POTTERY, PRACTICES AND BOUNDARIES IN EARLY BRONZE AGE SICILY (CA 2300-1500 BC).

Thesis for the Degree of Doctor of Philosophy at the University of Leicester

By

Matteo Cantisani

School of Archaeology and Ancient History University of Leicester

2019

ABSTRACT

Title: Pottery, Practices and Boundaries in Early Bronze Age Sicily (ca 2300-1500 BC) Matteo Cantisani

This thesis is a detailed study of painted and unpainted pottery in Castelluccio ceramic assemblages in Early Bronze Age Sicily (2300-1500 BC). The aim is not to perpetuate current definitions of static, culture-bearing regional grouping. Instead, the aim of my work is to explore morphometric variability as a representation of social boundaries and practices. The main purpose of such a work is to link material culture with society. So far, this task has remained a neglected topic in Sicilian EBA specialist studies, while current models of socio-cultural transformations rely on external sources as main drivers for local developments. My work will open up alternative understanding of local developments emphasising the centrality and embeddedness of material culture in mechanisms of socio-cultural reproduction as needed, initiating a broader re-assessement of Castelluccio cultural groupings and social organisation.

Thesis word count: 79,919

ACKNOWLEDGEMENTS

'He who has felt the deepest grief is best able to experience supreme happiness. We must have felt what it is to die, Morrel, that we may appreciate the enjoyments of life'. Alexandre Dumas wrote these words in his final pages of *The count of Monte Cristo*. Actually, mine was not an experience of suffering, yet much more terrific and rewarding; it was a marvellous journey of discovery into the human past and present life of mine. As I got lost many times in the effort of submitting this thesis, so often I found myself again looking at the stars, but this would have not been possible without the continuous support and kindness of my supervisors Dr. Oliver Harris, Dr. Ian Whitbread (University of Leicester) and Prof. Mark Pearce (University of Nottingham). Over the past four years, all of them have been the greatest source of inspiration through the course of my experience as a postgraduate researcher at the University of Leicester, offering the best scientific mentoring I could ever have. In this vein, I am also grateful to the AHRC M3C consortium who provided me with the necessary funding to support the ideas behind development of this work.

But this journey has had many stations and I would like to thank also Dr. Alessandra Serges of the Museo Etnografico Preistorico "Luigi Pigorini" in Rome (Italy) who granted access to the Sicilian collection for my study. Dr. Massimo Cultraro (CNR-IBAM, Catania) offered me invaluable support in getting access to the Castelluccio collections in Sicily, acting as a liaison with local state officers. In particular, I must acknowledge the support of Dr. Donatella Mangione and thank her for having assisted me in the process of accessing the material from Monte Grande, stored in the Museo Archeologico Regionale di Agrigento "Pietro Griffo". I must also thank Dr. Enrico Giannitrapani and Dr. Filippo Iannì with which I enjoyed a pleasant time during my short period of excavations in the 2017 summer campaign at the site of Case Bastione.

But at the same time I cannot forget the inestimable support of few, yet very important, new friends I came to know in Leicester during the same period. I am particularly grateful to Eleonora, alias the Queen, Eva, Tommaso and Stefania without whom I would have been definitely lost in times of greater sorrow! Similarly, I cannot forget Damjan, my office mate and friend. We had many great conversations about the most diverse topics, ranging from the Vaphio cup showed in fourth season of the Game of Thrones to the Oscan language and Middle-Late Bronze Age storage practices in Anatolia. Thank you Damjan for this and

for having commenting on early drafts of some of my chapters. Finally, Andrea Zocchi and Alessandra Pegurri with whom I share the experience of having been a graduate student at the Sapienza University of Rome; they simply gave me a sense of home in a foreign country.

Last, but not least, all my thoughts are directed toward my parents, Isabella and Luciano, and my brother Andrea. Without their immeasurable love, my terrific journey would have remained only a dream in the mind of a young adult. Thank you, from the depths of my heart.

Table of Contents

Volume I

CHAPTEI CASTELL	R 1: POTTERY, REPRESENTATION AND BOUNDARIES JUCCIO SICILY	IN 1
1.1 Т	THEMES AND INTENTIONS	2
1.1.1	Introduction	2
1.1.2	Pottery variability and representation in the present and in the past	2
1.1.3	The tradition of pottery studies	4
1.1.4	The landscape background	6
1.1.5	Conclusions	6
1.2 T VARIABI	TOWARDS AN ALTERNATIVE UNDERSTANDING OF REGIONAL CERAMIC LITY: FLUID BOUNDARIES AND SHARED PRACTICES	7
1.2.1	Introduction	7
1.2.2	Research questions and objectives	7
1.2.3	Methodology in outline	8
1.2.4	Conclusions	. 12
1.3 S	STRUCTURE OF THE THESIS	. 12
CHAPTEI REVIEW.	R 2: CASTELLUCCIO CULTURE AND SOCIETY. A LITERATU	RE 14
2.1 E The out	Early Bronze Age Sicily and the Mediterranean: Castelluccio fro	м 14
2.1.1	Introduction	. 14
2.1.2	Sicily and the central Mediterranean Bronze Age	. 16
2.1.3	Ceramic styles and cultural sequences	. 18
2.1.4	Conclusions	20
2.2 T Casteli	THE COPPER AGE LEGACY IN THE STUDY OF EARLY BRONZE AGE SICILY: LUCCIO FROM THE INSIDE	20
2.2.1	Introduction	20
2.2.2	"San Cono-Piano Notaro" and the Early Copper Age (ECA)	20
2.2.3	"Serraferlicchio" and the Middle Copper Age (MCA)	24
2.2.4	"Malpasso", "Sant'Ippolito" and the Late Copper Age (LCA)	25
2.2.5	Conclusions	26
2.3 I	DEVELOPMENT OF THE CASTELLUCCIO CULTURAL SEQUENCE	27
2.3.1	Introduction	27
2.3.2	Pioneering studies	28

2.3.3	Establishment of the cultural sequence	29
2.3.4	New assemblages and ideas	32
2.3.5	Current themes	35
2.3.6	Conclusions	36
2.4	THEMES CHARACTERISING THE STUDY OF CASTELLUCCIO SICILY	38
2.5	SYNOPSIS	38
CHAPTE BACKGI	ER 3: THE NATURAL, SOCIO-ECONOMIC AND CULTURA ROUNDS OF CASTELLUCCIO SICILY	۱L 39
3.1	The longue durée and Castelluccio archaeology	39
3.2	THE LANDSCAPE BACKGROUND	40
3.2.1	Introduction	40
3.2.2	Tertiary geology	41
3.2.3	Pre-Holocene litho-stratigraphic successions and outcrops	45
3.2.4	Climate and landscape in the Holocene	48
3.2.5	Conclusions	51
3.3	CASTELLUCCIO ECONOMY AND SUBSISTENCE	52
3.3.1	Introduction	52
3.3.2	The Copper Age background	54
3.3.3	Transition into the Castelluccio period	57
3.3.4	Conclusions	70
3.4	Long durée, situated practices and ceramic representativeness	71
3.5	Synopsis	72
CHAPTE AND SO	ER 4: APPROACHING CERAMIC VARIABILITY, REPRESENTATIO CIAL INTERPRETATION	N 73
4.1	INTRODUCTION TO POTTERY VARIABILITY AND REPRESENTATION IN	
CASTLI	JUCCIO SICILY.	73
4.2	ARTEFACTS, REPRESENTATION AND SOCIETY	74
4.2.1	Processualism	74
4.2.2	Post-processualism	76
4.2.3	Materiality and typologies	78
4.2.4	Artefacts, representativity and society: an integrated classificatory approach	79
4.2.5	Conclusions	81
4.3	Methodology	81
4.3.1	Introduction	81
4.3.2 and o	Formally-defined aspects of variability and functional differentiation: qualifying variability	ng 83

4.3.3	Approaching functional differentiation: ethnographic sources of evidence 8	3
4.3.4	Approaching regional and chronological differentiation9	3
4.4 S	YNOPSIS	3
CHAPTE	R 5: AN ARCHAEOLOGICAL REVIEW OF SITES	4
5.1 S review.	ETTLEMENT AND FUNERARY ARCHITECTURE: SCOPE AND PURPOSE OF THE	4
5.2 S	ETTLEMENTS AND DOMESTIC ENVIRONMENTS	1
5.2.1	Introduction	1
5.2.2	Hut architecture, indoor and outdoor installations	1
5.2.3	Large-scale stone made structures	8
5.2.4	Conclusions	5
5.3 (OTHER ENVIRONMENTS	6
5.3.1	Rock-cut funerary evidence and architecture	6
5.3.2	Exploitation of caves	0
5.4 S		1
5.5 N	IAIN ASSEMBLAGES	3
5.5.1	Introduction	3
5.5.2	Settlement sites	3
5.5.3	Burial sites and caves	7
5.5.4	Other anthropogenic remains15	0
5.6 S	YNOPSIS	1
CHAPTE VARIABI	r 6: A FUNCTIONAL TYPOLOGY OF MORPHOMETRIC LITY	C 2
6.1 F	EPEATING CENTRAL IDEAS ON DIFFERENTIATION, VARIABILITY AND	
REPRESE	entation	2
6.2 1	TERMINOLOGY AND DATASET COMPOSITION	3
6.2.1	Structural and anatomical descriptors, and definitions	3
6.2.2	Composition of the funerary repertoires	1
6.2.3	Composition of the settlement repertoires	1
6.3 V	/ariables and methods	3
6.3.1	Attributes of size and shape16	3
6.3.2	Statistics and procedure	5
6.4 A	A MORPHOMETRIC STUDY OF VARIABILITY	6
6.4.1	A study of shape variability	6
6.4.2	A study of size variability	5

6.5 E Casteli	DEFINING FUNCTIONAL DIFFERENTIATION. A TAXONOMY OF THE EXAMINI	ED 222
651	Size ranges and function in beakers, cups, and hourglass pots	223
6.5.2	Size ranges and function in bowls	224
6.5.3	Size ranges and function in jors	224
6.5.4	Size ranges and function in pedestalled vessels	224
0.5.4	Size ranges and runction in pedestaned vessels	220
6.5.5		227
6.6 S		228
MORPHC	METRIC VARIABILITY	OF 230
7.1 R	EGIONAL VARIABILITY AND REPRESENTATION	230
7.1.1	Dating Castelluccio sites	231
7.1.2	The incidence matrix	236
7.2 C	CHRONO-TYPOLOGICAL ANALYSIS AND CROSS-LINKS	237
7.2.1	Introduction	237
7.2.2	Further chrono-typological links with older and roughly contemporary loo	al
traditi	ons	253
7.2.3	Thermi Ware occurrence in Castelluccio sites. Further dating elements and ections with non-local traditions	1 260
7 2 4		262
73 \$	FRIATION	263
731	Introduction	263
732	Implementations	264
74 0		287
7.4 0	Introduction	282
7.4.2	Variability dimensions regional datasets and boundaries	283
7.4.2	Composition of the recipied subsets	205
7.4.3	Eventional value regional subsets	201
7.4.4	Conclusion of the second secon	200
7.4.3		298
/.3 5		299
CHAPTEI	R 8: TRADITIONS, PRACTICES AND PERMEABLE BOUNDARIE JUCCIO SICILY	S IN 300
8.1 N	AATERIAL CULTURE VARIABILITY AND HABITUS	300
8.1.1	Introduction	300
8.1.2	Object representation, social relations, boundaries and identities	301
8.1.3	Conclusions	302

	8.2	ENGENDERED CERAMIC SIMILARITIES AND DIFFERENCES IN CASTELLUCCIO	
	SICILY	7	.302
	8.2.	1 Introduction	. 302
	8.2.	2 Ceramic similarities and shared practices	. 302
	8.2.	3 Ceramic differences, interaction and social porosity	. 303
	8.2.	4 Conclusions	. 305
	8.3	THE ROLE OF ARCHITECTURE: INTER-COMMUNITY INTERACTION, POWER	
	RELAT	TONS AND INEQUALITIES	. 305
	8.4	CONTINUITY, DISCONTINUITY AND ADAPTATION TO THE ENVIRONMENT	. 307
	8.5	Synopsis	. 309
С	НАРТ	ER 9: THE WAY FORWARD	. 310
	9.1	THE SOCIAL SIGNIFICANCE OF CERAMIC DIFFERENCES AND SIMILARITIES:	
	ANSW	ERING THE RESEARCH QUESTIONS	. 310
	9.2	LONGUE DURÉE, TIME AND TRAJECTORIES: AN UNFINISHED BUSINESS	. 312
	9.3	FUTURE STUDY DIRECTIONS	.312

Volume II

Appendices

Bibliography

LIST OF TABLES

Chapter 1

Table 1.1: Distril	oution percentages	of whole publishe	d items, sherds	and diagnostic	fragments in the
main extensively	excavated sites				

Chapter 2

Table 2.1: CA-EBA cultural sequence in Sicily.	
Table 2.2: Orsi's chronological scheme.	
Table 2.3: Chronology of Cultraro regional sequence	
Table 2.4: Comparative scheme of the available cultural sequences of Castelluccio	

Chapter 3

Table 3.1: List of sites and locations m	nentioned in the text. A nur	nber is associated with each site
and indicates municipality and provine	ze	

Chapter 4

Table 4.1: Comparative classification	with size ranges in the examined e	thnographic corpora89
Table 4.2: Functional categories, type	s and size ranges corresponding to	ethnographic shapes92

Chapter 5

Table 5.1: Table of site categories.	96
Table 5.2: List of sites with architectural evidence and ceramic materials	97
Table 5.3: List of scatter areas of potsherds and sites with architectural evidence, yet without	
published assemblages	99

Chapter 6

Table 6.1: Description and sketches of the main shapes (drawings not to scale)	.157
Table 6.2: Terminology for the examined repertoires. The table shows the terms adopted in the	2
definition of shapes, plus further geometric descriptors that will be used in the following study morphological variability in order to describe the variety of forms within shapes, and between	of
them	.158
Table 6.3: Structure of the morphological typology. The table shows the different groups of	
artefacts arranged into shapes, forms, formal varieties and sub-varieties	.167
Table 6.4: Results of multiple Kruskal-Wallis tests per pair of shapes in rim diameter	.188
Table 6.5: Results of multiple Kurskal-Wallis tests per pair of shapes in height	.189
Table 6.6: Multiple Kruskal-Wallis results. The table shows the comparison between pairs of	
categorical variables in height measurements, in this case between pairs of each form considerir	ng
beakers, bowls, cups and hourglass pots	.195
Table 6.8: Multiple Kruskal-Wallis results. Rim diameter comparisons between jar forms	.196
Table 6.9: Multiple Kruskal-Wallis results. Height comparisons between jar forms	.197
Table 6.10: Summary of the statistics of all shapes.	.198
Table 6.11: Comparison of functional categories, use-types and size ranges	.223
Table 6.12: A functional taxonomy of the examined Castelluccio repertoires	.229

33
е
39
10
13
17
50
35

LIST OF FIGURES

Chapter 1

Figure 1.1: A comparative chronological scheme of central Mediterranean and Aegean sequences	
between 2300 and 1600 BC (after Carancini et al. 1996; Peroni 2004; Harding 2000, 16, fig. 1.5;	
Maran 2007, V; Gori and Krapf 2016, 98, fig. 2)1	l
Figure 1.2: A set of both 'traditional' Castelluccio painted pottery and unpainted ware (scale 1:6,	
after Tinè 1965; McConnell 1995; Castellana 1997; Tusa 1999)	5
Figure 1.3: Percentage distribution of settlement and funerary items in the overall dataset	l

Chapter 2

Figure 2.1: Early Bronze Age regional settlement distribution in Sicily and nearby islands. Plot and
annotations by the author (base map source: Esri, HERE, Garmin, Intermap, increment P. Corp.,
GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri
Japan, METI, Esri China (Hong Kong))15
Figure 2.2: Early Copper Age San Cono-Piano Notaro style (source: Leighton 1999, 107, fig. 50).
Vessels from (1-3) Piano Vento; (4, 6-8) Uditore; (9) San Cono; (10-11) Gela; (5, 12-17) Grotta
della Chiusazza; (18) Valdesi
Figure 2.3: Grotta della Chiusazza, with a drawing of the plan and stratigraphy (Tinè 1965)24
Figure 2.4: Middle Copper Age Serraferlicchio style (source: Leighton 1999, 109, fig. 51). Vessels
from: (1-3) Chiusazza; (4-7) Serraferlicchio; (8) Vecchiuzzo
Figure 2.5: Late Copper Age Malpasso-Sant'Ippolito styles (source Leighton 1999, 109, fig. 51):
vessels from (9-12) Malpasso; (13) Sant'Ippolito
Figure 2.6: Eastern (A) and western (B) assemblages, shapes and decorative motifs (source:
Bernabò Brea 1954, 222-223, pls. 9 and 10 respectively, not to scale) A: Cemeteries of Monte Sallia
and Monte Racello, typical forms from (1, 5) Monte Sallia, burial 1; (2-4) Monte Sallia, burial 9; (6)
Monte Racello, burial 1. B: Western province of Agrigento, typical forms from (1-3, 5-8); Monte
Aperto; (4) Cannatello
Figure 2.7: Castelluccio, Naro-Partanna shapes and decorative motifs of the earliest phase in the
development of the western style according to Bernabò Brea (source: Bernabò Brea 1958, 117, fig.
21). Vessels from: (a) Partanna; (b-e) Naro
Figure 2.8: Definitions of the regional groups in Castelluccio Sicily (elaborated from Cultraro 1996,
166, fig.3) A: Etna group; B: Syracuse group; C: Iblei group; D: Gelese group; E: Nisseno-
Agrigentino group; F: Belice group

Chapter 3

represented the last major tectonic event, with Sicily almost completely uplifted as it stands today
(source: Yellin Dror et al. 1997, 278, fig. 1)
Figure 3.4: Schematic geology of Sicily. ArcMap elaborations, features and labels by the author
(sources: Basilone 2018; wms services Geoportale Nazionale)
Figure 3.5: Main outcrops of the Permian-Triassic unit (a), and Imerese-Sicano domain in north-
western Sicily (a-b). The Permia-Triassic-Sicillide unit outcrops in the region of Lercara. The
Imerese-Sicano crops out in the Sicani, Madonie a Palermo Mountains (source: Basilone 2018, 13,
fig. 1.8)
Figure 3.6: Pollen diagram from core PG2, Lake Pergusa (source: Sadori et al. 2013, 1978, fig.6) 50
Figure 3.7: Distribution map of sites in the Catania Plain and Etna region. 1: Simeto River, 2:
Dittaino River, 3: Gornalunga River. While no sites are found within the plain itself, many are
concentrated along its the northern and southern margins. Only few are situated inland westward.
ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A.
Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical
Agriculture (CIAT) http://srtm.csi.cgiar.org)
Figure 3.8: Distribution map of sites in the Iblei Mountains, northern sector. Many sites are located
on high-standing plateaus, although few coastal sites are also present. Chert is provided by the
calcareous limestone which form the substratum of the Hyblean foreland. ArcMap elaborations,
features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara,
2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT)
http://srtm.csi.cgiar.org)
Figure 3.9: Distribution map of sites in the Iblei Mountains, southern sector. ArcMap elaborations,
features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara,
2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture
(CIAT)http://srtm.csi.cgiar.org)62
Figure 3.10: Distribution map of sites in the region of Gela, 1: Gela River and plain; 2: Salso River.
The map shows that there are few sites within the plain, while many are concentrated up-hill along
the belt surrounding the Gela Plain and along the course of the Salso River. ArcMap elaborations,
features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008,
Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT)
http://srtm.csi.cgiar.org)
Figure 3.11: Distribution map of sites in central-western Sicily. 2: Salso River; 3: Platani River.
ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A.
Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical
Agriculture (CIAT) http://srtm.csi.cgiar.org)
Figure 3.12: Site distribution and resources in central-western Sicily. ArcMap elaborations, features
and labels by the author (source: Basilone 2018)

