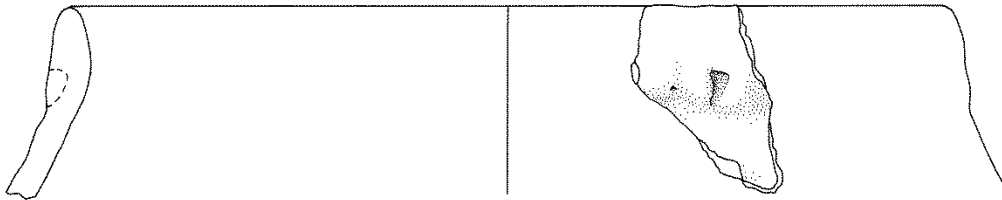
Site Grotta Di Pietra S. Angelo IV



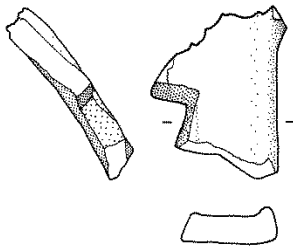




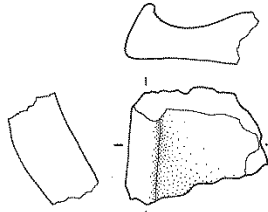
256



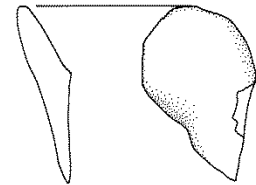
260



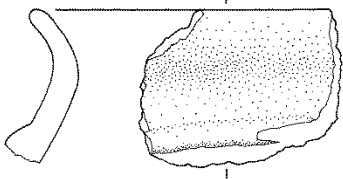
259



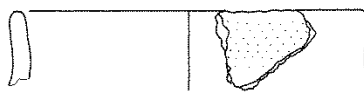
262



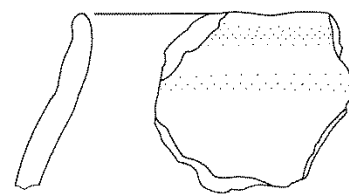
263



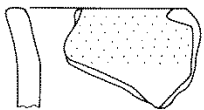
265



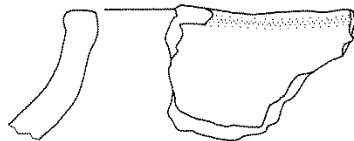
267



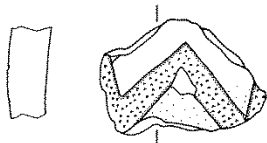
268



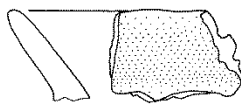
269



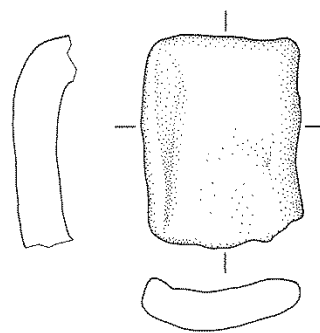
270



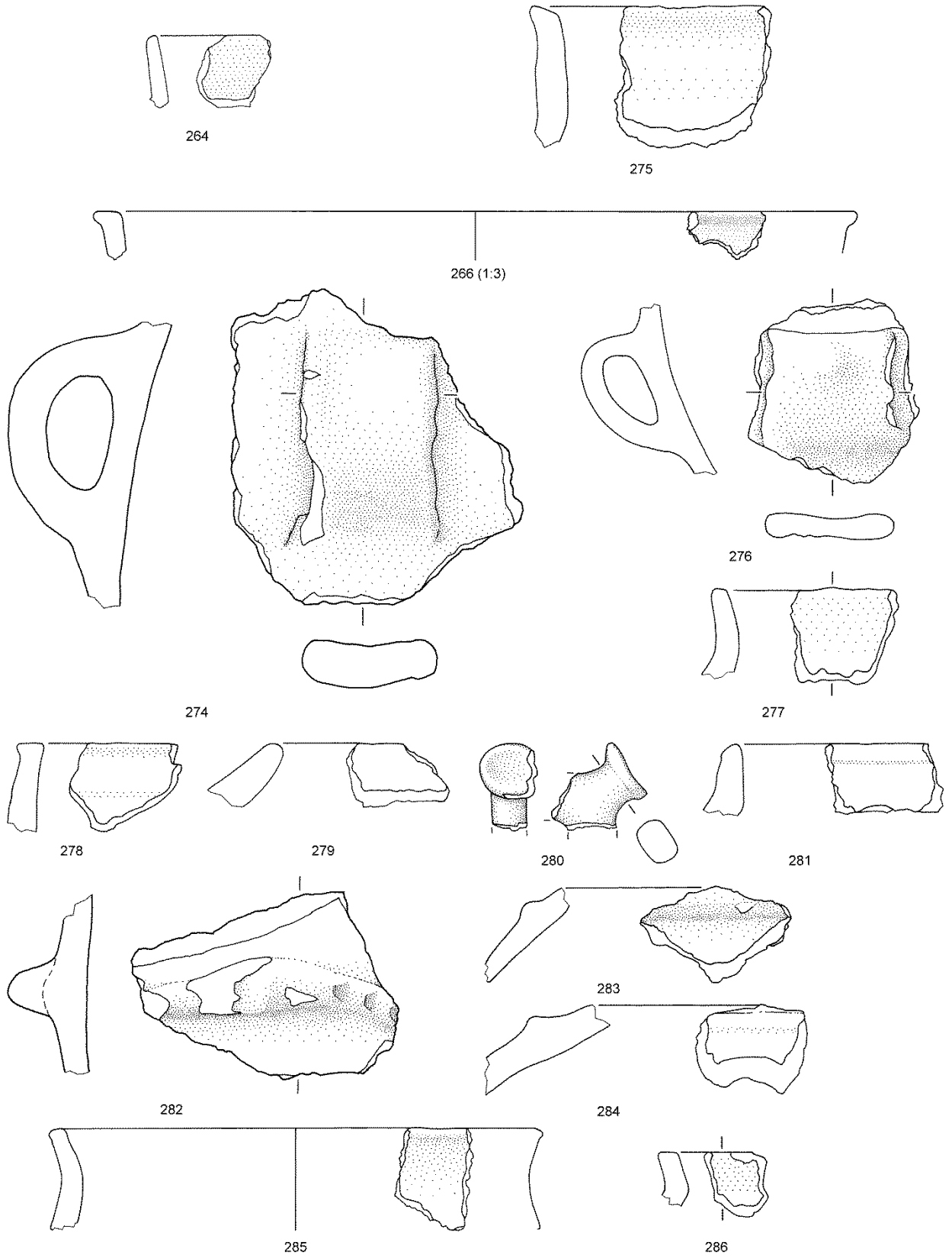
271



272

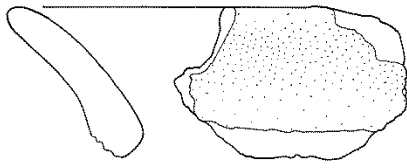


273

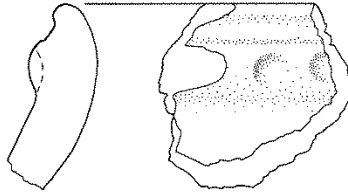


Site Timpa del Castello cont.