Figure 5.5: Examples of fortifications in Castelluccio Sicily, a: Branco Grande (source Orsi 1910, 162, fig. 2); b-c: EBA Thapsos (sources: Voza 1972, 192-193, fig. 15 and Castellana 2002, 140, fig.	1
$\frac{11}{12}$	1
Figure 5.0: The fortification of Mursia (source: Ardesia et al. 2000, p.5, fig. 1)	. 2
Figure 5./: The fortification of Petraro (source: Voza 1968)	.3
Figure 5.8: The terrace wall at the site of La Muculufa (after: Holloway et al. 1990, 18, fig. 14)11	.4
Figure 5.9: Plans and appearance of rock-cut funerary architecture. Top, the rock-cut tombs of	
Coste di Santa Febbronia, a: tomb 1; b: tomb 2; c: tomb 4; d: tomb 5 (after Maniscalco 1993-94: a,	,
891, fig. 5; b, 894, fig. 6; c, 883, fig. 1; d, 885, fig. 2)11	7
Figure 5.10: Further examples of rock-cut tombs. Top: Torre Donzelle, plan and section Tomba	
delle Colonne (source: Mannino 1994, 162, fig. 16); bottom: Torre Bigini, plan and section Tomb	
A (source: Mingazzini 1939)11	8
Figure 5.11: Contrada Paolina, architecture and plans of tomb 1 and 2 (Procelli 1996, 93, fig. 3).11	9
Figure 5.12: Hut from San Basilio (source: Orsi 1928–80, fig. 13) $(2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -$	24
Figure 5.12: Nut from oan Dasmo (source: Orst 1)20, 00, 112: 10).	26
Figure 5.14: Hut 1, artificial auto and accurace of but surfaces (Source: Orlandini 1062). Close aut	.0
rigure 5.14. Flut 1, artificial cuts and sequence of flut surfaces (Source: Offandini 1902). Clear-cut,	, 77
artificial levels are illustrated in the schematised section (tagli)	27
Figure 5.15: Topography of La Muculuta sites (source: McConnell 1995, 127, fig. 1.2)	28
Figure 5.16: Stratigraphy of the excavated deposit in area T (after Holloway et al. 1990, 19, fig. 16)	
	:9
Figure 5.1/: Area F, settlement plan. The displayed grid has squares measuring 5 m along each side	e
(source: McConnell 1995, 130, fig. 4)	29
Figure 5.18: Hut 3, plan and structural elements (source: McConnell 1995, 133, fig. 7.1)	6 0
Figure 5.19: Stratigraphy of hut 3, N-facing section of the exposed layers (source: McConnell 1992	2,
30, fig. 7)	50
Figure 5.20: Case Bastione, excavated areas (source: Giannitrapani et al. 2015, 183, fig. 2)13	\$2
Figure 5.21: Case Bastione, Area β, EBA remains of hut 1 (source: Giannitrapanit et al. 2015, 188, fig. 5)	32
Figure 5.22: Plan of the excavated area at Monte Grande 1: Baffo Superiore; 2: Pizzo Italiano; 3:	
Baffo Calcarone (source: Castellana 2000, 6-7, fig. 3)	34
Figure 5.23: Plan of Baffo Superiore (source: Castellana 1998, 32, fig. 4)	35
Figure 5.24: Stratigraphy of Baffo Superiore (source: Castellana 1997–10, fig. 2)	35
Figure 5.25: Hut 2 plan (source: Orsi 1910, 168, fig. 3a, scale 1:100)	36
Figure 5.26: Site plan (source: Orsi 1910, p.160, fig. 1, scale 1.100).	36
Figure 5.20. Site plan (source: Ofsi 1910, p.100, ing. 1, scale 1.500)	0
rigure 5.27. Memini-cava Demardina, plans and sections (after. Orsi 1891D). The figure shows an	10
E 5.29 M \star C II $= 1.41$ ± 1.4 C ± 1.41 ± 1.4 C ± 1.4 ± 1.4 C ± 1.4	50
Figure 5.28: Monte Sallia, ceramics and other objects found in the tombs (source: 1 usa 1999, 528,	
tig. 43, not to scale)	-1
Figure 5.29: Further non-ceramic grave goods from the cemetery of Santa Febronia, a, b:	
calcareous and greenstone pendants from tomb 1; c: greenstone pendant form tomb 5; d: dagger	
from tomb 5 (source: Maniscalco 1996b, 85, fig. 6)14	4
Figure 5.30: Cava della Signora, an example of an embellished façade (source: Tusa 1999, 315, fig.	
30)14	4
Figure 5.31: Contra Pergola, plan and section (source: Mannino 1971, 53, fig. 1)14	ł5
Figure 5.32: Grotta Lazzaro, sketch of the monumental facade and plan (source: Tusa 1999, 322,	
fig. 37)	16
Figure 5.33: Stratigraphic sequence of the cave of Chiusazza (after: Tinè 1963).	ł7
Figure 5.34: Monte Tabuto, location and cave plans a: general topography of the site (Orsi 1923	4
Fig. 1): by cave 5 (Orsi 1898–178 for 8): c; caves 1-4 (source: Orsi 1898–174 for 4) 14	., 18
Figure 5.35: Deposits of human remains and pottery at the sites of Ciavolaro (source: Castellano	0
1996)	50
1	

Figure 6.1: Schematisation of salient structural points affecting vessel morphology and profile	
development	.155
Figure 6.2: Appendage types.	.156
Figure 6.3: Composition of the funerary subset	.161
Figure 6.4: Composition of the settlement subset	.162
Figure 6.5: Summary of the measurements taken for the metric variables (items not to scale)	.164
Figure 6.6: Beaker forms and varieties	.172
Figure 6.7: Distribution of beakers in settlement and funerary repertoires	.172
Figure 6.8: Formal varieties in globular bowls.).	.173
Figure 6.9: Semi-spherical and rounded bowls with stem.	.174
Figure 6.10: Distribution of bowls in settlement and funerary repertoires.	.174
Figure 6.11: Forms and varieties in cups with s-shaped and continuous profile development,	
sampled bell-shaped (Type 8) and globular formal varieties (Types 9 and 10A and B).	.175
Figure 6.12: Forms and varieties in cups with s-shaped and continuous profile development,	
conical forms with curved wall sub-varieties (Type 11A and B), inverted, curved walls (Type 12)
and straight-sided wall sub-varieties (Type 13A and B)	.176
Figure 6.13. Forms and varieties in cups with an s-shaped and continuous profile development.	
semi-spherical cups.	.176
Figure 6.14: Forms and varieties of cups with corner points and composite profile	
development	177
Figure 6.15: Distribution of cups in settlement and funerary repertoires	177
Figure 6.16: Hourglass forms double-handled (Type 19) and upper restricted form with loop	• • • •
handle (Type 20)	178
Figure 6.17: Distribution of hourglass vessels in settlement and funerary repertoires	178
Figure 6.18: Flat barrel jars (Type 21) and elongated barrel jars (Type 22)	179
Figure 6.20: Pear-shaped double-handled jars (Type 24) and single-handled jars (Type 25)	179
Figure 6.21: Varieties and sub-varieties in globular iars with distinct neck	180
Figure 6.22: Varieties and sub-varieties in globular jars with indistinct neck	180
Figure 6.23: Varieties and sub-varieties of biconical jars with elongated body and indistinct	.100
ngure 0.25. Varieties and sub-varieties of bicomean jars with ciongated body and mensuret	181
Figure 6.24: Varieties and sub-varieties of biconical jars with expanded body and indistinct	.101
ngure 0.24. Varieties and sub-varieties of bicomean jars with expanded body and meisuriet	181
Figure 6.25: Distribution of jars in settlement and funerary reportoires	182
Figure 6.26: Forms and varieties in pedestalled vessels, pedestalled vessels with stem lower than	102
height of the bowl	183
Figure 6.27: Forms and varieties in pedestalled vessels, pedestalled vessels with stem equal to the	.105
hight of the how!	18/
Figure 6.20: Distribution of podostallod vessals in sattlement and functory reportations	185
Figure 6.30: Erectioner distribution in height in all pots (hin width=4 cm)	186
Figure 6.30. Frequency distribution in rim diameter in all pots (bin-width=4 cm).	187
Figure 6.32: Combined histograms of rim diameters of all shapes: comparisons of these frequency	.10/
distributions shows partial ovorlap between super bowls, hourseless pots and iars, setting aside	icy
instand podestalled vessels	101
Eigure 6.22: Combined histograms of heights of all shapes	102
Figure 6.34. Spottomlot of the correlation between sim diameter and height in interference	200
Figure 0.54. Scatterplot of the correlation between rim diameter and neight in jars by forms	.200
rigure 0.55: Scallerpiol of the correlation between maximum diameter and height in jars by	201
Eigene 6.26. Completion between aire discrete and height in 1.1.1	.201
Figure 0.50: Correlation between rim diameter and neight in globular cups	.202
Figure 0.57. Correlation between rin diameter and neight in diconical and conical cups	.203
Figure 0.56: Correlation in this diameter and neight in semi-spherical and bell-snaped cups	.204
Figure 0.57: Correlation in rim diameter and neight in carinated cups	.205

Figure 6.40: Correlation between rim diameter and height in hourglass pots206
Figure 6.41: Correlation between rim diameter and height in beakers
Figure 6.42: Correlation between rim diameter and height in bi-conical and collared bowls207
Figure 6.43: Correlation between rim diameter and height in globular bowls207
Figure 6.44: Density plot of height distribution in beakers, bowls, cups and hourglass pots209
Figure 6.45: Height size ranges in jars
Figure 6.46: Maximum vessel diameter size ranges in jars
Figure 6.47: Height frequency distribution combined in all pedestalled forms
Figure 6.48: Rim frequency distribution combined in all pedestalled forms213
Figure 6.49: Correlation between coupled variables in pedestalled vessels with stem lower than the
height of the bowl
Figure 6.50: Correlation between coupled distribution of variables in pedestalled vessels with stem
as high as the height of the bowl216
Figure 6.51: Correlation between coupled distribution of variables in pedestalled vessels with stem
higher than the height of the bowl
Figure 6.52: Frequency distribution in rim diameter of both pedestalled vessels with stem higher
and as high as the bowl. The presence of one peak is apparent
Figure 6.53: Frequency distribution in height of both pedestalled vessels with stem higher and as
high as the bowl
Figure 6.54: Frequency distribution in rim diameter in pedestalled vessels with stem lower than
height of the bowl
Figure 6.55: Frequency distribution in height of pedestalled vessels with stem lower than height of
the bowl
Figure 6.56: Combined histogram in overall height in both groups of pedestalled vessels
Figure 6.57: Frequency distribution of height in bi-conical jars225
Figure 6.58: Frequency distribution of height in globular jars226

igure 7.1: Castelluccio sites. The map shows the distribution of settlement, funerary and cave sites
n the basis of those reviewed in Chapter 5232
igure 7.2: Distribution of Early style assemblages. Plots and annotations by the Author (base map
ource: Esri, HERE, Garmin© OpenStreetMap contributors, and the GIS use community)242
igure 7.3: Multiplot of calibrated dates including La Muculufa village (A-5284, A-5283),
anctuary' (A-3956, A-3959, A-3960, A-3964, A-3955, A-3954, A-3962, A-3967, A-3966) and Case
astione hut 1 spots (R_Date LTL 3655A, Rome_2051, LTL-3656A, Rome-2061, Rome-2057,
ome-2055, Rome-2059, LTL 3653A, LTL 3657A)
igure 7.4: Single plot of combined dates. The graph shows the result of the combined dates
oming from the floor level of hut 2 in Caste Bastione (LTL 3654, Rome-2056, Rome 2050, Rome-
060)
igure 7.5: Multiplot of calibrated dates, all from Case Bastione248
igure 7.6: Distribution of Classic style assemblages. Plots and annotation by the author (base map
ource: Esri, HERE, Garmin [©] OpenStreetMap contributors, and the GIS use community)249
igure 7.7: Multiplot of calibrated dates from Castelluccio hut 8 (MAMS-29138, MAMS-22286,
IAMS-29137, MAMS-22285, MAMS-29136) and hut 2 (MAMS-22920). The diagram shows the
verlap between hut 2 and hut 8 in the lower ranges (MAMS-22920 and MAMS 29136)251
igure 7.8: Distribution of Late style assemblages. Plots and annotations by the author (base map
ource: Esri, HERE, Garmin [©] OpenStreetMap contributors, and the GIS use community)253
igure 7.9: Bell Beaker pottery (source: Giannitrapani and Iannì 2011b, 479, fig. 1, scale 1:3 ca). 254
igure 7.10: RTV pottery (source: Procelli 2004, 384, fig. 1, not to scale)255
igure 7.11: Thermi Ware pottery distribution (After Cazzella and Recchia 2015, 143, fig. 2). The
gure shows the distribution of TM in the eastern and central Mediterranean
igure 7.8: Distribution of Late style assemblages. Plots and annotations by the author (base map burce: Esri, HERE, Garmin [©] OpenStreetMap contributors, and the GIS use community)253 igure 7.9: Bell Beaker pottery (source: Giannitrapani and Ianni 2011b, 479, fig. 1, scale 1:3 ca). 254 igure 7.10: RTV pottery (source: Procelli 2004, 384, fig. 1, not to scale)

Figure 7.12: First attempt at constructing the incidence matrix	265
Figure 7.13: Introduction of the earliest radiocarbon determinations	266
Figure 7.14: Introduction of the latest radiocarbon determinations2	67
Figure 7.15: Second attempt at constructing the incidence matrix	268
Figure 7.16: Left edge of the graphic in the second attempt. Clustering of sites for which several	
occupational phases and a long-term occupation have been posited	270
Figure 7.17: Assemblages likely reflecting the distribution of ceramics in contexts characterised by	y
long-term use occur at the bottom of the graphic, as shown by several associations2	271
Figure 7.18: Central part of the sequence. The graph shows the concentrations of closed-contexts	s
in the upper-central part of the sequence2	273
Figure 7.19: Concatenations of regional assemblages at the top of the graphic2	274
Figure 7.20: Concatenations of regional assemblages at the centre of the graphic2	275
Figure 7.21: Matrix including only western sites in the third attempt of constructing the relative	
sequence2	276
Figure 7.22: Intermediate step in the construction of the western regional matrix	277
Figure 7.23: A further intermediate step in the construction of the western regional matrix2	278
Figure 7.24: The western regional matrix and hypothetical chronological phases that are reflected	in
the intertwined sequence of short-term and longer-term assemblages, exhibited by the former	
concatenations of sites and artefact types extrapolated in the process2	279
Figure 7.25: Attempt at construction of the eastern matrix2	280
Figure 7.26: A further attempt at the construction of the incidence matrix2	281
Figure 7.27: Final attempt at constructing the incidence matrix	282
Figure 7.28: Main ceramic types associated with their geographic areas2	286
Figure 7.29: Percentage distribution of ceramic repertoires in the western and eastern regions2	288
Figure 7.30: Percentage distribution of ceramics in the eastern subset of data irrespective of	
chronological phasing2	289
Figure 7.31: Percentage distribution of ceramics in the western subset of data irrespective of	
chronological phasing2	289
Figure 7.32: Quantitative distribution of shapes per chronological subset in the eastern regions2	290
Figure 7.33: Quantitative distribution of shapes per chronological subset in the western regions.2	90
Figure 7.34: Percentage distribution of shapes per chronological subset in the western region2	91
Figure 7.35: Percentage distribution of shapes per functional categories and chronological subsets	s
in the western regions2	92
Figure 7.36: Quantitative distribution of functional types and varieties of shapes in the western	
subsets2	93
Figure 7.37: Quantitative distribution of serving and eating vessels2	95
Figure 7.38: Quantitative distribution of storage and transport vessels2	96
Figure 7.39: Percentage distribution of storage, transport and cooking vessels per type of	
assemblages2	97
Figure 7.40: Percentage distribution of serving and eating vessels per type of assemblages2	97
Figure 7.41: Percentage distribution of settlement and funerary assemblages2	98

LIST OF ACRONYMS USED IN THE TEXT

LN: Late Neolithic ECA: Early Copper Age MCA: Middle Copper Age LCA: Late Copper Age EBA: Early Bronze Age MBA: Middle Bronze Age EH: Early Helladic MH: Middle Helladic LH: Late Helladic CG: Capo Graziano RTV: Rodì Tindari Vallelunga

CHAPTER 1: POTTERY, REPRESENTATION AND BOUNDARIES IN CASTELLUCCIO SICILY

This thesis examines pottery variability and representation in Early Bronze Age Sicily (EBA henceforth). By EBA, I mean the so-called Castelluccio period, intervening between the end of the Late Copper Age and the beginning of the Middle Bronze Age (LCA and MBA henceforth) as illustrated in Figure 1.1. Therefore, my assessment of the ceramic evidence will be limited to this period. The broader purpose is to bridge the current gap in Sicilian prehistory between Italian traditional culture historical assessments of cultural grouping, sequences, chronology and social interpretations. The main aim is to explore pottery variability as representation of social boundaries, practices and interaction. This chapter introduces the themes of variability, representation, boundaries, practices and interaction. Then, it goes on to define key research questions, objectives, research contexts and methodology.

Years BC	West Balkans	Greece	Central and southern Italy		n Sicily		Aeolian Islands
			Periods	Groups	Periods	Groups	Groups
		LH IIIA	MBA 1	Apennine	MBA	Thapsos	Milazzese
1500	Dinara	LH II	EBA 2				
		LH I		Proto- Apennine			
2000		MH I		Laterza Rinaldone	EBA	Castelluccio and RTV	Capo Graziano II
		EH III	EBA 1		-		Castelluccio
2500	Proto-Cetina	EH II	LCA	Beakers	LCA	S. Ippolito, Malpasso, Beakers	Piano Quartara

Figure 1.1: A comparative chronological scheme of central Mediterranean and Aegean sequences between 2300 and 1600 BC (after Carancini et al. 1996; Peroni 2004; Harding 2000, 16, fig. 1.5; Maran 2007, V; Gori and Krapf 2016, 98, fig. 2).

1.1 THEMES AND INTENTIONS

1.1.1 Introduction

In discussing the themes mentioned above that are focal to this thesis, I shall present my approach in outline. Secondly, I will touch on traditional culture historical perspectives that dominate the prehistoric archaeology of Sicily. This will emphasise neglected research topics, leading to the questions, objectives and the methodology designed in order answer those questions and achieve those objectives.

1.1.2 Pottery variability and representation in the present and in the past

Variability in material culture can be defined as both the outcome of the process through which people engage with objects, shaping and being shaped by society, and the representation of this process (Appadurai 1986; Hodder 1982; Shanks and Tilley 1987; Miller 1994). Current definitions of variability in Castelluccio studies tend to emphasise the latter with a focus on painted vessels, while the former is typical of more recent Anglophone syntheses in which, however, Castelluccio archaeological features are less related to the Sicilian mainland than they are with other regions - and then only in very general terms e.g. Malta (e.g. Malone et al. 1994; Skeates 2010). In fact, as discussed in depth in Chapter 2, neither the former nor the latter approach truly focused on the centrality and embeddedness of the very local EBA material culture - constituted by both painted and unpainted vessels (Figure 1.2) – in local practices and interactions. This thesis is a detailed study of ceramic variability in Castelluccio assemblages, including both painted and unpainted pottery. The purpose is not to perpetuate traditional definitions of regional groups on the basis of stylistic changes but to explore changes in shape and size as proxies for understanding statistical variability as representation of social boundaries in a context of shared practice and interaction.

Hence, defining variability as reflected in the archaeological record through a typologicalclassificatory approach will remain central to hypothesising what variability might have actually represented for the people living in EBA Sicily. To do so, I will draw from Pierre Bourdieu's notion of habitus. As defined in *Outline of a Theory of Practice* (Bourdieu 1977, 2), this concept accommodates fundamental aspects of both perpetuation of daily life practices and change. In this notion, shared dispositions may constrain, for instance, routine actions while enabling individuals to challenge the status quo (ibid., 77-79). In this sense, if ceramics are seen as markers of daily life activities, then is it possible that assemblages of archaeological pottery articulate with reference to specific geographical and temporal contexts, traditional socially-engendered dispositions, as well as changes in past habitus. By assuming this theoretical position, I argue that both similarities and differences in the archaeological record can be *representative* of socially engendered dispositions, practices and innovation in daily routines. As explained in Section 4.2.4, such a theoretical understanding of ceramic similarities and differences will inform my typological investigation of Castelluccio pottery variability. As expounded further in Section 4.3.2, I shall explore first functional differentiation. Using this as a heuristic tool, I shall quantify and qualify similarities and differences in both painted and unpainted pottery by looking at formally-defined aspects of pottery variability. Secondly, such an approach, combined with a chronotypological study of chronological and regional variability, will lead to the building of regional datasets in which both morphometric differences and functional similarities are reflected. That is, a taxonomy of shapes to identify both functional similarities and morphometric differences shall be complemented by a study of regional and chronological variability to anchor these variations to contexts and discuss blurred patterned variability as representative of social boundaries, practices and innovation bearing upon Bourdieu's concept of habitus and change.

All in all, my intention is to foster a less normative view of the emergence of the Sicilian EBA material culture to link with a dynamic social interpretation of the emergence of the local groups. This will be pursued by investigating how similarities and differences in Castelluccio pottery might be representative of social strategies involving manipulation of material culture rather than just a reflection of cultural groups and static boundaries. This approach aims to complement current traditional cultural historical perspectives that still dominate Sicilian prehistory. Indeed, a further step is needed in order to bridge the gap between these traditional perspectives and top-down social interpretations. This gap can be defined as the lack of convergence between local traditions of material culture studies and broader Anglophone accounts - what I define as the historical issue. This issue, as further expounded in the following chapter, complicates the writing of new syntheses aiming to integrate the social with the material, recursively hindering a thorough understanding of what kind of society Castelluccio might have actually been. This thorough comprehension is further complicated by a poor understanding of the human-landscape interactive background to EBA societal transformations over long-term period. Both issues strongly affect how EBA cultural grouping and social transformations are seen in current Sicilian scholarship and will be therefore addressed and discussed before engaging in the pottery analysis.

1.1.3 The tradition of pottery studies

As explained further in Chapter 2, I shall argue that the persistence of traditional, cultural historical perspectives is the most important factor that hinders a social interpretation of the local ceramic patterns. This for two main reasons: practical and theoretical. In practice, evaluation of ceramic variability and representation stems mainly from painted funerary repertoires, being these the most published in literature (Bernabò Brea 1954; 1957; 1958; Cultraro 1991-92; Cultraro 2004; cf. Iannì 2004; 2009). This was in spite of increased quantities of unpainted wares found more recently in settlement contexts (e.g. Mentesana 2015), likely because decorated shapes were considered more diagnostic for detecting cultural and chronological changes.

In theory, there is a persistent belief that artefact variability in the archaeological record directly represents culture-bearing, static, units. Such beliefs represent the endurance of Bernabò Brea's schematic organisation of the prehistoric cultures of the island and its surrounding archipelagos. Most of Bernabò Brea's works centred on the prehistory of the Aeolian Archipelago off the north coast of Sicily (Bernabò Brea 1957; 1966-67; 1991-92). However, as discussed further in the following chapter, other works by him put much effort into defining and describing the cultural sequence and chronology of the Sicilian Bronze Age (Bernabò Brea's foundational works and attached to regional distributions (Cultraro 1991-92; 1996; 1997; Iannì 2004; 2009). While unpainted pottery remains poorly published, further information regarding distribution of painted ceramics and style inform investigation of recently surveyed sites in the Central Uplands (Central Sicily), attached to a local cultural sequence (Iannì 2004).

Considering this fragmentary pottery evidence and a poor understanding of local unpainted ceramics, the extent to which published assemblages directly reflect regional groups and/or specific boundaries is uncertain. In fact, there are two main objections that affect the validity of such a reconstruction:

- There is an overall predominance of painted funerary ceramics in comparison to other settlement ceramics, also unpainted, from a quantitative perspective.
- Published material culture repertoires including ceramics are largely datasets that represent palimpsests of sites rather than the actual composition of household inventories and/or funerary sets.



Figure 1.2: A set of both 'traditional' Castelluccio painted pottery and unpainted ware (scale 1:6, after Tinè 1965; McConnell 1995; Castellana 1997; Tusa 1999). As evident, similar shapes crosscut both the 'styles' in almost every group. 1-2A: beaker-like, cups, bowls, single-handled jars; B double-handled jars. See Chapter 6 for a detailed morphometric classification. The Appendix II provides a complete illustrated typology of the examined published repertoires.