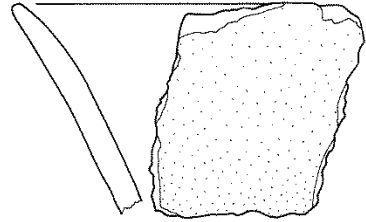
Plate XXV



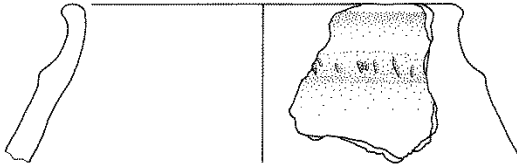
287



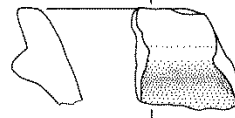
288



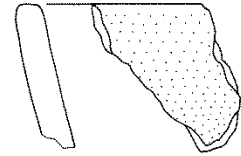
289



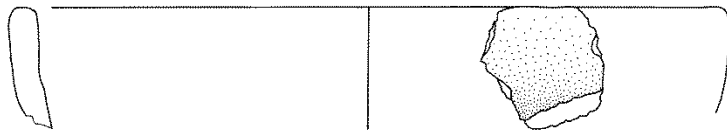
290



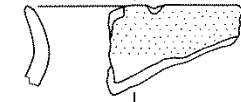
291



292

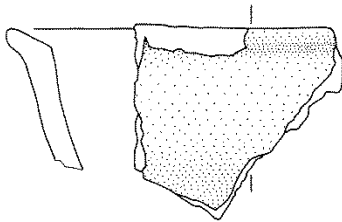


293

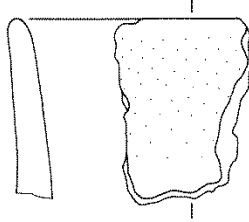


294

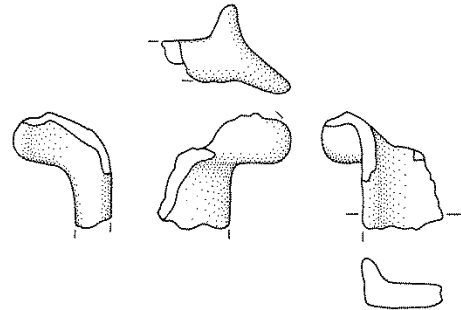
Site Timpa del Castello Section



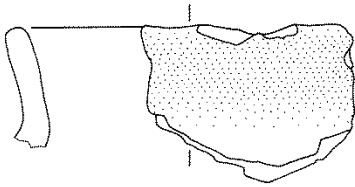
295



296



297



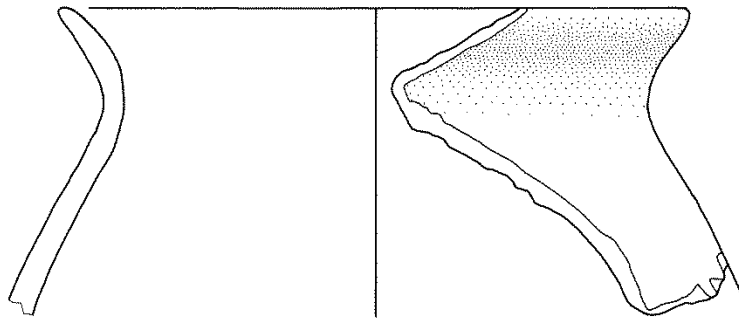
298



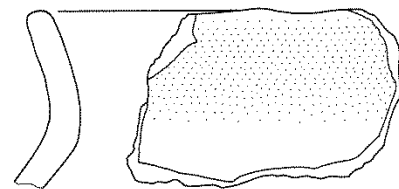
299



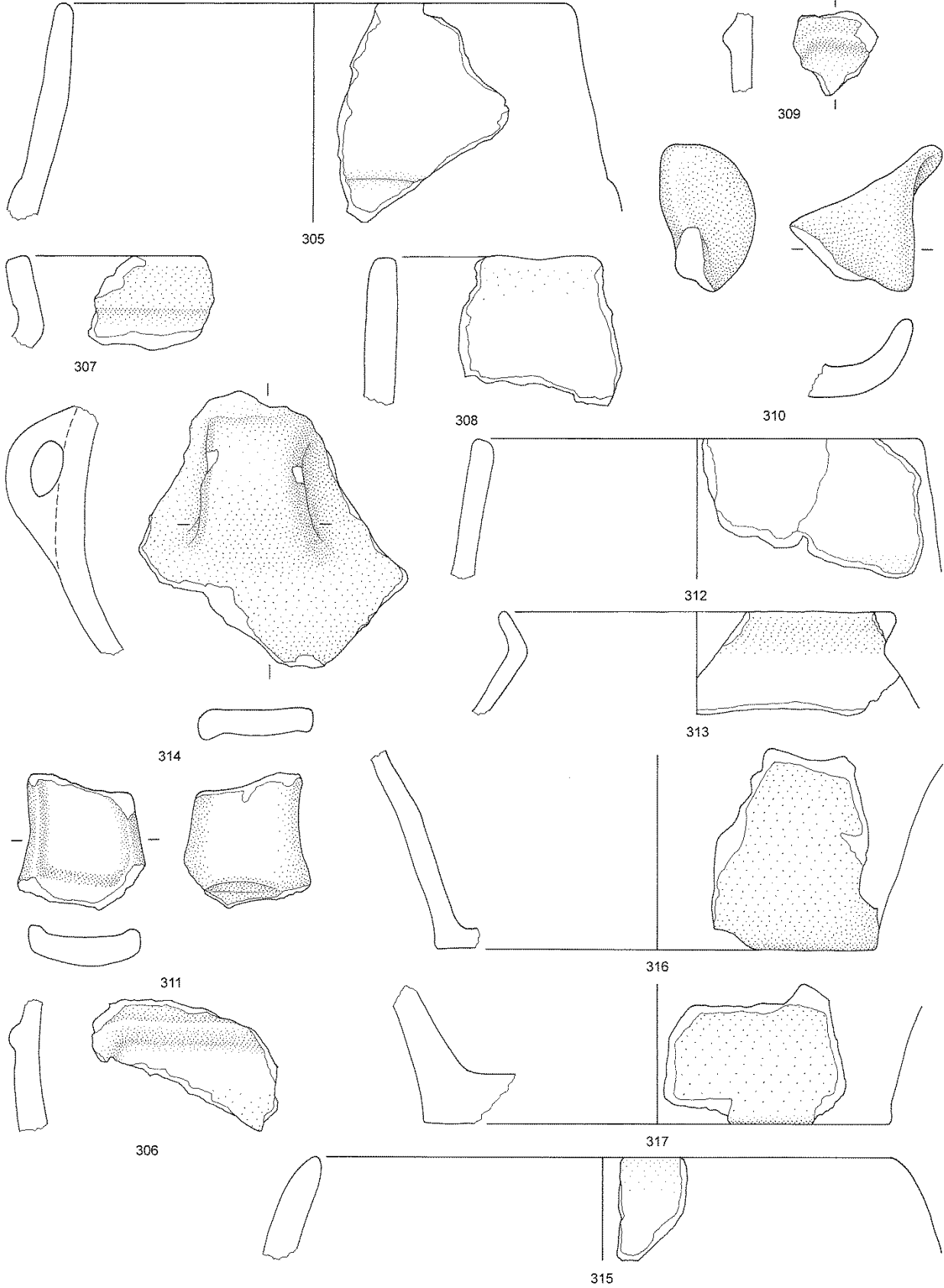
300

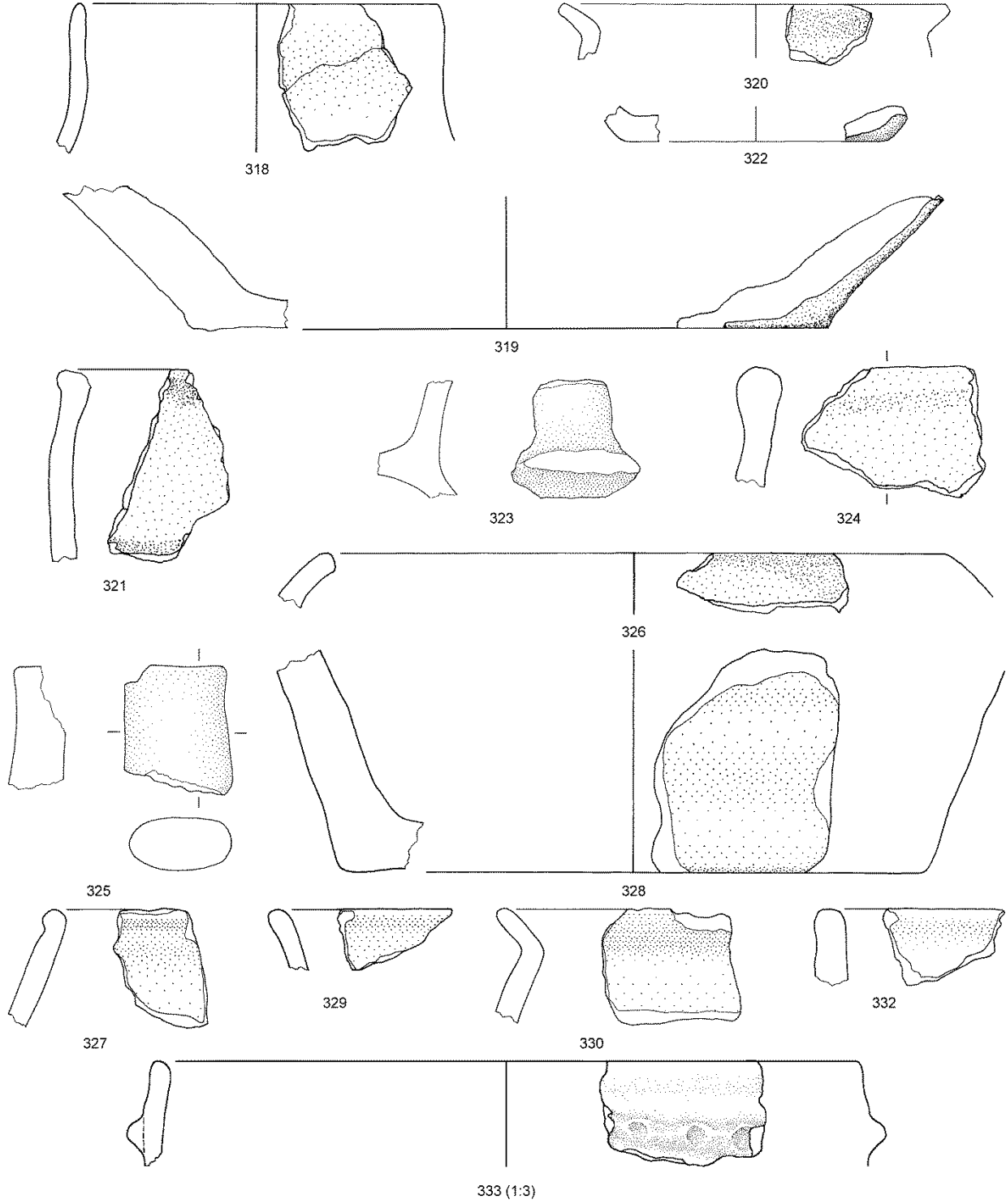


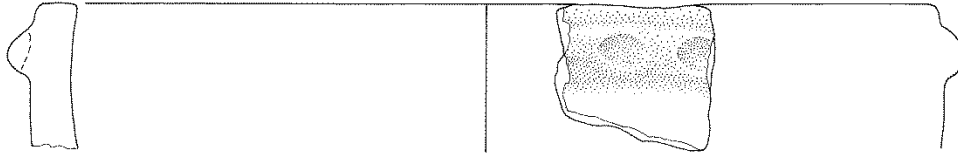
301



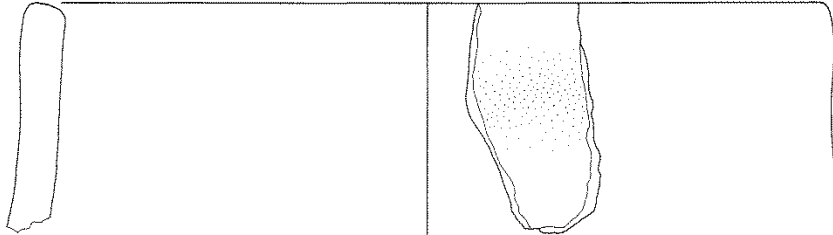
302



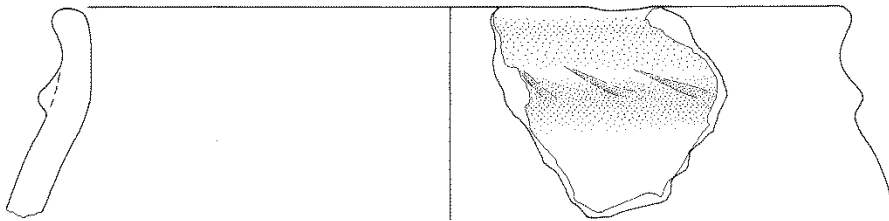




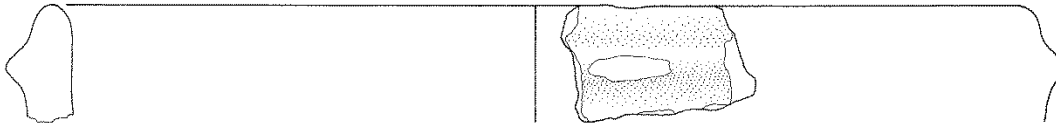
331



334



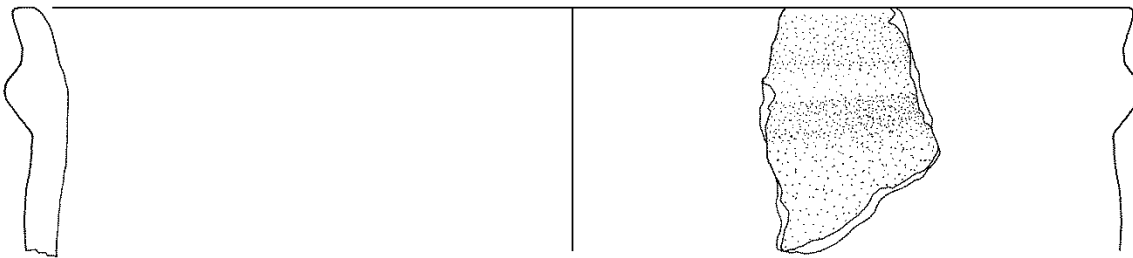
335



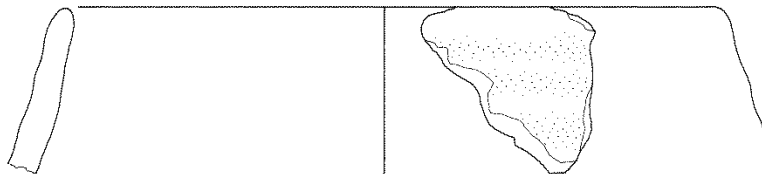
336



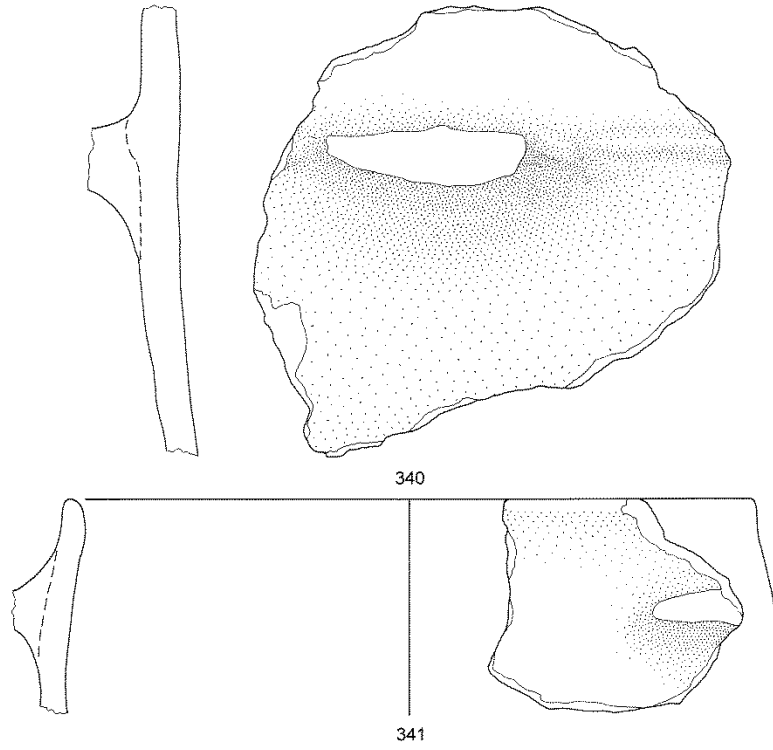
337



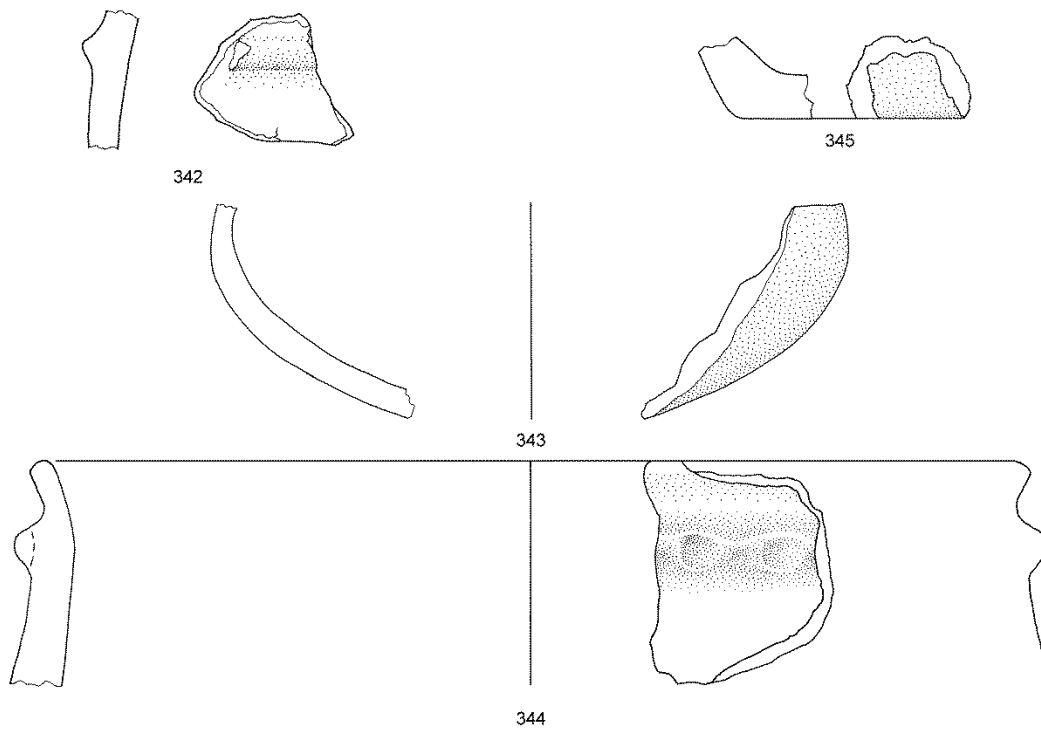
338

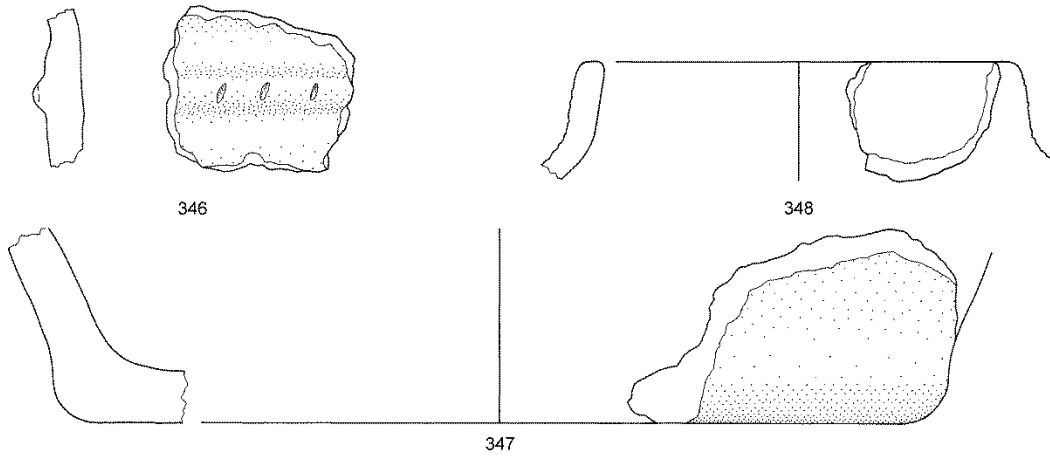


339

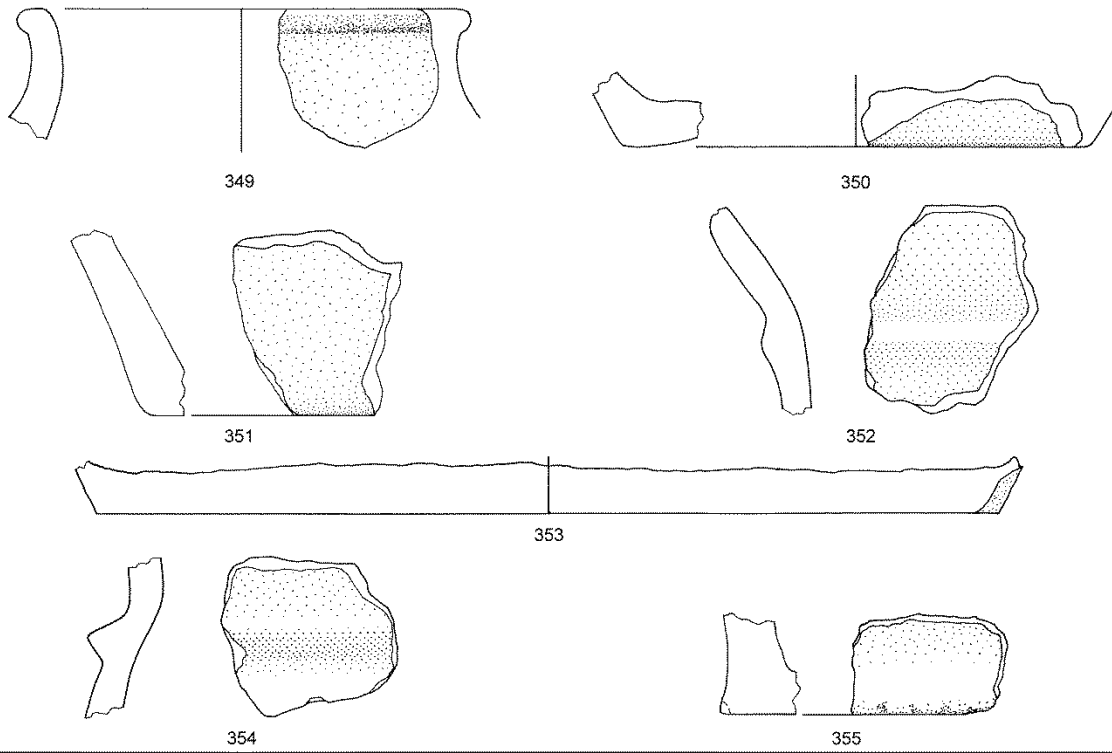


Site Banco del Prete

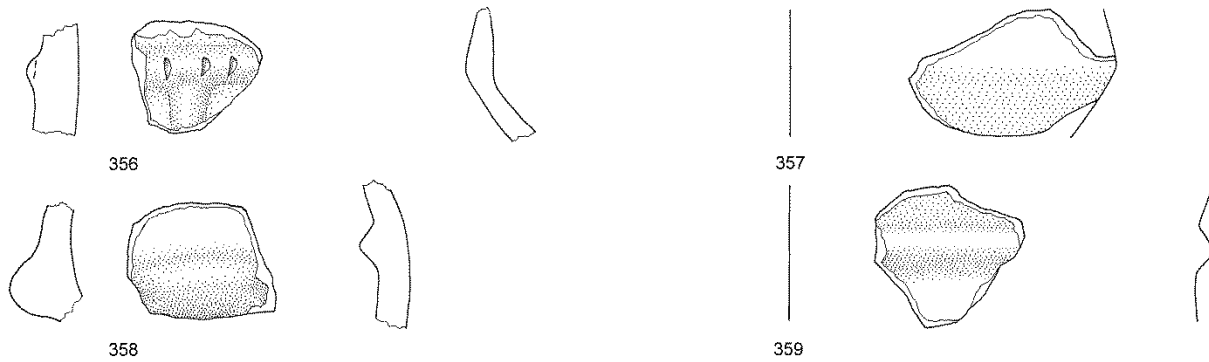


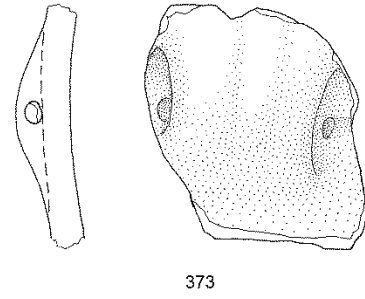
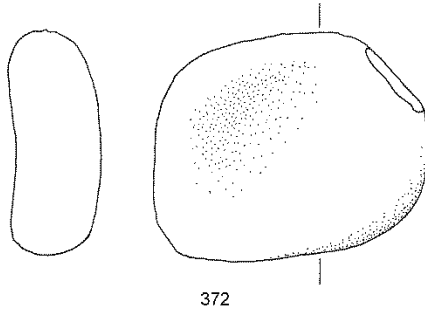


Site Timpa del Demanio

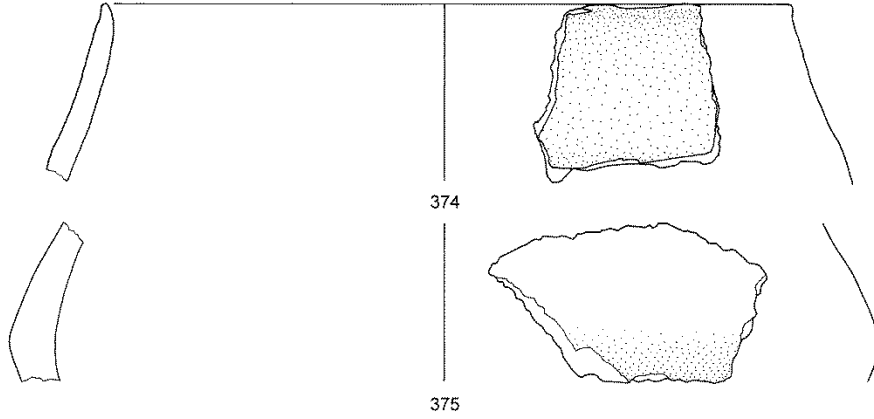


Site Banco Grande

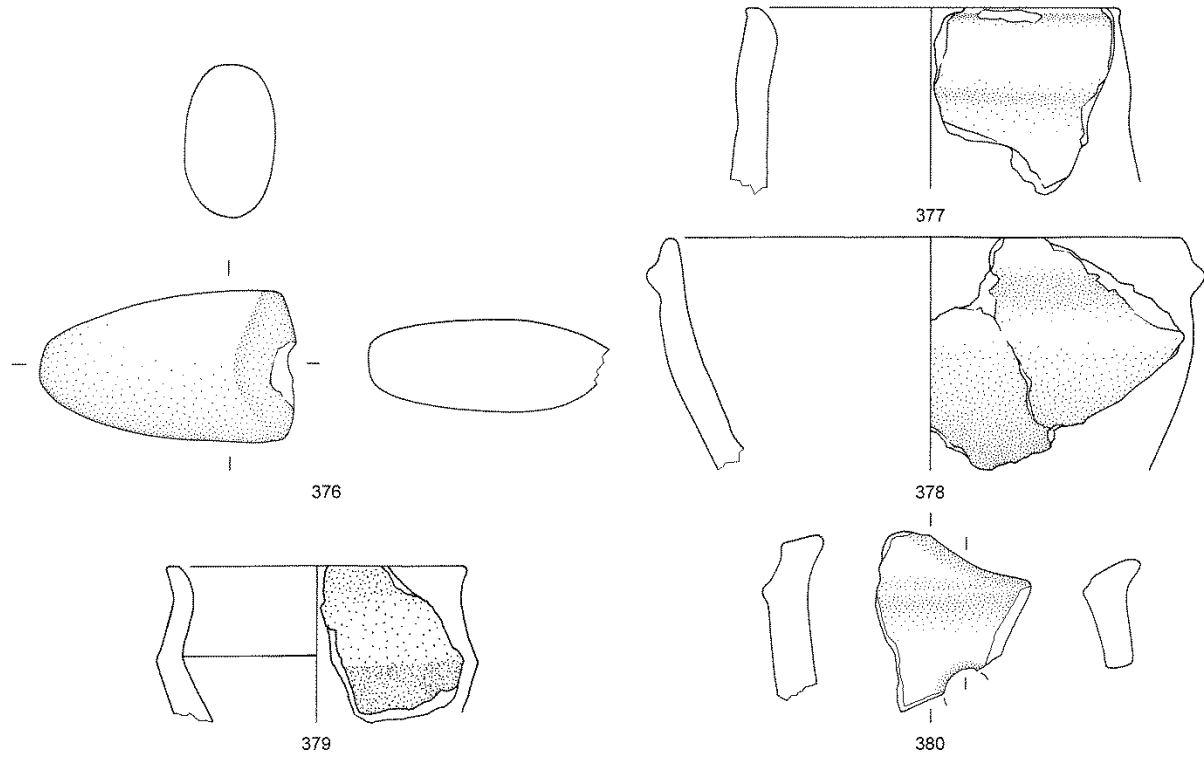


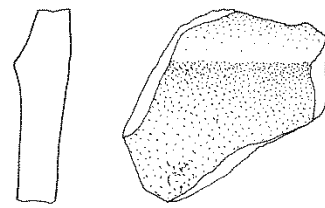
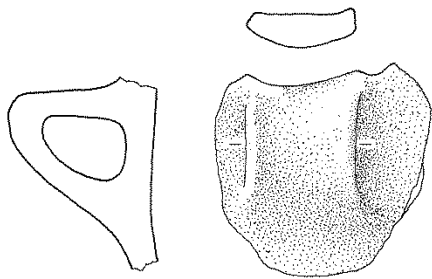
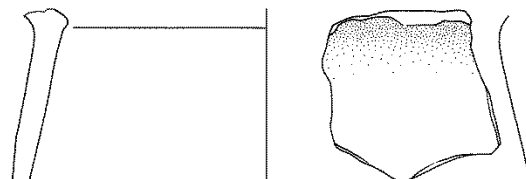
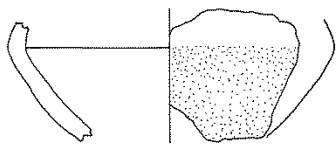
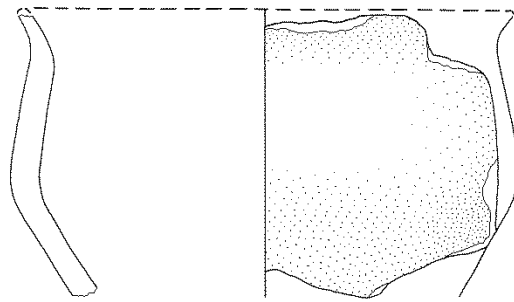
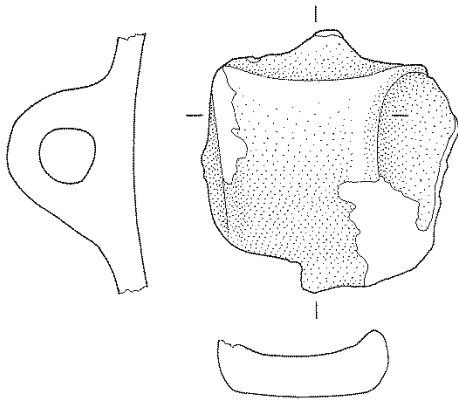
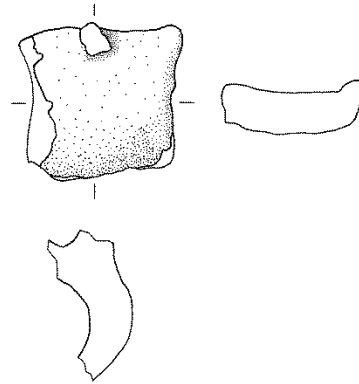
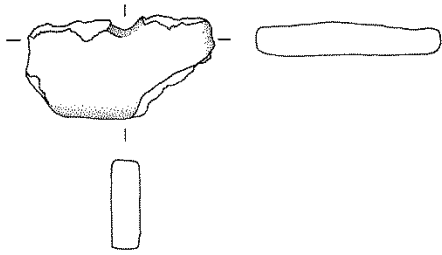
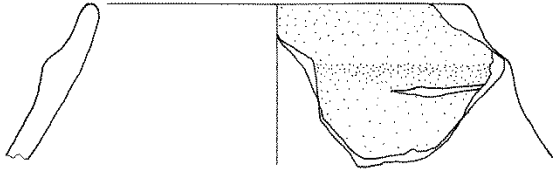


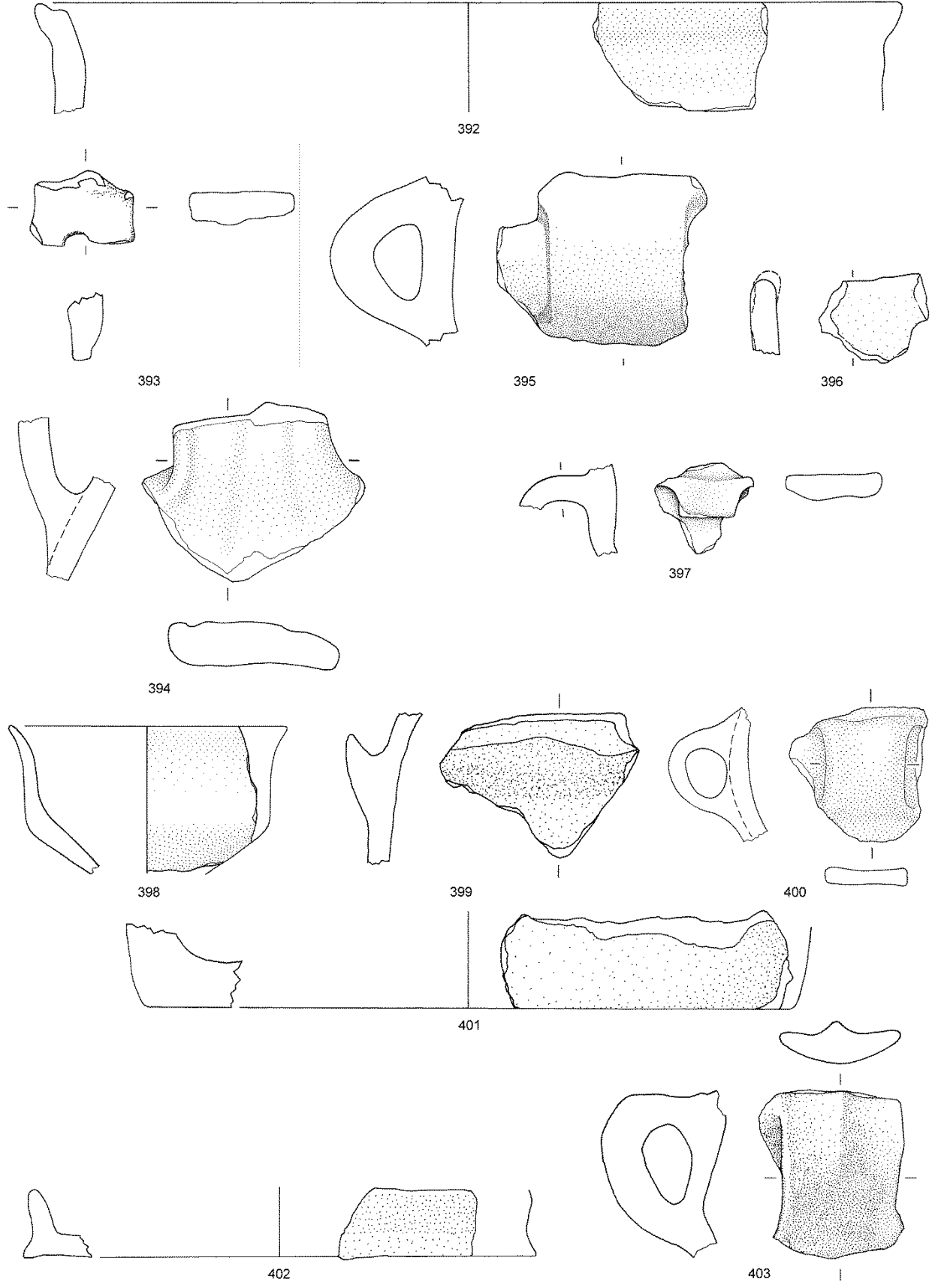
Site Grande Caverna di Damale

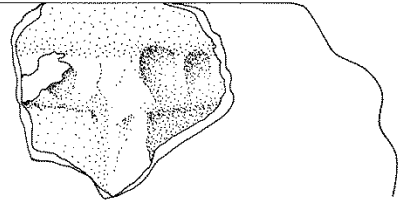


Site Terra Masseta

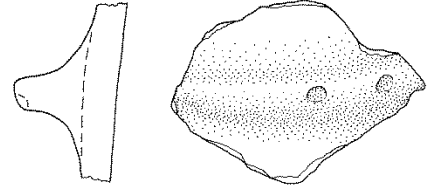
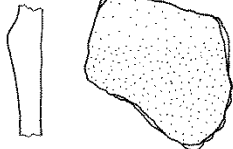
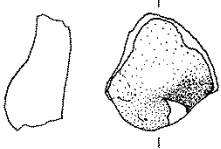








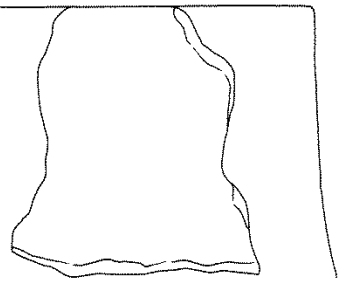
414



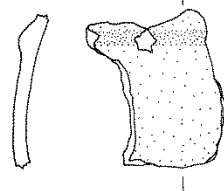
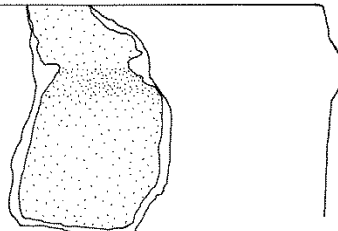
404

407

408

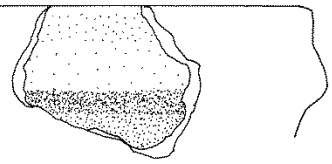
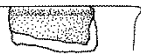


405



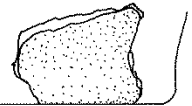
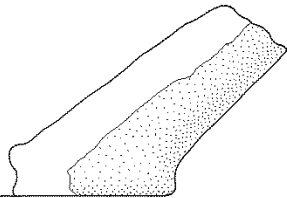
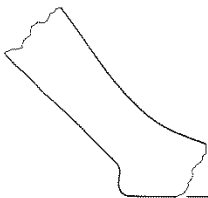
406

409



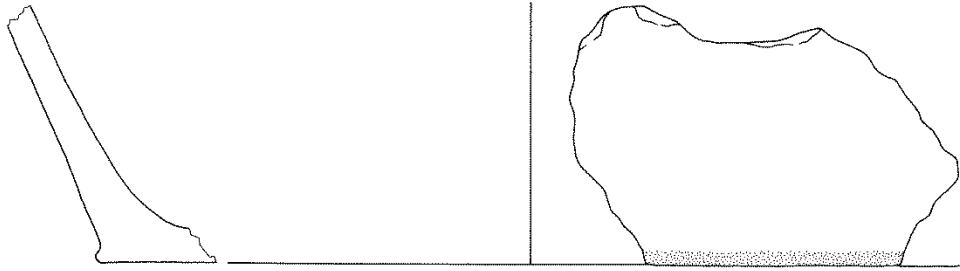
410

411

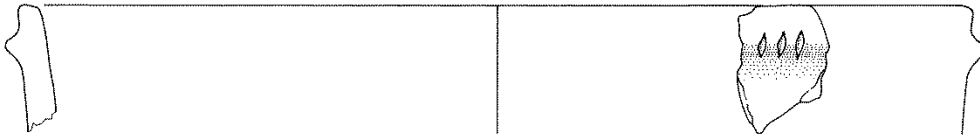


412

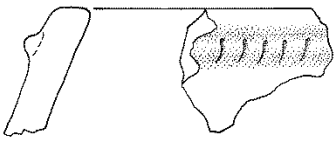
413



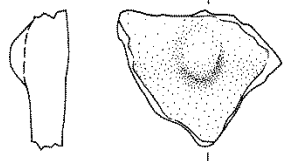
415



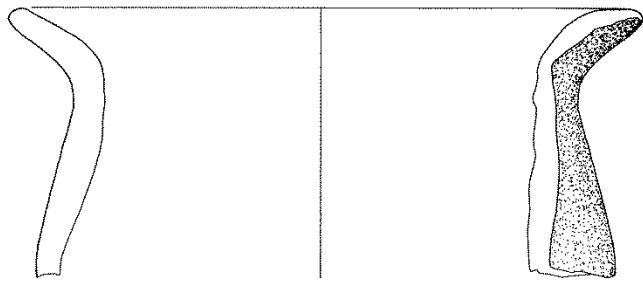
416



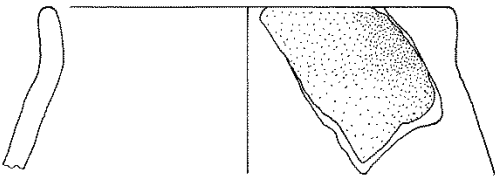
417



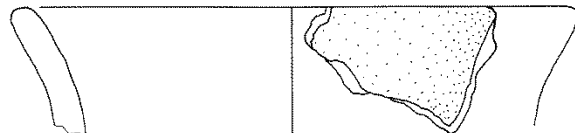
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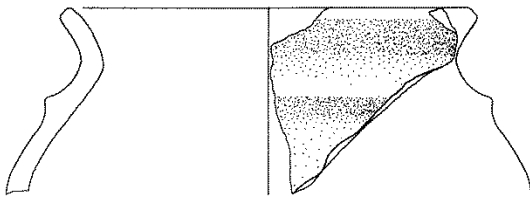
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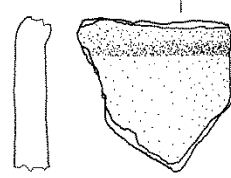
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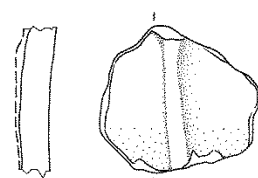
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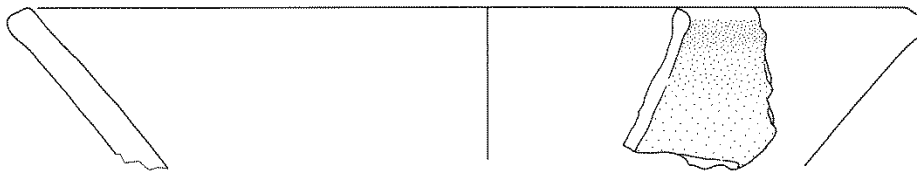
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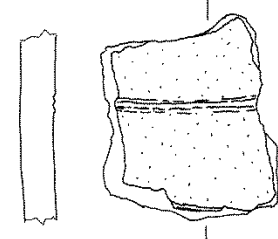
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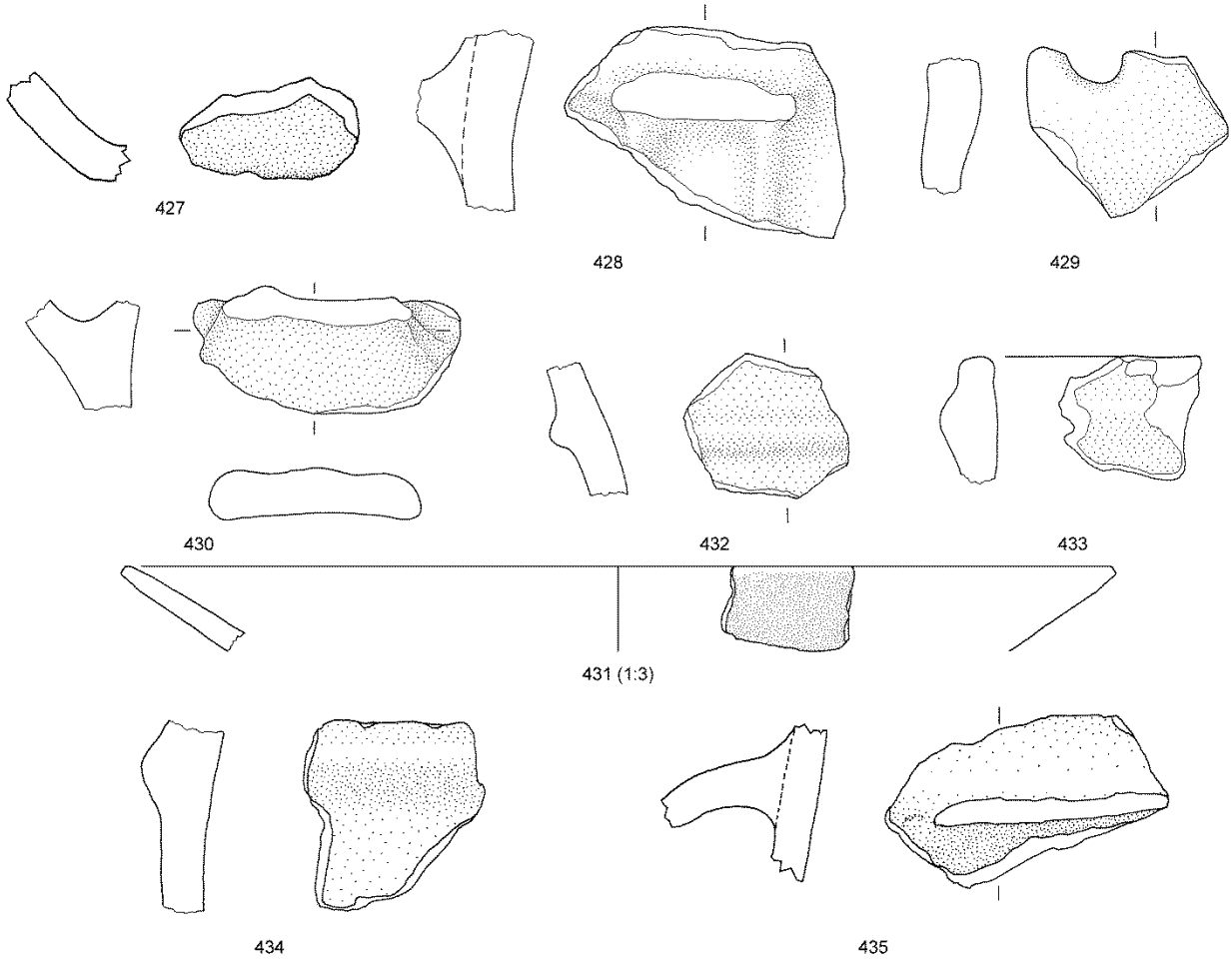
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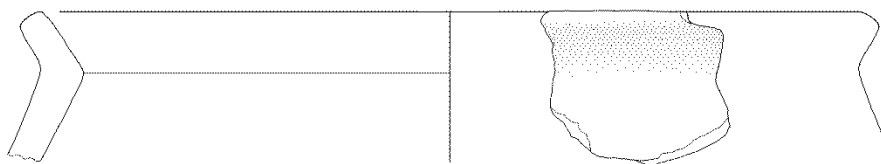
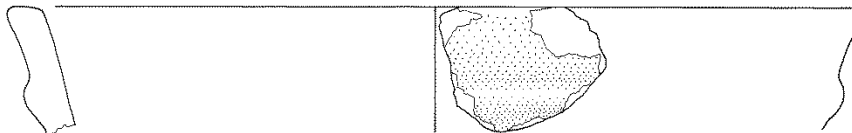
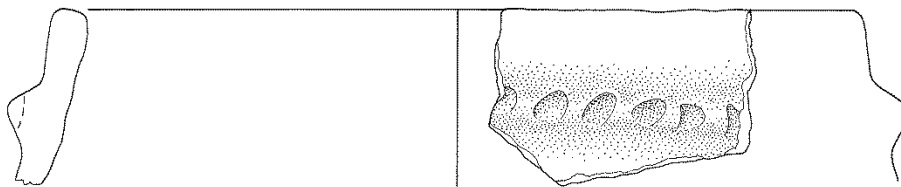
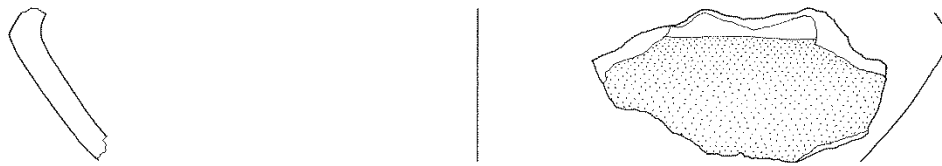
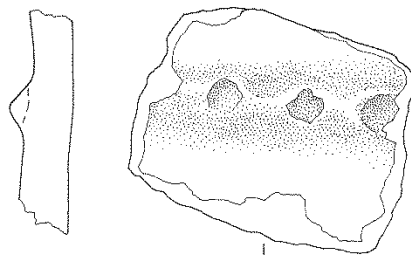
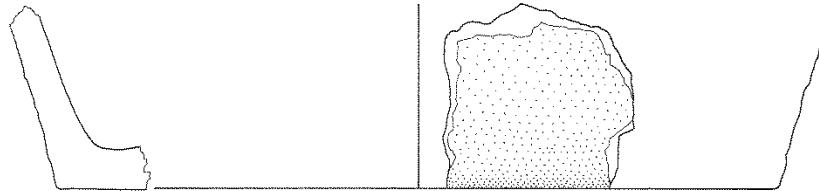
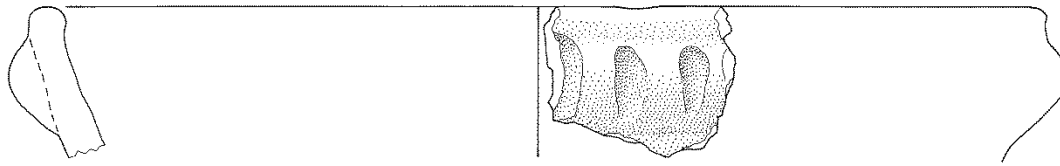


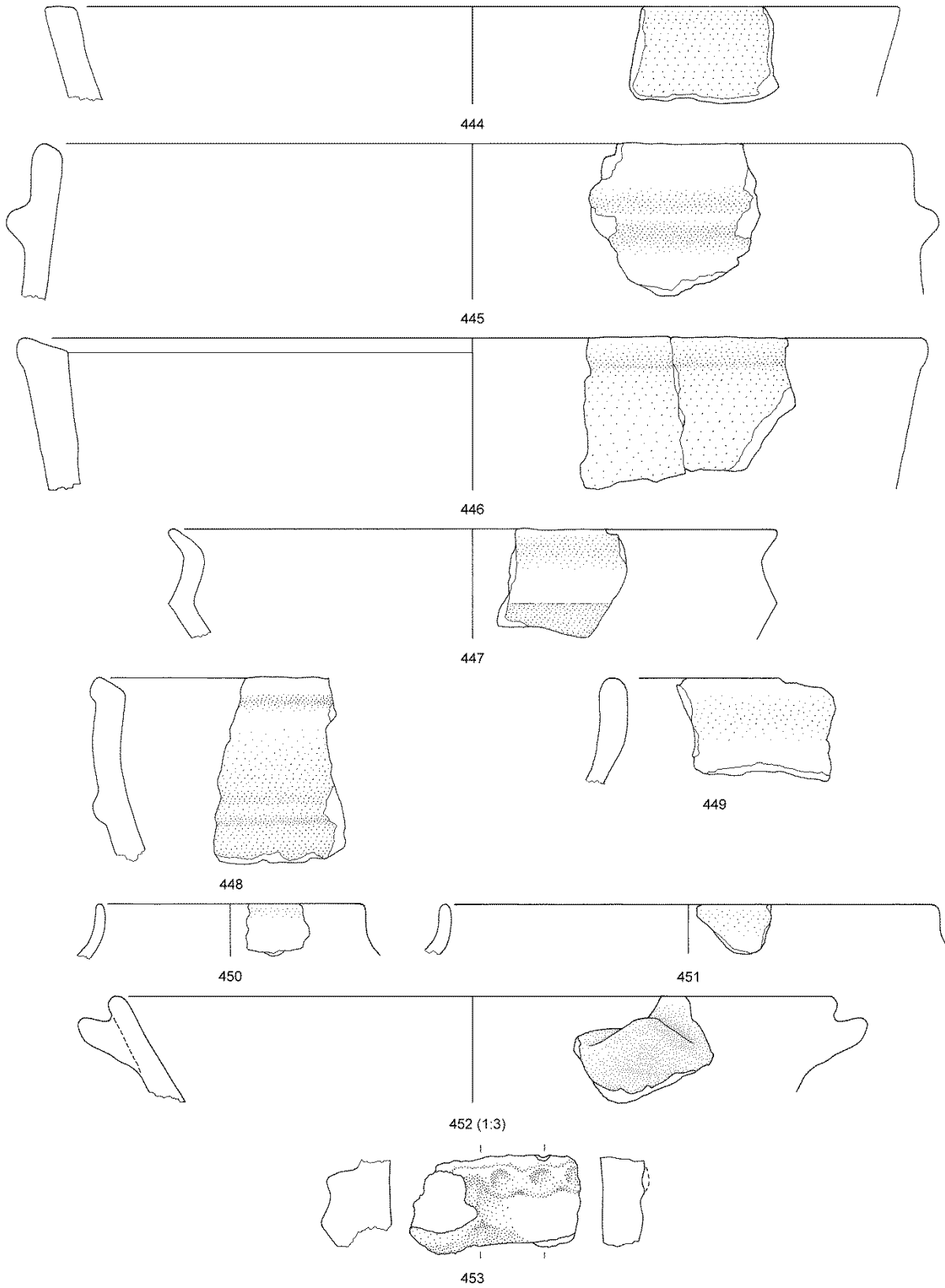
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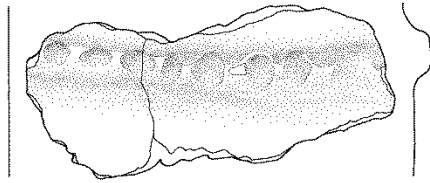


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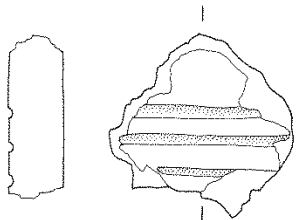




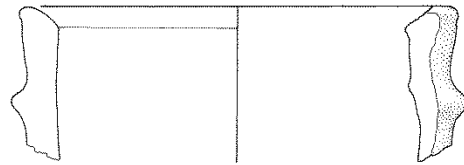




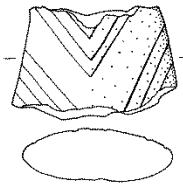
454 (1:3)



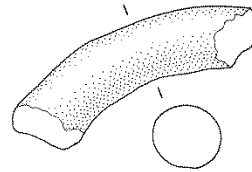
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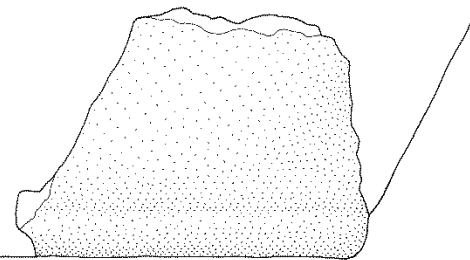
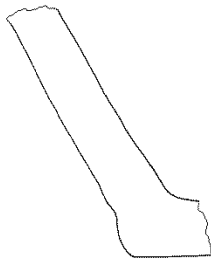
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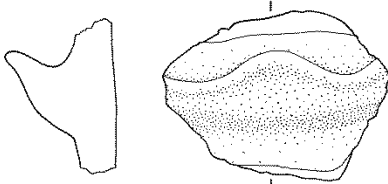
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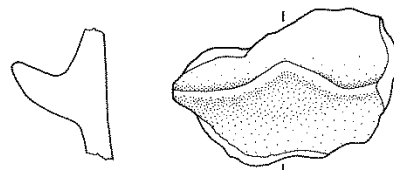
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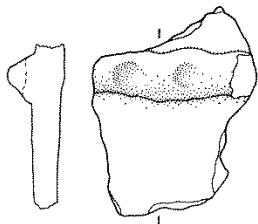
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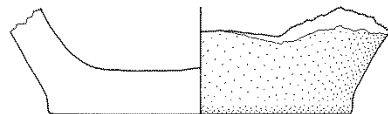
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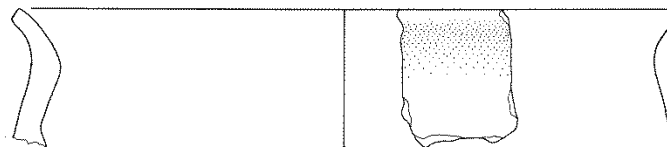
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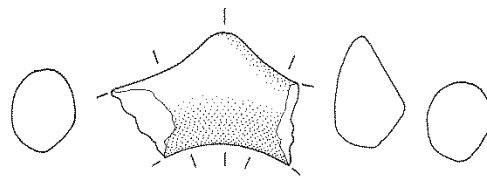
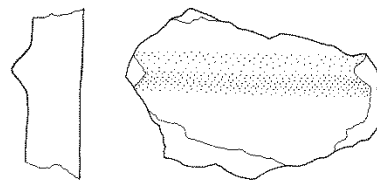
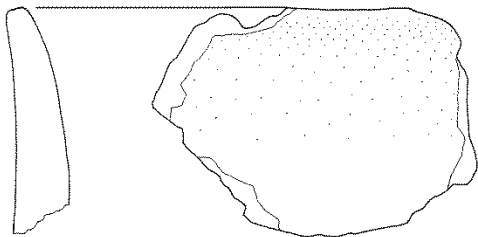
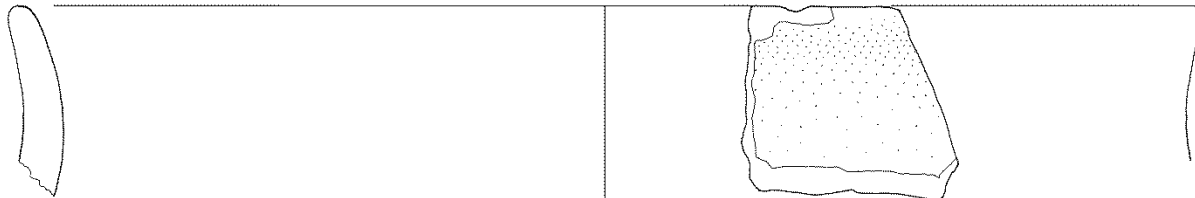
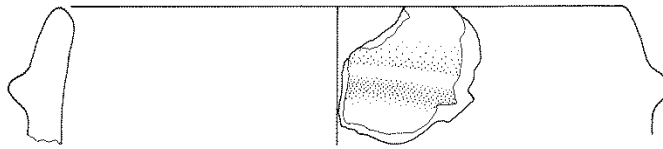
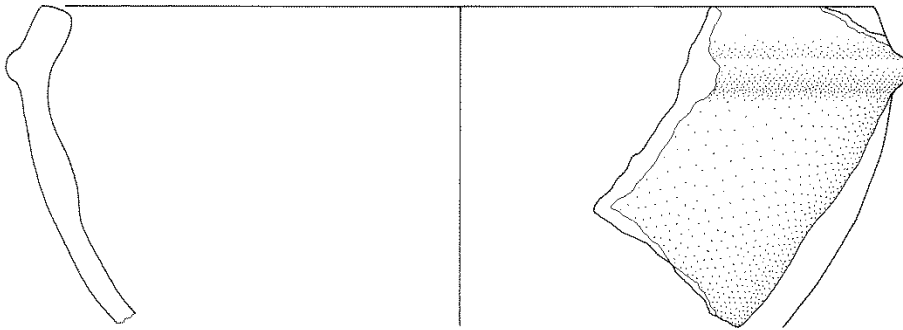
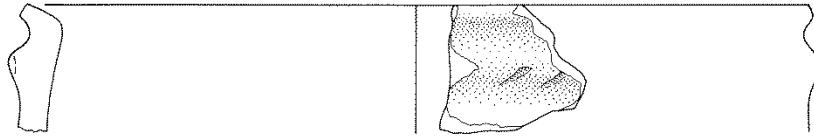
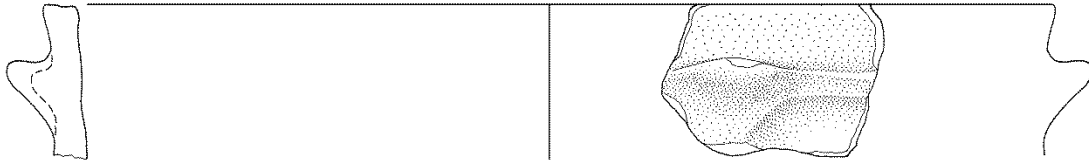
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463

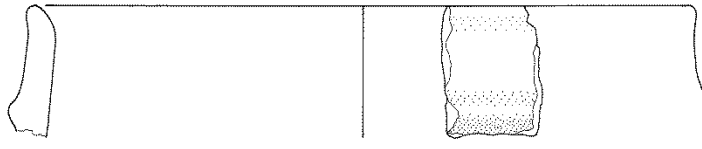


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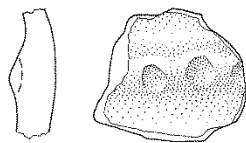




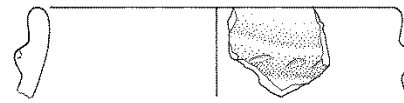
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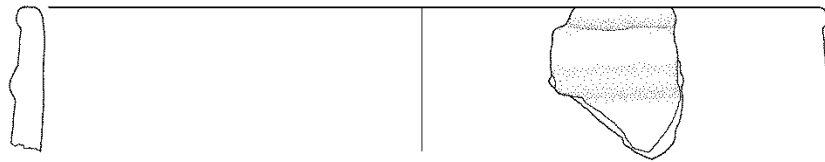
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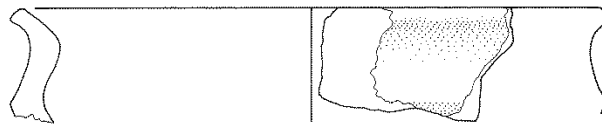
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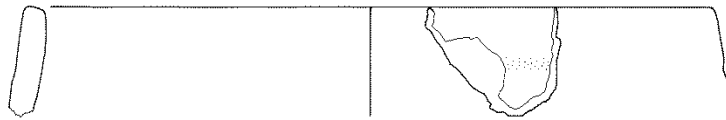
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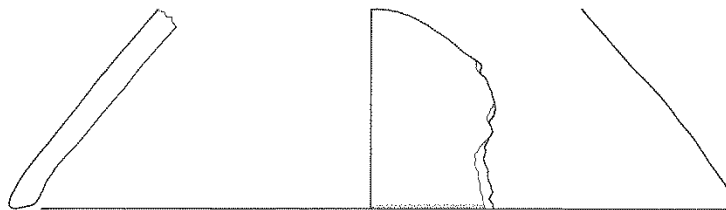
477 (1:3)



478



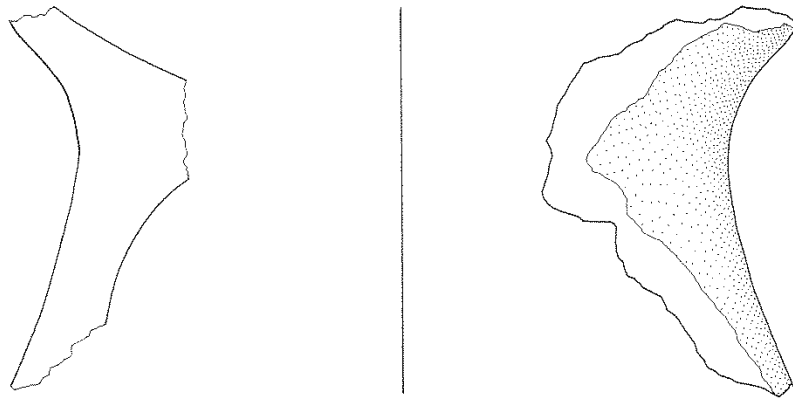
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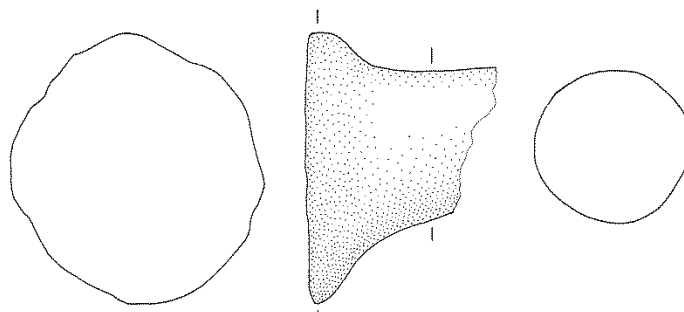
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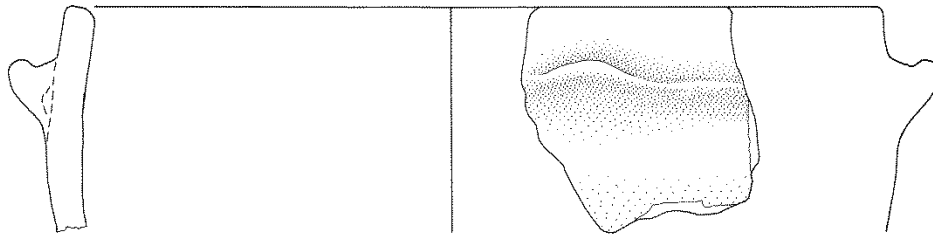
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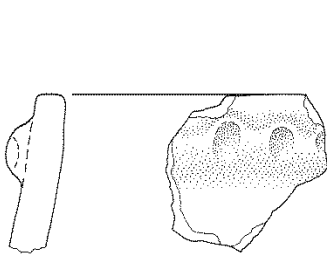
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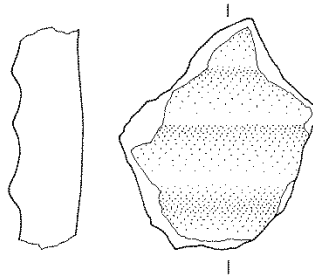
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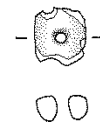
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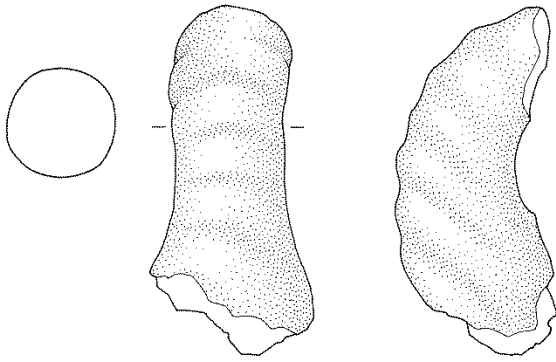
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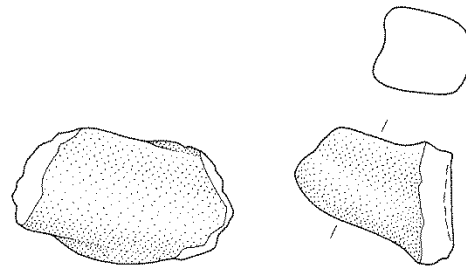
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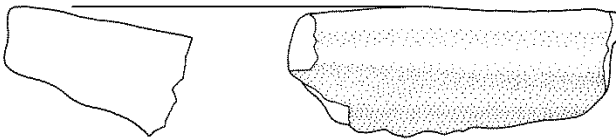
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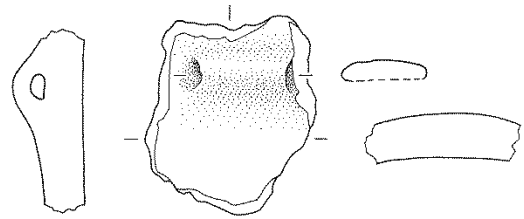
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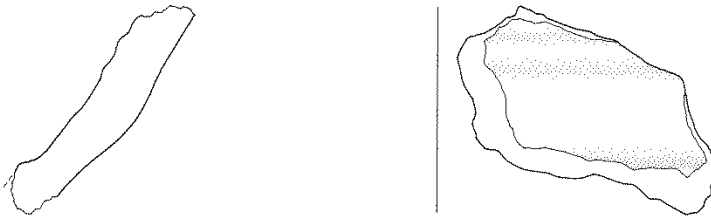
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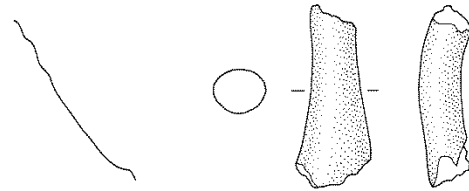
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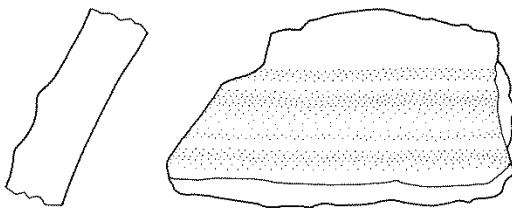
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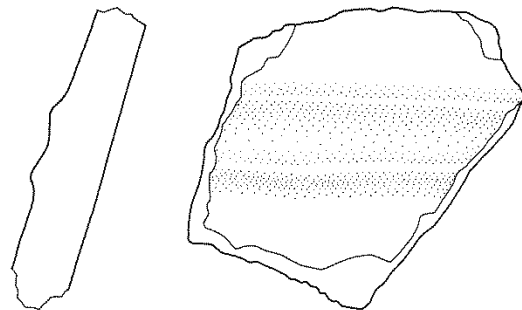
663 (1:3)