1.1.4 The landscape background

As stated above, the other issue is a poor understanding of the human-landscape interaction as a background to EBA social organisation and transformations. To what extent was the emergence and development of the Castelluccio groups and their material culture influenced by their relationship with the environment? It is appropriate to make certain deductions about environment, settlement choices and local socio-economic forms of development knowing modern conditions, however, this topic is still poorly explored in Castelluccio scholarship (cf. Fairbank 1977 (unpublished); Tusa 1991, 38; 1999, 379; Giannitrapani 2017). In addition, transformations in material culture are for the most part disconnected from these socio-economic transformations upon which long-term processes, such as human adaptation to the environment, must have had a significant impact. Under these circumstances, Anglophone top-down generalising models of social development must have enlarged the gap I refer to in Section 1.1.2, looking for broader cycles over the long-term perspective without a bottom-up evaluation of the strong regional, contextual patterning (Section 2.1). Yet, how the prehistoric landscape affected settlement choices, socioeconomic systems, material culture, social relations and interactions cannot be underestimated. Evidently, this thesis cannot address all these issues exhaustively, but a first step is needed in order to bridge this gap and initiate a reassessment of Castelluccio Sicily.

1.1.5 Conclusions

I argue that this gap, plus the enduring influence of the cultural-historical thought prevented further from developing social inference from material culture studies, reinforces in turn static views of social and cultural boundaries. As further discussed in Chapter 2, Tusa's (1991, 38; 1999, 379) attempt to investigate the relationship between settlement choices and natural resources was not taken further by subsequent pottery studies. Nor were there attempts to study painted pottery in combination with other roughly contemporary EBA unpainted ceramics, as further discussed in Section 2.1. Instead, while shared contexts of interaction in which Castelluccio groups likely emerged were neglected, assessment of pottery variability remained focused on detailed chronological assessment of the regional sequences (e.g. Iannì 2004; 2009; Gennusa 2015)¹. Likewise, while generalising models were attempted from reconstruction of the Holocene landscape's impact upon socio-economic

¹ Similarly, analysis of the so-called *instrumenta domestica*, such as spindle whorls and flint tools, developed in isolation, being focused on the analysis of typological aspects to support the chrono-typological regional sequence of the pottery forms (e.g. Militello 2008, 139). Investigations of huts and other types of settlement structures, e.g. hearths, kilns, are also undertaken in isolation with the purpose of defining evolution of the local architecture (e.g. McConnell 1992; McConnell and Bevan 1999) or its relation to external sources of development (Doonan 2001). Investigation of local household inventories, practices and social organisation at the settlement level is usually neglected (cf. Mentesana 2015).

systems, complementary views on the local, contextual, changes in material culture were not achieved.

1.2 TOWARDS AN ALTERNATIVE UNDERSTANDING OF REGIONAL CERAMIC VARIABILITY: FLUID BOUNDARIES AND SHARED PRACTICES

1.2.1 Introduction

The question of how EBA groups in Castelluccio Sicily emerged and developed remains open to debate in view of the considerations expressed above. Indeed, there are several neglected topics that would yield new perspectives had material culture been linked with society in some more depth, reducing the gap between top-down generalising social interpretations and bottom-up understanding of the local material culture features. The following sections define specific questions and objectives in order to initiate such a reassessment. Finally, I shall introduce the research context and issues, and the methodology in outline.

1.2.2 Research questions and objectives

In the Italian scholarship, traditional lines of arguments endure, as further discussed in Chapter 2, that stress ideas of regional static boundaries, cultural differentiation and Anatolian ancestry through the Late Copper Age background (LCA henceforth) (Bernabò Brea 1954; 1957; 1958; Procelli 1996; 2001; Castellana 1997, 50-51; Alberghina 2012; Alberghina and Gulli 2011), while ignoring hybridisation, interaction and social porosity. Similarly, long-term adaptive processes to the environment behind emergence of regional patterning and local material culture remain largely unquestioned. While it is impossible to answer all these questions in one thesis, it is argued that an understanding of variability in both painted/unpainted ceramics in Castelluccio assemblages as representative of social boundaries and interaction will initiate such a reassessment. This leads to the main question: what do similarities and differences in EBA pottery datasets represent? We will never know whether the six regional groups as defined in current scholarship truly existed. Nevertheless, we shall try to discuss the extent to which ceramic differences and similarities in regional assemblages of painted and unpainted ware represent the emergence and development local traditions, practices, social porosity and interaction. Five key questions and three main objectives derive from such an approach:

Questions:

• What are the key aspects of variations in Castelluccio ceramic assemblages that can be reassessed in this vein?

- What are the key chronological and regional aspects of variations embedded in these characteristics?
- Are there regional differences and/or similarities between assemblages?
- Can we compare these patterns with current definitions of the local regional groups?
- What kind of social scenarios does discussion of these differences/similarities open up when compared to the current views?

Objectives:

- Studying of ceramic variability in terms of similarities and differences encompassing regional and chronological aspects. As stated above, the concept of functional differentiation will be used as heuristic tool to classify such a variability first, looking for both morphometric differentiation and functional homogeneity. This will permit the arrangement of both similarities and differences into a taxonomy scheme.
- A chronological and regional assessment of these variations will follow in order anchor engendered variability to context and explore also Castelluccio relationship to other EBA non-Castelluccio like pottery traditions. This will offer scope to pin down blurred patterns with reference to a web of spatial and temporal associations and interpret engendered similarities and differences as representation of social boundaries, practices and innovation according to Bourdieu's notion of habitus.
- Finally, I shall discuss these themes further in the light of other evidence of material culture, e.g. architecture, and economic subsistence in order to debate issues of social organisation and development by situating practices in local arenas of interactions.

1.2.3 Methodology in outline

1.2.3.1 Natural settings

The natural settings of the island will be considered in this assessment with the aim of combining the results of the pottery analysis with an analysis of the socio-economic developments over longer periods of time. With a surface area of 25,708 km², 62% of the island surface today is hilly terrain, while only 24% is taken up by mountains (Benedetto and Giordano 2008, 120). As expounded further in Chapter 3, this patchwork reflects geological and climatic changes that shaped the Holocene landscape and certainly affected prehistoric settlement choices and economic systems over long periods of time. Actual landforms and rock units, e.g. the Sicilian Apennines and the Hyblean horst in the south-east corner of the

island, were already in place when extensive Tertiary tectonics faded into minor Quaternary rifting (Nigro and Renda 1999, 54; Cherchi and Montadert 1982). In addition, major rivers, e.g. the Simeto, Salso, Platani and Belice, incised these landforms especially during the last sedimentary-erosional cycle occurred after the end of the Pleistocene. Triggered by further climatic oscillations during the Holocene, an environmental patchwork of uplands, lowlands, grasslands, woodlands, rocks, mineral resources – intersected by rivers and valleys – developed accordingly. As further shown in Chapter 3, we shall see how human activities shaped and were recursively shaped by this environment.

1.2.3.2 Data quality issues

For these reasons, investigation of ceramic variability will expand to all regions of Sicily where evidence of Castelluccio culture is present, mixed Castelluccio assemblages included. This choice was also determined by the fact that spatial relationships to other EBA traditions have never informed contextual social interpretations of artefact variability. Moreover, case study-based research on ceramic variability, picking up only certain contexts, would have been largely inappropriate. In fact, while funerary repertoires are best represented, representation of settlement assemblages is highly fragmentary and unbalanced. This is plainly evident in Table 1.3, showing clearly how impractical a case study would have been. The table shows the main extensively excavated settlement contexts and signals the number of counted sherds and published materials from publications and excavation reports by establishing a quantitative comparison between the two. What emerges from the table is that a reconstruction of household inventories to explore specific practices relatable with social boundaries could have not been confidently achieved.

Table 1.1: Distribution percentages of whole published items, sherds and diagnostic fragments in main extensively excavated sites. This table shows to what degrees occurrence of settlement pottery may be representative of the entire population, having calculated, when possible, the total amount of the excavated sherds and compared these with the sampled ceramics from the repertoires that have been published. What emerged are low percentages from the majority of the better excavated sites with good quality information.

Sites	Areas	Sherds	Count of	Personal database	Percentage
			diagnostic	(published)	(published)
			sherds		
La Muculufa	Sanctuary	Ca. 1864	500 (ca. 26% of	41	8.2%
			sherds)		
La Muculufa	Village	500		62	12%
Manfria		-	300	32	11%
Monte	Baffo	-	-	66	-
Grande	Superiore				
Case	Hut 1 and	-	17	9	-
Bastione	hut 2				

1.2.3.3 Dataset evaluation and classificatory method

Instead, my dataset will be as inclusive as possible of the published painted and unpainted repertoires, with the aim of assembling a large dataset to be as representative as possible of both domestic and funerary material culture. Therefore, a classificatory approach other than an assessment of variations in shape and size was rejected, being the dataset formed by both painted and unpainted ceramics. As stated above, the concept of functional differentiation will be heuristically adopted in order to investigate morphometric variability, being function a formally-defined aspect of variation that crosscuts both painted and unpainted vessels. Of course, this choice raises issues regarding comparability between funerary and settlement repertoires in quantitative terms. Yet, this will not be a true problem. In fact, an underestimation of domestic pottery will offer scope to discuss cross-over patterns and reuse practices, despite the over-representation of funerary items (75%).



Figure 1.3: Percentage distribution of settlement and funerary items in the overall dataset.

1.2.3.4 Chronology and regionalism

A new theoretical understanding of ceramic similarities and differences informed by the concept of habitus needs to be connected with a study of regional variability in order to link morphometric variation with context and explore patterns representative of social boundaries, practices and interaction. For this purpose, similarities and differences will also be examined in terms of chronological variations, with the aim of identifying assemblages which are roughly contemporary and, therefore, linked to spatial distribution. This study will be based on the same variables of shape and size used to qualify and quantify functional differentiation. The principle behind this is that variability, in formally-defined aspects of pottery, may also be associated with distribution and use of pottery in a determined period of time, as explained further in Chapter 7. Therefore, the same variations in shape and size will be arranged into a seriation. Considering the paucity of radiocarbon determinations, analysis of the chrono-typological connection with other roughly contemporary traditions will also be undertaken in order to support phasing. This step does not seem to link directly with investigation of social boundaries and practices but it is in fact crucial. Indeed, since the radiocarbon dates are few, regional datasets can be confidently built only if further chrono-typological links are incorporated in the seriation process. A regional and chronological assessment of ceramic variability is, in this sense, the ultimate step.

1.2.4 Conclusions

As discussed above, this work will examine variations in Castelluccio ceramics from a range of different dimensions with the aim of constructing regional subsets potentially representative of social boundaries, practices and interaction. A discussion of the natural and socio-economic background will also be conducted with the aim of bridging the gap between bottom-up contextual assessment of material culture with general top-down models of development. As such, this work will allow a more critical view of the relationship between material culture and its representativity in terms of culture, groups and sociocultural transformations as needed in current Castelluccio studies.

1.3 STRUCTURE OF THE THESIS

Chapter 2 will discuss the most important Anglophone syntheses that sought to place Sicily in the context of central Mediterranean Bronze Age social developments, and the Italian Castelluccio scholarship. The discussion will highlight the great divide between the two traditions, as well as more recent traditional approaches to pottery typologies and classifications. The aim is to show how selective these latter approaches are in the construction of relative sequences of regional groups bounded to static temporal, geographical and cultural units. Current themes of research that hindered a more integrated understanding of social boundaries, practices and interaction will be therefore singled out, alongside appropriate considerations of published research.

Chapter 3 will present the natural landscape and Copper Age background to Castelluccio Sicily, with the aim of discussing settlement choices and subsistence economy developments over longer periods of time. The attempt is to understand what aspects of the local CA traditions were inherited by Castelluccio groups, and the extent to which settlement patterns and material culture reflect this inheritance. This will offer the background for a contextual appreciation of the EBA regional subsets to link with social boundaries, practices and changes.

Chapter 4 will highlight the methodological and conceptual framework through which exploring ceramic variability as a representation of social boundaries and practice. For this purpose, I will review first processual approaches to artefact variability before stressing more recent developments in new materialist studies. Subsequently, I will present my approach in arguing how the more recent focus on experience and performance in addressing cultural and social phenomena has neglected aspects of time, structure and meaning, demoting pottery typologies to tools for mere sorting purposes.

Chapter 5 will be a review of the archaeological assemblages comprising the examined pottery dataset. It also includes a study of the architectural elements. This will be necessary in order to discern reliable sources of evidence through which developing my morphometric, regional and chronological analysis of pottery variability in **Chapters 6** and **7**. Both are central chapters to this thesis, as they show how the taxonomic variability will be deployed in terms of functional differentiation into a chrono-typological scheme of spatial and temporal distribution. The purpose is to arrange classed variability into regional subsets in order to pin down morphological pottery types to contingent situations with reference to time and space contexts and discuss, therefore, ceramic representativity in terms of social boundaries, practice and interaction.

Chapter 8 will expand the discussion of the results from habitus-related considerations of variability to other themes related to practice theory, including observations on domestic/funerary cross-overs and reuse practices. Combined with an analysis of the architectural evidence of social cooperation and competition, this will permit the tackling of further themes like social interaction and change. In doing so, Chapter 8 will offer scope to initiate a discussion about discontinuity and continuity in mechanisms of socio-cultural reproduction related to manipulation of material culture, societal organisation and development to compare with current models.

Conclusions stemming from this discussion are stated in **Chapter 9**, which is a summary of the research undertaken. This will also constitute a summary of key research issues, questions and answers, and stress the significance of the achieved results within the framework of current Castelluccio scholarship. Finally, the chapter will present further research questions and possible future directions.

CHAPTER 2: CASTELLUCCIO CULTURE AND SOCIETY. A LITERATURE REVIEW

What Castelluccio material culture represents when considering its centrality and embeddedness in society requires further evaluation. In fact, there is a significant gap between bottom-up approaches to artefact variability and top-down social interpretations. Anglophone scholarship in Mediterranean prehistory has often showed an interest in settlement patterns, social dynamics and power relations to compare with anthropological models. Meanwhile, traditional Italian scholarship focuses on pottery sequences and chronologies. This is frustrating, as nowhere in the specialist Castelluccio literature is it possible to get a sense of what type of society Castelluccio was, unless one takes into account diffusionist views of culture change or generalising social typologies. Anglophone scholarship of Mediterranean prehistory has often criticised the former and upheld the latter. That said, there is a tendency in these approaches to ignore how Castelluccio material culture structured in space and time can be linked to these models. This chapter discusses these Anglophone approaches first before going on to debate the Italian tradition of pottery studies. In reviewing this literature, I am compelled to use Italian academic terms like 'San Cono-Piano Notaro', 'Serraferlicchio', 'Malpasso' and 'Sant'Ippolito' which, like 'Castelluccio', are used in the pottery scholarship to define both Copper Age and Early Bronze Age stylistic traditions (CA and EBA, henceforth). I will elucidate the influence of local CA studies on the definition of Castelluccio groups and sequences. This will permit me to highlight what is actually missing and lead the way to novel interpretations of ceramic variability, social boundaries and practices in order to bridge the gap and link material culture with society in some depth.

2.1 EARLY BRONZE AGE SICILY AND THE MEDITERRANEAN: CASTELLUCCIO FROM THE OUTSIDE

2.1.1 Introduction

Sicily is just one of the many regions in which evidence of Bronze Age society appears as archaeologically distinct from preceding and subsequent periods, and where the potential to link it with social relations, boundaries and practices are promising. This evidence has been interpreted for most of the 20th century as representative of discrete chronological phases and cultural groups (Figure 2.1).



Figure 2.1: Early Bronze Age regional settlement distribution in Sicily and nearby islands. Plot and annotations by the author (base map source: Esri, HERE, Garmin, Intermap, increment P. Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong)). There is a predominance of sites with Castelluccio-like traits but the occurrence of other types of assemblages in Castelluccio regions suggests a more cautious approach to defining regional groupings in terms of static entities. Rather, this patchwork seems to foreshadow a certain degree of social and cultural porosity of the local communities that deserves further attention. As discussed further in Section 4.3.1, my research area corresponds to that occupied by the green dots in the map, including also sites with Rodi-Tindari-Vallelunga and Thermi Ware pottery.

While this trend is still common in Italian specialist studies, Anglophone scholars realised that these cultural historical sequences could no longer directly reflect the complexity of the material record. Instead, social interpretations were put forward, especially in studies of southern Italian prehistory, that highlighted the role of active manipulation of material culture, in accordance with the broader instances of the post-processual turn, as debated further in Section 4.2. Networks of interactions, social relations and practices, e.g. mortuary, were seen as the main drivers for local developments (e.g. Whitehouse 1984; 1990; Malone 1985; 1996; Skeates 1995; 1998; 2000, 2005; Robb 2007; cf. Bernabò Brea 1968-69; Peroni 1967; 1989). In fact, CA-EBA Sicily was not the focus of such a sustained foreign reexamination, despite the growing awareness of being situated in a central Mediterranean region increasingly interconnected (e.g. Marazzi and Tusa 1976; 2005; Maran 2007, 14-17; Thomas 2010, 181-210; Gori et al. 2018), and, therefore, likely disposed towards social porosity and interaction. For these reasons, a gap between a local bottom-up analysis of the strong regional patterning and top-down social interpretations has been engendered in Castelluccio scholarship.

Under these circumstances, describing in depth the establishment of its internal cultural sequences and chronological phases is as important as placing the description of Castelluccio Sicily in the context of EBA central Mediterranean societies. Therefore, I shall introduce first the wider context in reviewing Anglophone accounts of central Mediterranean prehistory, then the few regional accounts that attempted a social interpretation of its strong regional patterning. This will offer scope for an outline of EBA Sicily in terms of the pottery styles and regional groupings before engaging in depth with the Italian scholarship. The chronological span of this initial review, as introduced in Chapter 1, is about 2300-1500 BC and built on Pacciarelli et al. (2015), even if, concurring with Leighton (1999; 2005), I would prefer a slightly earlier boundary for the LCA-EBA transition at around 2500 BC.

2.1.2 Sicily and the central Mediterranean Bronze Age

In the timespan covered by this review, Sicily and the central Mediterranean region underwent changes that finished to alter the very fabric of the local societies. It is likely that this process had its origin back to the end of the Neolithic period during the shifts that the local CA communities underwent following environmental changes and increased interaction (Broodbank 2013, 345-348). As discussed in depth in Chapter 3, the former must have led in Sicily to a gradual landscape management, if not significant transformations, as settlements increased in number and the occupation of almost all environmental niches led to increased specialisation in economic activities and forms of pastoralism to integrate with farming in lowlands locales. It was certainly a testing time during which increased stabilisation and mobility must have triggered also changes in local ways of life.

According to some authors (Malone 1985; Skeates 2005, 132), expanding networks since the Late Neolithic (LN, later fifth to earlier fourth millennia BC) in the southern Tyrrhenian basin must have accompanied the dissolution indeed of regional pottery-based boundaries, likely indicative of ancestral groups bounded to a very distinct sense of identity and belonging. According to characterisation studies, goods circulated at that time over long distances across the sea and overland (Leighton and Dixon 1992; Tykot 1996). Obsidian from Lipari, for example was exported to distant places and relatable with sites in southern Italy characterised by essentially similar pottery styles (Malone 1985). Similarly, the spread of grey ware pottery characterised the last two centuries of the 3rd millennium. Particularly noteworthy is the widespread occurrence of Cetina-like pottery across the western Balkans and southern Italy, recently linked by Cattani et al. (2015) with some Rodi-Tindari-Vallelunga ware (RTV, henceforth)².

As discussed further below, culture historians tend to explain these changes, reflected in pottery variability, by emphasising movements of people and spread of ideas. Anglophone accounts have placed more emphasis upon supra-regional cycles of social developments by invoking social interaction and relations as main drivers. Based upon such evidence of exchange networks and inter-regionally recognisable styles widely distributed, some authors, for example, used ethnographic analogies to infer the development of 'Big Men' societies (e.g. Robb 1999), especially as far as LN/CA southern Italy is concerned. Working within a similar post-processual strand to this, Malone et al. (1994, 188) argued that that social organisation in EBA Sicily was characterised by a limited centralisation prior to 1300 cal. BC.

² The most important site related to these latter styles is located at Boccadifalco in the province of Palermo. Excavations carried out in the 1940s and 1950s highlighted three huts (Bovio Marconi 1964-65). Analysis of the ceramic repertoire showed the presence of ceramics that Bernabò Brea (1958) later defined as RTV because of their formal characteristics so distinct from both Capo Graziano and the painted ware of Castelluccio. On the easternmost part of the island, other RTV assemblages were also found in the province of Messina at the site of Rodì. In the 1950s, a cemetery was identified there within which fragments attributed to RTV were recovered (Bernabò Brea 1966-67. Moreover, RTV assemblages in the province of Messina are quite widespread. During excavations in the city of Messina itself, multiple locations have been identified that are rich in evidence that can be dated to the EBA. In via Farina 158, for example, traces of a huts have been highlighted in the layer 6 (Bacci Spigo and Martinelli 1998). Similarly, a small trench of 3 x 2 m opened in via dei Mille 145 showed other features associated with RTV material. Also, the city of Milazzo, located on the homonymous promontory opposite to the Aeolian Islands, yielded remains of a settlement and a cemetery (Tigano 1993-94, 1076-1084; Tigano 1997-98, 543).

While sensible, this latter reconstruction neglected the centrality and embeddedness of material culture in structuring and being structured by local social relations and groups. In fact, a general material culture patterning was ascribed to a societal type characterised by a certain degree of 'complexity' without considering the very local character of certain patterned variability. For example, it is suggested that Sicilian society became centralised following the end of the Castelluccio period, as shown by evidence of increased settlement hierarchy and specialisation in pottery-making, but there is not discussion of Castelluccio contexts of pottery production/use nor innovations in local practices.

This lacuna is persistent also in more recent accounts of central Mediterranean prehistory. In Broodbank (2013, 428-429), for example, a traditional dichotomy between the local underdeveloped hinterland and the nodal coastal communities is restated without considering the variety of links that can be established between the variety of the local pottery productions in Castelluccio assemblages, as described in Section 3.3.3. I have mentioned already the occurrence of unpainted RTV pottery. Moreover, a few Castelluccio contexts also have Thermi Ware occurrence (TM, henceforth). This is another kind of unpainted grey ware which features also in some Maltese contexts. As further discussed in Section 7.2.3, what TM actually represents is still matter of debate among experts in Maltese prehistory (Malone and Stoddart. 2009; Cazzella and Recchia 2012a; 2012b, 1007-1008; 2015, 147; 2017; Copat et al. 2012, 48). Nevertheless, despite this evidence and the variety of regional patterning in local material culture, more recent theoretically-informed studies of central Mediterranean society in the Bronze Age escaped careful examination of EBA Sicilian material culture. In fact, how local Castelluccio material culture structured in space and time is representative of any social process affecting both traditional developments and innovations remains a neglected topic.