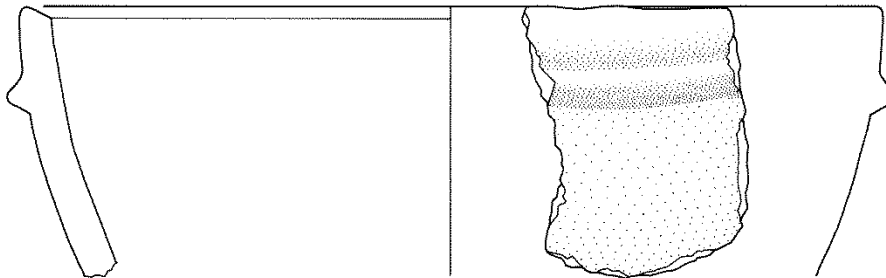
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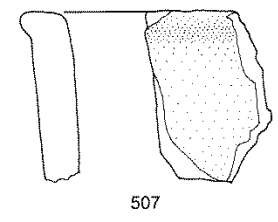
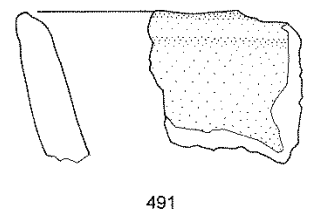
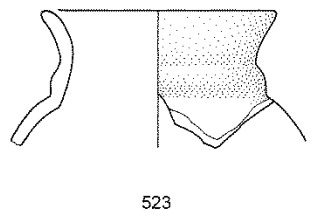
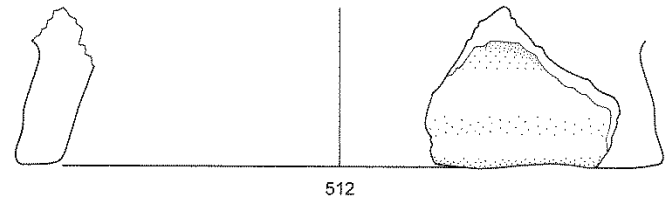
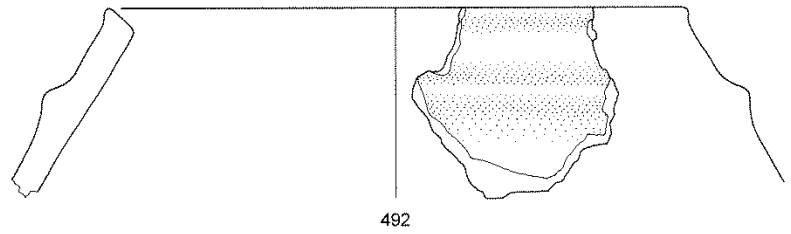
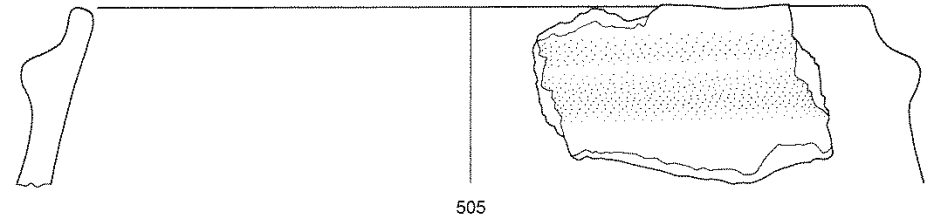
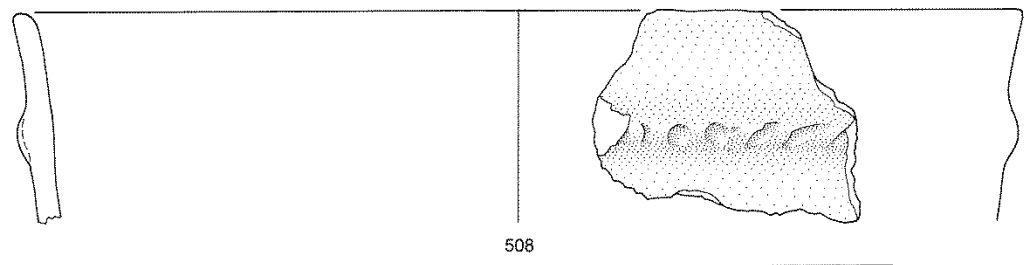
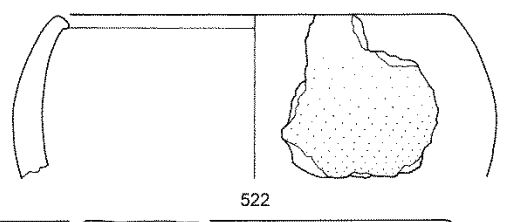
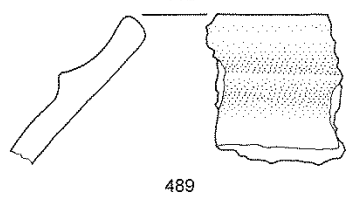
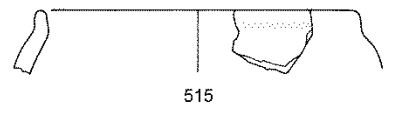
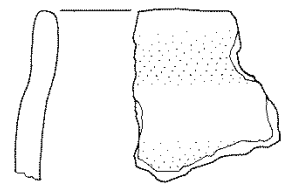
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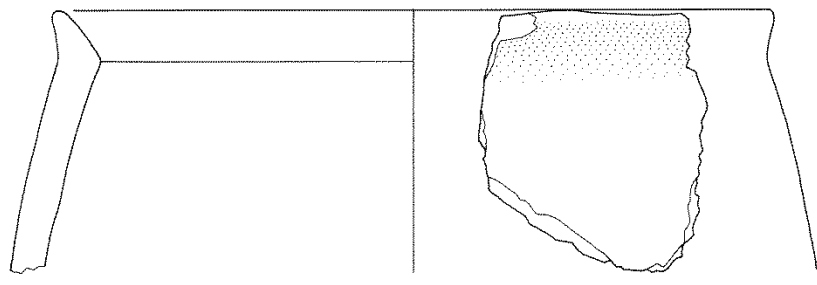


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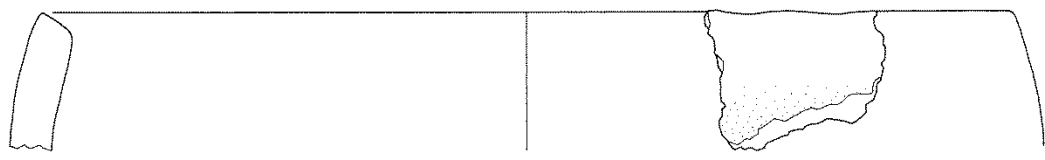


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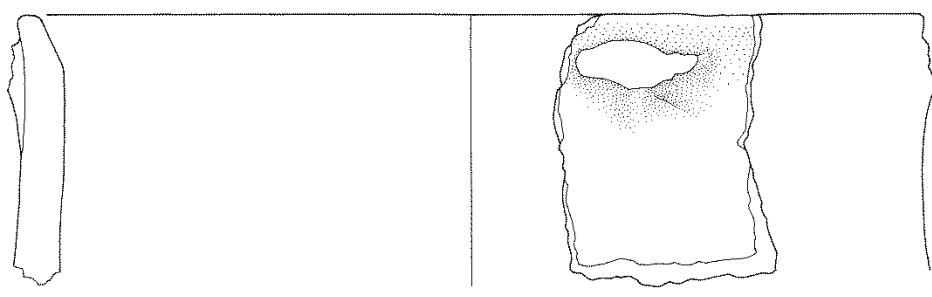




488



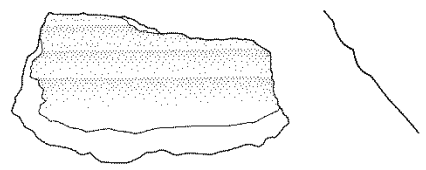
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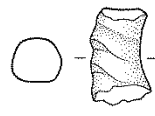
532



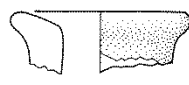
519 (1:3)



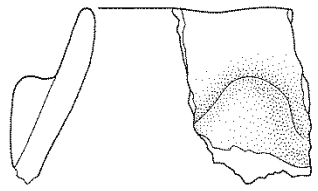
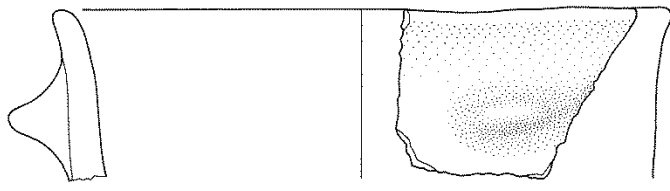
510



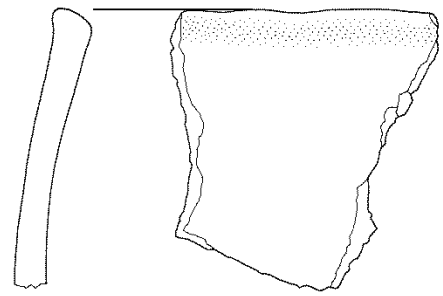
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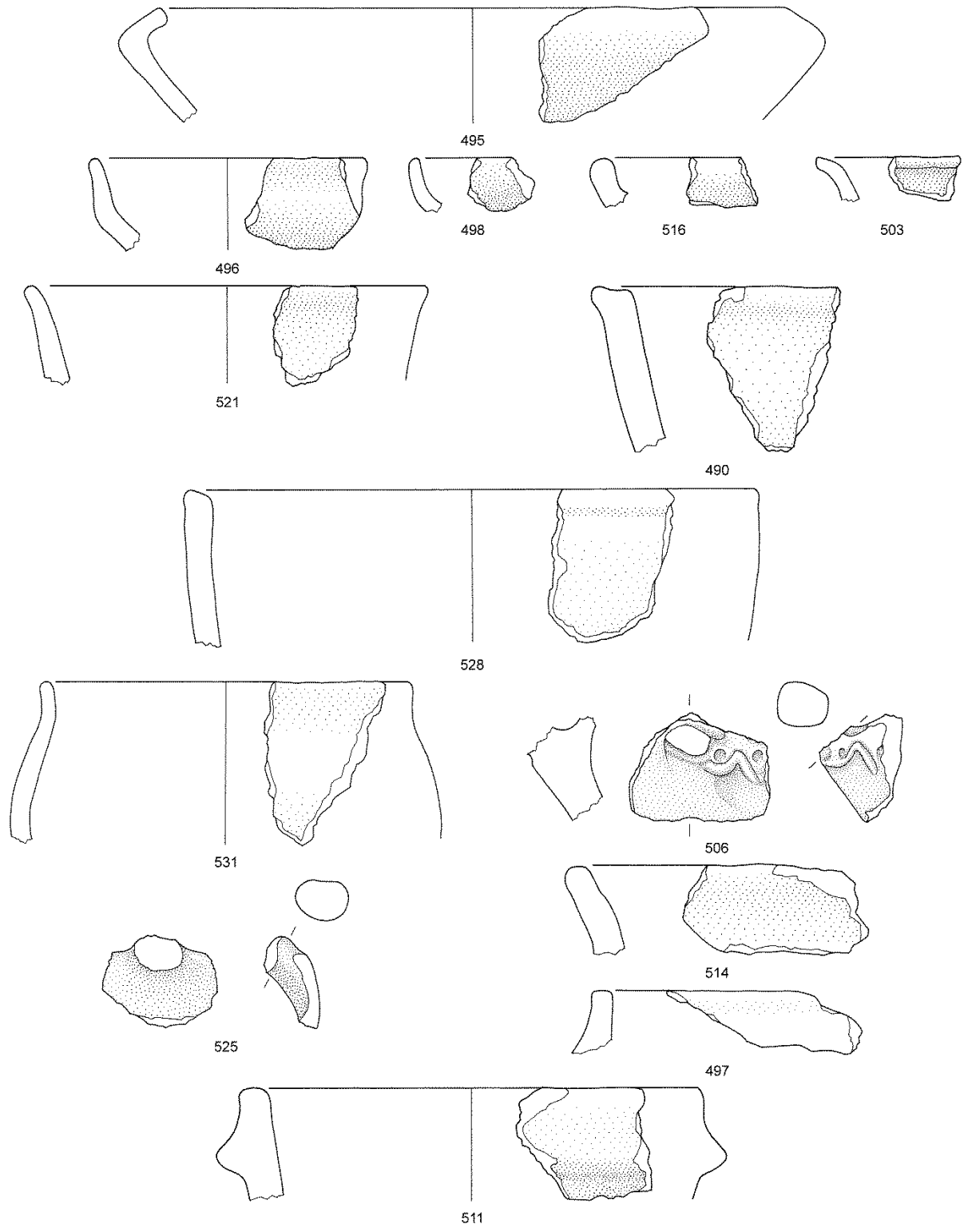
513

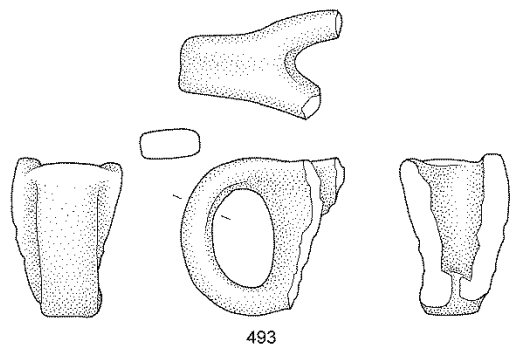


499

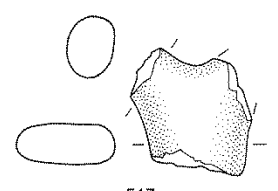


526

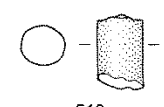




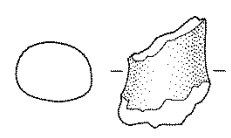
493



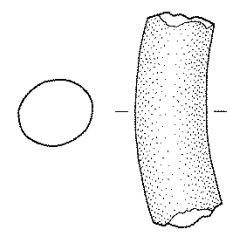
517



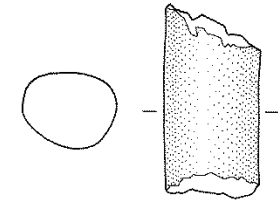
518



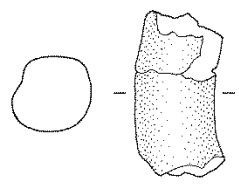
501b



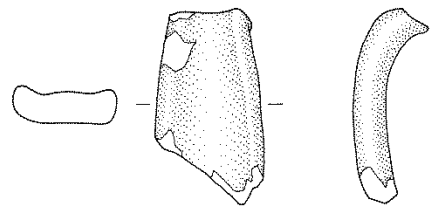
494



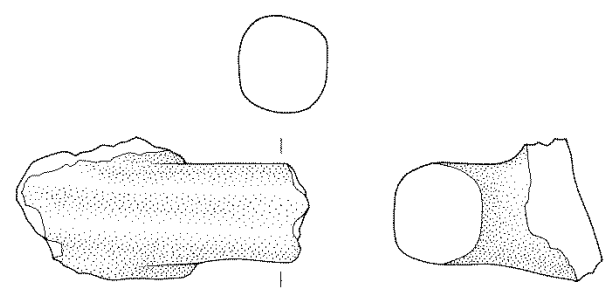
529



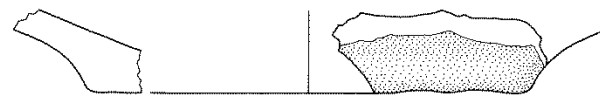
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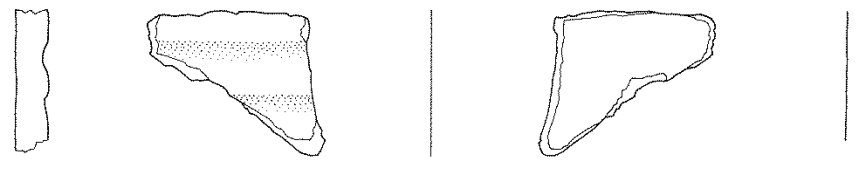
524



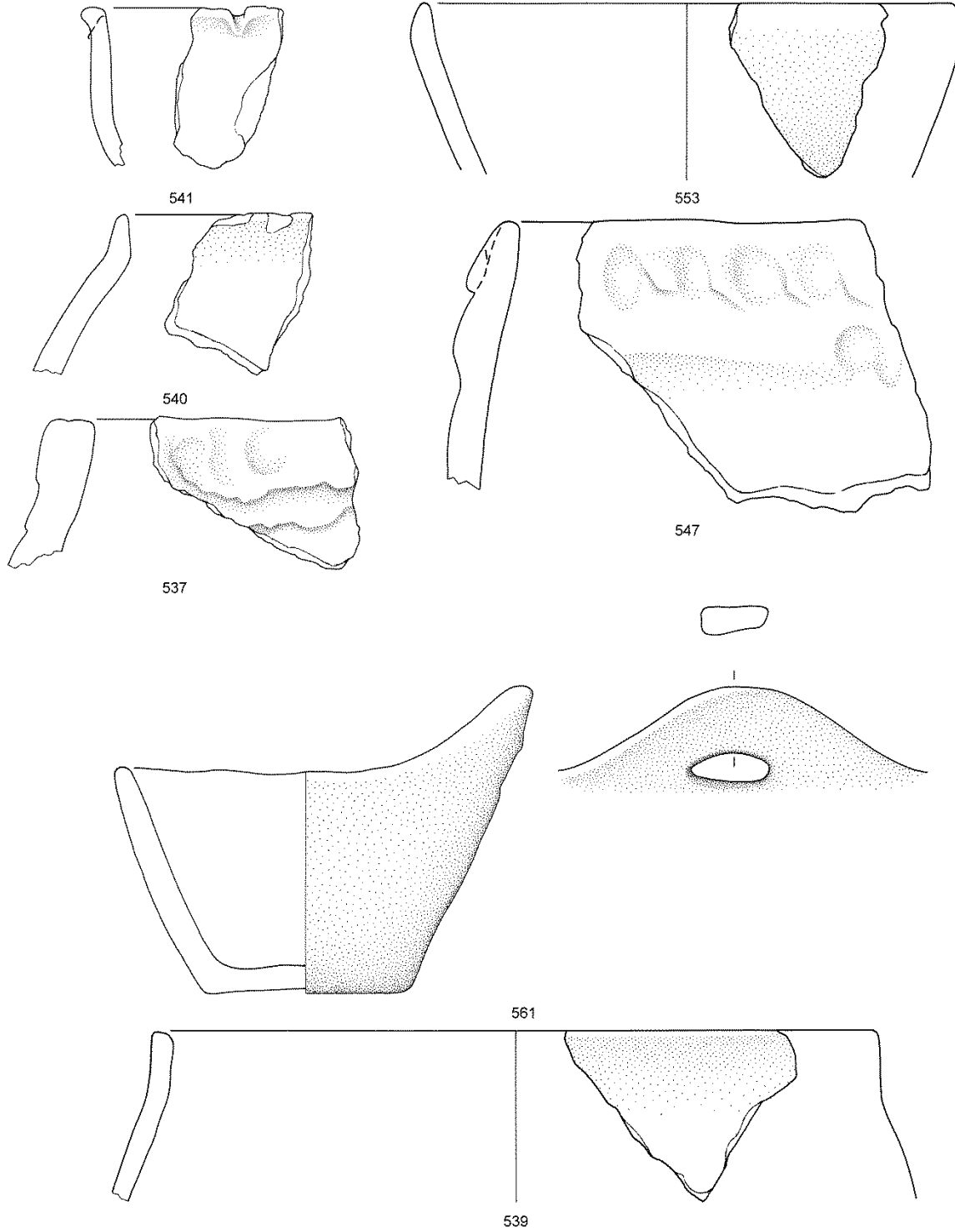
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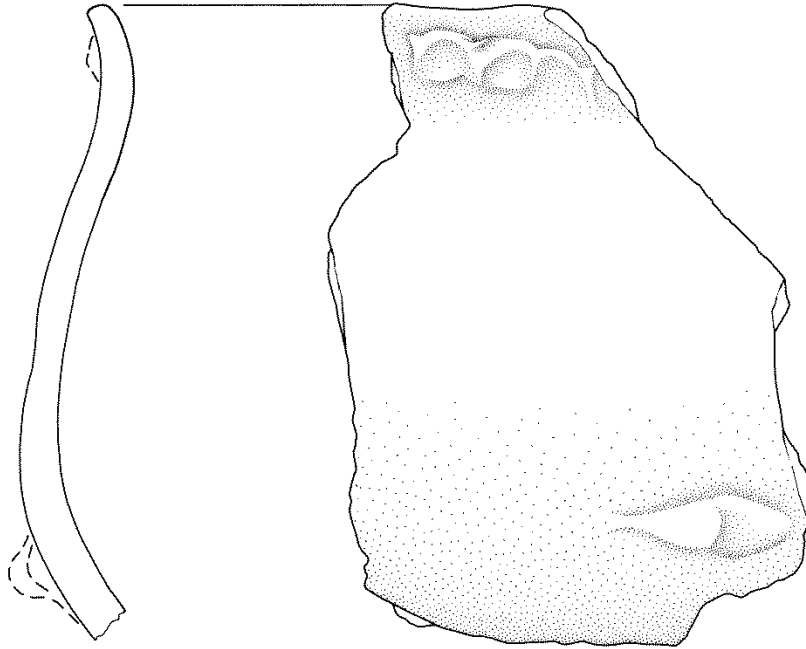


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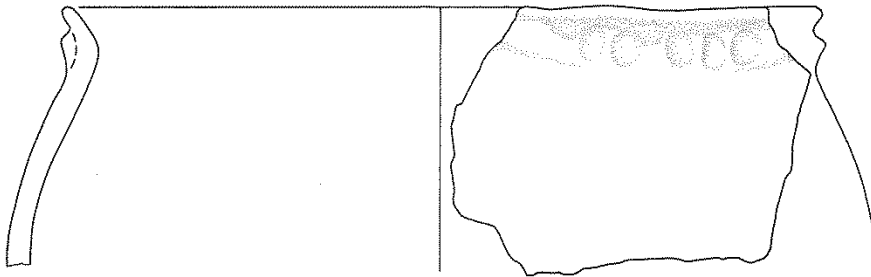


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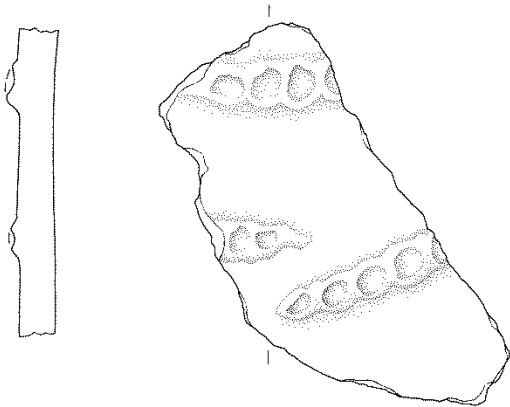




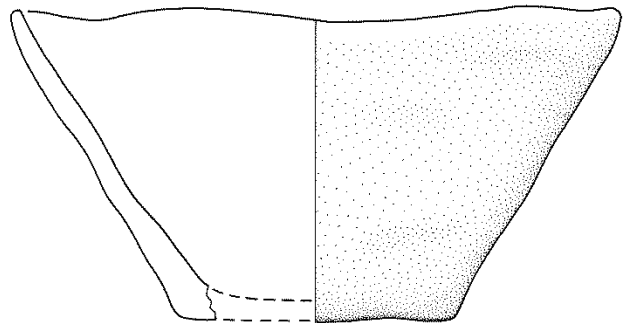
548



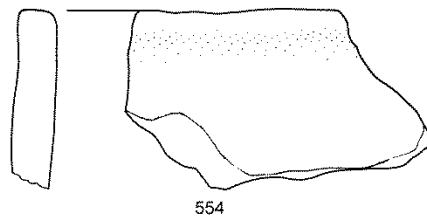
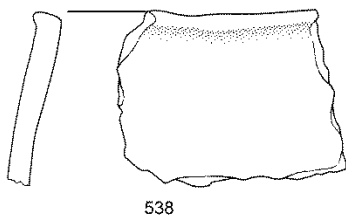
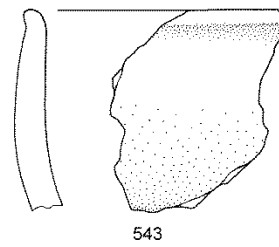
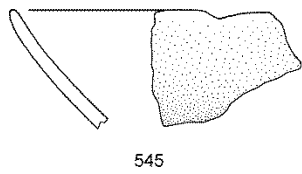
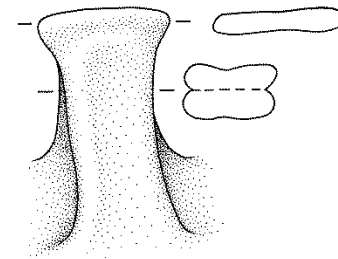
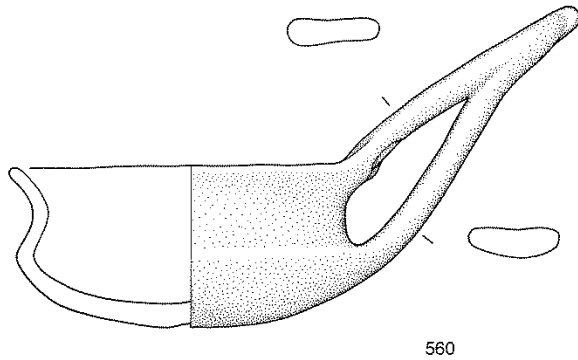
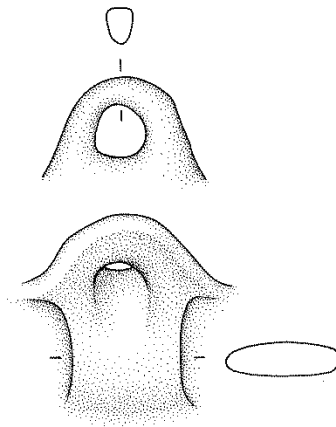
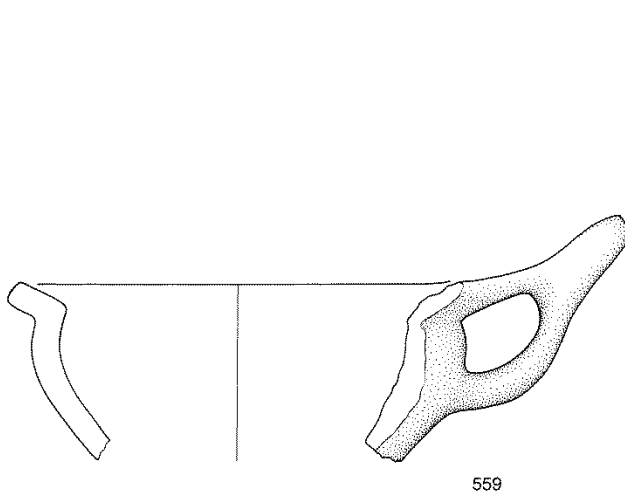
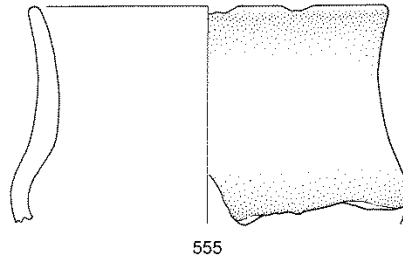
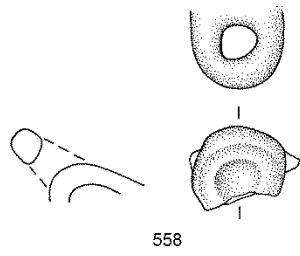
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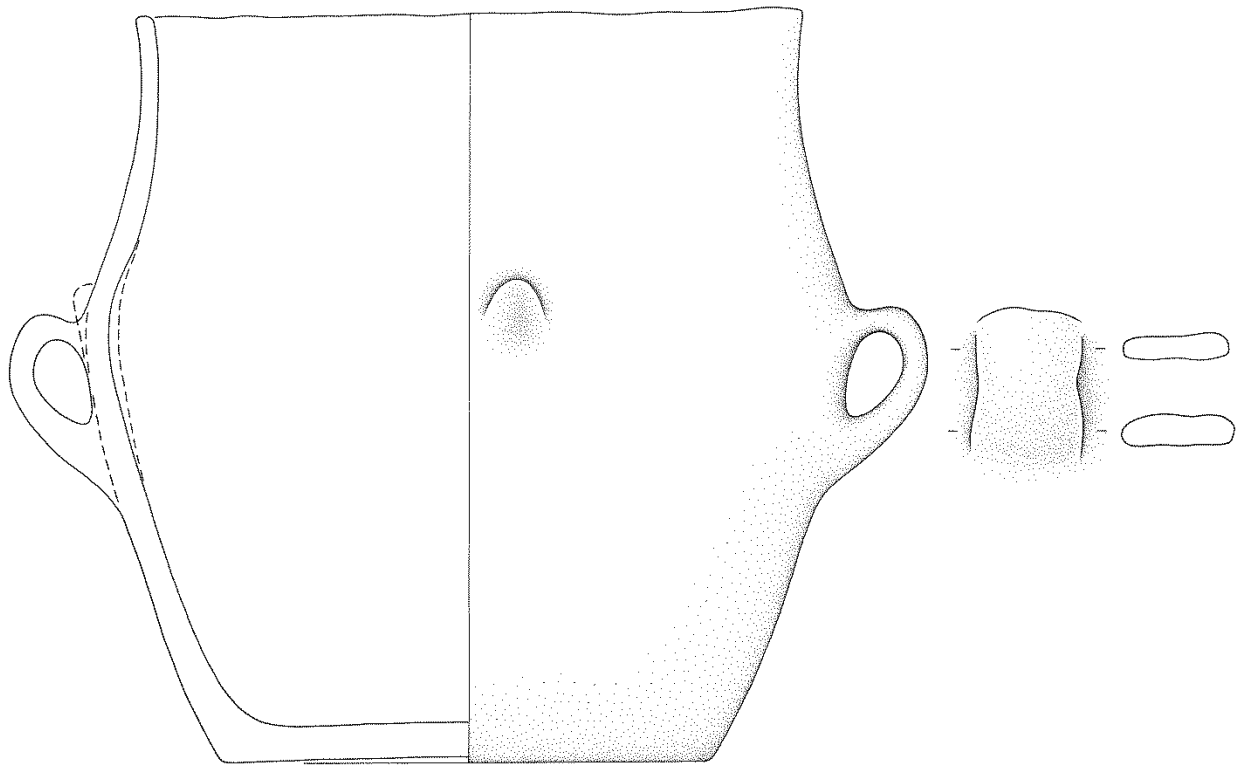


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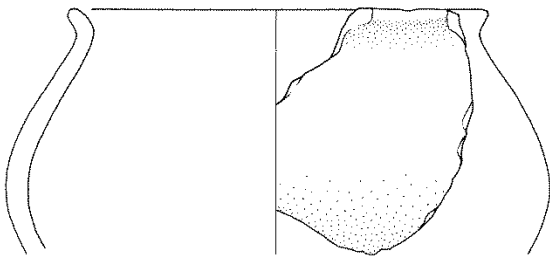


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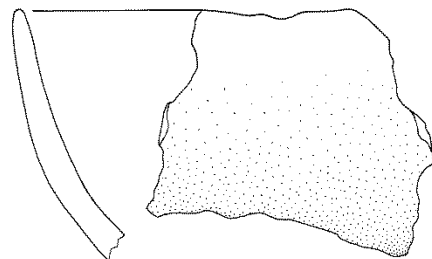




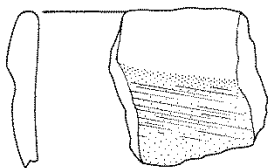
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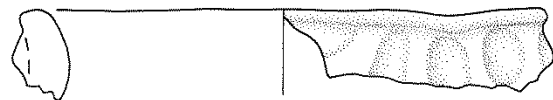
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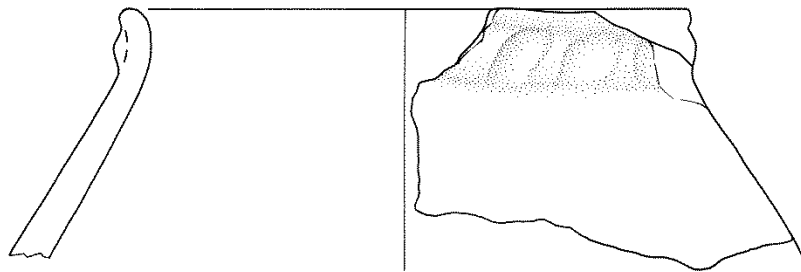
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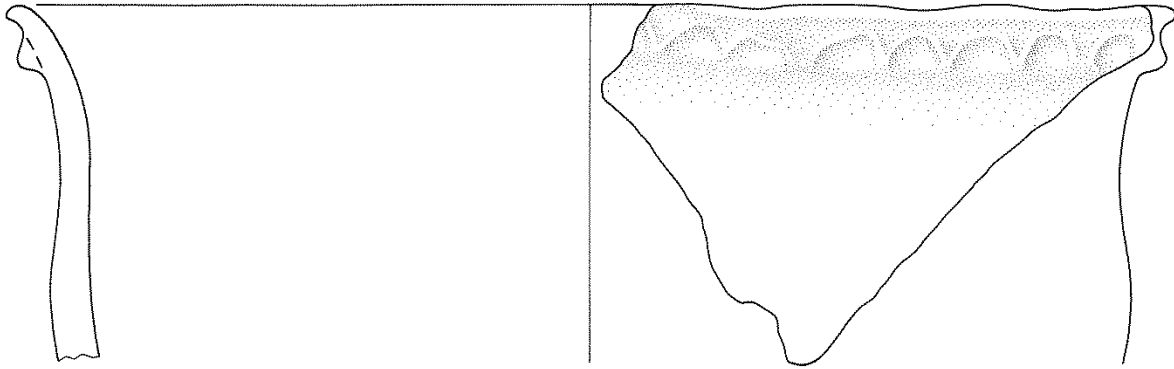
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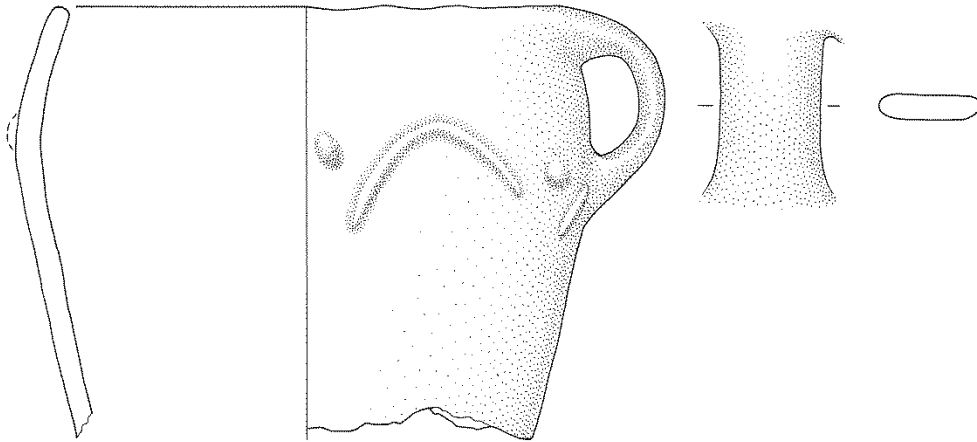
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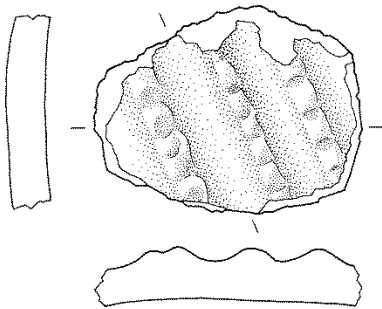


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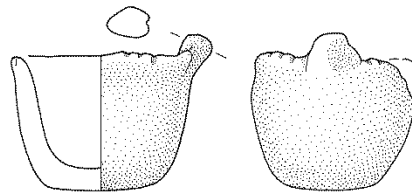


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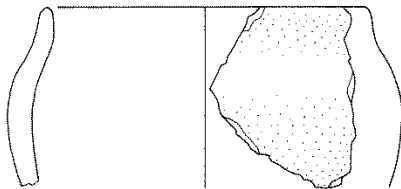
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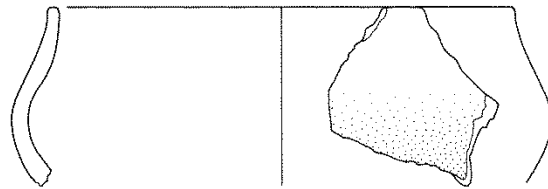
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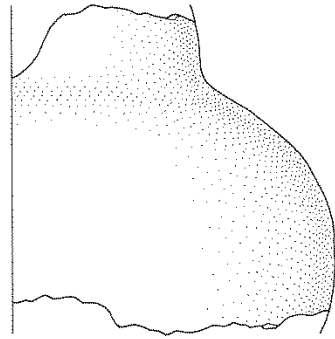
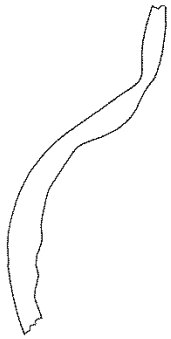
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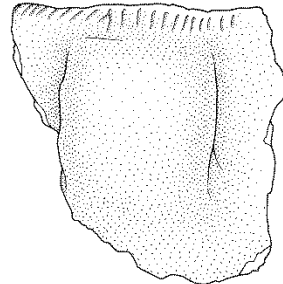
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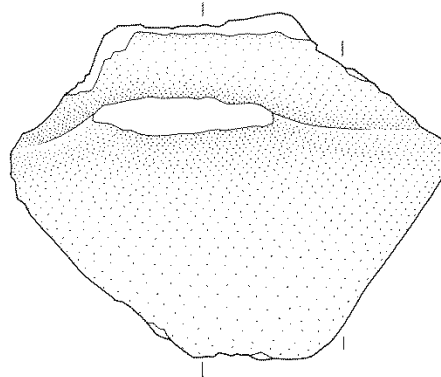
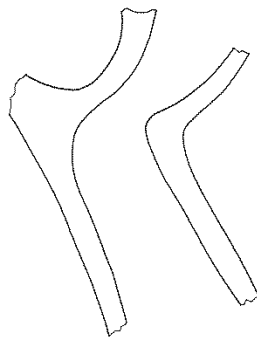
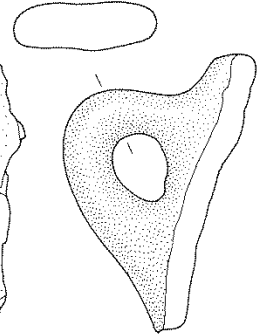
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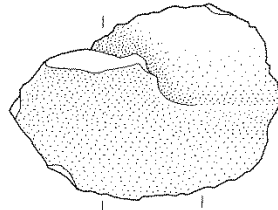
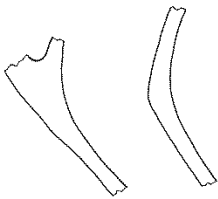
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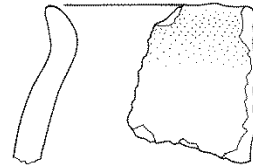
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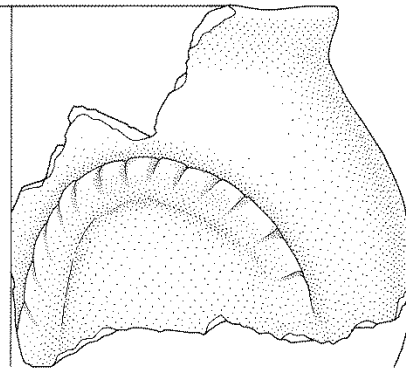
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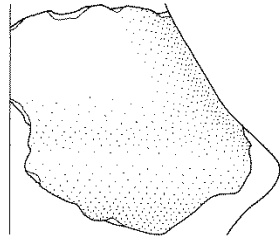
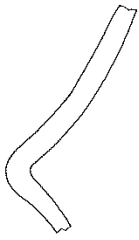
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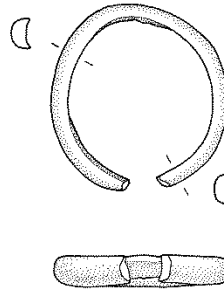
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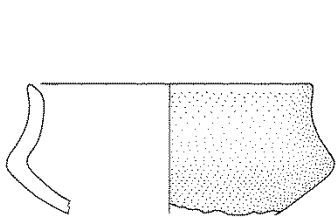


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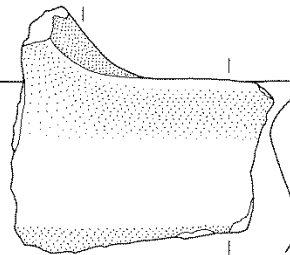


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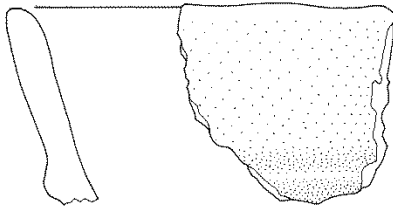
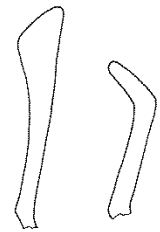
Timpone della Motta, Francavilla M.ma, Southern Sector



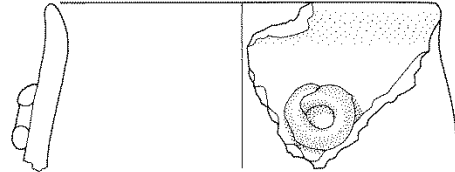
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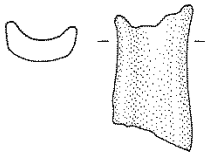
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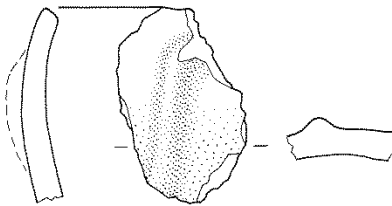
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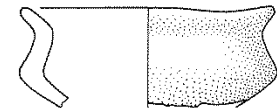
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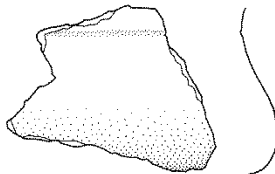
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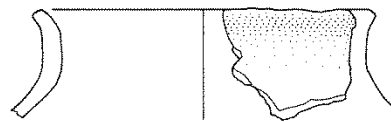
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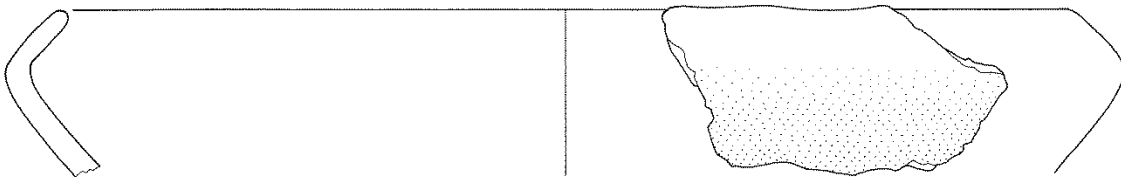
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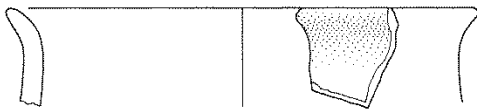


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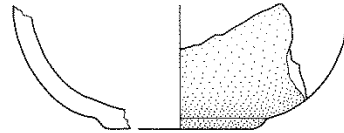


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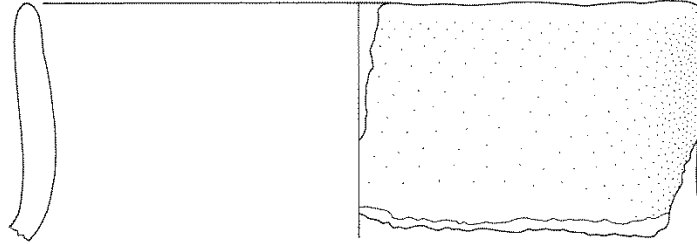




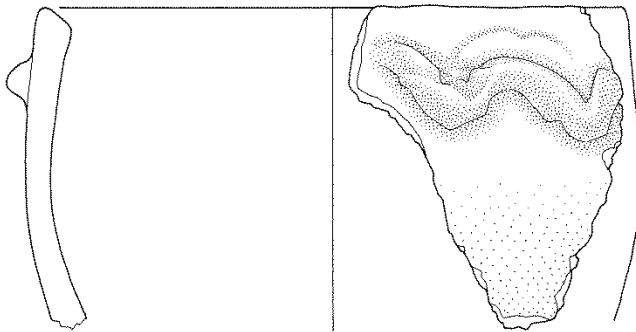
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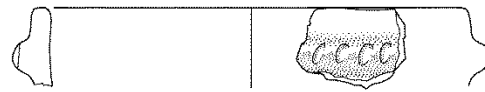
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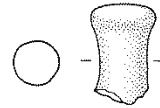
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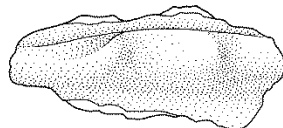
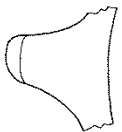
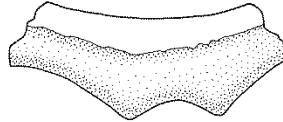
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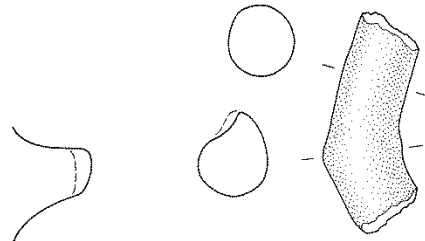
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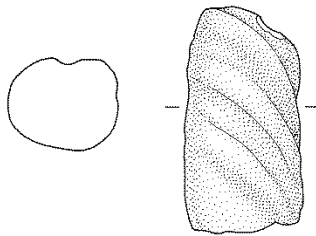
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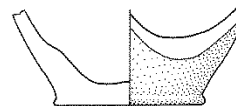
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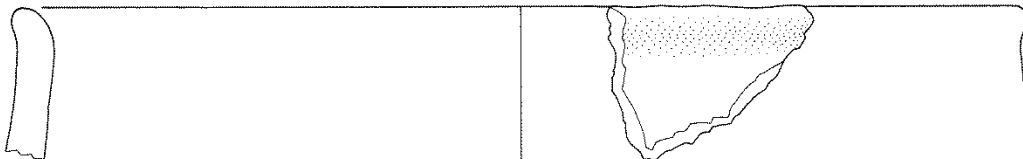
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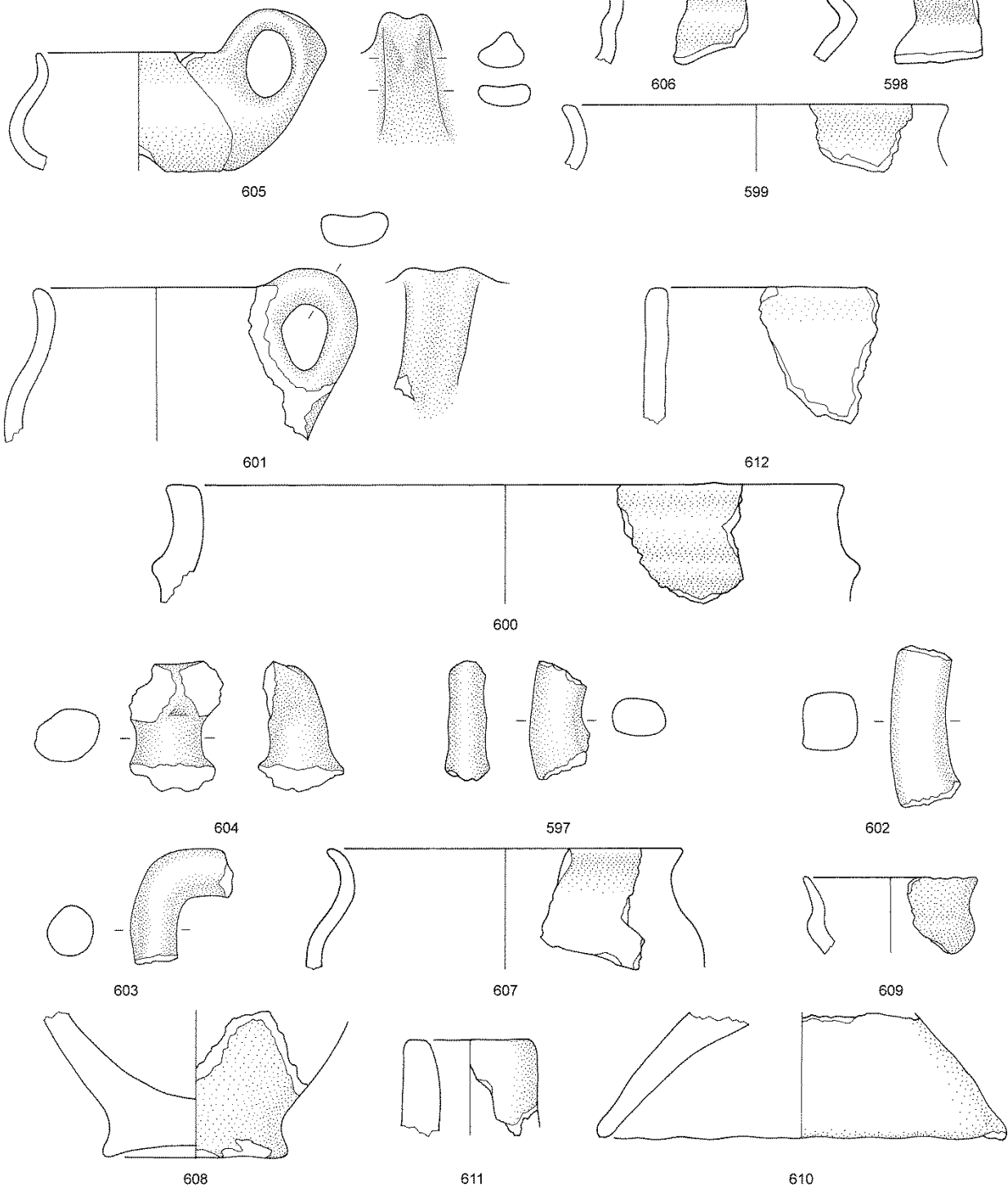
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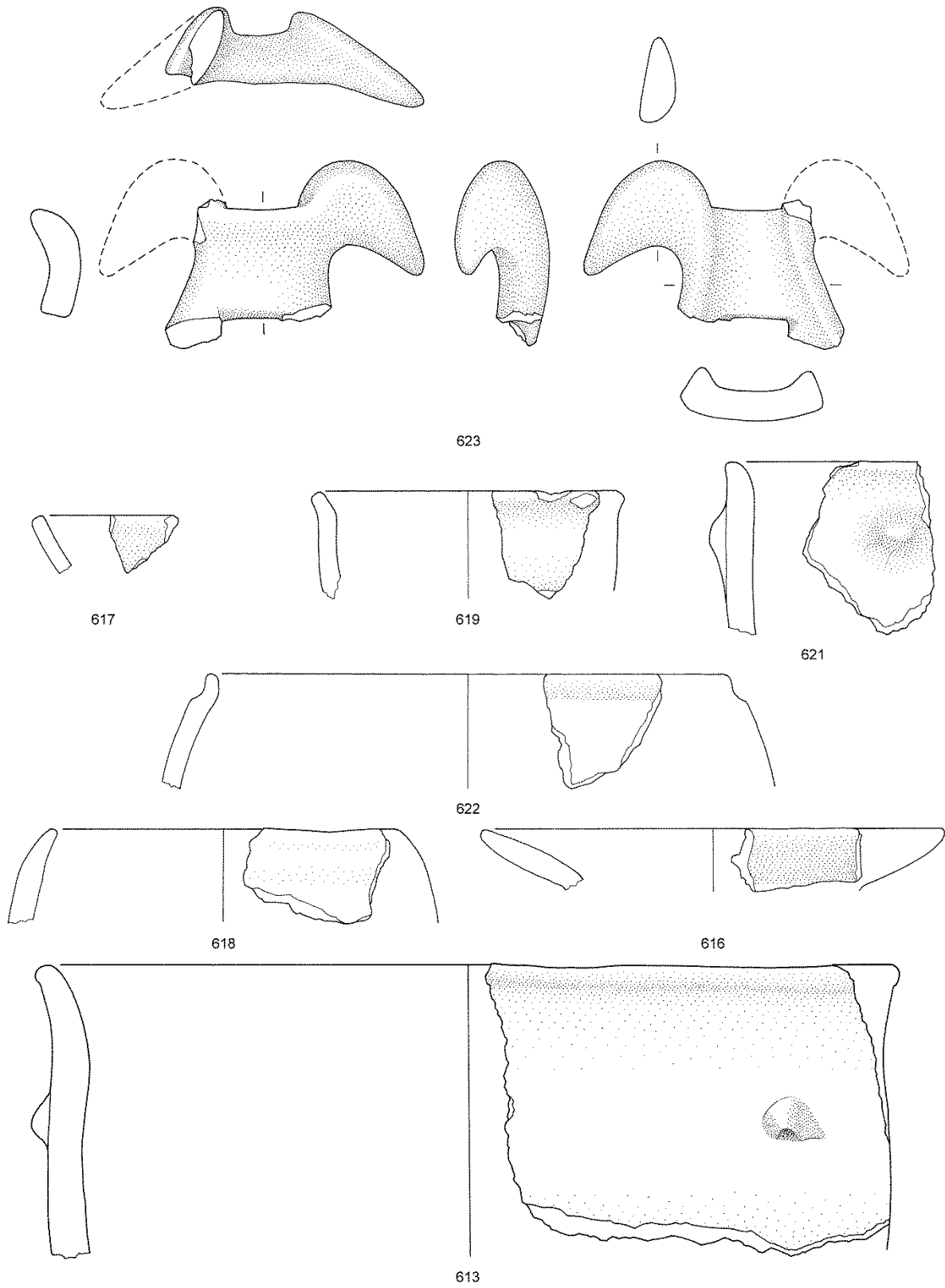