2.1.3 Ceramic styles and cultural sequences

This loss of attention towards the local material patterning is contrasted, however, by the varied distribution patterns illustrated in Figure 2.1, which is indicative, sometimes, of distinct groups, sometimes of more blurred ones. For example, it is possible to observe that Capo Graziano material culture distribution is limited to the Aeolian Islands (Bernabò Brea 1957; 1976-77; 1985; Bernabò Brea and Cavalier 1960; 1968; 1980; 1991; cf. Levi et al. 2009). This is also represented by a burnished and incised grey ware pottery, as much as the RTV found sometimes in Castelluccio contexts (CG and RTV, henceforth), despite some morphological differences (Adamo et al. 1999; Cattani and Ardesia 2012). Both can easily be distinguished from the traditional Castelluccio painted pottery, a kind of matte-painted,
black-on-red brushed on ware characterised by a variety of shapes and decorative schemes, as discussed further in Section 2.3.3. A first distinction of the unpainted pottery occurred, for example, already in Childe's (1947, 233 (4th edition)) *Dawn of European Civilisation,* who placed the development of Castelluccio culture in a wider Mediterranean context. Noteworthy in this attempt are Childe's (1947, 233) comparisons between the matte-painted shapes from Vallelunga and the Dhimini Ware from Greece, while unpainted pottery from western Sicily was seen as not representative of the "Castelluccio civilisation" (so-called First Siculan Period, see Section 2.3.2 for further details on this periodisation). In fact, a mingling of painted and unpainted wares in Castelluccio contexts such as Ciavolaro (Castellana 1996b) would indicate a more complex relationship between the two; and this would open up the possibility that they represent the outcome of practices situated in contexts of shared interaction, cooperation and competition.

Indeed, such a mingling is not exclusive of Sicily. EBA distribution of burnished, unpainted grey ware pottery such as RTV extends to other southern Italian regions (Pacciarelli et al. 2015), and similar productions to these occur also in the western Balkans under the label of 'Cetina package' (Della Casa 1995; Gori et al. 2018). That is, there is an ample central Mediterranean distribution of fabrics and different ware categories that occasionally overlap in certain parts of Sicily, suggesting a more cautious approach towards the definition of boundaries attached to local static cultural groups.

Fairbanks' unpublished PhD partly recognised this point (Fairbanks 1977), proposing an alternative view of Castelluccio variability by examining its relationship with the landscape and resource exploitation. Her thesis includes detailed descriptions of ceramic productions, from the viewpoint of fabric also, while observations regarding chronology were limited (e.g. no seriation was developed). The result is a study of strong regional patterning which links regional differences in material culture distribution with different landscapes and economic specialisation. Fairbanks explains her focus on regional distribution as determined also by the paucity of radiocarbon determinations to establish secure chronological grids. In fact, her assessment did not present a meticulous chrono-typological study of the ceramic evidence, despite the thorough descriptions of ceramic colours and wares.

More recently, Leighton (1999) attempted to fill in this gap. His effort is noteworthy in connecting material culture with fluid social boundaries and identities, providing an extensive scrutiny of the local specialist literature on pottery styles, sequences, chronology and settlement trends. His placing the development of Castelluccio society under the lens of

a meticulous review of the local ceramic traditions acknowledged the need for a better definition of the relationship between material culture and society. However, this aim was not an objective of his book, which kept the focus on local chronology, settlement trends, burial architecture and subsistence economy.

2.1.4 Conclusions

From this point of view, there is no doubt that the works cited above have filled an important lacuna in studies of the central Mediterranean region by attempting to offer social interpretations of the local evidence. In actual fact, social interpretations of Castelluccio Sicily are contrasted by limited attention devoted to understanding how local material culture is structured in space and time. On the contrary, a loss of focus on detailed examinations of variability in local material culture has characterised Anglophone studies in the area, in favour of social interpretations of overarching supra-regional exchange networks. In this sense, there is a significant theoretical gap in the study of EBA Sicily which highlights the need for more research linking material culture variability with society from the bottom.

2.2 THE COPPER AGE LEGACY IN THE STUDY OF EARLY BRONZE AGE SICILY: CASTELLUCCIO FROM THE INSIDE

2.2.1 Introduction

A more traditional cultural historical approach dominates the prehistoric studies on the island, carried on by Italian scholars (Bernabò Brea 1954; 1957; 1968; 1988; Cultraro 1991-92; Iannì 2004; 2009; Gennusa 2015). As further shown below, these scholars developed a bottom-up understanding of Castelluccio Sicily complemented by pottery sequences which describe the diffusion and succession of cultural groups. The subsequent sections discuss Bernabò Brea's development and interpretation of the CA cultural sequence in this view, illuminating his profound influence on current Castelluccio scholarship. For the sake of clarity, Table 2.1 illustrates the pottery sequence across the CA-EBA periods, highlighting excavated sites which were relevant to establishment of the cultural sequence.

2.2.2 "San Cono-Piano Notaro" and the Early Copper Age (ECA)

As evident from Table 2.1, I am using the term 'Copper Age' for the period between the end of the Neolithic – characterised by red ware pottery, defined as an expression of the Diana Culture – and the beginning of the EBA. San Cono-Piano Notaro pottery is an incised ware representing the ECA and linked to increased regional variations expressed in terms of regional styles, e.g. Conzo in western Sicily and Piano Vento in the region of Agrigento (Castellana 1995, 82-84) (Figure 2.2). Many authors currently share the feeling that during the Late Neolithic (LN), diffusion of the Diana style was widespread and inclusive of further

territories in southern Italy (e.g. Leighton 1999, 65; Pacciarelli 2011, 253; Piacciarelli et al. 2015). Traditionally, the appearance of the San Cono-Piano Notaro pottery style is therefore seen as substantial turning point from the homogeneity of the LN Diana period, explained through the replacement of local communities with new settlers (Bernabò Brea and Cavalier 1980).

This established sequence mostly relies on the stratigraphy and associated ceramics exposed at the site of Grotta della Chiusazza (Tinè 1965; Bernabò Brea 1968-69), and Lipari in the Aeolian Islands (Bernabò Brea and Cavalier 1960; Bernabò Brea and Cavalier 1980) (Figure 2.3). There are two radiocarbon dates from Lipari (4000-3544 and 3775-3638 cal. BC) which situate this transition around the first half of the 4th millennium cal BC, suggesting that Piano-Notaro was current already in the mid-4th millennium cal. BC (3786-3380 cal. BC) (Leighton 1999, 65, 93). This seems to suggest a certain degree of overlap between the Diana and San Cono-Piano Notaro wares, and a more cautious approach to diffusion instead of emphasising a lack of continuity.

Period (after Bernabò Brea 1968-69; Pacci and Tusa 1990; Iannì 2016)	Key sites			Ceramic styles		
	East	West	Central Uplands	East	West	Central Uplands
Late Neolithic	Grotta della Chiusazza				Diana	
Early Copper Age	Grotta della Chiusazza/layer 4, Grotta Calafarina, Grotta di Sbriulà, Trefontane	Fontanazza 1/layers 7-6, Grotta Zubbia, Santa Margherita Belice	Serra del Palco di Milena	San Cono-Piano Notaro, Conzo	Conzo	San Cono-Piano Notaro
Middle Copper Age	Serraferlicchio	Fontanazza 1/layers 6-3		Serraferlicchio	Serraferlicchio	Serraferlicchio
Late Copper Age	Sant'Ippolito, Grotta della Chiusazza, Malpasso	Fontanazza 1/layers 5-1, Durrueli		Malpasso, Sant'Ippolito, "Stile di Adrano" or Proto- Castelluccio Etneo	Malpasso, Sant'Ippolito, Naro- Partanna	Malpasso, Sant'Ippolito
Early Bronze Age	Grotta Chiusazza/layer 3, Adrano	La Muculufa, Monte Grande, Grotta Ticchiara, Case Bastione		Castelluccio regional styles (see Table 2.4 for further periodisation)		

Table 2.1: CA-EBA cultural sequence in Sicily.



Figure 2.2: Early Copper Age San Cono-Piano Notaro style (source: Leighton 1999, 107, fig. 50). Vessels from (1-3) Piano Vento; (4, 6-8) Uditore; (9) San Cono; (10-11) Gela; (5, 12-17) Grotta della Chiusazza; (18) Valdesi. The incised decoration is shared between all the vessels, while the occurrence of certain patterns is also evident. Vessels from Pianto Vento, for instance, are characterised by incised dots and lines, while triangles are more common at San Cono and Chiusazza.



Figure 2.3: Grotta della Chiusazza, with a drawing of the plan and stratigraphy (Tinè 1965). Radiocarbon dates from Grotta del Cavallo and Lipari have suggested a certain degree of overlap between San Cono and Diana period. This seems plausible also by looking at the stratigraphy of the cave where the lack of continuity is not apparent in the drawing.

2.2.3 "Serraferlicchio" and the Middle Copper Age (MCA)

The same issue is evident when the transition to the MCA period is analysed. Traditionally, the style of Serraferlicchio marks the beginning of the MCA (Figure 2.4). Its characteristics make it similar to LN red wares and the subsequent LCA Malpasso ware, especially if we consider the brilliant red slip of its exterior surface. Despite these similarities, the view that this style represents a new production in the CA sequence is predominant. Again, the stratigraphic sequence at Grotta della Chiusazza was foundational to the establishment of this clear-cut distinction (Figure 2.3), but we can note again that there is no clear-cut distinction between the ECA and the MCA levels from looking at the section drawing. Nonetheless, despite this and the co-occurrence of Serraferlicchio and San Cono-Piano Notaro fragments in the lower part of layer 4, Bernabò Brea chose to consider these elements as unimportant. It is difficult to judge whether he did so because he disliked the association *a priori*. At that time, excavations followed arbitrary cuts (*tagli*) and it might be possible that the excavator of the cave, Santo Tinè, mixed up different assemblages in overcutting the boundary between the lower and upper part of layer 4.



Figure 2.4: Middle Copper Age Serraferlicchio style (source: Leighton 1999, 109, fig. 51). Vessels from: (1-3) Chiusazza; (4-7) Serraferlicchio; (8) Vecchiuzzo.

2.2.4 "Malpasso", "Sant'Ippolito" and the Late Copper Age (LCA)

It is evident from these considerations that Bernabò Brea's interpretation of the succession between the style of San Cono-Piano Notaro and Serraferlicchio prevailed, although the stratigraphy discussed above would suggest that, at least for a certain period, the two styles were contemporaneous. There are elements of co-occurrence that seem to show that the same situation might have happened regarding the transition to the LCA period. While Malpasso is a red ware, Sant'Ippolito is a black-on-red brushed on pottery, and it should be therefore noted that the latter is fairly similar to MCA Serraferlicchio (Figure 2.5). More recent excavations at Fontanazza di Milena targeting the upper levels, namely five and four, showed a certain degree of overlap between Serraferlicchio and Malpasso style. Maniscalco claims that this overlap remains unclear because levels 5 and 4 might be more disturbed than the lower ones, but she does not provide actual evidence of this to support her argument (Maniscalco 2007, 170).



Evidently, the LCA period still appears to be thought of in current scholarship as a very distinctive phase following the MCA that marks the end of the CA period. Maniscalco concludes that "it is possible to hypothesise therefore a sequence starting with the earliest manifestation of San-Cono Piano Notaro – associated with wares darker in colour – and followed by Serraferlicchio" (ibid., 174). In sum, Maniscalco restates Bernabò Brea's thesis of the succession of the three styles (1968-69). This is limiting, especially considering the growing body of evidence showing significant overlaps in terms of ceramic traditions in more recently excavated sites such as Case Bastione. However, these do not appear to have received sustained scholarly examination. We shall see, for example, in Section 7.2.1, how continuity is clearly documented at this site, associated with absolute dating showing a continuity of use between ca. 2400 and 2200 cal. BC (Giannitrapani et al. 2014, 194).

2.2.5 Conclusions

The first issue with the pre-Castelluccio sequence is that establishment of a rigid scheme prevents archaeologists from analysing ceramic variability as representative of more fluid socio-cultural dynamics. Instead, this approach informs – and is recursively informed by – a diffusionist perspective of cultural change. This tendency was apparent in Bernabò Brea's definition of San Cono-Piano Notaro as a style marking the transition from an earlier local cultural homogeneity to a later regional fragmentation, as shown above. In providing this interpretation, Bernabò Brea acknowledged San Cono-Piano Notaro as a cultural expression of new people, through looking at stylistic parallels with the Proto-Helladic pottery from Poliochni Azzurro and Anatolian pottery from Beycesultan (layers 17-19) (Bernabò Brea 1968-69, 29-30). A similar transition was argued also for the LCA period, showing how Sant'Ippolito bridged-spouted-vessels might have been compared with Middle Minoan pottery jars from Crete (ibid., 35). These relationships, especially as far as LCA period is

concerned, were restated by Bernabò Brea in later contributions (Bernabò Brea 1988; 1991), and even more recently by Alberghina and Gullì (2011), evidently forgetting that black-onred painted decorations may also show a persistence of painted wares since MCA Serraferlicchio, as suggested above.

Noteworthy also is the lack of studies on the relationship between Castelluccio pottery and unpainted CA wares, in spite of the occurrence of unpainted pottery in Castelluccio assemblages. In fact, a chrono-typological relationship to CA unpainted ware remained as much a neglected topic as the relationship between Castelluccio painted ware and other EBA grey ware traditions, as further shown below. In this sense, CA studies did not offer scope to link ceramics and their variability to manipulations of material culture that are embedded in socio-cultural phenomena like, for instance, hybridisation or traditional production and use practices. Instead, they facilitated the description and interpretation of variability as a passive reflection of cultural grouping. Supported by the evidence of stronger connections with the LCA background, this view was complemented by the belief that emergence of these groups was a new phenomenon (Bernabò Brea 1956), while persistence of earlier CA life-ways remained a neglected topic. As further shown below, this promoted definitions of regional groupings in isolation, that is, not only unconnected from social practices shaping the materials but also from socio-economic transformations over longer periods of time.

2.3 DEVELOPMENT OF THE CASTELLUCCIO CULTURAL SEQUENCE

2.3.1 Introduction

It is evident from the discussion above that movements of people and cultural assimilation are still considered to be the main drivers for socio-political and cultural change in CA-EBA Castelluccio Sicily (e.g. Cultraro 2004; Cazzella et al. 2011). By disregarding hybridisation, local interaction and variations in material culture over longer periods, new light cannot properly be shed onto the emergence and development of EBA groups in Castelluccio Sicily. In fact, descriptions of several regional groups and chronological sequence take over in analyses of pottery variability in this theoretical framework imbued with ideas of cultural diffusionism and assimilation. These approaches currently stress either differences or similarities in isolation, focusing on painted ceramics and demoting unpainted ware to utilitarian pottery. But this was not always the case. The first archaeological investigations of Paolo Orsi were not entrenched in this cultural historical milieu. I shall outline first his pioneering attempts to link material culture with societal developments in prehistoric Sicily, then current culture historical approaches.

2.3.2 Pioneering studies

Orsi perceived the prehistoric remains of Sicily as representative of quite a homogeneous local cultural complex rooted in ancient African origins, in opposition to the old local antiquarian tradition. For example, Antonino De Rosalia's translation of Fazello's *De rebus Siculis*, highlights the 16th century AD Dominican monk reporting a tradition that the Greek hero Herakles killed the local giant *Erice* and buried his bones in a cave, bringing civilisation to the island (De Rosalia 1990, 24). Orsi's task was to establish and secure a reliable chronological framework (Table 2.2), within which locating development of the pre-Greek Sicilian cultures without claiming any cross-cultural contact – or *ex oriente lux*-type mechanisms – as the main driver for development. Rather, it remains apparent that Orsi nurtured an interest for the technological aspects in the evolution of human cultures. There are similarities with Thomsen's Three Age system in this vein which, however, cannot be link with certainty considering the lack of direct referencing of the Danish scholar. Nevertheless, Orsi paid meticulous attention to the materials of artefacts and production techniques, differentiating between polished and unpolished lithic tools, painted and unpainted pottery and metalwork (Orsi 1889).

Prehistoric finds were already known at the time when Orsi arrived in Sicily in 1888, such as the lithic tools, matte-painted ware and red-slipped vessels from Cava Lazzaro (Von Andrian 1878, pl. 1, fig. 1; pl. 4, fig. 10; pl. 5, figs. 1, 2, 3, 4, 5, 13). In challenging Von Andrian, Orsi argued that these items were not all contemporaneous, for they were too different in terms of production technology – the latter being lustrous, wheelmade and having a finer fabric (Orsi 1889, 53). He thus argued for a more advanced technological level of production and posited a later development for the red-slipped pottery. Orsi developed an evolutionary perspective, arguing for the existence of three periods as schematised in Table 2.2, in contrast to the growing interest in the cultural history of the island, likely driven by a growing nationalism re-shaping a sense of common identity (e.g. Pace 1932). We can see in this scheme that Orsi dated the red-slipped pottery to the beginning of the 2nd millennium BC (an age he called the 'First Siculan Period') without positing an eastern Mediterranean origin, as later advocated by Bernabò Brea (see below). Instead, Orsi remained focused on the definition of the technological character of the Siculan periods as schematised in Table 2.2.

Table 2.2: Orsi's chronological scheme. Following this sequence, the Second Siculan Period was represented by a red-slipped pottery often polished and wheelmade. To this period Orsi (1891a, 122-123) dated most of the cemetery sites in eastern Sicily, such as Milocca and Plemmyrion, where Mycenaean pottery also occurred. During the Third Siculan Period, he observed that iron rings and fibulae were quite frequent in comparison to the previous phases. He then saw increased development of the geometric style of the local pottery and the occurrence of Late Corinthian vases in the indigenous sites as marking the Fourth period.

Orsi's period	Main features		
First Siculan period	Matte-painted ware pottery with black geometric motifs, lithics		
Second Siculan period	Wheelmade red-slipped pottery, Bronze swords and daggers, Mycenaean pottery		
Third Siculan period	Fibulae, Early to Middle Corinthian imported vessels		
Fourth Siculan period	Late Corinthian vessels		

2.3.3 Establishment of the cultural sequence

Studies of artefact variability after Orsi became focused more on establishing a history of cultural developments looking at definitions of chronological and culture-bearing units. We have seen above that this trend characterised the establishment of the CA cultural sequence. Similarly, Bernabò Brea defined, for the EBA period, a distribution of mutually exclusive groups of artefacts sharing similar stylistic features thought to be reflective of regional groups. Therefore, Castelluccio as a homogeneous cultural and technological complex was deconstructed by Bernabò Brea. This pottery approach is already evident in *La Sicilia prehistórica y sus relaciones con Oriente y con la Península Ibérica* (Bernabò Brea 1954), in which he posited the emergence of the Castelluccio culture in reassessing and splitting the pottery of the First Siculan Period into different regional sub-groups.

In particular, Bernabò Brea focused on the formal distinctions between a western and eastern Castelluccio group through looking at pottery shapes and decorations from well-known assemblages recovered by Orsi at Montedoro, Montesara, Monteaperto and Monte Racello (Bernabò Brea 1954, 174-176). As stated in Section 2.1.2, this painted pottery is characterised by a variety of shapes and decorative motifs that certainly facilitated Bernabò Brea's splitting typology to define mutually-exclusive groups of artefact types. As examined in depth in Chapter 6, shapes range from shallow cups to deep bowls, a huge variety of jars and pedestalled vessels (Figure 2.6).



Figure 2.6: Eastern (A) and western (B) assemblages, shapes and decorative motifs (source: Bernabò Brea 1954, 222-223, pls. 9 and 10 respectively, not to scale) A: Cemeteries of Monte Sallia and Monte Racello, typical forms from (1, 5) Monte Sallia, burial 1; (2-4) Monte Sallia, burial 9; (6) Monte Racello, burial 1. B: Western province of Agrigento, typical forms from (1-3, 5-8); Monte Aperto; (4) Cannatello. The figure schematises the variety of shapes that characterised the painted Castelluccio repertoires. Figure 2.6A shows, for example a variety of hourglass shapes, how they were deployed into different kind of pots, such as cups and jars. Figure 2.6B shows more angular shapes such as bi-conical vessels. The illustration also elucidates the variety of decorative motifs and patterns that characterise these repertoires. Lines, triangles and butterfly are essential motifs (A), which can be deployed into complex arrangements (B). Vertical lines can form bundles alternating to hutching covering the main body of the vessel. Horizontal groups of lines often decorate the upper part of the vessel. See Table 2.3 for relatable chronological phases as defined in current scholarship.

Bernabò Brea examined both the morphological and stylistic varieties, looking also at the decorative aspects of the Naro Partanna collection stored at the museum of Palermo (Figure 2.7). In defining differences between shape, he distinguished an eastern group from a western group (Bernabò Brea 1954; 1957; 1958), where, for example, the hourglass shape was virtually absent (Figure 2.6). Likewise, he saw the richly decorated motifs of the vessels from Montedoro-Montesara-Monteaperto as indicative of a later chronology (Bernabò Brea 1958, 113-114), and recognised the "Bell Beaker-like" vessels of the Naro Partanna collection as informative of an earlier phase of the western group (Figure 2.6).



Figure 2.7: Castelluccio, Naro-Partanna shapes and decorative motifs of the earliest phase in the development of the western style according to Bernabò Brea (source: Bernabò Brea 1958, 117, fig. 21). Vessels from: (a) Partanna; (b-e) Naro. The evidence according to which Bernabò Brea developed the relationship between Naro-Partanna and the LCA is also that of the shapes like the bottle (a) which is similar to LCA Sant'Ippolito jugs. Likewise, we can also notice the lack of hourglass shapes that appear to be characteristic of Castelluccio in the eastern regions while there are apparent similarities in terms of decorative patterns and motifs, e.g. parallel bands and triangles, with the Sicilian beaker stylistic repertoire.