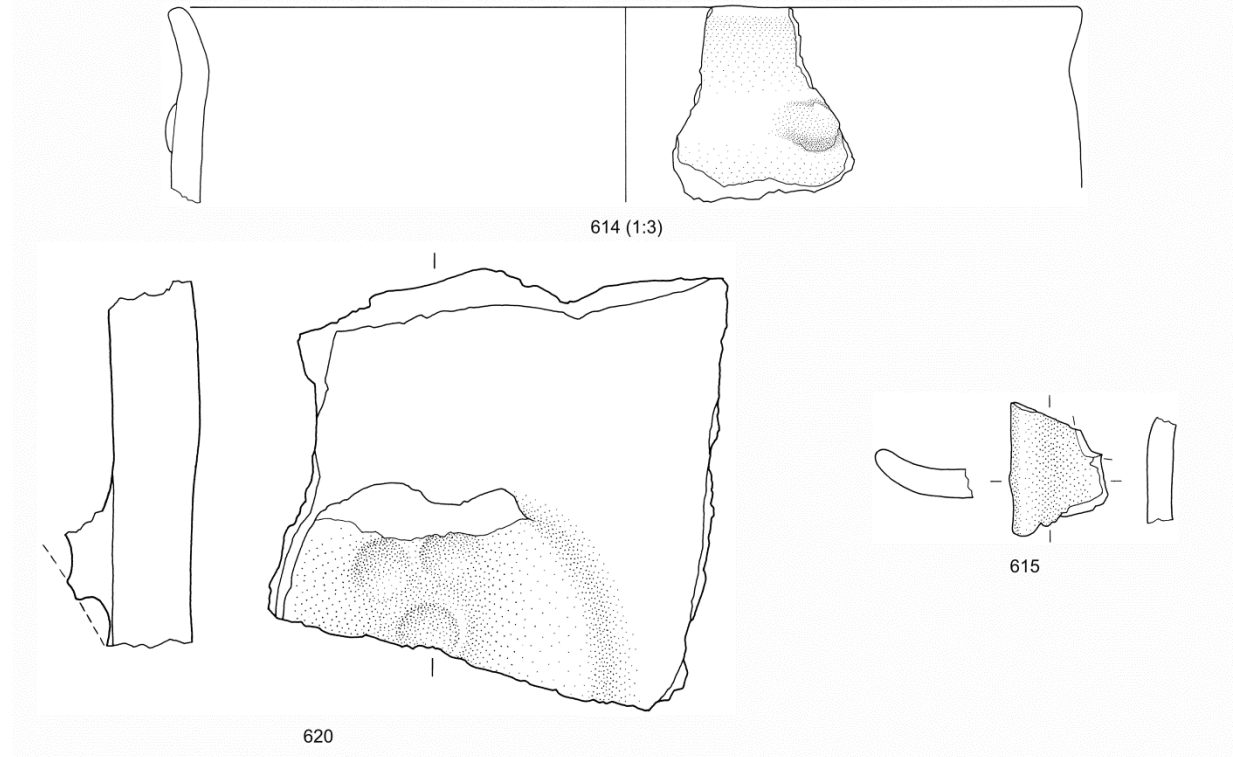
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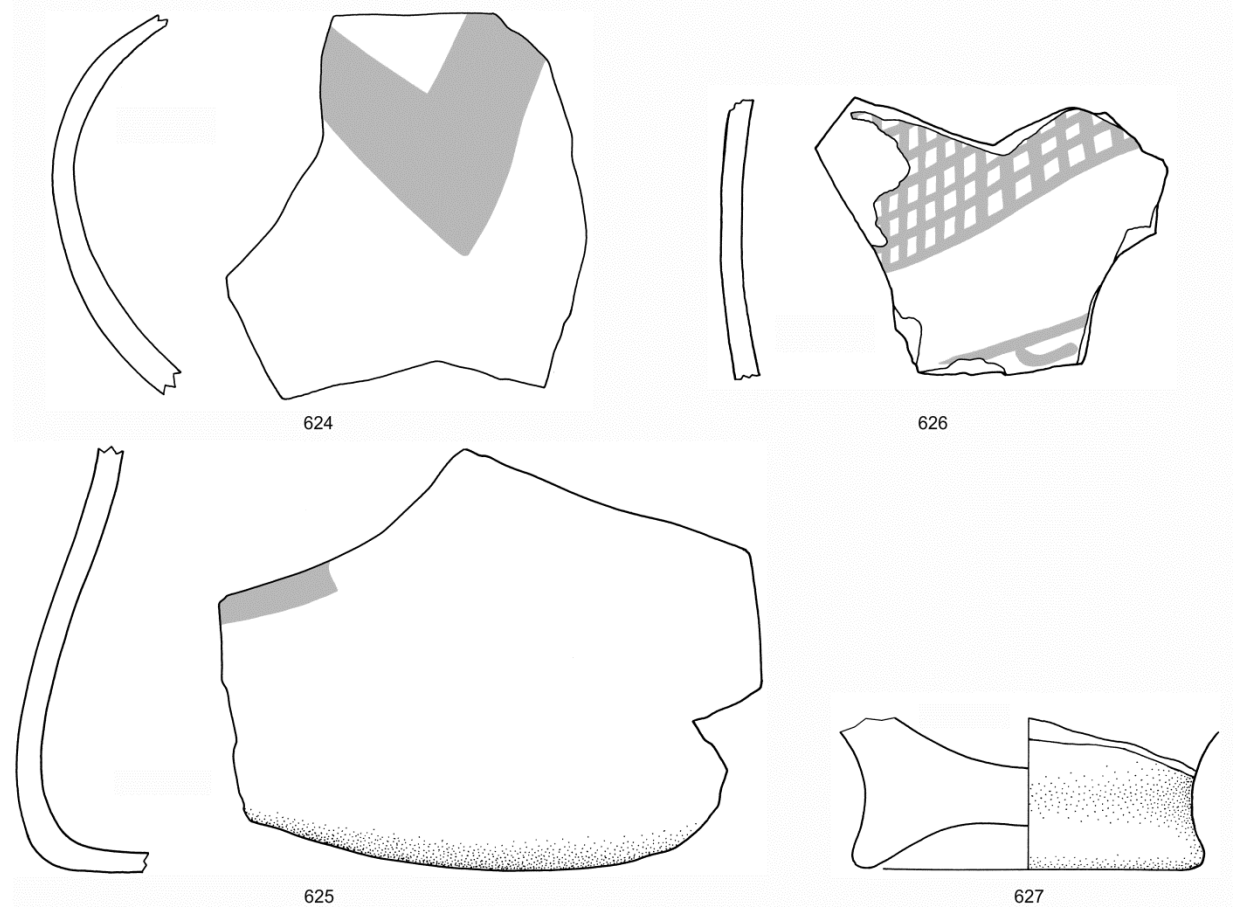
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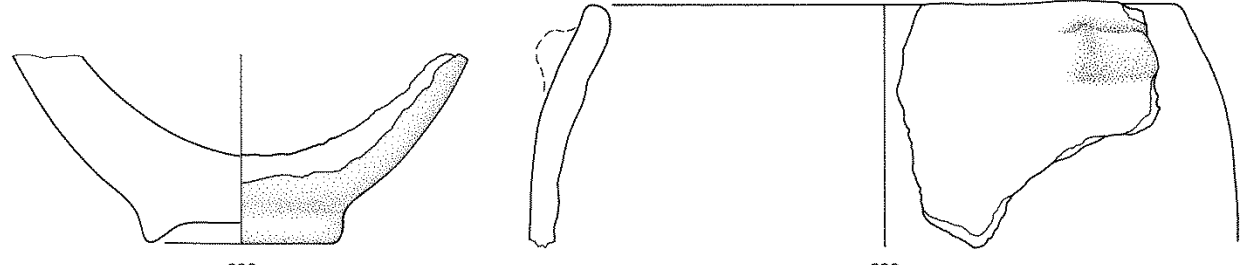






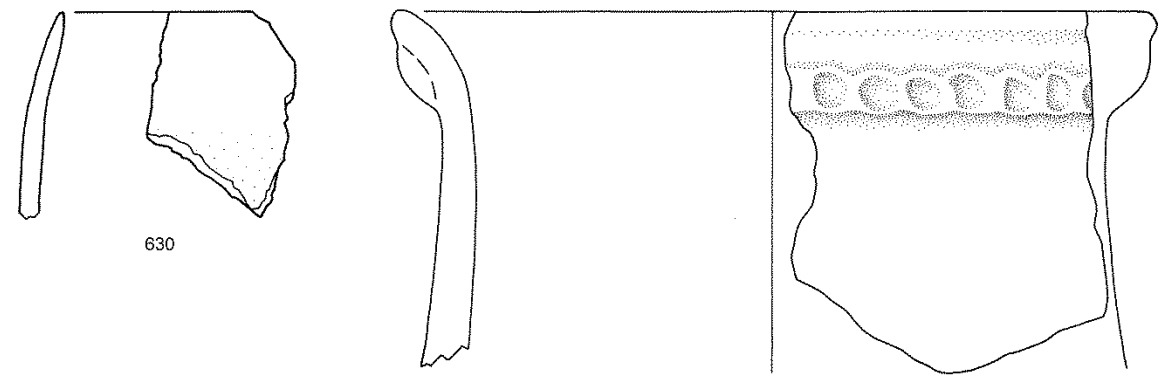
Grotta S. Angelo II, Galleria dei Vasi





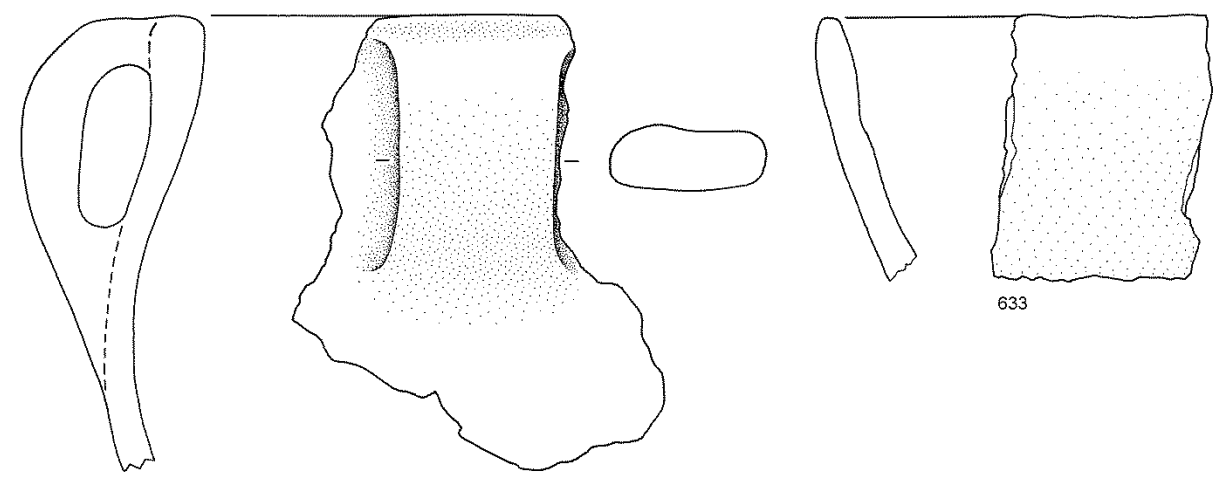
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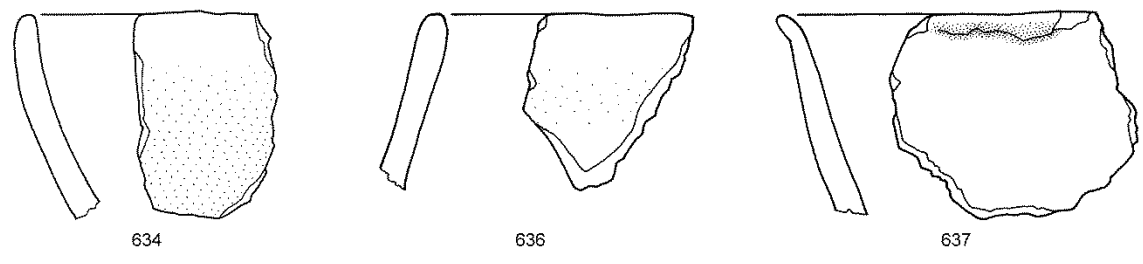
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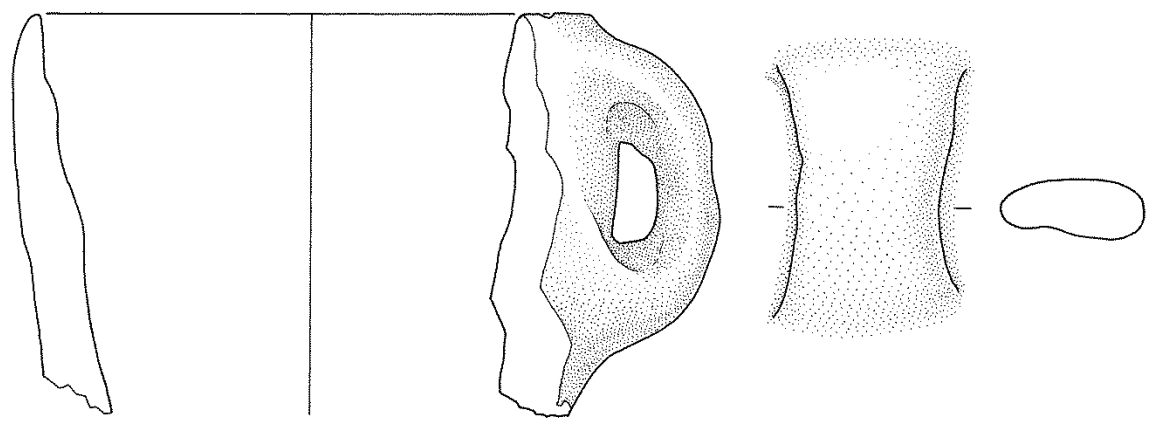
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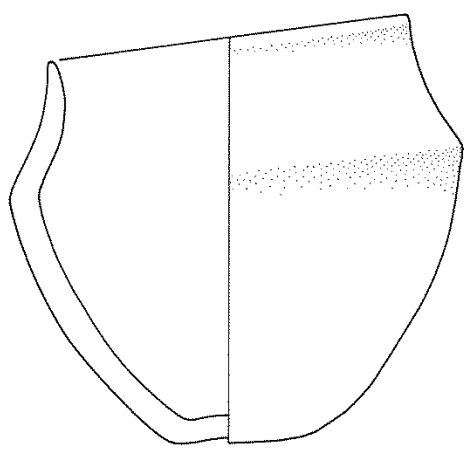
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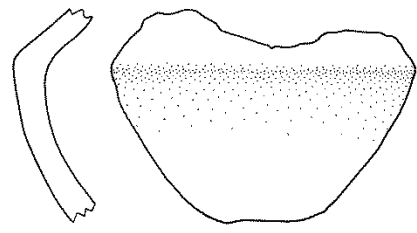
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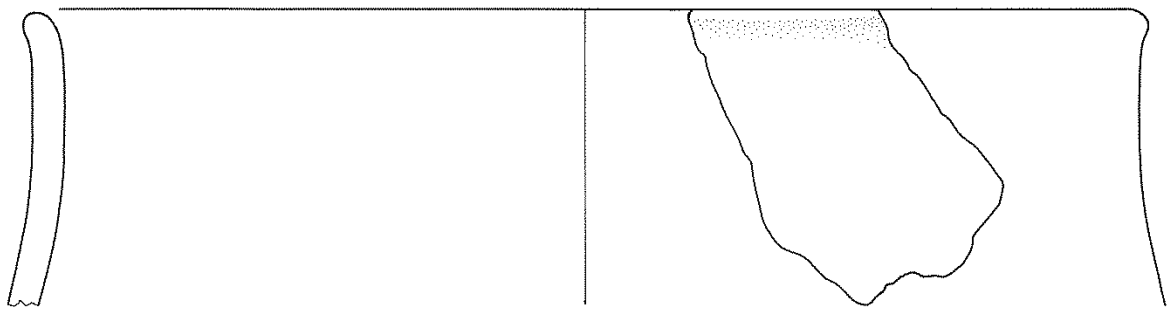
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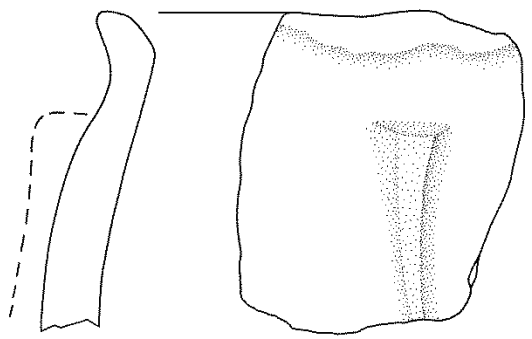
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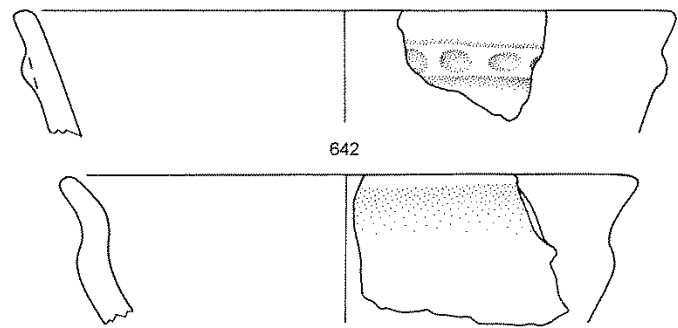
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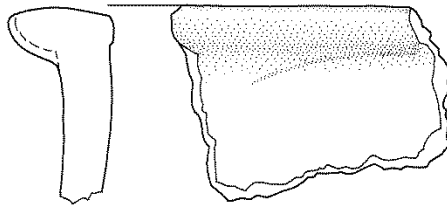


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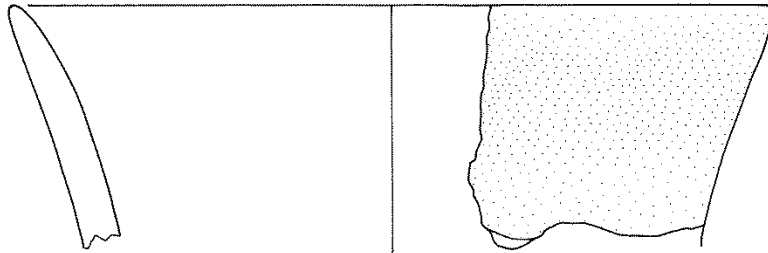


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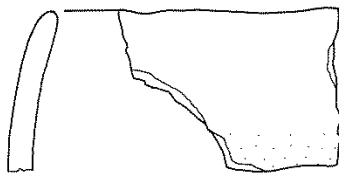
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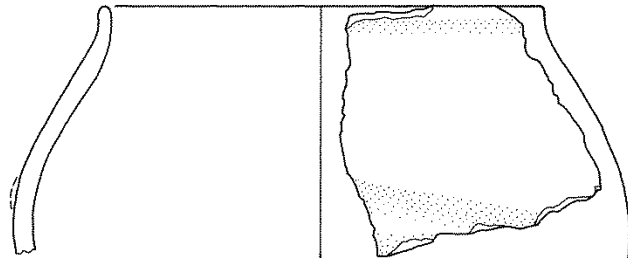
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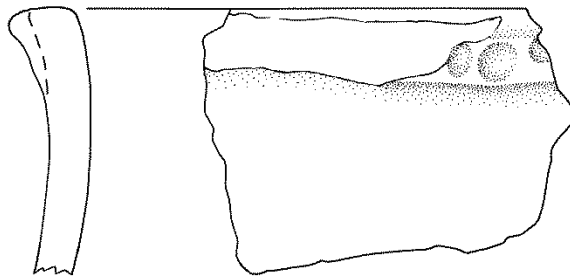
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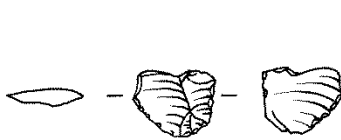
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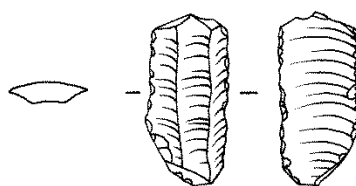
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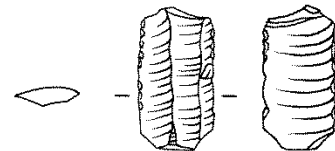
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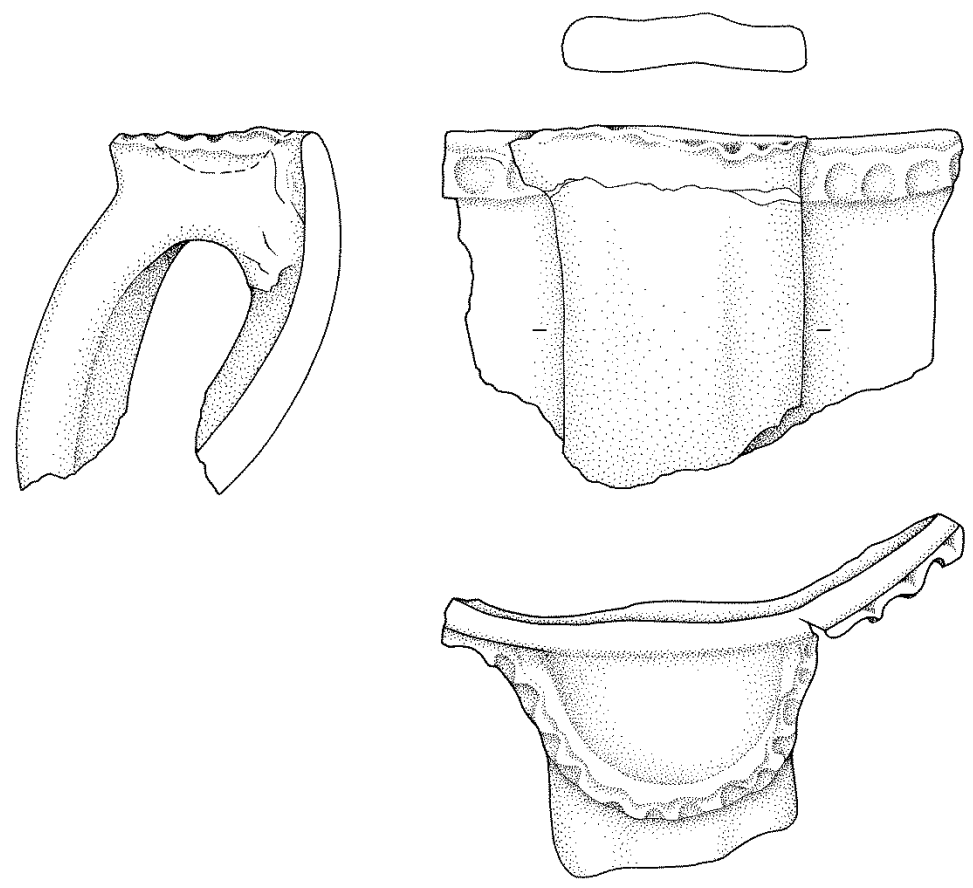
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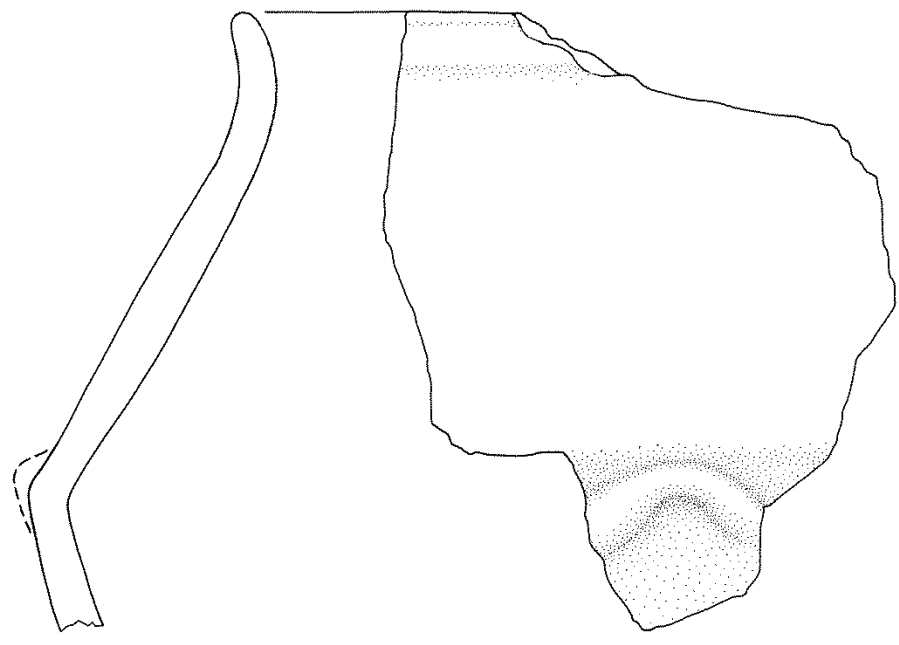
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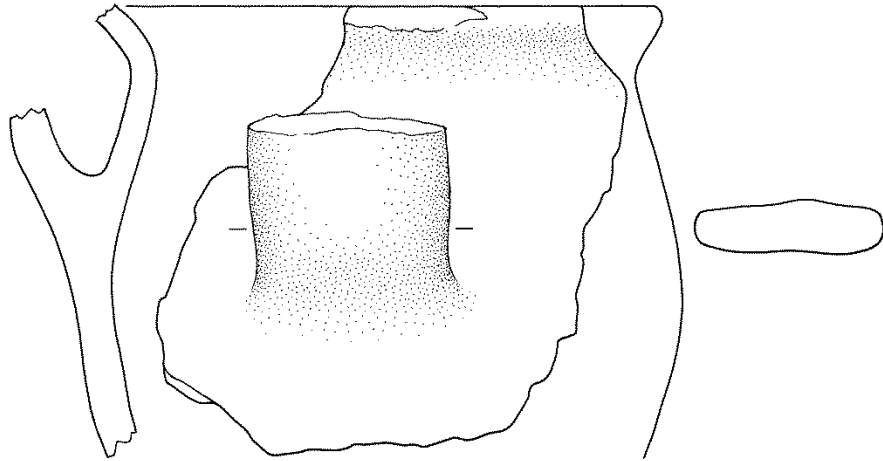
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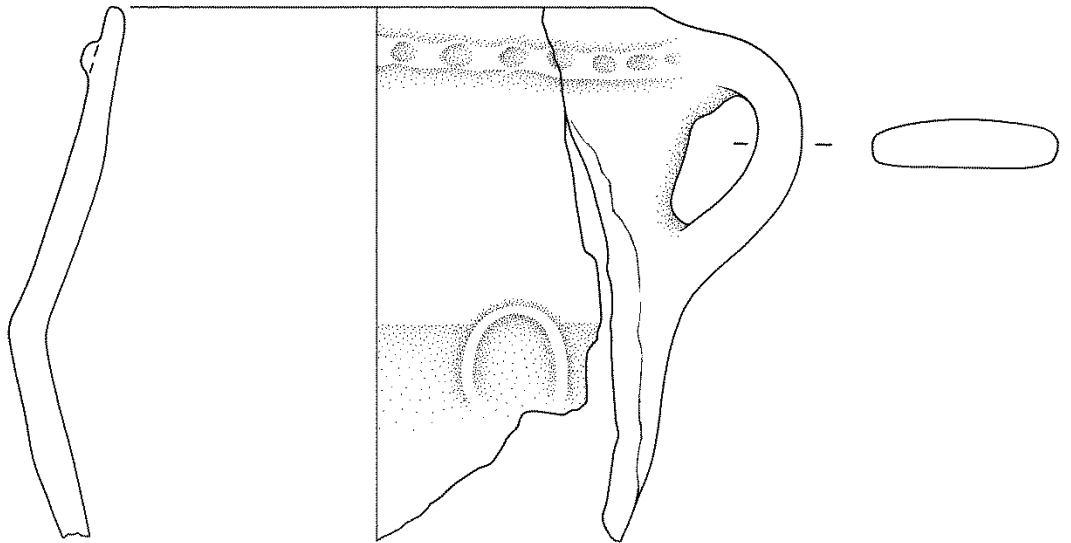
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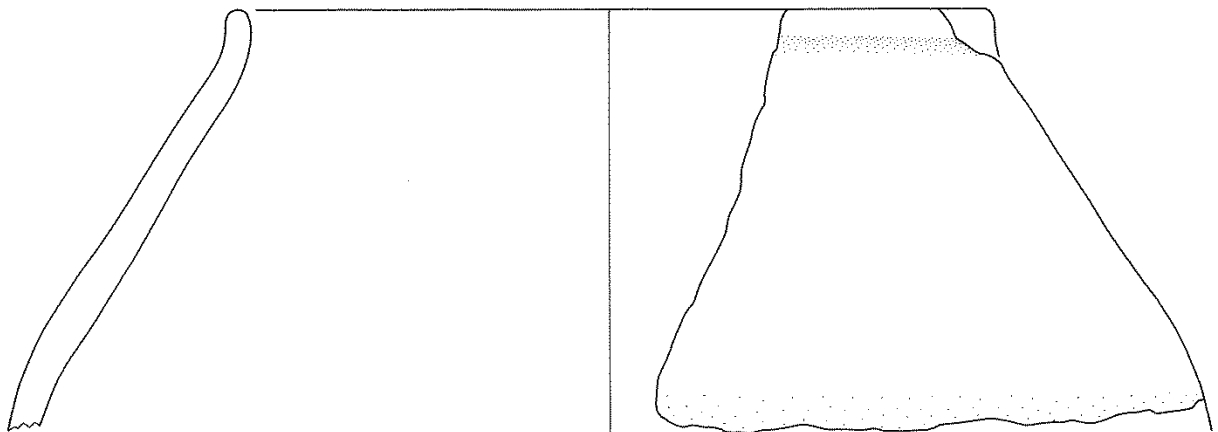
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Summary

Being part of a broader research project into the Bronze Age settlement dynamics of the Sibaritide and its hinterland, carried out within the framework of the Raganello Archaeological Project (RAP) of the Groningen Institute of Archaeology (GIA), this thesis focuses on the protohistoric pottery data collected at sites investigated in the initial stages of the RAP and that excavated during the investigations by the GIA at the protohistoric settlement of Timpone della Motta at Francavilla Marittima. In order to contextualize the pottery, I carried out a preliminary reconstruction of its territorial context, discussing possible landscape archaeology approaches.

The study starts out with a summary of current knowledge on pre- and protohistoric settlements in the Sibaritide. In the literature only little evidence exists for human settlement during the period between the Neolithic and the beginning of the Bronze Age. However, from the Middle Bronze Age 2 onwards a high number of sites is recorded distributed throughout the hilly strip surrounding the Sybaris Plain. Based above all on the research of Renato Peroni and his team, it appears that the development of Middle Bronze Age settlements was followed in the Recent Bronze Age by a slight decrease in the number of sub-coastal sites oriented towards the more hilly internal area; in the Final Bronze Age the number of sites in the internal highlands increases, and at the same time there is a significant growth in size of a few larger settlements that are strategically placed overlooking the plain. Peroni argued that these political and economic changes reflect the establishing of a hierarchic territorial organization that would develop further in the Iron Age.

The thesis has resulted in two important new insights:

1. The pottery study here presented, allows us to trace back in time human settlement in the study area which traditionally is thought to start in the Middle Bronze Age2 to earlier phases thanks to new insights into the typo-chronological articulation of the Neolithic to Eneolithic (or Copper Age) periods.
2. The pottery study shows that there was a distinct development of Middle Bronze Age sites in the inland areas and abandonment in the Late Bronze Age.

Both observations derive from the chronological study of the pottery from the proto-historic sites found in the Raganello valley collected at a range of sites recorded in the field-walking surveys by the Groningen Institute of Archaeology and the speleological explorations by the “Gruppo Speleologico Sparviere”. Since protohistoric sites are mostly represented on the surface by worn and often poorly preserved pottery sherds that are difficult to date, understanding how surface artefact scatters can define chronology and function of sites became one of the goals of this research. In this vein, this study has aimed to provide high resolution chronological, functional and cultural information from the study of ceramics of the RAP sites. The surface sherds that were dated on basis of typology were diagnostic or had characteristics that allow me to identify specific shapes or types of vessels to which they would have belonged. The chronological and functional analysis of the sites in the Raganello inland valley implied the search of parallels for each selected sherd: these parallels provided data about the chronology and diffusion of types from the local to the (inter) regional scale and led to the identification of specific cultural phases and the occurrence of the associated materials during different periods both within the research area and (far) beyond.

Below is a summary of the implications of these new data for the two main themes of this thesis.

1. Tracing back the settlement history of the Sibaritide

For my thesis, I carried out a study of materials found in two caves belonging to the Sant'Angelo karst system located N-W of Cassano allo Jonio: Sant'Angelo II Cave and Sant'Angelo IV Cave.

Reassessing the potsherds collected by S. Tinè in 1964 in Sant'Angelo II Cave, it appears that a first frequentation of the cave took place in the Middle-Recent Neolithic, a second one between the Eneolithic and

the Early Bronze Age, and a third one in the transitional period between the Early and the Middle Bronze Age, pointing to long and wide ranging cultural interactions with both coasts of the Adriatic sea.

The Sant'Angelo Cave IV shows the first evidence of settlement at the end of the Middle Eneolithic and during the period between the end of the Eneolithic and the beginning of the Bronze Age in the Sibaritide.

Both caves show the cultural shift between the Eneolithic and the EBA and both of them were in use until the beginning of the Middle Bronze Age. After the beginning of the Middle Bronze Age, and therefore in the Middle Bronze Age², the Sibaritide became characterized by a settlement pattern of open air sites while cave sites were abandoned. Further environmental studies could perhaps shed light on the reasons that led to the different use of the territory from the second half of the Middle Bronze Age and the possible existence of a "hidden" Early Bronze Age landscape. Pottery found at these two caves show cultural relationships with North-Eastern Italian contexts. It must be noted that until now, long duration shapes that last until the transitional period Late Eneolithic/Early Bronze Age, had not been recorded in the study area. These new artefacts, including features from both the end of the EBA and the beginning of the Middle Bronze Age, support the hypothesis introduced in this thesis that the pottery from the late Early Bronze Age and the Middle Bronze Age¹ in the Sibaritide reflects a single transitional chrono-typological phase.

2. Settlement development in the inland areas with respect to the foothills from MBA to Iron Age

The protohistoric sites this study deals with were all detected within the administrative borders of San Lorenzo Bellizzi, Francavilla Marittima, Civita, Cerchiara di Calabria and partly Frascineto and Cassano allo Jonio.

- The analysis of the pottery found in protohistoric sites within the territory of San Lorenzo Bellizzi led to the discovery of a settlement pattern composed of Middle and Recent Bronze Age sites, with a few indications for potential Neo-Eneolithic and Early Bronze Age settlement phases. Considering the geological background of some of the S. Lorenzo sites, it seems that they were not deserted at the end of the Recent Bronze Age because of changes in the surrounding environment, but for reasons related to the reorganization in social structure.
- In the surroundings of Francavilla Marittima faint attestations prior to the Middle Bronze Age² were noted in the course of the RAP surveys, mostly in sites in the foothills and at a cave site (Grotta del Caprio). Two other sites near Francavilla attest to a weak frequentation of the area before the Middle Bronze Age 2: these are Timpa del Castello and Timpone della Motta. Sites dating to the Middle Bronze Age 2-3 and Recent Bronze Age were only found at Timpa del Castello, Timpone della Motta and Carnevale. In addition to these sites, another site, Rovitti, provided evidence dating to the Late Bronze Age. Apart from the sites of Timpa del Castello and Timpone della Motta, sites providing evidence for Final Bronze Age and Early Iron Age occupation are all located in the foothills of the Sibaritide, in a slightly flat area, such as the sites located at Portieri, Macchiabate and Pietra Catania. One could infer that at the end of the Bronze Age settlement locations in the foothills are preferred over those in the hinterland, as shown by the lack of Late Bronze Age-Early Iron Age sites in the latter area.

It must be realized, however, that the protohistoric settlement framework that can be reconstructed for the territory of Francavilla M.ma depends also on the documentation coming from the excavations at the site of Timpone della Motta. Research at the site has focussed above all on the Iron Age and Archaic phases of the site so far and less so on the phases preceding these. I reassessed these earlier phases. I observed how the known Middle Bronze Age settlement phase on the top of the Timpone della Motta was followed by a Late Bronze Age phase disturbed at the end of the Final Bronze Age. The Recent Bronze Age and Final Bronze Age remains, both on the Acropolis and in the Plateau I excavation trenches, constitute indeed traces of a frequentation throughout the Bronze Age. In any case, it is now possible to assume that settlement development on the Timpone della Motta started in the Middle Bronze Age and continued into the Recent Bronze Age and Final Bronze Age, as provided

by a constant although weak presence of evidence from this period. The observation is corroborated by the information from the stratigraphic profile of Carnevale, along the north side of the hill, and from the Area Rovitti on the Southern foothill of Timpone della Motta. Indeed the Carnevale section shows that one (or more) Bronze Age habitation structures had been set along the Northern side of the hill. In the area Rovitti, along the Southern slope, also Bronze Age frequentation is attested. The physical settlement organization which can be hypothesized for the hill of Timpone della Motta is thus constituted by a series of terraces, still detectable on the top but no longer visible along the slopes. Therefore, we can imagine that the entire hill, overlooking the Raganello and surrounded by secondary water streams on the other sides, was settled from the Middle Bronze Age until the Iron Age without interruption.

- Research was carried out also in the territory of the town of Civita. This led to the discovery of a long-term site in use from the Middle Bronze Age to the Final Bronze Age-Early Iron Age located among a group of Late Bronze Age sites in the Demanio area. In the territory of Civita only one mono-phase Middle Bronze Age site was found so far, Pietra della Sentinella. As a consequence, it appears that in the territory of Civita there is a predominance of Late Bronze Age open air sites.
- Furthermore, research was carried out at Cerchiara di Calabria, where a Bronze Age settlement area constituted by small settlement units was found dispersed over the Terra Masseta plateau and between the Terra Masseta rock face and the area of Balze di Cristo. What is left is a non-homogeneous scattering of impasto pottery, attesting to the presence of a settlement area the non-durable structures of which are still partially buried or may have disappeared after centuries of cultivation and slope processes.
- With regard to the territory of Frascineto, my thesis included the study of the site of Timpone delle Fave. It was settled in the Recent Bronze Age, developed further in the Final Bronze Age and was continuously inhabited until the end of the Final Bronze Age. Since most of the evidence that attests to the Early Iron Age is represented by shapes in use from the late Final Bronze Age onwards and since the Final Bronze Age materials are consistent, it is possible to restrict the chronology of the settlement to the late Final Bronze Age. At Timpone delle Fave fragments of large storage jars (Greek: pithoi, Italian: dolii) scattered over the settlement area were found. They are of the so-called *dolii cordonati* class (jars decorated with encircling bands and/or grooves) typical of this period. Many Final Bronze Age1 ceramics were found during GIA surveys also in the Contrada Damale, between Cerchiara and Francavilla, in sites overlooking the Sybaris plain among which a notable presence of dolii cordonati. Impasto dolium fragments were found also at Amendolara, Timpone della Motta and Torre Mordillo. Thus far Timpone delle Fave is the westernmost site in which this ceramic production has been found.

Conclusions

What we may consider the main result of the two main observations in this thesis as outlined above is that the pottery study enables us to formulate new hypotheses on the basis of the new and very detailed chronological insights in the dynamics of the protohistoric frequentation of the study area, and the changing role of the study area within the wider settlement pattern of the Sibaritide.

The chronology of the pottery and the archaeological contexts in which parallels were found for the materials of the RAP surveys as presented in this study allowed me to make observations on cultural connections within the Italian peninsula and in adjacent areas from the Neolithic to the Late Bronze Age. From the Late Bronze Age, materials from the Aegean area occur more prominently in the RAP area (grey ware, decorated storage jars and, later, matt-painted pottery). From the end of the Final Bronze Age until the beginning of the Early Iron age, the RAP pottery suggests that material cultures of Calabria, Campania and Central Italy become more connected to each other.

The results obtained in the first four chapters are synthesised in the concluding chapter by reviewing the evidence from the sites within the study-area and expanding this evidence to discuss the settlement pattern and changes therein. This approach includes the relevant environmental data, chronology, type and function of sites, and the socio-economic conditions that played a role in shaping the Bronze Age landscape.

In order to look into the articulation of sites over the landscape in a diachronic perspective, I divided the inland part of the study area in a northern and southern part divided by the river Raganello, as I noticed that the chronology of the sites differs: the northern part includes the oldest settlements while the southern part is characterized by a stronger development during the Final Bronze Age. In the Final Bronze Age the micro-landscapes in the hinterland were abandoned and settlement organization started to gravitate towards the foothills. In order to understand the possible reasons for this, I analysed the various micro-landscapes of the study area (Siedlungskammer), starting from the interpretation of the material cultural remains and analysing it in the context of its physical setting.

It was worth to compare the distribution of sites over the landscape as presented in the research directed by Peroni with that of the Raganello Archaeological Project. While Peroni's team searched almost exclusively the foothills and related uplands around the Sibari plain, the Groningen team covered also a sample of an internal valley and its related uplands.

Although the research carried out so far by the Raganello Archaeological Project, as presented in this thesis, only deals with part of the available data, it constitutes already a meaningful dataset. As such, it is a further stimulus for elaboration of Peroni's hypotheses.

All of the sites recorded in the territory of S. Lorenzo, which is the most internal area investigated by the RAP, show a same diachronic development of strong material presence during the Middle Bronze Age and less so, during the Recent Bronze Age. At a certain point in the Recent Bronze Age, this spatially continuous settlement organization ceased to function and the inland sites were abandoned. Sites in the foothills, in contrast, were frequented during the whole Bronze Age until the beginning of the Iron Age. This has certainly to do with their specific locations in the landscape dominating large tracts of potential agricultural land. Major sites in the foothills or near to them indeed continued to be settled until the beginning of the Iron Age and few of them would develop in the Iron Age. However, true urbanization processes did not take place in the Sibaritide. The persistence of small to medium sized settlements in the Late Bronze Age that did not evolve into urban forms, and the continued occupation of sites during the whole Bronze Age, indicate that the inhabitants of this area wanted to keep up existing political structures that were likely compatible with their economic needs and territorial setting. The fact that they could manage this settlement pattern is also revealed by the choices they made at the beginning of the LBA, when they abandoned some of the hinterland areas and founded new sites with specific functions in areas economically well supplied.

Between the Final Bronze Age and the Early Iron Age, the archaeological evidence in the study area points to the formation of an élite that established connections with the Euboean (or Euboeanizing) world. The emphasis on the foundation of the Greek colony of Sybaris as the main reason of the lack of urbanization of the study area should therefore be downplayed and considered as one of the factors of a gradual process of interregional exchanges and interconnections. Indeed, if the Euboean phase preceded the foundation of Sybaris by a half century, the period during which changes in the social and economic structure in the Sibaritide started should be moved back into the beginning of the Early Iron Age, well before the historical colonization.

To conclude, this research has been successful in the diachronic reconstruction of the settlement dynamics in the study area as part of long-term history by filling the gaps in the *longue durée* of the settlement history of the Raganello basin. The results are meant to be included in the long term sequence of human occupation patterns that has resulted in the current landscape to be perceived as the cumulative result of previous landscapes. While the understanding of the current landscape as derived from the past is important to scholarship, the main recipients of this information should be the inhabitants of this territory, so that through the knowledge of their past, they feel part of their landscape and responsible for its future.

Riassunto

In quanto parte del vasto progetto di ricerca “Raganello Archaeological Project” (RAP) del Groningen Institute of Archaeology (GIA) sulle dinamiche insediative dell’età del Bronzo nella Sibaritide e nel suo hinterland, questo studio s’incentra sui dati ceramici rinvenuti in siti protostorici rilevati nelle fasi iniziali del RAP e su quelli acquisiti durante gli scavi del GIA nel sito di Timpone della Motta a Francavilla Marittima. Al fine di contestualizzare la ceramica si è proceduto ad una ricostruzione preliminare del contesto territoriale analizzando le possibili linee di ricerca improntate a un approccio di archeologia del paesaggio.

Lo studio è introdotto da una ricapitolazione dei dati insediativi pre-protostorici editi per la Sibaritide. Nella letteratura, il periodo compreso fra l’età Neolitica e gli inizi dell’età del Bronzo risulta scarsamente abitato, mentre dalla seconda fase dell’età del Bronzo (Bronzo Medio 2) si registra nell’area un alto numero di insediamenti distribuiti lungo la fascia collinare che circonda la piana di Sibari. In base agli studi di Renato Peroni e della sua équipe, risulta che lo sviluppo dei siti del Bronzo Medio è seguito, nel Bronzo Recente, da una lieve diminuzione quantitativa del numero di siti sub-costieri e dall’aumento di siti nelle aree collinari più interne; nel Bronzo Finale il numero dei siti sugli altopiani interni aumenta e allo stesso tempo si registra una significativa crescita delle dimensioni di pochi centri strategicamente gravitanti intorno alla pianura. Peroni teorizza che questi cambiamenti politici ed economici riflettono lo stabilirsi di un’organizzazione territoriale gerarchica che si svilupperà più compiutamente nell’età del Ferro.

In questa tesi sono stati raggiunti due nuovi e importanti risultati:

1. Lo studio della ceramica qui presentato consente di retrodatare l’avvio dell’occupazione antropica dell’area di studio avvenuta tradizionalmente nel Bronzo Medio2 a fasi precedenti, grazie a nuove prospettive di ricerca riguardanti l’articolazione dei periodi Neolitico ed Eneolitico (età del Rame).
2. Lo studio della ceramica mostra un chiaro sviluppo insediativo di siti del Bronzo Medio in aree montuose interne che vengono abbandonate nel Bronzo Tardo.

Entrambi i risultati derivano dallo studio tipologico e cronologico della ceramica proveniente da siti protostorici individuati nella valle del Raganello e raccolta durante le ricognizioni di superficie del GIA e le esplorazioni speleologiche del Gruppo Speleologico Sparviere.

Pervenendo alla conclusione che i siti protostorici rilevati in superficie sono per lo più rappresentati da frammenti ceramici mal preservati, erosi, e quindi difficilmente databili, capire come le concentrazioni di materiali di superficie potessero fornire informazioni utili sui siti è diventato uno degli obiettivi di questa ricerca. In tal senso, questo studio è stato finalizzato ad un’analisi della ceramica volta all’acquisizione di dettagliate informazioni cronologiche, funzionali e culturali riguardanti i siti del RAP. I frammenti di superficie sono stati datati su base tipologica, considerando sia i frammenti propriamente diagnostici, che i frammenti con caratteristiche tali da consentire l’individuazione di forme e tipi ceramici specifici. L’analisi cronologica e funzionale dei siti dell’hinterland lungo la valle del Raganello ha implicato una dettagliata ricerca di confronti atti all’acquisizione di dati riguardanti cronologia e diffusione di tipi ceramici su piccola e/o vasta scala. La classificazione dei siti basata sulla cultura materiale ha pertanto portato all’identificazione di fasi culturali e quindi all’inserimento dei siti RAP in una rete di diffusione, diacronica e sincronica, di aspetti culturali. Tali aspetti hanno consentito di mettere in relazione l’area di studio con altre aree geografiche.

Di seguito verranno brevemente discusse le implicazioni che i principali risultati raggiunti comportano.

1. Retrodatare gli inizi della storia insediativa della Sibaritide

Questa tesi ha incluso lo studio di materiali archeologici recuperati in due grotte che fanno parte del sistema carsico di Sant’Angelo, a nord-ovest di Cassano allo Jonio: Grotta di Sant’Angelo II e Grotta di Sant’Angelo IV.

L'analisi dei frammenti ceramici raccolti da S. Tinè nel 1964 nella Grotta di Sant'Angelo II, ha mostrato che una prima occupazione della grotta, che ebbe luogo nel neolitico Medio-Recente, è seguita da una seconda fase di frequentazione avvenuta fra l'Eneolitico e il Bronzo Antico e da una terza fase avvenuta fra il Bronzo Antico e Medio. Le ceramiche consentono inoltre di delineare una vasta rete di interazione e scambi culturali che raggiunge entrambe le sponde dell'Adriatico.

Nella grotta di Sant'Angelo IV sono state rinvenute, e per la prima volta nella Sibaritide, testimonianze insediative della fine dell'Eneolitico Medio e del periodo compreso tra la fine dell'Eneolitico e gli inizi dell'età del Bronzo.

Entrambe le grotte forniscono pertanto indicazioni che riguardano il periodo di transizione Eneolitico-Antica età del Bronzo ed entrambe le grotte risultano esser state utilizzate fino agli inizi dell'età del Bronzo Medio. Siccome dalla seconda fase del Bronzo Medio si afferma nella Sibaritide un modello insediativo caratterizzato dallo sviluppo diffuso di siti all'aperto e dall'abbandono dei siti in grotta, future ricerche, anche ambientali, contribuirebbero senz'altro alla comprensione dei meccanismi che hanno portato al cambiamento di uso del territorio dal Bronzo Medio e alla decodificazione del "paesaggio nascosto" del Bronzo Antico. Oltre a mostrare contatti e scambi culturali con contesti archeologici dell'Italia nordorientale, tipi ceramici trovati nelle due grotte, mai rinvenuti prima nell'area di studio, costituiscono il primo assemblaggio di forme di lunga durata del periodo di transizione Fine Eneolitico-Bronzo Antico. Inoltre, fra i materiali rinvenuti nelle due grotte, ve ne sono alcuni che, includendo caratteristiche tipologiche ascrivibili sia alla fine dell'età del Bronzo che agli inizi del Bronzo Medio, supportano l'ipotesi, introdotta in questa tesi, che la ceramica della fine dell'Antica età del Bronzo e degli inizi dell'età del Bronzo Medio costituisca in realtà nella Sibaritide un'unica fase tipologica.

2. Sviluppo insediativo nelle aree interne a ovest della fascia pedecollinare dall'età del Bronzo Medio all'età del Ferro.

I siti protostorici trattati in questa tesi rientrano nei territori amministrativi di San Lorenzo Bellizzi, Francavilla Marittima, Civita, Cerchiara di Calabria e in parte di quelli di Frascineto e Cassano allo Jonio.

- Lo studio della ceramica rinvenuta nei siti protostorici individuati nell'area di San Lorenzo Bellizzi ha consentito di delineare un modello insediativo costituito da piccoli insediamenti del Bronzo Medio, con alcune indicazioni riguardanti il periodo ad esso precedente (Neolitico-Bronzo Antico) e ad esso seguente (Bronzo Recente). Considerando anche aspetti geologici e ambientali dell'area S. Lorenzo, sembrerebbe che alla fine del Bronzo Recente gli insediamenti non furono abbandonati a causa di cambiamenti ambientali ma per ragioni riguardanti una riorganizzazione della struttura sociale.
- Nell'area di Francavilla Marittima, le sporadiche attestazioni riguardanti il periodo Neo-Eneolitico acquisite durante le ricognizioni del RAP provengono per lo più da siti situati nella zona pedecollinare ad est di Francavilla e da un sito in grotta (Grotta del Caprio). Altri due siti nei dintorni di Francavilla hanno restituito materiali anteriori al Bronzo Medio2: Timpa del Castello e Timpone della Motta. Alcuni siti si datano al Bronzo Medio2-3 e le uniche testimonianze relative al Bronzo Recente sono state trovate a Timpa del Castello, Timpone della Motta e Carnevale. Si aggiunge Rovitti, dove oltre a ceramiche del Bronzo Recente, sono state trovate evidenze del Bronzo Finale. Oltre ai siti di Timpa del Castello e Timpone della Motta, altri siti in cui è stata rinvenuta ceramica databile fra il Bronzo Finale e la Prima età del Ferro sono situati nella fascia pedecollinare intorno alla piana di Sibari, in una zona pressoché pianeggiante come nel caso di località quali Portieri, Macchiabate e Pietra Catania. Risulta pertanto che alla fine dell'età del Bronzo questa zona pedecollinare venne preferita alle aree interne, come ulteriormente confermato dall'assenza di siti del Bronzo Tardo e della Prima età del Ferro nelle zone interne a ovest di Francavilla.

Tuttavia, il quadro insediativo protostorico che può essere ricostruito per il territorio di Francavilla M.ma si avvale anche della documentazione relativa agli scavi condotti a Timpone della Motta. Le

ricerche che hanno interessato questo sito sono state per lo più incentrate sulle sue fasi dell'età del Ferro e Arcaica e meno sulle fasi precedenti. In questa tesi ho pertanto riesaminato tali fasi. Ne è risultato che ad una fase insediativa del Bronzo Medio sull'acropoli del Timpone della Motta è seguita una fase del Bronzo Tardo disturbata alla fine del Bronzo Finale. I frammenti ceramici del Bronzo Recente e Finale, sia sull'Acropoli che nei saggi di scavo condotti sul Plateau I costituiscono infatti tracce di una frequentazione dell'area durante tutta l'età del Bronzo. E' pertanto possibile affermare che lo sviluppo insediativo del sito di Timpone della Motta ha avuto inizio nel Bronzo Medio e si è protratto nel Bronzo Recente e Finale, come testimoniato dalla presenza costante ma sporadica in tutta l'area del sito di materiali databili a questi periodi. Questa osservazione è corroborata dai dati acquisiti dalla stratigrafia di Carnevale, lungo il pendio settentrionale della collina del Timpone, e dai dati di scavo relativi all'Area Rovitti, lungo il pendio meridionale. Sia il profilo stratigrafico di Carnevale che l'area Rovitti mostrano infatti che più unità insediative dell'età del Bronzo erano situate lungo i pendii della collina. L'organizzazione insediativa che può essere ipotizzata per la collina di Timpone della Motta risulterebbe pertanto costituita da unità abitative e produttive dislocate su una serie di terrazzamenti ancora percettibili sulla sommità ma non più visibili lungo i pendii. Possiamo immaginare che l'intera collina, affacciata sul Raganello e circondata da corsi d'acqua secondari lungo gli altri versanti, fu abitata dal Bronzo Medio all'età del Ferro senza interruzioni.

- Le ricerche del RAP effettuate nel territorio di Civita hanno portato all'individuazione di un sito di lunga durata abitato dal Bronzo Medio al periodo Bronzo Finale-inizi della Prima età del Ferro in un'area caratterizzata da diversi siti del Bronzo Tardo, a Demanio. Nell'area di Civita solo un sito monofase del Bronzo Medio è stato individuato finora a Pietra della Sentinella. Risulta pertanto nel territorio Civita una predominanza di siti all'aperto del Bronzo Tardo.
- Le ricerche che hanno interessato l'area di Cerchiara di Calabria hanno portato all'individuazione di un'area insediativa dell'età del Bronzo costituita da piccole unità abitative che risulta dislocata dal pianoro di Terra Masseta, delimitato da una parete rocciosa, all'area di Balze di Cristo. Le testimonianze di questa articolazione dello spazio sono costituite da concentrazioni sparse di ceramica d'impasto che indica la presenza di un'area insediativa costituita da strutture abitative di materiali deperibili parzialmente sepolte o scomparse in seguito alla secolare pratica agricola e ai processi di erosione.
- Per quanto riguarda il territorio di Frascineto, nella mia tesi ho trattato il sito di Timpone delle Fave, che risulta esser stato abitato dal Bronzo Recente fino alla fine del Bronzo Finale, con un deciso sviluppo agli inizi del Bronzo Finale. Siccome la maggior parte dei frammenti ceramici databili alla Prima età del Ferro appartengono a forme in uso dal Bronzo Finale e siccome la quantità di frammenti del Bronzo Finale risulta molto consistente, è possibile limitare la durata dell'occupazione dell'insediamento alla fine del Bronzo Finale. A Timpone delle Fave, inoltre, sono stati trovati diversi frammenti di doli cordonati (grandi contenitori per lo stoccaggio caratterizzati da scanalature e cordonature plastiche) all'interno della concentrazione di materiali d'impasto che identifica l'area insediativa. Molti frammenti ceramici del Bronzo Finale¹, fra i quali frammenti di doli cordonati, sono stati raccolti anche durante le ricognizioni che il GIA ha condotto in Contrada Damale, fra Cerchiara e Francavilla, in un'area a ridosso della piana di Sibari. Frammenti di doli di impasto sono stati trovati anche ad Amendolara, Timpone della Motta e Torre Mordillo. Si può pertanto concludere che per il momento Timpone delle Fave è il sito più interno, ad ovest di Sibari, in cui questa produzione ceramica è stata riscontrata.