In the 1960s, further discoveries of ceramic materials were made in the Etna region, where a group of important cave sites with stratified deposits associated with Castelluccio and LCA materials, was explored (Tinè 1960, 123). These sites, namely Grotta Pellegriti, Grotta Maccarone, Grotta Pietralunga and Villaggio Garofalo, became crucial in providing other stratigraphic information with associated pottery for the sequence. As discussed in Section 2.2.4, they further strengthen the analysis of Castelluccio ceramic variability in terms of LCA connections to the Aegean-Anatolian world. For instance, Bernabò Brea observed the stark contrast between the later Montedoro-Montesara pottery mentioned above and the LCA pottery from the Etna sites (Bernabò Brea 1968-69), where materials similar to those of the

Naro Partanna collection were found above the LCA levels. In this sense, the sites mentioned above offered new evidence of LCA-EBA pottery to frame within the context of Western-Eastern Mediterranean contacts.

Observations about the type of contact were further elaborated in *Considerazioni sull'Eneolitco e sulla prima età del Bronzo della Sicilia e della Magna Grecia* (Bernabò Brea 1968-69). Bernabò Brea argued that pottery from the deposits of Grotta Maccarone and Grotta Pellegriti represented, as much as the vessels of Naro-Partanna, a proto-Castelluccio phase that shared traits with the LCA production of Sant'Ippolito (ibid., 34-45). Likewise, he also argued for a Cypriot origin of the Proto-Castelluccio style, as he did for Sant'Ippolito using the same arguments (ibid.). Meanwhile, the pottery from Grotta Pietralunga and Villaggio Garofalo would have expressed, in his scheme, a mature stage of production, chronologically linked to the late western style of Montedoro-Montesara-Monteaperto (ibid., 45).

2.3.4 New assemblages and ideas

After the discovery of the Etna sites, other new sites were excavated in central-western Sicily and the Sicilian Uplands in the last four decades, leading investigations of the Castelluccio style and culture in new territories, as illustrated in Figure 2.8. The latter maps out the six regional groups defined by Cultraro. It is not clear, however, how these groups were defined (Cultraro 1989, 272-277; 1991-92; 1996; 1997, 356-357). In fact, Cultraro did not discuss emergence and development of mutually exclusive regional groups of shapes, even if he mentioned them (Cultraro 1996, 170). Meanwhile, the identification of four chronological phases is more convincing since it relies on further typological cross-links between the new contexts of central Sicily and the Etna deposits, as shown in Table 2.3. Indeed, the dots represented in Figure 2.8 include the most important new sites upon which Cultraro based his new comparisons, in particular the site of La Muculufa (Figure 2.8, group D; Table 2.3) where 20 new radiocarbon dates were collected (Holloway et al. 1990). The excavation strategy at La Muculufa did not permit the establishment of a long stratigraphic sequence for the whole site, since only a few hut contexts were fully excavated, as discussed further in Section 5.5.2. This hindered a meticulous evaluation of the contextual association between typological data, stratigraphy and radiocarbon determinations, forcing Cultraro to make further use of cross-cultural links.



Figure 2.8: Definitions of the regional groups in Castelluccio Sicily (elaborated from Cultraro 1996, 166, fig.3) A: Etna group; B: Syracuse group; C: Iblei group; D: Gelese group; E: Nisseno-Agrigentino group; F: Belice group. Actually, there is no critically questioned evidence of six mutually exclusive groups of regional assemblages. Rather, the limits posited by Cultraro seem to correspond mainly with natural barriers and/or corridors.

The same chronological sequence was acknowledged by Procelli. He stressed a phylogenetic connection between Sant'Ippolito and Castelluccio looking at the ceramic evidence from Contrada Paolina, in the south-east of the island, in the province of Syracuse (Procelli 1981, 100-102). Before this paper, the south-eastern part of Sicily was a neglected area of research, even though most of the sites were initially discovered there by Orsi. However, links with LCA style had not been identified by Bernabò Brea, who later focused his attention on the Etna areas where these links were apparent. Looking at the materials from Contrada Paolina, Procelli managed to establish these links through a comparison with the ceramics from the site of Deposito Sapienza in the Etna region.

Phase	Typological cross	s-links	Region (see Figure 2.8 for keys)		
	Shapes	Decorative motifs	Key sites		
1	Ovoid jars, flat-bottomed bowls	Sant'Ippolito decorative patterns (wolf teeth, lines and dots)	A (Grotta Pellegriti, Grotta Pietralunga, layer 3); B (Sant'Ippolito al Bersaglio); D (La Muculufa); E (Grotta dell'Infame Diavolo); F (Naro-Partanna)		
2	Oval jars, bowls, conical handled vessels	Lines of chevrons, hatching patterns	A (Grotta Pietralunga, layer 2; Biancavilla); B (Barriera, Novaluccello); C (Castelluccio scarico; Contrada Paolina, Monte Tabuto); D (La Muculufa sanctuary; Manfria); E (La Ragusetta, Grotta Ticchiara; Naro); F (Partanna; Pietralonga)		
3	Angular and hourglass vessels	Butterfly motifs, horror vacui	A (Grotta Pietralunga, layer 1); B (Torricella); C (Monte Tabuto, Castelluccio cemetery); D (Manfria, hut 9); E (Montesara, Montedoro, Monteaperto; Monte Grande)		
4	Very high pedestalled vessels, carinated vessels	Poor decoration of exterior surfaces	A (Deposito Sapienza, Villaggio Garofalo); B (Ossini San Lio, Passanatello, Coste di S. Febbronia, Valsavoia); C (Piano dell'Angelo, Grotta Chiusazza, Castelluccio, Monte Racello, Monte Sallia); E (Serra del Palco di Milena, Vallelunga-Marianopoli		

Table 2.3: Chronology of Cultraro regional sequence.

A slightly different position on pottery variations, regional boundaries and chronological developments was undertaken by Tusa who was more open to external theoretical influence. In a comprehensive new synthesis of Sicilian prehistory (Tusa 1999), the scholar suggested more caution in organising the Castelluccio cultural sequence into very distinctive regional groups and clear-cut chronological sub-phases of development, owing to the paucity of radiocarbon-dated stratified contexts (Tusa 1999, 348-350). There were still few radiocarbon determinations at that time in comparison to the growing body of evidence regarding the Aegean-Anatolian links. Therefore, Tusa recognised the general validity of the traditional pottery sequences and regional groups but also provided an alternative view. In particular, he attempted to focus on socio-economic processes of transformations looking at humanlandscape interplay and settlement patterns; the aim was to investigate how development of Castelluccio communities was affected by this interaction. Tusa sought to investigate the relationship between human occupation and the surrounding landscape by examining prehistoric remains at Pietraperzia (Central Uplands) (Tusa 1991). In this example, the scholar sought to discern settlement and economic trends in the area from geomorphological aspects to connect with the exploitation of natural and animal resources (Tusa 1991, 38).

2.3.5 Current themes

Current definitions of Castelluccio developments have not incorporated Tusa's observations, although the definition of regional groups no longer appears to be the focus of sustained pottery examination. Instead, chronological refinements of the current scheme remain central. Iannì (2004), for example, carried out an extensive survey campaign along the Salso River valley with the aim of identifying different site types to link with Cultraro's four chronological phases. The lack of significant stratified contexts led Iannì to focus on evidence of Castelluccio occupation in the form of ceramic scatters. This work resulted in a chrono-typological seriation of available pottery evidence without truly establishing a connection with specific settlement patterns, even if a few interesting hypotheses have been developed regarding, for example, defensive strategies and occupation of inland hilltop sites. In fact, only links with the La Muculufa style were identified, and further studied by Iannì, which came to link the earliest Castelluccio occupation of the Salso River valley with further expansion of 'La Muculufa style' northward (Iannì 2009). More recently, excavations at Case Bastione (Giannitrapani et al. 2014) permitted further refinement of this sequence in the Salso Valley.

Cultraro (2004) also reconsidered the formal and stylistic variability in the published repertoires still focusing on chronology, regional groups and traditional concepts of style, though it is worth noting the attempt at offering a slightly more social interpretation of these developments. The stylistic variations expressive of the regional groups are seen in this paper as media for transmission of information between groups. In fact, the researcher remained focused on the chronological dimension of change in these motifs without truly explaining *how* the arrangement of these motifs might have conveyed information and *why*. Instead, he simply argued that the diminution in quality and quantity of the decorative schemes through time would express social fragmentation in groups that developed in isolation (ibid, 110-111). Finally, Gennusa (2015) offers the most recent contribution that, through quite a comprehensive reassessment of the available ceramic evidence, elaborates a parallel sequence of mutually exclusive artefact types defining four phases of development across all the island. While this comprehensive approach is interesting, the social implications of considering regional and chronological variations as an expression of a homogeneous complex spread across the island remain unaddressed.

2.3.6 Conclusions

Despite the emergence of new ideas, current sequences show that Bernabò Brea's reconstruction of the social and cultural developments of EBA Sicily persists. We have seen that the legacy of the study of the LCA background was extremely influential in the development of the Castelluccio sequence that stresses both differences between regional groups and long-distance cross-cultural links with the eastern Mediterranean. We have seen also how the emergence and development of these regional groups was first organised into two regions, then into six. Such an approach was already in place in Bernabò Brea's first synthesis on Castelluccio Sicily, *La Sicilia prehistórica y sus relaciones con Oriente y con la Península Ibérica.* It became apparent later in more comprehensive syntheses, including his prehistory of the Aeolian Archipelago (Bernabò Brea 1957; 1958; 1977-78; 1980; 1991-92). These accounts remain unchallenged and the regional groups in place without further critical questioning (e.g. Iannì 2009; Gennusa 2015) (see Table 2.4 for a comparison between the earlier and latest sequences).

Bernabò Brea (1954; 1957; 1958; 1968-69		Cultraro (1991-92; 1996; 2004)		Iannì (2004; 2009)	Gennusa (2015)	Shared cross-linked contexts
East	West	East	West	Central Uplands	Overall Sicily	
Proto- Castellucciano Etneo	Early style /Naro- Partanna	1	1	0	0	La Muculufa village
Classic style		2		1	1	La Muculufa sanctuary; Case Bastione
		3		2	2	Case Bastione
Late style	Montedoro- Montesara- Monteaperto/Late	4	4	3	3	Grotta Maccarone

Table 2.4: Comparative scheme of the available cultural sequences of Castelluccio.

2.4 Themes characterising the study of Castelluccio Sicily

In view of the considerations expressed above, analysis of artefact variability in the local tradition of study overemphasises differences and static boundaries, while ignoring crosscutting similarities across space and time. In the first instance, this led to the disregard of aspects of pottery variability potentially linked with social porosity, interaction and hybridisation. Instead, themes like cross-cultural contact and cultural assimilation developed at the expense of a more comprehensive understanding of material culture and its centrality and embeddedness in the social life of people. Therefore, the analysis of local practices and interaction shaping and being recursively shaped by material culture was neglected in the primary pursuit of seeking differences in material culture to isolate culture-bearing groups defining static boundaries. In this view, exogenous materials occurring in Castelluccio assemblages became very important indicators, while unpainted local ware was completely neglected. Besides, we have seen how attempts to explore the socio-economic life and relations of prehistoric cultures characterised few Anglophone account of central Mediterranean prehistory which, however, barely described and studied the strong regional patterning characterising Sicilian CA-EBA material culture. This amplified instead of having reduced the divide between bottom-up accounts of local material culture distribution and top-down social interpretations. In turn, it has offered new scope for novel integrated approaches and interpretations of ceramic variability as active representation of social boundaries, practices and interaction.

2.5 Synopsis

This chapter has discussed past and current approaches to the study of Castelluccio culture and society with the aim of singling out the main themes of research, highlighting, however, the lack of connection between local material culture studies and society. In fact, there is a gap in the understanding of this relationship that Anglophone top-down approaches did not fill, as seen above. Similarly, Italian studies which focused on variability as passive representation of cultural groups neglected this gap overtly, focusing on the description of pottery sequences, cultural groups and chronological phases. This led to a poor comprehension of both large and small-scale mechanisms through which reproduction of local material culture might have driven social transformations. Instead, external factors such as cultural assimilation were preferred as drivers for developments, without considering local practices, interaction and adaptive changes over longer periods of time. Thus, I shall discuss these themes together in the following chapter, before engaging in an analysis of the ceramic record to link with a representation of social dynamics.

CHAPTER 3: THE NATURAL, SOCIO-ECONOMIC AND CULTURAL BACKGROUNDS OF CASTELLUCCIO SICILY

This chapter explores the landscape background of Castelluccio Sicily. I will begin by presenting the geology of the island, climatic changes and the impact of human intervention. Next, I will discuss land use and resource exploitation in reviewing the evidence of Copper Age (CA) and Early Bronze Age (EBA) Castelluccio sites distribution across the island. Finally, the discussion will be expanded to CA-EBA material culture, in particular, stone tools and pottery. The aim of this chapter is therefore to focus on the longue durée of Castelluccio history and open up new understandings of social boundaries, practices and long-term adaptive strategies as interwoven factors.

3.1 THE LONGUE DURÉE AND CASTELLUCCIO ARCHAEOLOGY

As discussed in Section 2.1, the emergence and development of EBA Sicily has been placed under the lens of Anglophone studies that emphasised inter-regional networks. In these studies, there was a tendency to generalise about societal developments without considering contextual patterns of local interactions and practices. Analysis of the human-landscape interaction often complemented these approaches, while escaping detailed examination of the local material culture. However, both small-scale human activities and large-scale natural agents have long been recursively shaping factors that characterised much of the societal and cultural transformations in the Mediterranean, as persuasively argued by Braudel (1972, 11). Single events lie at one end of the scale, informing accounts, for example, of battles, while the longue durée of climatic and geological factors shaping the world lie at the other end. In the middle, events developing over a generation, for example, take place (ibid., 21). In this view, understanding of human relationship with the landscape over the longue durée can offer scope to contextualise emergence of the Castelluccio groups and support a social interpretation of what material culture produced and used by these very groups represented in terms of local practices, interaction and social boundaries.

This chapter explores the landscape background to the CA-EBA social developments drawing from available archaeological record. The aim is to discern distribution patterns in settlement trends, subsistence economy and material culture to relate with social organisation and regional interaction. I shall therefore reconstruct the Holocene landscape first. To do so, I will discuss the development of the geological background by looking at the earliest tectonic movements in the area and the impact of climatic change. The extent to

which both forces, in shaping the island present-day topography, determined the longest lasting pattern in the history of the relationship between humans and the landscape cannot be underestimated. As further shown below, actual landforms upon which human settlements developed derived from a combination of thrusting and uplift of Tertiary sedimentary basins. Eventually, the climate had a further effect upon these and shall be considered also.

3.2 THE LANDSCAPE BACKGROUND

3.2.1 Introduction

Sicily is the largest island in Italy with a surface of 25,708 km² (Benedetto and Giordano 2008, 117), bounded by the waters of three seas: the Tyrrhenian to the north, the Ionian to the east, and the Sicilian to the south. As we see it today, the island's topography is comprised of mountains, valleys and rivers (Benedetto and Giordano 2008, 117-120) (Figure 3.1). In fact, this landscape is the outcome of a complex collisional system of orogenic uplift and basin sedimentations, originating after the convergence and interaction of the different Palaeozoic-Mesozoic paleogeographic domains in the Tertiary era (Basilone 2018, 16-22). The following section will explore the history of these interactions through time, with the aim of explaining how the Holocene geomorphology developed from these interactions. Actual rock bodies forming the topography of the island reflect this history and represent the geological background to the vegetational cover and terrain upon which CA-EBA groups settled. A description of this background will follow the history of movements that forged current Sicily, arranged from the earliest Permo-Triassic lithological units to the latest Mio-Pliocene sedimentations.

Finally, I shall discuss the climatic oscillations. Pointing first to climatic oscillations as significantly impactful factors was Vita Finzi, who first established the idea that devegetation of the Mediterranean landscape could have been a product of large-scale environmental changes, besides clearance linked with intensive agriculture (Vita Finzi 1969, 115-116). As in many other Mediterranean regions, past climates in Sicily ranged between arid and sub-arctic. More recently, palynological data from the core samples of Lake Pergusa (Sadori and Narcisi 2008; Sadori et al. 2013) and Urio Quattrocchi (Bisculum et al. 2012) has been collected, showing a tendency towards more arid conditions at least since 8000 cal. BC and the spread of grasslands (Sardori et al. 2013, 1978). Landscapes in the form of grasslands potentially suitable for pasture would have driven groups to settle inland and not necessarily to focus on farming activities. Likewise, earlier geological strata exposed through erosion – once the vegetational cover was diminished by shifting climate conditions towards increased aridity –

might have facilitated access to the mineral resources. Thus, I shall first consider the geology of the island.

3.2.2 Tertiary geology

The earliest tectonic movements were triggered by extensive structural changes that affected the foreland area of the Afro-European zone during the Permian-Triassic times ca. 250 mya. Catalano et al. (1991) refer to this as the origin of the Permian Sicanian domain, a deepwater marine sedimentary basin belonging to the Tethys Ocean (Figure 3.2). Sedimentation in marine environments as such have been particularly important in the uplifting of Sicily.

The earliest history of the Permian-Sicanian basin is reflected in the Permian-Middle Triassic stratigraphic units outcropping, as further shown below, in several actual rock bodies. Originally, this basin likely was a westward prolongation of the Neotethys Ocean (Stampfli 2005, ch.3, 747-762), bordered by carbonate reefs (Figure 3.2). Erosion of the reefs resulted in pelagic sedimentations that filled the bottom of the basin up to the end of the Triassic (Catalano et al. 1996). It is believed then that Jurassic extensional rifting split the earliest basin into two different basins, triggering erosion along the carbonate margins of the ancient basin and the creation of shallow, marine carbonate sedimentations (Basilone 2018).



Figure 3.1: Topography and hydrology of Sicily. The main rivers and formations are labelled. The predominance of hilly terrains under 1000 metres asl is evident, intersected by the occurrence of many natural corridors, incised by the river channels. A multifaceted character stems from such a patchwork of naturally embedded features that shape the actual Sicilian landscape. Map, keys and reconstruction by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT) http://srtm.csi.cgiar.org).



Figure 3.2: Paleogeographic reconstruction in the area of present-day Sicily. The carbonate platform signals the beginning of the Tethyan continental margins during the Permian and Triassic. Deep-water basins were located where today the central part of Sicily is uplifted, surrounded by shallow-water carbonate rift environments (source: Catalano et al. 1996, 315, fig. 22).

Originally bordered by carbonate platforms, the Permian-Sicanian basin would have fed a large amount of debris material to the newly created basins, the so-called Imerese and Sicanian domains, through erosion (Basilone 2018). Abate et al. (1982) defined another domain of carbonate platform, the so-called Panormide region, which today makes up the outcrops in north-western Sicily (see below). Likewise, Yellin Dror et al. (1997, 283) posit the emergence of a shallow-marine carbonate platform in the present-day area of the Hyblean Plateau, following the Late Triassic onset of rifting and corresponding to the Hyblean-Pelagian domain (Nigro and Renda 1999, 54).

Further subduction and thrusting movements deformed these paleo-domains belonging to the Tethys Ocean. Specifically, it is believed that the Later Oligocene-Early Miocene rotation of the Sardinian-Corsican block, originally belonging to the Iberian Plate, caused an inversion of the extensional Jurassic tectonic processes, triggering collision between the European and African continental plate and the uplifting of the Sicilian Apennines (Cherchi and Montadert 1982). In combination with a reduction of pelagic sedimentation, due to the closure of the Gibraltar Strait (Messinian salinity crisis), these events provided more energy to fill the deep-water basins of the paleo-geographic domains with terrigenous deposits. These led to an extensive accumulation of salts and the formation of evaporites on a large scale in the area (Decima and Wezel 1971). These formations eroded the underlying terrigenous deposits. In the Lower Pliocene, around 5 mya, there was then another reversal in tectonic upheavals in relation to the re-opening of the Strait of Gibraltar. The region in which Sicily is now situated entered into a new extensive phase, which caused the marine Zanclean transgression. This event boosted the rise of the sea level again, triggering another cycle of pelagic sedimentation.

Following a massive Late Miocene-Early Pleistocene basaltic volcanic flare-up (Schmincke et al. 1997), the Hyblean Plateau underwent a renewed uplift during the Early-Middle Pleistocene. Meanwhile, thrusting along the frontal part of the Sicilian-Maghrebian fold-and-thrust belt came to an end (Figure 3.3). These new conditions created the accommodation for Plio-Pleistocene sediment accumulation within the Gela-Catania foredeep, a foreland basin filled with several hundred metres of marine clays and sands overlying older successions.



Figure 3.3: Main geological structural elements in present day Sicily. The boxed area represents the Hyblean Plateau uplifted from the foreland area of the Pelagian block, following thrusting along the margins of the Maghrebian-Calabrian belt. These margins are marked by the triangles circumscribing the Gela region as illustrated in the map. Actually, this thrusting and uplifting represented the last major tectonic event, with Sicily almost completely uplifted as it stands today (source: Yellin Dror et al. 1997, 278, fig. 1).

At this point, Sicily was almost entirely uplifted, setting the stage for the final transformations that shaped the present-day topography. Increased climatic cooling

replacing the Pliocene-Early Pleistocene mild climate regime came to shape coastlines and govern maritime and continental sedimentations about 450 kya. This situation was the product of major oscillations in global temperatures, with regular peaks of cold occurring every 100 kya associated with drier conditions and short interglacial periods, especially since the last 500 kya (Broodbank 2013, 88-89). The last of these peaks occurred around 20 kya, with a massive sheet of ice covering Scandinavia, Britain, Ireland, the Baltic and the North Seas, locking up much of the world's water and determining a drop in sea level as much as 110-120 m (Cunliffe 2017, 80). It is calculated that around 17 kya, Sicily was connected to southern Italy and Malta through temporary land bridges (Incardona et al. 2010, 72). Only after the end of the Younger Dryas around 9600 BC, increased warming reinitiated the sea level rise making the earlier Holocene Sicilian coastlines resemble today's (Broodbank 2013, 158).