Conclusioni

L'importante risultato che deriva dalle due rilevanti osservazioni discusse in questa tesi e appena delineate, riguarda il ruolo che lo studio della ceramica assume nel consentire la formulazione di nuove ipotesi tramite

innovative e dettagliate informazioni cronologiche utili per comprendere le dinamiche di frequentazione protostorica dell'area di studio, offrendo la possibilità di delineare il ruolo che tale area ha avuto all'interno del più ampio quadro insediativo della Sibaritide.

Infatti, la cronologia della ceramica e i contesti archeologici da cui provengono i confronti stabiliti con i materiali rinvenuti durante le ricognizioni del RAP e presentati in questo studio, hanno consentito osservazioni sui contatti culturali fra l'area di studio e altre regioni sia all'interno della penisola italiana che in regioni a quest'ultima adiacenti, dal Neolitico alla fine dell'età del Bronzo. A partire dal Tardo Bronzo, nell'area di indagine del RAP si riscontrano in maniera più evidente materiali provenienti dall'area Egea (ceramica grigia, doli cordonati, e, in seguito, ceramica figulina dipinta/matt painted). Dalla fine del Bronzo Finale fino agli inizi della Prima età del Ferro, la ceramica dell'area del RAP indica che culture materiali della Calabria, della Campania e dell'Italia centrale mostrano fra loro maggiori affinità.

I risultati ottenuti nei primi quattro capitoli sono sintetizzati nel capitolo conclusivo, dove vengono riesaminate e approfondite le evidenze rinvenute nei singoli siti all'interno dell'area di studio al fine di analizzare il modello insediativo risultante e i cambiamenti in esso avvenuti. Questo approccio include imprescindibili dati ambientali e cronologici, dati relativi alla tipologia e alla funzione dei siti e le condizioni socio-economiche che hanno concorso alla formazione del paesaggio dell'età del Bronzo.

Nell'esaminare l'articolazione dei siti all'interno del paesaggio in una prospettiva diacronica, la zona interna dell'area di studio è stata convenzionalmente suddivisa in una parte settentrionale ed una meridionale, in quanto durante l'analisi crono-tipologica dei materiali è emerso che la parte posta a nord del Raganello includeva siti più antichi rispetto ai siti individuati nella parte a Sud del fiume, che risulta invece caratterizzata da uno sviluppo più marcato nel Bronzo Finale. Nel Bronzo Finale, i micro-paesaggi nell'hinterland vengono abbandonati e la riorganizzazione territoriale inizia a interessare la zona pedemontana. Per capire quali siano stati i motivi alla base di questi cambiamenti, ho analizzato i vari micro-paesaggi (Siedlungskammer) all'interno dell'area di studio, partendo dalla contestualizzazione dei resti della cultura materiale all'interno del quadro geografico e ambientale.

Si è ritenuto opportuno confrontare la distribuzione dei siti nel paesaggio formulata sulla base delle ricerche dirette da Peroni, con quella risultata dalle indagini del RAP. Mentre le ricerche dell'équipe di Peroni hanno riguardato esclusivamente la zona pedecollinare e i pianori intorno alla Piana di Sibari, i ricercatori del GIA hanno indagato anche parte di una valle interna e i relativi altopiani.

Sebbene i dati presentati in questa tesi e derivanti dalle ricerche del RAP finora condotte, trattino solo parte dei dati disponibili, possono comunque essere ritenuti rappresentativi e costituire uno stimolo ulteriore al prosieguo degli studi volti alla elaborazione delle ipotesi formulate da Peroni.

I siti rilevati nel territorio di San Lorenzo, vale a dire l'area più interna indagata nel corso del RAP, mostrano un omogeneo sviluppo diacronico durante l'età del Bronzo Medio e, seppur meno incisivamente, durante il Bronzo Recente, periodo durante il quale vengono abbandonati. A un certo punto, infatti, durante il Bronzo Recente, l'organizzazione insediativa sorta nel Bronzo Medio e che appare costituita da nuclei omogenei sparsi nel territorio, viene meno. Allo stesso tempo, i siti situati nella zona pedecollinare, verso la Piana di Sibari, continuano ad essere occupati per tutta l'età del Bronzo fino agli inizi dell'età del Ferro. Ciò dipende quasi sicuramente dalla posizione che questi siti occupano all'interno del paesaggio, in quanto dominano ampi tratti di suolo coltivabile. I siti maggiori situati nella zona pedecollinare e pianeggiante continuano ad essere occupati fino agli inizi della Prima età del Ferro e alcuni di essi conosceranno un'ulteriore fase di sviluppo nella piena età del Ferro, fermo restando che veri e propri processi di urbanizzazione non si sono avuti nella Sibaritide. La persistenza di insediamenti di piccole e medie dimensioni nel Bronzo Tardo che non evolveranno in senso urbano e la continua occupazione di medesimi siti durante tutta l'età del Bronzo, indica a mio avviso che gli abitanti di quest'area vollero mantenere esistenti strutture politiche verosimilmente compatibili con le loro esigenze economiche e le caratteristiche del loro territorio. Il fatto che essi gestissero consapevolmente il loro sistema insediativo è suggerito dalle scelte che essi operarono agli inizi del Tardo Bronzo, quando abbandonarono aree interne e fondarono nuovi insediamenti con funzioni specifiche in aree ritenute economicamente più vantaggiose.

Evidenze archeologiche nell'area di studio suggeriscono che fra l'età del Bronzo Finale e la Prima età del Ferro si ha la formazione di gruppi sociali élitari che stabiliscono contatti con il mondo Euboico (o Euboicizzante). L'enfasi sulla fondazione della colonia greca di Sibari come principale causa della mancata urbanizzazione dell'area di studio dovrebbe essere attenuata e tale evento si dovrebbe considerare come uno dei risultati di un graduale processo di scambi e interrelazioni. Infatti, se la fase Euboica, momento durante il quale si registrano cambiamenti nella struttura sociale ed economica della Sibaritide, precedette la fondazione di Sibari di mezzo secolo, le ragioni per cui non si ebbero sviluppi urbani devono essere cercate in una fase precedente la colonizzazione storica, cioè agli inizi della Prima età del Ferro.

Per concludere, questa ricerca ha fornito risultati soddisfacenti al fine della ricostruzione diacronica delle dinamiche insediative che hanno interessato l'area di studio, in quanto hanno colmato le lacune che caratterizzavano la sequenza dello sviluppo insediativo del bacino del Raganello nel continuum storico. L'intento di questa tesi è infatti quello di includere tali risultati nella sequenza storica che ha visto i modelli di occupazione antropica avvicinarsi nell'area di studio e che hanno concorso alla formazione dell'attuale paesaggio da percepirsi pertanto come il prodotto cumulativo dei paesaggi precedenti. Se la comprensione del paesaggio attuale come prodotto del passato riguarda gli studiosi, i principali destinatari delle informazioni contenute in questa tesi sono gli abitanti del territorio studiato, affinché attraverso la conoscenza del loro passato possano sentirsi parte del loro paesaggio e responsabili per i suoi sviluppi.

Samenvatting

Deze dissertatie onderzoekt de bredere context van protohistorisch aardewerk gevonden tijdens onderzoek van het Groninger Instituut voor Archeologie in Noord-Calabrië in het kader van het Raganello Archaeological Project (RAP). Als onderdeel van een regionaal onderzoek naar de nederzettingsdynamiek in de Sibaritide en zijn achterland werd proto-historisch aardewerk gevonden tijdens veldkarteringen in het Raganello vallei en dit werd samen met het aardewerk uit opgravingen op de Timpone della Motta (Francavilla Marittima) onderzocht. Op basis van de gevonden sites en het aardewerk is een voorlopige reconstructie van de territoriale context gemaakt gebruikmakend van een landschapsarcheologische benadering.

Het onderzoek begint met een samenvatting van de huidige kennis van pre- en proto-historische sites in de Sibaritide. Uit de literatuur blijkt dat er geringe aanwijzingen zijn voor sites uit de periode tussen het Neolithicum en het begin van de Bronstijd. Dit ondanks het feit dat vanaf Midden Bronstijd 2 een hoog aantal sites verspreid over de heuvelachtige strook rondom de vlakte van Sybaris is gedocumenteerd. Voornamelijk gebaseerd op het onderzoek van Renato Peroni en zijn team, lijkt de ontwikkeling van Midden Bronstijd sites te worden gekarakteriseerd door een lichte afname van sites die georiënteerd waren op het heuvelachtige achterland; in de Finale Bronstijd stijgt het aantal sites in de voetheuvels met tegelijkertijd een aanzienlijke groei in de omvang van een aantal grotere sites die strategisch gelegen uitkijken over de vlakte. Peroni is van mening dat de politieke en economische veranderingen de consolidatie van een territoriale organisatie weerspiegelen, die zich verder zou ontwikkelen in de IJzertijd.

Deze dissertatie heeft twee belangrijke nieuwe inzichten opgeleverd:

1. De aardewerkstudie staat toe om de ontwikkeling van het nederzettingsspatroon in het onderzoeksgebied terug in de tijd te plaatsen. Van oudsher wordt gedacht dat deze ontwikkeling begint in de MB2, maar deze dissertatie laat zien dat het Neolithicum en de Kopertijd ook vertegenwoordigd zijn in de typo-chronologische ontwikkeling.

2. De aardewerkstudie toont aan dat er een duidelijke ontwikkeling was van Midden Bronstijd sites in het achterland en een neergang daarvan in dit landschapsdeel gedurende de late Bronstijd.

Beide observaties zijn gebaseerd op een chronologische studie van het aardewerk gevonden op proto-historische sites in de Raganello-vallei, verzameld tijdens veldkarteringen door het GIA en speleologische expedities door de "Gruppo Speleologico Sparviere". Hiertoe is eerst gezocht naar de beste manier om de chronologie en functie te bepalen van dit doorgaans slecht geconserveerde en moeilijk te dateren oppervlaktemateriaal. In het verlengde hiervan heeft de studie zich gericht op het verschaffen van hoogwaardige chronologische, functionele en culturele informatie uit de studie van het aardewerk van de RAP sites. Het aan de oppervlakte gevonden aardewerk dat op deze basis gedateerd is, was diagnostisch van aard of had andere eigenschappen die het mogelijk maakte om specifiek vormen of typen van aardewerk te herkennen. De chronologische en functionele analyse van het aardewerk van de sites in de Raganello-vallei dwong tot een zoektocht naar parallellen voor elk geselecteerd stukje aardewerk: deze verschaften informatie over de chronologie en de verspreiding van aardewerktypen op lokale en regionale schaal. Uiteindelijk heeft dit geleid tot de identificatie van culturele fases binnen het onderzoeksgebied en relaties met vergelijkbaar materiaal uit andere, soms veraf gelegen gebieden. Hieronder volgt een samenvatting van de implicaties van deze nieuwe gegevens voor de twee centrale thema's van het proefschrift.

1. Het herleiden van de nederzettingsgeschiedenis van de Sibaritide

Voor mijn dissertatie heb ik het materiaal bestudeerd uit twee grotten die onderdeel uitmaken van het karststelsel van Sant'Angelo, gelegen ten Noordwesten van Cassano allo Jonio: Grotta Sant'Angelo II en Grotta Sant'Angelo IV.

Na het opnieuw bestuderen van het door S. Tine in 1964 verzamelde aardewerk in Grotta Sant'Angelo II, bleek dat een eerste gebruik van de grot plaatsvond in het Midden-Laet Neolithicum, een tweede tussen de Kopertijd en de Vroege Bronstijd, en een derde in de overgangperiode tussen de Vroege en de Midden Bronstijd. Het materiaal wijst op langdurige en brede culturele interacties met beide kusten van de Adriatische zee.

De Grotta Sant'Angelo IV laat een eerste bewijs zien van vestiging in de Sibaritide aan het einde van de Midden Kopertijd en gedurende de periode tussen het einde van de Kopertijd en het begin van de Bronstijd.

Beide grotten tonen een culturele verschuiving tussen de Kopertijd en de Vroege Bronstijd en beide waren in gebruik tot aan het begin van de Midden Bronstijd. Kort na het begin van de Midden Bronstijd werd de Sibaritide gekenmerkt door een dunne spreiding van sites in open, onverdedigde locaties in het landschap, terwijl de grotten werden verlaten. Nadere studies van de natuurlijke omgeving zullen wellicht meer inzicht kunnen verschaffen in de factoren die hebben geleid tot een verschillend gebruik van het territorium vanaf het tweede gedeelte van de Midden Bronstijd en in een mogelijk bestaan van een 'verborgen' Vroege Bronstijd landschap. Het aardewerk gevonden in deze twee sites laat eveneens culturele contacten met Noordoostelijke contexten zien. Langlopende nederzettingvormen die voortduurden tot in de overgangperiode Late Kopertijd / Vroege Bronstijd zijn tot nu toe niet waargenomen in het onderzoeksgebied. Deze nieuwe gegevens, inclusief materiële aspecten van zowel het einde van Vroege Bronstijd als het begin van de Midden Bronstijd, ondersteunen de hypothese in deze dissertatie dat het aardewerk uit de late Vroege Bronstijd en de Midden Bronstijd 1 in de Sibaritide één enkele chrono-typologische transitiefase weerspiegelt.

2. Nederzettingsontwikkeling in de binnenlandse gebieden in relatie tot voetheuvels vanaf de Bronstijd tot de IJzertijd

De proto-historische sites die behandeld worden in deze studie zijn alle gelegen binnen de gemeentegrenzen van San Lorenzo Bellizzi, Francavilla Maritima, Civita, Cerchiara di Calabria en deels in Frasinetto en Cassano allo Jonio.

- De analyse van het aardewerk gevonden in de proto-historische sites binnen het gebied van San Lorenzo Bellizzi heeft geleid tot de ontdekking van een nederzettingpatroon gevormd door Midden en begin van Late Bronstijd sites, met een aantal aanwijzingen voor mogelijke Neolithische/Kopertijd en Vroege Bronstijd nederzettingfasen. De landschappelijke achtergrond in ogenschouw nemend van sommige van de sites in San Lorenzo Bellizzi, lijkt het dat ze niet verlaten werden aan het einde van de Recente Bronstijd vanwege veranderingen in de leefomgeving, maar vanwege een achtergrond die verband houdt met een andere opbouw van de sociale structuur.
- In de omgeving van Francavilla Maritima zijn sporadische aanwijzingen waargenomen voor de perioden voorafgaand aan de Midden Bronstijd, meestal in nederzettingen aan de voet van de heuvels en in een grot (Grotta del Caprio). Twee andere sites nabij Francavilla getuigen van een geringe aanwezigheid van het gebied vóór de Midden Bronstijd 2: Timpa del Castello en Timpone della Motta. Materiaal uit de Midden Bronstijd 2-3 en uit de Recente Bronstijd is alleen gevonden in Timpa del Castello, Timpone della Motta en Carnevale. Naast deze sites leverde een andere vindplaats, Rovitti, bewijs voor datering in de Late Bronstijd. Afgezien van de sites Timpa del Castello en Timpone della Motta zijn de sites die getuigen van sporen uit de Late Bronstijd en de Vroege IJzertijd allemaal gelegen in de voetheuvels van de Sibaritide, in een licht glooiend gebied, zoals de sites in Portieri, Macchiabate en Pietra Catania. Men kan hieraan afleiden dat bij de overgang naar het eind van de Bronstijd nederzettinglocaties in de voetheuvels werden verkozen boven die in het achterland, zoals aangetoond door het gebrek aan Late Bronstijd-Vroege Bronstijd sites in dit laatste gebied.

Niettemin is het belangrijk om te realiseren dat het proto-historische nederzettingraamwerk dat kan worden gereconstrueerd voor het gebied van Francavilla Maritima ook afhangt van de opgravingsdocumentatie van de site van Timpone della Motta. Het onderzoek op Timponen della Motta heeft zich tot nog toe voornamelijk gericht op de IJzertijd en archaische fasen en minder op de voorafgaande fasen. Voor deze dissertatie zijn de voorgaande fasen opnieuw bestudeerd en is geobserveerd hoe de al bekende Midden Bronstijdnederzettingfase op de top van Timpone della Motta werd opgevolgd door een Late Bronstijdfase welke vervolgens werd verstoord aan het einde van Finale Bronstijd. De artefacten gevonden op de Acropolis en in opgravingsssleuven op Plateau I bevatten inderdaad sporen van aanwezigheid gedurende de gehele periode vanaf de Midden-Bronstijd. We mogen nu aannemen dat de nederzettingontwikkeling op de Timpone della Motta begon in de Midden Bronstijd en voortduurde tot in de Recente en Finale Bronstijd, zoals blijkt uit

een constante, doch zwakke aanwezigheid van aardewerk uit deze periode. De observatie wordt bevestigd door de informatie van het profiel van Carnevale, langs de noordzijde van de heuvel, en door het gebied van Rovitti aan de zuidelijke voet van de Timpone della Motta. Het Carnevale profiel toont inderdaad dat één (of meer) Bronstijd bewoningsstructuren waren aangelegd langs de noordelijke zijde van de heuvel. In het Rovitti-gebied langs de zuidelijke helling is tevens Bronstijd frequentatie vastgesteld. Het is mogelijk dat de nederzetting bestond uit een serie terrassen, die nog altijd waarneembaar zijn op de top maar niet langer op de hellingen. Daarom kunnen we ons inbeelden dat de gehele heuvel, die uitkijkt over de rivier Raganello en omgeven wordt door secundaire waterlopen, zonder onderbreking was bewoond vanaf de Midden Bronstijd tot in de IJzertijd.

- Onderzoek in het gebied van het stadje Civita leidde tot de ontdekking van een langdurige aanwezigheid van één specifieke site vanaf Midden Bronstijd tot de Finale Bronstijd-Vroeg IJzertijd. Deze vindplaats is gelegen tussen een groep van Late Bronstijdsites in het Demanio gebied. In het gebied van Civita is tot nu toe slechts één mono-fase Midden Bronstijdvindplaats gevonden en dat is Pietra della Sentinella. In het gebied van Civita lijkt er echter een meerderheid te zijn aan Laat Bronstijd vindplaatsen in open landschapslocaties.
- Verder is er onderzoek uitgevoerd in Cerchiara di Calabria, waar een Bronstijd nederzettingengebied wordt gevormd door kleine nederzettingseenheden verspreid over de vallei van Terra Masseta en het gebied van Balze di Cristo. Het betreft een niet-homogene verspreiding van impasto aardewerk, die de aanwezigheid van afzonderlijke nederzettingen aangeeft. Deze liggen mogelijk deels nog onder de grond of zijn geheel verdwenen vanwege eeuwenlange landbouw- en erosieprocessen.
- In het gebied van Frascineto is de site van Timpone delle Fave bestudeerd. Deze vindplaats was bewoond van de Recente Bronstijd tot het eind van de Finale Bronstijd. Aangezien het meeste materiaal uit de Vroege IJzertijd wordt vertegenwoordigd door vormen die al in gebruik raakten vanaf de late Finale Bronstijd, en de Finale Bronstijdmaterialen consistent zijn, is het mogelijk de chronologie van deze nederzetting te beperken tot de late Finale Bronstijd. Verspreid over het nederzettingengebied zijn fragmenten van grote opslagvaten (Grieks: *pithoi*, Italiaans: *dolii*) gevonden. Deze zijn van het type *dolii cordonati* (opslagvaten met rondlopende banden op de schouder). Deze zijn typerend voor deze periode. Veel Finale Bronstijdmaterialen (FBA1) zijn ook gevonden gedurende RAP veldwerk in de Contrada Damale, tussen Cerchiara en Francavilla, op sites die uitkijken over de vlakte van Sybaris, inclusief een groot aantal *dolio cordonato* fragmenten. Dit soort dolium fragmenten is tevens gevonden in Amendolara, Timpone della Motta en Torre Mordillo. Tot nu toe is Timpone delle Fave de meest westelijke site waar dit aardewerk is gevonden.

Conclusie

Het voornaamste resultaat van de twee bovengenoemde hoofdobservaties is dat de gedetailleerde aardewerkstudie het ons mogelijk maakt om nieuwe hypothesen te formuleren over zowel de dynamiek van de proto-historische aanwezigheid in het studiegebied als de veranderende rol van het studiegebied binnen het bredere vestigingspatroon in de Sibaritide.

De chronologie van het aardewerk en de archeologische contexten waarin parallellen zijn gevonden voor het materiaal staan toe om ideeën te vormen over de contacten binnen het Italiaanse schiereiland en met omliggende gebieden vanaf het Neolithicum tot in de Late Bronstijd. Vanaf de Late Bronstijd komt materiaal uit het Egeïsche gebied voor in het RAP gebied (grey ware, *dolii cordonati* en het latere *matt-painted* aardewerk). Vanaf het einde van de Finale Bronstijd tot het begin van de Vroege IJzertijd duidt het aardewerk erop dat de materiële culturen van Calabrië, Campania en Centraal Italië meer verbonden raakten.

De verkregen resultaten, besproken in de vier hoofdstukken, zijn samengevat in een afsluitend hoofdstuk en worden gebruikt om het nederzettingen patroon en de veranderingen hierin te bespreken. Deze bespreking omvat de natuurlijke omgeving, de chronologie, type en functie van sites, en de socio-economische omstandigheden die een rol speelden in de vorming van het Bronstijdlandschap.

Om de verspreiding van de sites in het landschap in diachroon perspectief te kunnen beschouwen, heb ik het binnenland van het studiegebied verdeeld in een noordelijk en zuidelijk deel, waarbij de rivier

Raganello de scheidingsgrens vormt. De chronologie van sites in deze twee delen is verschillend. Het noordelijke gedeelte bevat de oudste nederzettingen terwijl het zuidelijke gedeelte wordt gekenmerkt door een sterkere ontwikkeling gedurende de Finale Bronstijd. In de Finale Bronstijd worden de valleien in het achterland verlaten en beweegt het zwaartepunt van de nederzettingsorganisatie zich naar de voetheuvels. Om mogelijke redenen voor deze ontwikkeling te kunnen begrijpen, heb ik kleinere landschappelijke eenheden binnen het studiegebied onderscheiden en nader uitgewerkt, beginnend met de interpretatie van de materieel culturele overblijfselen en de analyse daarvan in de context van het specifieke fysieke lokale landschap.

Het was waardevol om de verspreiding van de sites over het landschap, zoals gepresenteerd in het onderzoek geleid door Peroni, te vergelijken met die geobserveerd in het RAP. Terwijl Peroni's team vrijwel alleen zocht in de voetheuvels en de hiermee verbonden hogere landschapsdelen rond de vlakte van Sybaris, voerde het Groningse team ook onderzoek uit in een gedeelte van een interne vallei en de hiermee verbonden hooglanden.

Hoewel het onderzoek gepresenteerd in deze dissertatie, slechts een deel van de beschikbare data behelst, vormt het een veelzeggende dataset. Hiermee vormt het een stimulans voor nadere bestudering van Peroni's hypothesen.

Alle gedocumenteerde sites in het gebied van San Lorenzo Bellizzi, het meest landinwaarts gelegen gebied in het RAP-onderzoeksgebied, tonen eenzelfde diachrone ontwikkeling: een sterke aanwezigheid van aardewerk tijdens de Midden Bronstijd en veel minder gedurende de Recente Bronstijd. Op een gegeven moment in de Recente Bronstijd hield deze ruimtelijk continue nederzettingsorganisatie op te functioneren en werden de vindplaatsen in de binnenlanden verlaten. Sites gelegen in de voetheuvels waren daarentegen in gebruik gedurende de gehele Bronstijd tot aan het begin van de IJzertijd. Ik ben ervan overtuigd dat dit te maken heeft met hun specifieke locaties in het lager gelegen landschap, waar veel potentieel landbouwgrond ligt.

Grotere sites in de voetheuvels bleven inderdaad bewoond tot aan het begin van de IJzertijd. Een aantal hiervan ontwikkelt zich verder in de IJzertijd. Niettemin hebben echte urbanisatieprocessen niet plaatsgevonden in de Sibaritide. Het voortbestaan van kleine en middelgrote nederzettingen in de Late Bronstijd, die niet verder ontwikkelden tot stedelijke vormen, en de ononderbroken bewoning van sites gedurende de gehele Bronstijd, geven aan dat de bewoners van dit gebied de bestaande politieke structuur wilden behouden. Deze kwam waarschijnlijk overeen kwam met hun economische behoeften en de territoriale situatie. Het feit dat zij dit vestigingspatroon konden behouden komt ook aan het licht door de keuze die ze maakten aan het begin van de Late Bronstijd, toen de hoger gelegen binnenlanden deels werden verlaten en nieuwe nederzettingen ontstonden in gebieden die economisch van waarde waren.

De archeologische data wijst op het ontstaan van een elite met contacten met de Euboïsche (of Euboïserende) wereld in the Finale Bronstijd en de vroege IJzertijd. De nadruk op de stichting van de Griekse kolonie Sybaris als de belangrijkste reden voor het gebrek aan urbanisatie in het onderzoeksgebied, zou daarom moeten worden afgezwakt. In plaats daarvan zou het eerder moeten worden gezien als een van vele factoren in de ontwikkeling van interregionale uitwisseling en contacten. Als de Euboïsche fase inderdaad een halve eeuw voor de stichting van Sybaris plaatsvond, zou de periode waarin economische en sociale veranderingen in de Sibaritide beginnen moeten worden geplaatst in de vroege IJzertijd, ver voor de historische kolonisatie.

Afsluitend kan gesteld worden dat het dissertatieonderzoek succesvol is geweest met betrekking tot de reconstructie van de nederzettingsdynamiek in het studiegebied. Het aardewerkonderzoek heeft ertoe geleid dat lacunes in de langlopende nederzettingsgeschiedenis van de Raganello vallei nu beter zijn ingevuld. De resultaten moeten worden gezien als onderdeel van de lange termijn van bewoningspatronen in dit landschap. Dit moet worden gezien als het cumulatieve resultaat van voorafgaande landschappen. Hoewel het begrip van het huidige landschap als afgeleide van het verleden belangrijk is voor de wetenschap, zouden de voornaamste 'ontvangers' van deze informatie de inwoners van het gebied zelf moeten zijn. Met deze nieuwe gegevens over hun landschapsgeschiedenis kunnen zij zich meer onderdeel van het landschap voelen, en verantwoordelijkheid nemen voor de toekomst ervan.