3.2.3 Pre-Holocene litho-stratigraphic successions and outcrops

The Oligocene rock bodies forming the Sicilian Apennines, the Peloritani Mountains, the Sicilian north-west, central Sicily and the Hyblean Plateau reflect the dynamism of such a process, as mapped out in the schematic geology of the island (Figure 3.4). The earliest lithological succession corresponds to the deposition of Permo-Triassic clastics that originated during the early stages of the southern Tethyan continental rifting. Shallow and deep-water carbonate, clastic-carbonate and siliceous deposits, which originated before the Oligocene orogenic period, formed the Mesozoic-Cenozoic carbonate units (Basilone 2018, 9). The former Permo-Triassic deposition belongs to sedimentations which derived from alteration of the Tethyan paleogeographic pelagic areas (Nigro and Renda 1999, 69). The latter corresponds to subsequent depositions of carbonate platforms (Basilone 2018, 10-15) and should, therefore, be distinguished from the former. Terrigenous deposits of Oligo-Miocene sedimentation, and Plio-Pleistocene evaporites, clasts and pelagic carbonates represent the subsequent sedimentary cover of the earlier basins (Basilone 2018, 10). Finally, the latest sequence is represented by Quaternary units, mainly constituted by Early-Middle Pleistocene continental and marine deposits.



Figure 3.4: Schematic geology of Sicily. ArcMap elaborations, features and labels by the author (sources: Basilone 2018; wms services Geoportale Nazionale).

3.2.3.1 Palaeozoic-Mesozoic succession

The succession is represented by the Permo-Triassic units originated in the area of the socalled Sicillide domain. It consists mainly of deformed rock bodies located in the area north of the African continental plate and likely developed, as mentioned above, from large depositions of pelagic sedimentation. Today, this domain represents the innermost part of the tectonic units of the Sicilian Apennine chain where it outcrops extensively while is barely visible in the west (Ogniben 1960) (Figure 3.4). Upper Jurassic-Oligocene carbonates and sandy mudstones, including the Troina sandstones and multicoloured clays, mainly form the former extension (Basilone 2018, 10). In the west, the Permo-Triassic unit barely crops out in the rock bodies of Cerda and Lercara region, while it is buried in correspondence of Valledolmo (Figure 3.5). The top of this Paleo-Mesozoic succession is represented by the Imerese-Sicano rock units. The main bulk outcrops in the Madonie and Sicani Mountain, and nearby Termini Imerese (Figure 3.5).



Figure 3.5: Main outcrops of the Permian-Triassic unit (a), and Imerese-Sicano domain in north-western Sicily (a-b). The Permia-Triassic-Sicillide unit crops out in the region of Lercara. The Imerese-Sicano crops out in the Sicani, Madonie and Palermo Mountains (source: Basilone 2018, 13, fig. 1.8).

Other carbonate platform deposits form the so-called Panormide domain formed during the Upper Triassic/Lower Jurassic. Outcropping rock bodies associated with this domain can be found in the northernmost sector of the island (Figure 3.4). They mainly consist of stromatolites, limestone and deposits of Dolomite breach (Basilone 2018, 13-14). Frixa et al. (2000) have recently assimilated this domain to the extended carbonatic platform which outcrops in the area of the Hyblean foreland to the south-east. The latter is known as the Ibleo-Pelagiano rock unit (Nigro and Renda 1999, 54) (Figure 3.4). The Ibleo-Pelagiano carbonatic platform is covered by Jurassic to Eocene mudstones, and pelagic limestone (Basilone 2018).

3.2.3.2 Oligo-Miocene succession

Oligo-Miocene terrigenous deposits occur as outcrops almost everywhere in both western and eastern Sicily. These deposits are mainly characterised by clays, marls and sandstones overlying the Permian-Triassic carbonatic platforms (Basilone 2018, 10-13). Carnian to Lower Oligocene deep-water limestone, mudstones, carbonates and cherts outcroppings (so-called Numidian flysch unit) occur especially in northern Sicily (Figure 3.4). Upper Tortonian-Lower Messinian conglomerates, marls and clayey sandstone top Lower Oligocene deposits, as apparent in the Terravecchia formation (Figure 3.4). During the Messinian salinity crisis, extensive sedimentation of evaporites widely spread, triggered by a reduction of pelagic sedimentation. In turn, this led to a substantial accumulation of salts and the formation of evaporites on a large scale (Decima and Wezel 1971). The evaporites eroded the underlying sandy Tortonian substratum. Today, evaporite deposits crop out extensively in body rocks in central and southern Sicily, under the label of the so-called "Gessoso-solfifera" unit (Basilone 2018, 15), particularly apparent in the regions of Agrigento and Caltanisetta (Figure 3.4).

3.2.3.3 Plio-Pleistocene succession

In the lower Pliocene, around 5 mya, the reopening of the Strait of Gibraltar caused reversal of this trend. As discussed above, the region in which Sicily is situated entered thus into a new extensive phase which caused the Zanclean marine transgression. As the reference profile at Heraclea Minoa (established by the International Stratigraphic Commission) shows, the Messinian evaporitic deposits were covered by pelagic deposits of limestones (Nigro and Renda 1999, 55). The formation originated by these depositions is called "Trubi" and outcrops in the region of Caltanissetta, Enna, and in the Gela region (Figure 3.4). The Gela-Catania foredeep was then filled with Pliocene marine clays and sands overlying older Miocene successions. A massive Early Pleistocene basaltic eruption caused the deposition of volcanites, finally covered by the most recent Holocene alluvial deposits (Figure 3.4).

3.2.4 Climate and landscape in the Holocene

As stated in the conclusion of Section 3.2.2, marine incursion following the rise of sea-levels triggered the deposition of marine sediments when the Younger Dryas ended. This was determined by a substantial warming which also led to melting of the last small ice caps of the island. Deep gullies and elongated valleys, previously incised by rivers owing to the lower sea level in Pleistocene times, were therefore refilled by new alluvial sediment. In turn, this infilled marine coastal environments (Stewart and Morhange 2009, ch. 13, 402). Exposed marine-to-continental sediments along the coastal belt, as schematised in Figure 3.4, are

broadly representative of these ultimate changes (Agate et al. 2017). A deciduous, humid woodland likely expanded during this period of climatic amelioration. Pollen research analysis from Lake Pergusa, situated near Enna in central Sicily, shows that progressive spread of predominantly oak forest seems to begin around 9000 BC, followed by elm, hazel and beech (Jalut et al. 2009, 7).

Details of the sequence of Lake Pergusa can be found in Sadori et al. (2013), while a pollen diagram is provided in Figure 3.6, showing the tendency towards open woodland with increased concentrations of olive, pistachio and grasses. All in all, it is sensible to think that during this time erosion was reduced, following expansion of dense vegetational covers across the island. Indeed, as climate improved alongside expansion of different plants, the rise of mixed oak forest would have preserved the topsoil from weathering and increasing its stability (e.g. Silva-Sanchez et al. 2014). Likewise, rivers were driven to incise their beds again, channelled by abundant water regimes following the melting of the last small ice caps in the most elevated places (Stewart and Morhange 2009, ch. 13, 402), shaping again the local geomorphology, especially littoral areas (Figure 3.4). The last maximum concentration of oak pollen is recorded before 3500 BC. After, grasses increased, suggesting a less dense forest cover combined with an increase in prickly scrub in the subsequent phase (Sadori et al. 2013). This suggests an increase in aridity once the climatic optimum of the Early-Middle Holocene had faded into drier, cooler conditions (Broodbank 2013, 262-263).



Figure 3.6: Pollen diagram from core PG2, Lake Pergusa (source: Sadori et al. 2013, 1978, fig. 6). A general trend in the increase of open woodland is evident looking at this picture, except for the bottom. In fact, *quercus* specimens decrease while *poaceae* increase continuously, suggesting the evolution of an open landscape perhaps formed by grasslands or some kind of hydrophilous vegetation (Sadori et al. 2013, 1977).

Increased human activity connected with deforestation and clearance in this context of cooling can be an explanation for the drier conditions, and there may be some truth in the consideration that increased cooling might have triggered more intensive farming. Nevertheless, there is no certain archaeological evidence to say whether diminishing of Middle Holocene forests was mainly linked with increasing farming activities. It seems, rather, that these communities must have practiced some kind of forest management, facilitating the persistence of certain arboreal species than others (e.g. Jamrichová et al. 2017, 56-57). In fact, we know in later times that a large fleet was maintained by Syracuse (Diodorus Siculus, Historical Library, 14.41.4), suggesting that Greeks in the 3rd century BC had access still to substantial woodlands, and that intensive exploitation and massive clearance must have thus begun in their time. By that time Syracuse also increased its political hegemony, becoming the major settlement of Hellenistic Sicily. Livy tells us that grain was a prominently stored good in the royal granaries of Ortygia (Ab urbe condita, 24.21.11-12). It is likely that deforestation accelerated under Roman rule through the implementation of the latifundia system to supply Rome's plebs with grain, especially in case of shortages (Rickman 1980).

It is possible that after the economic, social and cultural collapse following waning of the western Roman Empire, natural vegetation began to recuperate during the Byzantine, Arab and Norman periods. In fact, clearance linked to human intervention and extensive farming regained momentum likely from the 13th century AD onwards (Bresc 1986). It is well known how the opportunity of selling grain to important cities in a newly interconnected Mediterranean world transformed the economy of Sicily in the late Middle Ages (Braudel 1972, 151-152). By the end of the 15th century, the city council of Seville petitioned King Philip I of Spain to negotiate the purchase of grain from Sicily (Horden and Purcell 2000, 116). In this sense, deforestation must have regained impetus in these times, leading to an increase in treeless districts, despite the work of the Spanish king's huntsmen and foresters (Mack Smith 1963, 181).

It is likely that such an intensive exploitation of soils and cutting of trees led to a deterioration of the soil, which, in turn, might have affected soil stability. A massive flood has been reported by King (1973, 106), as recently as 1901, that caused substantial damage in the area of Modica. Generally, it seems therefore that the present-day barren state of the island is mainly an anthropogenic outcome of intensive land exploitation. It is hard to say whether this was a continuous trend but it presumably started with the Greek colonisation of the island. This suggests a different situation for the prehistoric people.

3.2.5 Conclusions

As seen above, Sicilian uplands have become increasingly accessible to extensive farming activities from the 8th century BC to the Roman period (Broodbank 2013, 548). Resurgence of these activities followed demise of the Norman rule possibly (Bresc 1986). Similarly, it is reasonable to imagine how impactful this deterioration became after increased intensive ploughing in the last 120 years, following the 19th-20th century agrarian reforms (Giannitrapani and Pluciennik 1998, 67; Rackham 2008, 57-59). This puts Sicily at the centre of complex historical trajectories, characterised by economic cycles of demise and resurgence (for instance in the commerce of grain), intersecting major political changes (Bresc 1986, 523-544). These considerations permit the reasonable assumption that CA/EBA groups might have accessed a more favourable environment, with fertile soils likely more widespread than today. From this point of view, we can consider the current multifaceted character of the island's topography as the endpoint of this long-term process and try to explore, if not properly read off the landscape, archaeological patterns potentially indicative of the Castelluccio socio-economic system. I will discuss these settlement patterns in the following sections, with the aim of exploring what EBA Castelluccio groups might

have inherited from the CA socio-economic system. In doing so, I shall describe also material culture distribution. Finally, I shall contrast continuity in the socio-economic system with certain degree of discontinuity when material culture is considered, placing Castelluccio Sicily in context in Section 3.3.4. This will permit me to anticipate some considerations about practices, interaction, ceramic variability and societal transformations in Section 3.4.

3.3 CASTELLUCCIO ECONOMY AND SUBSISTENCE

3.3.1 Introduction

Given the extent of soils and exposed rocks potentially available to prehistoric people, one would expect also a variety in exploitation strategies linked with a certain degree of economic specialisation. Where archaeological survey activities have been intensive, such as in southern Italy and the Aegean, evidence of this specialisation is apparent. For example, analysis of faunal materials has showed that in the Biferno Valley (Molise) animal husbandry developed considerably with evidence of cattle-keeping and shepherding (Barker 1995, 113). Exploitation of cattle for their traction, primary and secondary products was not new to the earlier Neolithic world. Evidence of lesions on a few cow thigh bones from Middle Neolithic Knossos (5800-5300 BC) would suggest that cows were exploited in order to pull heavy loads (Isaakidou 2008, 96-104). Besides, CA expansion to higher altitudes might have prompted different ways of exploiting cows, e.g. in the production of more durable dairy products. This would be supported by the appearance of perforated sherds potentially suitable for cheese making in the archaeological record of the period (Broodbank 2000, 83). Similarly, increased presence of spindle whorls in CA ceramic repertoires of southern Italy would suggest further investment in wool production, if we consider that the earliest Italian evidence is dated around the late 4th millennium (Broodbank 2013). This would suggest also that some form of pastoralism might have developed when CA farming communities becoming more and more reliant on animal husbandry, shifted also towards increased use of secondary products such as milk and wool. As persuasively argued by Sherratt (1981), the development of animal husbandry and pastoralism was an essential and decisive ingredient in the early development of agricultural societies triggering a form of symbiotic coexistence between woodland exploitation and clearance.

I argue below that transition to the Sicilian ECA paralleled to an extent this shift, which endured and developed further during the transition to the EBA. Traditionally, this transition was dated around 1800 BC and the period was named Castelluccio after the eponymous site (Bernabò Brea 1956). However, following excavations at the site of La Muculufa, new radiocarbon determinations led scholars to propose a longer duration for this phenomenon between 2500-1700 cal. BC (Holloway et al. 1991). These new determinations led Leighton (1999) to raise the end of the LCA to 2500 cal. BC. Although unusual, such an earlier date seems a reasonable possibility. As shown above, there were certainly new territories and soils available to that time – because of the increased arid conditions – that might have driven the expansion of CA settlements to higher elevations in the search for pastures to integrate with exploitation of lowland fertile soils for farming. In fact, it is most likely that the overall prehistoric landscape was characterised by a canopy of soils, grasslands and woodlands that would have afforded CA prehistoric communities the exploitation of a broad range of resources.

The following sections will discuss the archaeological evidence, starting with the CA background. As shown below, continuity from the LCA can be posited in general for the earliest phase of Castelluccio development when settlement expansion is considered. However, it seems likely that Castelluccio society inherited a good deal of the CA traditions in general. There remain issues for a thorough comprehension of this trajectory across the entire island. In south-eastern Sicily, for example, Thomson's Morgantina survey showed that CA sites outnumber EBA sites (Thomson 1999, 107-112), while in central-southern Sicily an increase in EBA sites is documented in more recent surveys (Iannì 2004; 2016). However, detection of EBA sites in south-eastern Sicily is often linked to identification of ceramic scatters with no architectural evidence (e.g. Nicoletti 2001), suggesting that Thomson's estimates may be high for certain sites in comparison to others. Given these issues and the extended chronological framework, the following discussion will be necessarily limited, mostly focusing on central Sicily where most of the published evidence comes from. Similarly, a discussion of the Castelluccio economy will be also limited, following regional distribution of sites as much as possible. All sites mentioned below are listed in Table 3.1.

Table 3.1: List of sites and locations mentioned in the text. A number is associated with each site and indicates municipality and province. The reader should refer to this number when looking for information on the location of each site mentioned in this section.

Site (no.)	Municipality Province		Location	
2	Adrano	Catania	Catania plain	
5	Adrano	Catania	Catania plain	
15	Adrano	Catania	Catania plain	
16	Adrano	Catania	Catania plain	
		Catania	Hyblean	
39	Palagonia		foreland/southern	
			Catania plain	
		Catania	Hyblean	
40	Palagonia		foreland/southern	
			Catania plain	
	Militello in Val di		Hyblean	
42	Catania	Catania	foreland/southern	
	Gataina		Catania plain	
	Militello in Val di		Hyblean	
43	Catania	Catania	foreland/southern	
			Catania plain	
53	Melilli	Svracuse	South-east/Hyblean	
		0,140430	foreland	
54	Augusta	Svracuse	South-east/Hyblean	
	8		foreland	
59	Noto	Svracuse	South-east/Hyblean	
		,	toreland	
71	Ispica	Ragusa	South-east/Hyblean	
	1	0	toreland	
106	Ragusa	Ragusa	South-east/Hyblean	
120	C 1		foreland	
129	Gela	Gela	Gela plain	
135	Butera	Caltanissetta	Central Sicily	
141	Butera	Caltanissetta	Central Sicily	
143	Butera	Caltanissetta	Central Sicily	
144	Butera	Caltanissetta	Central Sicily	
149	Pietraperzia	Enna	Central Sicily	
151	Caltanisetta	Caltanissetta	Central Sicily	
155	Caltanisetta	Caltanissetta	Central Sicily	
202	Palma di Montechiaro	Agrigento	Central-southern Sicily	
226	Pietraperzia	Enna	Central Sicily	
227	Troina	Enna	Central Sicily	
228	Milena	Caltanissetta	Central Sicily	
229	29 Pietraperzia		Central Sicily	

3.3.2 The Copper Age background

3.3.2.1 Settlement trends and subsistence economy

At the risk of simplifying matters too much, changes in local economic subsistence and technology that are visible in settlement structure and trends seem to parallel trends in CA southern Italy, as mentioned above. These changes certainly shaped socio-economic transformations which must have recursively shaped ways of life, as potentially reflected in new settlement developments. I have mentioned already settlement expansion into new territories; another interesting point is the diminution of "intramural" burials in favour of
collective burials, grouped in cemeteries outside inhabited areas. In Sicily, both the former and latter evidence is far clearer than analysed faunal materials. As discussed in Section 2.2.1, the uniformity of LN Diana Culture was apparently fragmented, as the appearance of different ECA styles would suggest. While it is difficult to explain this fragmentation from a cultural viewpoint, the funerary architecture clearly signals discontinuity with the LN traditions of the island, showing development of rock-cut tombs and collective burials (Tusa 1999, 209).

The contexts attributable to the ECA are particularly numerous in central and western Sicily where settlements are concentrated between the Salso and Belice Rivers (La Rosa 1994; Maniscalco 1994, Giannitrapani 2017, 54, fig. 6). Settlement structures are not known in this region except at few sites such as Case Bastione (149) and Tornambè (226). Yet, the surrounding area is filled with rock-cut tombs with CA materials, showing the divide between inhabited and funerary areas mentioned earlier. In the south-east corner of the island (Hyblean foreland area), a concentration of CA sites occurs on the plateaus of Dosso Tamburaro (42), Fildidonna (43) and Coste di Santra Febbronia (39-40) along the northern fringes of the Iblei Mountains (Cazzella and Maniscalco 2012, 60). The area is now mainly given to wheat cultivation but in prehistoric times it was likely wooded, as suggested by the paleoenvironmental reconstruction discussed above. The settlement evidence would suggest that CA groups might have moved towards upland areas. This should not be surprising; in fact, this might have allowed for a greater exploitation of the local resources through an integrated system of animal husbandry and farming, moving from densely occupied lowland areas towards up hill. A similar pattern can be argued for the ECA site of Rocca Aquilia (228). A trend towards an integrated system of agriculture and husbandry was found by the analysis of faunal remains from this site, where a higher percentage of ovicaprids (71.55% of the total) was detected in comparison to limited presence of wild fauna (Wilkens 1997, 131). Since this seems to suggest that sheep were slaughtered in adulthood, the exploitation of their milk and/or wool seems to have been likely. This raises the possibility that already in the ECA local transhumance might have been integrated with farming.

In this view, this integrated system seems to be a distinctive trait of the transition to the CA, although it remains hard to say at which point land exploitation and use of animal resources became really important, especially because of the paucity of analysed faunal materials. However, some observations can be developed when considering climate change and the positioning of other CA sites in upland regions. For some CA sites such as Case Sollima (227), located at ca. 650 metres asl, for example, we must posit at least an integration in

terms of animal resources, assuming that cooler temperature in the uplands might have reduced the growing period for the crops. A mixed agricultural economy has been posited for this site (Malone and Stoddart 2000, 472). Following further prehistoric survey, archaeologists identified materials from the 4th millennium BC in the form of scatters across a wide area, which led to the identification of Case Sollima hut, subsequently excavated (Ashley et al 2007, 59-80). A similar case can be argued for the hilltop site of Cozzo Amatrice (229), located within the Torcicoda Valley. A study of the faunal assemblages has not been published, however, storage pits have been excavated (Valbruzzi and Giannitrapani 2017, 91), suggesting, even if indirectly, storage practices to mitigate crop shortage.

As stated, the picture is incomplete. In this sense, we are on a more secure ground when looking at the LCA period, characterised by the distribution of Malpasso-Sant'Ippolito ceramics (Section 2.2.4). Indeed, there appears to be an enormous increase in new settlements, especially in central Sicily. As noted by Leighton (1999, 100; 2005) and Giannitrapani (2017, 57-58), new LCA settlements increase in central Sicily by some 60%, spreading from hilltops to lowlands and along the river terraces and valleys. That is, there seems to be an increase in the occupation of every natural niche. From this point of view, transition into the LCA period might have marked a transition to a fully-fledged integrated system of pastoral and farming activities, perhaps with the aim of diversifying resource exploitation strategies as much as possible to reduce the impact of the increased arid conditions of the period.

3.3.2.2 Material culture

I have already mentioned in Section 2.2.1 how similar certain painted CA pottery – e.g. Serraferlicchio, Sant'Ippolito – is to matte-painted Aegean-Anatolian traditions. The distribution of unpainted Bell Beaker-like pottery in the same period is also noteworthy, especially in LCA contexts. As further discussed in Chapter 7, Bell Beaker fragments have been recently found in several CA sites especially in central Sicily (Giannitrapani and Iannì 2011; Giannitrapani 2017). Unfortunately, however, there is not enough critical questioning of pottery production that may allow further insight into the social, cultural and economic life of these CA communities. In-depth analysis of clay sources and production practices remains a neglected topic.

In contrast, lithic tools have been better analysed since the earliest times of modern Sicilian archaeology (I. Cafici 1928). These studies have shown increased specialisation in the chert industry. The sites of the Militello Plateau mentioned above are located on sedimentary

deposits interrupted by a series of paleochannels, containing easily accessible pebbles and basaltic boulders that might have constituted a real open-air quarry (McConnell 2003). Moreover, we have seen above that Cretaceous limestone outcrops exist in the entire area of the Hyblean Plateau; it is full of good quality chert (I. Cafici 1928, 99), and is thus possible that settlement expansion was also driven by the presence of these mineral resources. At the village of San Cono, chert processing seems to have taken place in a well-defined sector of the site (C. Cafici 1925). Among the lithic materials of this settlement, the presence of numerous arrowheads that were certainly made on site is also notable (I. Cafici 1899), suggesting a workshop station. It is noteworthy, from this point of view, that first appearance of chert arrowheads is limited to this period, with no arrowheads in the preceding Neolithic phase. It seems that they developed particularly during the LCA (Nicoletti 1996a, 61), suggesting a trend towards increased specialisation characterised by the making of retouched geometric tools.

3.3.3 Transition into the Castelluccio period

3.3.3.1 Settlement trends by regions and subsistence economy

3.3.3.1.1 The Etna region and the plain of Catania

In the eastern part of the island, sites have been surveyed that yield Neolithic-to-Castelluccio materials. Many were identified along the south-eastern fringes of Etna and the southern margins of the plain (Figure 3.7) (Cultraro 1991-1992: 10, 762-765). As noted by Franco (1968), these were major tracts of fertile soil. Indeed, this area was populated at least since the Neolithic, so that presence of Castelluccio materials would suggest a certain degree of continuity. Architectural evidence is rare, while most sites correspond to caves, e.g. Maccarone (5), Tartarici (2), Filiciosa (16). In this group, the settlement of Fogliuta di Adrano (15), Grotta Maccarone, Grotta Pelletriti (15) and Grotta Pietralunga (15) have long been the most important, since they represented, as discussed earlier in Section 2.3.3, pivotal contexts in Bernabò Brea's chronological scheme.



Figure 3.7: Distribution map of sites in the Catania Plain and Etna region. 1: Simeto River, 2: Dittaino River, 3: Gornalunga River. While no sites are found within the plain itself, many are concentrated along its the northern and southern margins. Only few are situated inland westward. ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT) http://srtm.csi.cgiar.org).

This distribution is striking when compared to the lack of evidence *within* the Catania Plain itself and on its western margins, west of the Erei Mountains (Figure 3.7). Resource availability does not seem to have been a problem – in fact, the plain is filled with fertile soil and is rich in river terraces, including the major channels of the Simeto, Dittaino and Gornalunga Rivers. Today, it is fully cultivated, making such a lack of evidence strange when considering the agricultural potential. Thucydides reported of some danger of malarial infection in the Anapo Plain in the 5th century BC, and this may have been a reason for the lack of populated areas, although it does not explain absence of sites far from marshy coastal areas. Another reason may be the lack of defensive locales, but this does not seem to have hindered establishment of Castelluccio settlements in flat topographies elsewhere, as further shown below. In this view, I am more inclined to think that sites in the Catania Plain were ultimately buried under recent alluvial deposits.

3.3.3.1.2 The Hyblean Plateau

Settlement choices influenced by landscape use and integration with animal husbandry are more evident in this region. Castelluccio sites appear again on the southern margins of the Catania Plain. Cretaceous limestone (Hyblean foreland) with good chert outcrops is close to the area (Figure 3.8). Plateaus with CA sites like Fildidonna (43) and Santa Febbronia (39-40) continued to be densely occupied, as shown by some settlements and cemeteries (Maniscalco 2012; 1996a; 1996b; 1997; Mentesana 2015). Thirty rock-cut tombs were found by Orsi in the location of Cava Cana Barbara (54) (Orsi 1902b). Thus, it is possible that continuity of settlement locales and funerary architecture indicates a persistence of CA habits, at least as far as exploitation of chert is concerned. From this point of view, it is likely that EBA sites such as Coste di Santa Febbronia (39-40) or Fildidonna (43) might reflect specialised centres of chert exploitation. In this view, there are no reasons to object *a priori* to supposing continuity in animal husbandry despite the lack of direct evidence of faunal remains. As stated above, the area was likely rich in woods and grasslands, especially towards the interior, with a cooler upland climate potentially shaping the movement of flocks.



Figure 3.8: Distribution map of sites in the Iblei Mountains, northern sector. Many sites are located on high-standing plateaus, although few coastal sites are also present. Chert is provided by the calcareous limestone which form the substratum of the Hyblean foreland. ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT) http://srtm.csi.cgiar.org).

In bypassing the south-eastern foothills of the Iblei, we encounter another group of Castelluccio sites that are located partly along the coast, partly on the mountains of the interior (Pelagatti and Del Campo, 1971, 16, 31ff; Pelagatti 1973, 26-29) (Figure 3.9). No evidence of milking boilers was detected, yet fragments of perforated vessels potentially suitable for diary production were found in this area (Di Stefano 1976-77). An important site is Castelluccio (59), one of the few with evidence of architecture (huts), as further shown in Chapter 5. The site of Timpa Dieri/Petraro di Melilli (53) is situated on a hill overlooking the narrow coastal strip between Syracuse and Augusta (Castellana 2002, 38; Tusa 1999, 361-363; Voza 1968-69, 173-192). In the municipality of Ispica, the fortified site of Baravitalla (71) is located. Excavations in 1982 unearthed the remains of two huts (Di Stefano 2002, 100: 126-127). Near the mouth of the Ippari, in the municipality of Camarina, is the site of Branco Grande (119) (Castellana 2002, 38; Tusa 1999, 396-398; Orsi 1907, 33, 45; Orsi 1910, 3-26). Finally, there remain the complex of Monte Tabuto (106), where Orsi found chert outcrops and evidence of lithic exploitation associated with funerary remains (Orsi 1898). Also in this case, continuity can be traced back to the evidence on the other side of the Iblei Mountains, at Fildidonna and Dosso Tamburaro, as discussed above.



Figure 3.9: Distribution map of sites in the Iblei Mountains, southern sector. ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT)http://srtm.csi.cgiar.org).

3.3.3.1.3 Central Sicily and the Uplands

Where the Hyblean horst ends the Gela Plain begins, in which there is an abundance of Pleistocene clays and Holocene deposits, suggesting that it must have been an alluvial basin with only sparse vegetational cover. Again, this would explain the paucity of sites within the plain (Figure 3.10), likely buried under recent alluvial sediments and/or destroyed by modern urbanisation of the area. The plain may be considered as a catchment basin separate from the area of the Hyblean horst to the east and the central part of the island to the west, yet strictly interlinked with both, as the occurrence of ceramics with shared stylistic traits at the site of Manfria (129) would suggest (Orlandini 1962). Manfria is situated between the Gela and Salso Rivers. About nine huts have been excavated there (Tusa 1992, 405-406; Orlandini 1962; Procelli 2003, 571ff).

Analysed faunal remains from Manfria support the hypothesis that it was situated within an open woodland environment, showing a predominance of cattle, wild boar and deer (Orlandini 1962). This information confirms a trend in the local economy of this site that can be compared with the other nearby regions. Occurrence of other EBA sites in the area of the Gela Plain is suggested by distribution of rock-cut cemeteries, especially along the northern hills that bordered the coastal plain (Figure 3.10). In particular, towards the western margins of this belt, near Butera, tombs were identified on the plateau of Suor Marchesa (141), Monte Desusino (144) and Milingiana (143) (Panvini 2003). Again, these are fertile areas, especially because of the presence of many springs, and site distribution can thus be interpreted as reflective of economic choices when compared with the settlement expansion.



Figure 3.10: Distribution map of sites in the region of Gela, 1: Gela River and plain; 2: Salso River. The map shows that there are few sites within the plain, while many are concentrated up-hill along the belt surrounding the Gela Plain and along the course of the Salso River. ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT) http://srtm.csi.cgiar.org).

Further westward and inland, between the Platani River valley and the Erei Mountains, lies a region characterised by a varied geomorphology (Figure 3.11). As discussed above, this geomorphology is the product of extensive Miocene-Pliocene cycles of marine-continental sedimentations, including deposition of the evaporitic series (Nigro and Renda 1999, 55-69) (Figure 3.4). Further Neogene tectonic uplifting excavated deep gullies (Decima and Wezel 1971), exposing outcrops rich in Miocene-Pliocene clays and marls. A landscape developed accordingly in which a variety of clay sediments, rocks and sulphur outcrops are encrusted within Tertiary units (Figure 3.4). Also in this area, changes in the last 10000 years further modified the landscape, following pan-Mediterranean Holocene transformations from wet woodlands to open grasslands and a generally drier environment. The result is an extremely varied landscape incised by the course of the Salso River and its tributaries, potentially affording varied exploitation of interconnected environmental niches.

Continuity between CA and EBA settlements is far more evident in this region. As already highlighted in Thomson's survey, newly founded EBA sites represent here almost 60% of the total. In a recent survey of the Salso River valley, Iannì identified dozens of other sites with CA-EBA materials (Iannì 2004). As further discussed in Chapter 7, CA ceramics occur, for example, at La Muculufa (135), Case Bastione (149) and Monte Grande (202). Considering the variety of exploitable sources, this should not be a surprise. In fact, besides cultivation and pastoralism, local inhabitants may have had access to a variety of local clay sources (Terravecchia and Pleistocene clays) and sulphur (Figure 3.12). As stated above, sulphur mining deserves a dedicated research focus. Uncertain evidence of sulphur exploitation for this period comes from the site of Monte Grande (202), where sulphur outcrops are apparent and traces of smelted sulphur were found in a layer with CA-EBA materials associated with stone structures (Castellana 1998; 2000). In view of this evidence, it is hard to be certain but possible that sulphur might have been exploited. Sulphur is indeed quite a toxic element but can be used as natural fertilizer in intensive farming (La Rosa 2005). Perhaps soils might have been artificially enriched with this element in the attempt to offset the increased arid conditions of the period. Although speculative, this strategy might be retrospectively convincing if we think that still in the last century arid summer conditions in this area would have forced people to gather plants in the previous months to supplement cultivated vegetables, plus the use additional water to feed them (Gower Chapman 1973, 15-24).



Figure 3.11: Distribution map of sites in central-western Sicily. 2: Salso River; 3: Platani River. ArcMap elaborations, features and labels by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT) http://srtm.csi.cgiar.org).

Regarding animal husbandry and herding, analysed faunal remains show an increasing integrated system of farming and pastoralism. Mortality patterns in faunal analyses from the EBA levels of Monte Grande (202), for example, show that young ovicaprids represent only 15% of the assemblage, while almost half (40%) of specimens are adult individuals (Cultraro 2005, 203). This pattern resembles that of CA Rocca Aquilia. Moreover, Cultraro has noted that this picture is comparable with archaeozoological data from La Muculufa (135). So far, these data are consistent with a trend towards further economic specialisation. In this region particularly, the long Salso River valley would have facilitated the development of large transhumance tracks towards the very interior of the island (Figure 3.11). The fact that the terraces and hills along the river were densely populated, as shown by most recent surveys (Iannì 2004; Giannitrapani et al. 2014; Giannitrapani 2017), would support this scenario. Again, while settlement evidence is poor, such as that from Case Bastione, large cemeteries with Castelluccio materials have been identified together with large scatter areas of potsherds on top of extensive plateaus. Tombs were found, for example, at Gibil Gabib (151). Meanwhile, there are indications that Monte San Giuliano (155) was an important centre, with a few structures and a large cemetery exposed (Iannì 2016). Site as such in the valley might have been turned into crossroads/transhumance stations.



Figure 3.12: Site distribution and resources in central-western Sicily. ArcMap elaborations, features and labels by the author (source: Basilone 2018).

3.3.3.2 Material culture

The EBA lithic industry differs from preceding CA tradition. As discussed earlier, chertbearing strata lying in the Iblei region might have afforded local LCA communities situated in Fildidonna and Dosso Tamburaro good quality chert for retouched geometric tools. EBA communities near Monte Tabuto (106), where concentrations of working floors where identified by Orsi, might have exploited also chert. However, this former industry appears to be mainly characterised by bifacials and tranchets (Nicoletti 1997a, 395). The bifacial group is mainly characterized by axes, often a coarse flake industry. It is referred to as the Campignano type and distinguished by a better quality chert blade industry (Nicoletti 1996a, 62; 1996b). Evidently, the former differs from the LCA retouched, geometric tools previously mentioned, for these characteristics. Besides, occurrence of a Castelluccio blade industry informs us of diversified exploitation of chert sources. Combined with the settlement trends, this diversification would suggest a persistent, if not increased specialisation in tool making, following CA trends.

The same can be argued for the so-called Castelluccio pottery, although aspects of production have been overshadowed by stylistic analysis. We know that, as discussed already in Section 2.3.3, there is an inescapable general resemblance, in terms of shape and decorative techniques, with the matte-painted Aegean-Anatolian traditions. In fact, vessels relatable to Castelluccio contexts appear to be characterised by a wide range of fabrics and colours. Published information regarding these aspects is scarce, if not virtually absent. However, in my research visits it was possible to identify museum materials including both very coarse wares, up to 2 cm thick, to thin-walled fine wares such as that from La Muculufa sanctuary. Analysis of its mineralogical and chemical constituents remains limited to the assemblages of La Muculufa (135). These have shown results compatible with exploitation of local clay sources and manganese from the vicinity of the site (McConnell 1995, 60). Manganese, which is rich an iron-oxide, could have been used as a pigment for the surface of the painted vessels. However, without knowing the array of the different clays that might have been used, we can only guess the exploitation strategies and forming techniques. Fairbanks suggested (1977, 129), for example, that pots were initially formed by coil-building but we cannot rule out the possibility that some containers, especially the largest jars, might have required more expertise and a different technique, e.g. paddle-and-anvil. Actually, the variety of available clay sources and tempers offered by the varied geology (Figure 3.4) might have afforded potters different clays (Rice 2005, 137). Potting might have been in this sense the result of a complex chaîne opératoire, in which practice, experience and perception were

likely significant factors (e.g. Gosden 1994, 82; DeMarrais et al. 2004, 2; Scarre 2004, 141). From this point of view, it is possible that certain pottery production also might have represented the product of highly skilled people.

3.3.4 Conclusions

Considering the persistence of CA settlement patterns and resource exploitation strategies over the longue durée, it is possible that the emergence of Castelluccio groups represented the end of a cycle in continuity with the preceding phase. Chert exploitation, flint knapping and pottery styles partly seem to reflect this continuity, although the occurrence of grey ware pottery is also noteworthy. As stated above, unpainted pottery in Castelluccio assemblages is frequent though it remains often unpublished. Moreover, there are other ceramic styles present which are roughly contemporaneous with the Castelluccio painted pottery such as beakers, RTV, CG and TM. They may represent a patchwork of styles that most likely overlap in several areas. As discussed in Section 2.1, such non-Castelluccio traditions in Castelluccio pottery studies are not examined, while their importance is evident, in view of the observations developed above. They suggest that Castelluccio material culture was developed in a broader framework of local social interaction. Indeed, we cannot exclude the possibility that local Castelluccio coarse ware and the aforementioned grey ware pottery were, in fact, one and the same. This opens up the possibility of a certain degree of discontinuity with the preceding phase, suggesting a persistence of CA life-ways yet within a context of shared practices and social porosity opened to hybridisation and inter-cultural contact. Considering this patchwork of material culture distribution, it is evident how selective current examinations of Castelluccio assemblages have been till now, while an approach to ceramic variability that integrates analysis of both painted and unpainted wares from mixed assemblages, as stated in Section 2.4, is needed. I shall discuss these traditions, namely beaker, RTV and TM, further in Chapter 7.

3.4 LONG DURÉE, SITUATED PRACTICES AND CERAMIC REPRESENTATIVENESS

The preceding discussion of settlement trends, land use and analysed faunal materials suggests that the 3rd millennium BC was characterised by development of pastoralism, increasingly intensive farming, animal husbandry and some degree of specialisation in tool making. The results suggest the emergence of an integrated subsistence economy based upon more intensive exploitation of secondary products, which triggered in turn the development of certain settlement trends, shaping and being recursively shaped by the surrounding environment. It is possible that this trend indicates the emergence of strong traditions during the 3rd millennium that adapted to the environment and persisted in a developed form during the EBA. However, the similarities encountered in the local pottery styles would indicate also that, as discussed above, local and regional interactions with other groups must have been frequent. This would suggest that emergence of the Castelluccio agro-pastoral communities was linked to the persistence of CA life-ways and that innovation and local cultural contact might have affected subsequent transformations. The issue is how reproduction of CA life-ways intermingling with innovation was upheld by local interaction and practices that were recursively shaped by such contexts.

As stressed earlier in Chapter 2, local practices and interaction were ignored by Anglophone social interpretations of EBA Sicilian material culture which, hence, remained disconnected from local mechanisms of social manipulation. This chapter raises the possibility of linking both persistence of CA traditions and innovation with local material culture patterns likely representative of local social boundaries and practices upholding the reproduction of those very traditions within a context of interaction. Rather than make regional assessments of each EBA style, I shall thus bring together both EBA painted and unpainted ceramics in a comprehensive study of shape and size variation. As further explained in the following chapter, in doing so I shall draw upon Bourdieu's concept of habitus to discuss variability in the archaeological record as representative of social boundaries and practices.

3.5 Synopsis

This chapter has illustrated the potential to explore social developments and adaptive processes in CA-EBA Sicily over the longue durée. However, it also showed the possibility that further short-term developments took place in a context prone to innovation and interaction. This offered scope for debating over the kind of socio-economic transformations that encompassed 3rd millennium Sicilian communities, setting the stage for a detailed morphometric study of the Castelluccio pottery assemblages as representative of practices, social porosity and interaction. The following chapter will show how to approach pottery variability in these terms.

CHAPTER 4: APPROACHING CERAMIC VARIABILITY, REPRESENTATION AND SOCIAL INTERPRETATION

This chapter explains how ceramics will be examined through a classification of the formallydefined aspects with the aim of investigating shape and size variations through space and time as representation of social boundaries and practices. This approach is missing from existing scholarly typological examinations of Castelluccio pottery. In fact, further understanding of social boundaries and practices is hindered by the manner in which Castelluccio artefact variability is currently interpreted. The chapter discusses first the theoretical reasons for this before going on to consider alternative approaches to material culture and society. First, it highlights processual approaches, then post-processual and new materialist approaches. Finally, I will present my own methodology.

4.1 INTRODUCTION TO POTTERY VARIABILITY AND REPRESENTATION IN CASTELLUCCIO SICILY

In current understandings of Castelluccio Sicily, the archaeological record is seen as a passive representation of cultural groupings. The missing theoretical aspect therefore pertains to a lack of understanding of the active role played by material culture in shaping society, and vice versa. On the one hand, this gap was no doubt maintained by a long-lasting interest in cross-cultural contacts and assimilation, all hallmarks of the Castelluccio research in traditional agendas (Section 2.4). Firmly entrenched in a cultural-historical milieu, this interest provided the background for the development of a grand history of migrations. On the other hand, we have seen that Anglophone interests in social interpretations preferred generalising models involving supra-regional interaction instead of contextual bottom-up analyses of the archaeological record (Section 2.1.3). I argue that an emphasis on both long-distance contacts and supra-regional social networks overshadowed the possibility of looking at situated interaction and practices between and within the local groups, as well as CA traditions over the longue durée. In turn, this impeded further understanding of how material culture was locally reproduced – shaping and being recursively shaped by local practices, interaction and long-lasting habits.

This opens up new possibilities to approach what local material culture might have actually represented when linked to CA continuity, local practices and interaction. Representational studies have usually complemented archaeological investigations of material culture. In fact, more recent new materialist approaches have tended to apply models of production and consumption that emphasise more the centrality of people's engagement with materials over meaning, chronology and context (A. M. Jones 2012; Cochrane and Jones 2012). As further shown below, artefacts are seen as less representational than they are related with mutable materials, experienced and manipulated by people to construct their own identities, stressing or weakening social boundaries. While I do not argue against this possibility, my simple objection is that enacted performance with materials can still be representative of worldviews that have recursively shaped the entire process (e.g. Hodder 1982; Shanks and Tilley 1987).

This recursive interplay between active engagement and overarching structure can be interpreted with reference to Bourdieu's (1977) theory of practice, when applied to a study of the representational character of artefact variability. In this case, although grounded in the realm of practice and daily-life experience, material culture retains its meaning in so far as it is recursively reproduced and maintained through practices. Hence, the importance of a study of Castelluccio pottery variability cannot be underestimated, since it will offer scope to discuss what kind of social boundaries and practices are represented in the archaeological record. An alternative classificatory approach is needed in this vein which, as further discussed below, is able to stress both differences and similarities in the dataset. As shown in Chapter 2, this strategy escaped traditional typological accounts. Meanwhile, Anglophone scholars have simply neglected bottom-up contextual assessments of how material culture is structured through formally-defined aspects, space and time. The following sections shall discuss, therefore, notions of material culture, representation, materiality and habitus in processual, post-processual and new materialist approaches. The aim is to show what kind of classificatory approach can be taken further in order to carry out my investigation of ceramic similarities, differences, social boundaries and practices.

4.2 ARTEFACTS, REPRESENTATION AND SOCIETY

4.2.1 Processualism

In the New Archaeology of the 1960s and early 1970s, scholars pursued a systematic reaction against normative views of material culture which saw artefact variability as passive reflection of people's cultural affiliation (Binford 1962; 1965; 1971; 1972; Renfrew 1972). Arguing that culture in normative approaches was studied in isolation (Binford 1965, 203), North American archaeological research in particular provided scope for a conceptualisation of culture in terms of adaptive responses. Conceiving culture as an adaptive process – as originally defined in White's concept of culture as product of extra-somatic adaptations (White 1959, 8) – found in Binford one of his fiercest advocates. In Binford's (1965, 205) own words: *If we define culture as man's extrasomatic means of adaptation, in the partitive sense culture*

is an extrasomatic adaptive system that is employed in the integration of a society with its environment and with other sociocultural systems.' Binford's redefinition of culture led to the examination of the archaeological record not only as passive objectification of distinct traits belonging to one and the same cultural group but as informative of complex adaptive systems (Binford 1965, 205).

This is also evident in the works of Flannery. In his (1976) edited volume *The Early Mesoamerican Village*, treating obsidian exchange in the region as marker of elite central redistribution (ibid., ch. 10) led to a comprehensive explanation of the emergence and development of the local cultural systems. In this work, Flannery and other authors examined settlement patterns, economics and environmental adaptation in the valley of Oaxaca (Mexico) during the Formative Period (1500 BC-AD 500). They looked concurrently at three interconnected levels of analysis: the household, the settlement and the regional environment. The importance of the interplay between all these levels is recognised, showing through an investigation of obsidian redistribution the extent to which obsidian allocation was driven by the establishment of elite households at the regional level.

Thus, scholars started to emphasise the functional complexity of the systems in which cultures and material cultures were embedded. Such an approach was able to break the static character of the cultural units upon which reconstruction of prehistoric societies had been built, putting forward a further understanding of artefact variability as a product of interactions (Sackett 1977, 376-377). For instance, Hill, explained emergence of different style patterns in the local ceramic design as representative for mother-to-daughter transmission in pottery making, embedded within a matrilocal society (Hill 1970). Such studies started to acknowledge the social embeddedness of material culture production and distribution (e.g. Lathrap 1983, 37; Arnold 1983, 56).

This trend is also evident in the early works of some British processualist archaeologists, such as Renfrew. His book (1972) *The Emergence of Civilisation: The Cyclades and the Aegean in the Third Millennium B.C.* developed on the same processual ground, yet it focused on society rather than cultural systems. In Renfrew's reassessment of the emergence and development of Minoan and Mycenaean civilisations looking back at the local EBA cultures and society, artefact variability and distribution informed discussions about the emergence of central places and their role in the organisation of productive activities and redistribution (Renfrew 1972, 51-52). For Neolithic and Copper Age Europe, where such places were absent, Renfrew highlighted instead the role of eminent elites who expressed their status through

ownership and display of certain objects. He suggested, for instance, that the rich grave goods in the Varna cemetery were instrumental to vehicle expression of personal prestige and ranking (Renfrew 1986).

Turning to prehistoric Italy, an approach similar to these is apparent in Peroni and Di Gennaro's (1986) seminal work on the emergence and development of social hierarchies and socio-economic units in MBA-LBA central Italy. Analysis of cemeteries and settlement trends has been of paramount importance in this school of thought in establishing regional chrono-typological sequences of artefacts to correlate with emergence of personal prestige, rank and economic specialisation. Several studies developed in this frame (Peroni 2004, 471-472; Pacciarelli 1991-92, 164; 1994, 230; 2001; Cardarelli and Di Gennaro 1996; Mandolesi 1999, 135), which focused on processes of settlement selection, concentration and stabilisation, and funerary display, informed by regional overviews of artefact variability. Pacciarelli's (1991-92; 1994, 230; 2001) examination of regional aspects of ceramic variability and settlement distribution in northern Latium (*Etruria meridionale*), for example, interpreted the deposition of ceramics in burial contexts as an expression of elite status and increased socio-economic hierarchy.

4.2.2 Post-processualism

In view of these considerations, one might argue that this processual strand already opened up the possibility of interpreting material culture as embedded in the realm of the social, involving, therefore, a reconceptualisation of culture as an aspect of social organisation. Nevertheless, such a link remains, as shown above, essentially functional, while complex issues involving the fluidity of the relationship between the social and the material was addressed explicitly in post-processual developments. Hodder (1986) argued that archaeological investigations of material culture should 'make abstractions from the symbolic functions of the objects in order to identify the meaning content behind them, and this involves explaining how the ideas denotated by material symbols themselves play a part in structuring society' (Hodder 1986, 124-125). This argument was key in fostering a very different understanding in Anglo-American scholarship of what material culture represents to those very people that ascribed it with meaning. Understanding archaeological objects as the materialisation of individual thoughts and actions was a concern in culture historical studies of artefact variability, however, without the idea that material culture itself plays an active role. In other words, the necessity to explore the complexity of people's involvement with material culture emerged. Or, as Shanks and Tilley (1987, 97) noted: 'In considering the nature of material culture as communication, as a form of writing and silent discourse, we need some perspective on the relationship between the individual subject and society'.

Such a paradigm emphasised how objects are meaningfully constituted, embedded within a web of associations which gives them meaning and influence how they are produced and used. Hodder argued (Hodder 1982, 125), for instance, that questions about stylistic variability can only be answered when it is possible to measure the multiple social variables affecting production, distribution and use of artefacts. Examining development of decorative cross-motifs among the Nuba of Sudan, for example, he claimed that a generative grammar, a logic beneath the decoration of the calabashes, was embedded in a system of social rules (Hodder 1982, 174-181). This new way of thinking emphasised the centrality and embeddedness of material culture in both cultural processes and social organisation, opening up alternative understandings of social boundaries, cultural representation and representation of individuals and social values.

From this point of view, understanding the structured and structuring role of material culture in daily-life experiences became increasingly important in order to pin down the unstable, fluid meaning of objects with reference to spatial context. Gosselain (1992) demonstrated, by investigating how pottery-making is undertaken among different groups in Cameroon, that the existence of specific manufacturing techniques was strongly determined by cultural and social practices constrained by local interactions. He showed, for instance, that most of the techniques employed in the creation of pottery depended upon a set of inculcated rules, concluding that: *'all the potters I was able to interview, among Bafia as among other groups, are convinced that there are no possible alternatives to their shaping techniques'* (Gosselain 1992, 572). Leading on from this, it might be argued that the production of certain objects can be used to express identities, enhance the breakdown of boundaries, or be used and consumed in order to express status or prestige.

In S. Jones' work (1997, 119-127), for example, investigating the use of artefacts in practices became an essential tool to shift the focus from artefacts as passive representation to artefacts as actively arranged assemblages of objects expressing cultural difference. Similarly, in exploring Neolithic Britain, A.M. Jones (2001, 106), examined how social boundaries are expressed through production use and deposition of grooved ware pottery, contending that identities are formed out of this relationship. Moreover, bodily engagement and performance complemented further use-practices oriented studies which focused on how objects became functional to symbolise status and/or enhance prestige. For instance,

Skeates interpreted increased distribution of portable objects in graves, such as copper artefacts, in LCA southern Italy as an indication of increased demand in new valuable objects for social display (Skeates 1993). He argued that copper was rare in Apulia, and, therefore, exotic, providing scope for ascribing it with prestige value. The deposition of retouched flint arrowheads, long blades and polished stone axes alongside the dead would have also represented the same intent in symbolising prestige, perhaps in mortuary ceremonies upholding religious beliefs (Skeates 2005, 153).

4.2.3 Materiality and typologies

Understanding artefact variability in terms of practices became increasingly significant to the point that individual perception, experience and engagement with materials have been recognised as further important themes in attempts to explore how enacted worlds are represented through material culture. Actually, this perspective derives from early-mid 20th century anthropological studies tackling experience as a fundamental aspect of people's socio-economic life. The argument in Marcel Mauss' *Les techniques du corps* that knowledge is acquired through engagement of human body with things is foundational to this approach. Mauss argues that things, experience and knowledge are all linked together and that this link varies in a number of ways depending on any particular social context and, at a complex level, society (Mauss 1935). This reflection has been taken further by André Leroi Gourhan in *l'Homme et la Matière* (Leroi Gourhan 1943) and more recently by Lemonnier. Lemonnier in particular has argued that "All techniques are simultaneously embedded in and partly a result of non-technical considerations" (Lemonnier 1993, 4).

Over the last two decades, however, it has been argued that materials worked by humans also actively influence establishment of rules imposed by humans upon them (Meskell 2005; A.M. Jones 2012, 200). The argument that knowledge, experience and making things are all interlinked in shaping and being recursively shaped by the surrounding world has therefore been taken further in developing the concept of engagement with raw materials (e.g. Michelaki, Hancock and Braun 2011). For Jones, for example, pottery production is rather a performance in which every activity is not pre-determined but rather the results of cumulative experiences dealing with forming techniques and selection of raw materials (A.M. Jones 2012, 192). Similarly, in exploring plastering practices and raw material exploitation at the Neolithic site of Çatalhöyük, Turkey, Boivin argues that the significance of making artefacts lies '*in the fact that they are part of the realm of the sensual, of experience…rather than the world of concepts, codes and meaning*' (Boivin 2008, 9-19). Besides, further attention given to emotions

and senses engendered the belief that distributed objects are less representational than they are linked with processes of engagement with materials (e.g. Cochrane and Jones 2012, 11).

It is understandable, in view of these considerations, how typological approaches to artefact variability are demoted, in this period, to simple classificatory tools to organise the archaeological record. A.M. Jones (2012, 191) argues that the non-representational character of artefact variability, potentially expressive instead of human experience and performance, cannot be explored through approaches that conceptualise variations into categorical groups. Rather, in arguing that greater attention should be given to materials rather than objects, typologies and classifications are explained as a substitute for knowledge (ibid., 183-184), inadequate for exploring practices, boundaries and interaction. However, this may not always be the case, especially when changes through time are considered. In fact, I shall argue below that an understanding of culture and society in terms of fluid dynamics can still be approached through classificatory methods.

4.2.4 Artefacts, representativity and society: an integrated classificatory approach

This consideration stems from the fact that experience is predominant over context and chronology in A. Jones' stated work (but see also Thomas 1991; Brück 2004a; 2004b). Jones (2012, 192) assumes that pottery distribution reflects only fluid, contingent behaviours that are not pre-determined, using concepts such as "repetition" and "citation" when approaching pottery-making, for instance. That is, artefact variability is seen by Jones as product of bodily engagement with materials encapsulated in experiences living the moment. As stated in Section 4.1, I do not object that, yet, I also argue that external norms might have still shaped certain performances. In fact, as Osborne observes (2008, 284), ritual and tradition can be overlapping concepts. Whether pottery variability can reflect both remains an unaddressed issue by Jones which gives greater significance instead only to experience (A.M. Jones 2012, 197). How patterned variability is maintained beyond contingent circumstances and vice versa escapes his evaluation. For example, while in Jones' view performance and rituals appear as the most important factors impinging upon societal transformation, external structures potentially affecting local pottery-making, e.g. exchange networks, and persistent traditions anchored to old life-ways are not considered. In fact, how experiences foundational to society are anchored to both small and large-scale geographic and temporal factors remain unaddressed. This exposes Jones' approaches to ceramic variability to further critiques and opens up new ways of using classificatory tools to link how material culture variability is structured through space and time with representation of the society.

Classificatory tools have long been criticised because static views of cultures often stemmed from typological definitions, as shown by the approaches to Castelluccio pottery variability discussed so far (e.g. Bernabò Brea 1968; Cultraro 2004; Iannì 2004; 2009; Gennusa 2015; see Table 2.4). However, this is a just an interpretation of artefact variability that does not consider both similarities and differences but stresses only one or the other. In fact, both similarities and differences in material culture are important features in the process of social reproduction, as is apparent when applying Bourdieu's notion of habitus to archaeological analysis (1977, 2). In this notion, shared dispositions that may concurrently constrain and enable routine actions of individuals are accommodated (Bourdieu 1977, 77-79). The role played by individuals in the reification of the social structures was familiar to most postprocessualist archaeologists. As discussed above, some rejected definitions of human culture as just an extrasomatic means of adaptation in turning to Bourdieu's notion of habitus (Ortner 1984, 148), or other social theories highlighting the capacity of individuals to produce social change when engaging in practices (e.g. Giddens 1984, 6-7). Poblome et al. (2006) show, for example, how objects are embedded in society and are part of practices which may inform their use and the extent to which their use is focal to reconfirming established practices. Ceramics, in this view, can be seen as important markers of everyday activities, yet are embedded in and representative of shared worldviews and traditions (cf. A.M. Jones 2012).

In this sense, it is argued that uniformity in the composition of archaeological assemblages, is *representative* of socially engendered dispositions in daily routines involving one or more shared practices. Instead, differences in the archaeological record would represent attempts to change, if not disrupt, traditional life-ways, promoting innovation. This suggests that it is possible to interpret artefacts as representative of situated pratictes contingent upon innovation *and* traditional templates by quantifying and qualifying variability, opening the possibility of using classifications as hermeneutic tools to contextualise interpretation on variability. For example, it can be hypothesised, given the variety reflected in the composition of the regional Castelluccio assemblages, that a certain degree of functional uniformity represents shared activities connected with traditional use-practices, while stylistic variations might signal innovative reactions in a context of local interaction. A renewed interpretation of both similarities and differences in this sense can build upon Bourdieu's (1977) observation that habitus *represents* a shared, unconscious, perpetuation of long-lasting habits, yet providing also the basis for change.

In view of these considerations, I argue that an understanding of Castelluccio pottery variability informed by Bourdieu's notion of habitus can be pursued through a pottery classification of similarities and differences. Similarities will be indicative of dispositions that are part of long-lasting traditions, while differences can represent episodes of modification or true change within a shared background of interconnections. It is argued that a classificatory approach to artefact variability as reflected in the composition of the regional assemblages can, thus, further an understanding of Castelluccio material culture and society. In turn, this will provide new interpretative models for the emergence and development of EBA groups in Sicily to link with social porosity, practices and interaction.

4.2.5 Conclusions

Following the review of current approaches to pottery variability, I discussed the possibility of building my interpretation of ceramic variability in Castelluccio assemblages based upon Bourdieu's notion of habitus, which accommodates dispositions of shared habits with changes. This view highlights the possibility that pottery variability reflected in archaeological assemblages is representative of enduring traditions that were nonetheless open to innovation and change. This will permit a reassessment of the emergence and development of the Castelluccio culture relating ceramic variability with the representation of habitus, social boundaries and practices. Evidently, exploration of ceramic variability is key to this objective, as defined in Section 1.2.2. In particular, an analysis of variability in this vein shall investigate both similarities and differences and explore regional and chronological variations, as discussed below in depth. Analysis of the relationship between objects, space and time was at the heart of traditional typological studies but without considering practice and boundaries. Likewise, we have seen above that the temporal and spatial dimension remained a neglected aspect of research in new materialist approaches to artefact variability which label typologies and classifications as inadequate tools. My typological and classificatory approach to ceramic variability will foster new perspectives on local sociocultural changes incorporating practices, habitus and interaction as potential drivers for local developments, as discussed further in Chapters 8-9.

4.3 Methodology

4.3.1 Introduction

Data quality issues have also shaped the development of this new approach to ceramic variability. If this was not the case, a combination of spatial analysis and *ad hoc* scientific determinations might have offered some scope to investigate specific production and use-related practices (e.g. Hildebrand and Hagstrum 1999; Tani 1994). It is almost certain,

however, that published pottery evidence would have reflected palimpsests of activities uneasily relatable with specific practices. Similarly, had specific assemblages been selected from publications as case studies, it is also likely that they would have not only reflected distribution of local inventories linked to specific activities, but also chronological variations, reuse and discard practices. For the same reasons, a focus on non-domestic activities, such as ritual and/or communal consumption practices, e.g. feasting, would have been impossible. In fact, only recently have scientific campaigns become more aware of the importance of complete stratigraphic excavations (e.g. Giannitrapani et al. 2014), generating a huge, yet, unpublished amount of information.

Besides, a habitus-informed ceramic classification encompassing both similarities and differences opens up a variety of classificatory methods through which exploring social boundaries, practices and interaction in terms of statistic representativeness. Identification of decorative types and patterns through a stylistic classification, for example, might have been used to explore the emergence of local traditions and shared traits (e.g. Graves 1985). Most Castelluccio ceramics are painted, as described in Chapter 3, and we have seen in Chapter 2 that many scholarly examinations of artefact variability were conducted through a classification of stylistic attributes. In fact, the development of a classificatory method to explore decoration as a proxy to help understand variability as representative of social boundaries would have failed to argue for statistically relevant patterns, since examined repertoires do not include only painted ceramics. Instead, they also include unpainted pottery, as highlighted in Chapter 3.

As shown further in Section 5.1, this led me to examine and map the distribution of 217 sites, namely across south-eastern and central Sicily, and focus on formally defined aspects of pottery variability in order to examine both painted and unpainted ceramics. Indeed, there are such mixed Castelluccio assemblages which have previously escaped scholarly examination that I have included in this work. Moreover, such an expanded research area will permit me to incorporate also cross-cultural links to non-Castelluccio materials in the regional assessment of the formally-defined aspects of variability. The following sections explain in detail how formally defined aspects of variability will be classified and arranged into a taxonomy through a study of functional differentiation. They also show how I shall use the same variables for a chrono-typological study of the regional and chronological variations.

4.3.2 Formally-defined aspects of variability and functional differentiation: qualifying and quantifying variability

Formally-defined aspects of pottery variability express variations in shape and size that may correspond to functional differentiation (Rice 2005, 215-217). The concept of functional differentiation can be explained as that of variability in the shape and size of containers potentially affecting the ways in which containers are used. Functional differentiation is therefore different from the concept of actual use which defines what pots are/were truly used for. It is usually the actual use of pottery that receives sustained examination in practiceoriented archaeological investigations but it is completely useless for the purpose of this thesis. Moreover, studying actual use is difficult, since it requires accessing archaeological museum collections and invasive techniques, such as gas chromatography which requires sampling (Mills and White 1977; Heron et al. 2015, 36-37). Alternatively, use-wear analysis may not be invasive but still requires direct access to the container, plus fair levels of preservation. Instead, functional differentiation can hence be employed as a heuristic concept to explore similarities and differences through a morphometric classification of the published painted and unpainted repertoires. Through this method, we can ascribe objects to categories considering functional differentiation instead of actual use. There are limits in this classificatory approach too that concern the way in which ethnographic sources can help to approach functional differentiation, as further shown below. However, the advantage is that such an approach will permit the arrangement of a taxonomic scheme that will reflect the level of differentiation encompassing both painted and unpainted Castelluccio vessels. Finally, a habitus oriented view of this taxonomic differentiation, following assessment of time and regional variables, will lead to, as noted above, an interpretation of shape and size variability as statistically representative of differences and similarities which are indicative of social boundaries and practices.

4.3.3 Approaching functional differentiation: ethnographic sources of evidence

4.3.3.1 A note on Mediterranean ethnography

As stated above, ethnographic evidence will be used in order to approximate functional differentiation in the archaeological datasets. For this purpose, I shall review ethnographic ceramic corpora in order to compare ethnographic size ranges and function with morphometric variability in archaeological pottery. Ethnographic and ethnoarchaeological information represent one of the most important sources to approach functional differentiation (Sillar and Joffré 2016, 1-2). However, the problem concerns the type of analogy: the stronger the analogy, the better the comparison. Some authors argue that it is

of paramount importance to run analogies when ethnographic inventories parallels that of the archaeological context within the same region (Varien and Mills 1997, 159). It is possible that similar ecological conditions, combined with persistent strategies of traditional subsistence economy and manufacture, may lead to analogous ceramic assemblages (Nelson 1991, 180). In fact, such an analogy often relies on assumed historical and cultural continuity, on the belief that the ancient substratum lives on the ethnographic present which, in turn, instructs us about the past.

Ethnographic studies of the Mediterranean have made ample use of this kind of analogy, and we cannot ignore Braudel's influence upon it. On the contrary, his timeless view that some aspects of the Mediterranean landscape and life-ways have been immune to change a strong belief that past lives on in the present (Braudel 1972, 1332; Braudel and Wallerstein 2009, 178-179) - constitutes the underlying assumption in many ethnographic studies that emphasise continuities over the longue durée. This is already evident in Pitt Rivers' Mediterranean Countrymen, in which islands and mountainous peninsulas in the region are seen as remnants of an arcadian past (Pitt Rivers 1963, 9). Similarly, in Portrait of a Greek Mountain Village, du Boulay only occasionally observed how external socio-economic and political pressures were affecting life-ways in a Greek mountain village (du Boulay 1974, 258). Likewise, Blitzer's Storage jar production and trade in traditional Aegean does not seem to encourage the reader to bear in mind that development of 19th-20th century AD local jar production and trade took place during intense periods of civil wars and conflicts. In fact, Blitzer's reconstruction of Aegean LBA storage jar (pithos) trade follows the discussion of 19th-20th century Peloponnese storage jar distribution and production, as if the immediate background would have not affected these patterns (Blitzer 1990, 59).

These are classic examples informed by a traditional Braudelian view of continuity, which was fundamental to unfold, as seen in Chapter 3, a Sicilian (pre)history of the relationship between humans and environments. In fact, we have seen in Section 3.2.4 how the Holocene history of that relationship, although inevitably part of the longue durée of natural and economic changes, amounted also to wider political events. This evident in Barker (1995). A traditional Braudelian conception of history is apparent in this volume from the title, with the work purposing to unfold the history of the Biferno Valley (southern Italy) since the Palaeolithic to the post-fascist era. In actual fact, the complex socio-economic and political events of the region prevented from the identification of a continuous trajectory. On the contrary, differences in the socio-economic life-ways of this micro-region were articulated by observations of animal husbandry and pastoralism practices already in modern times. We find, for example, that the latter's evolution from a developed form of 16th century AD longdistance transhumance is very complex and constrained by particular social, economic and political conditions that were certainly absent in earlier prehistoric groups. As Barker noted:

"...typical was a law of 1549 that no flocks from Abruzzo or Molise could begin their journey to Apulia before September 15th, except in case of exceptionally bad whether coming early to the mountains, and on no account could they cross the Biferno before October 15th. They then had to remain on the pastures around Larino and San Martino in Pensilis until October 31st, during which period the flocks were counted and winter pastures on the Tavoliere (Apulia) assigned." (Barker 1995, 292-293).

A similar case can be argued for agricultural practices. After the formal abolition of the feudal regime in the 19th century, major landowners still successfully protected their rights against the majority of poor farmers. As Barker observed (ibid., 297), most of the land in the 19th century still belonged to landlords, while only in the 1950s was it possible for the post-unitarian state agencies to sell land to the majority of people at low cost. This provided local farmers with new means to maintain their "traditional" ways of life. In fact, it has been argued that the reforms created a new client class entirely dependent on national government agencies (ibid., 303). In this sense, despite the fact that present-day traditional pastoralism and farming might still be similar to earlier practices, the context of practice in which they now operate bears no resemblance to that of much earlier periods. In fact, the context in which local prehistoric agro-pastoral groups might have operated must have been really different from that of the 19th-20th centuries after the agrarian reforms.

Transformations following 19th century AD feudal reforms in Sicily are similar to those which occurred in the Biferno Valley. As Blok (1966) noted, peasants were utterly dependent upon landlords who granted them the land for livestock pasture and farming. Following the British invasion of Sicily in the early 19th century, the landlords lost some of their rights. In fact, they maintained ownership of pasture and arable land until the 1950s (Bandiera 2003; Montalbano 2012). Despite other state-driven reforms, social upheavals were confronted by the regional government and the Mafia, who cooperated with the landlords to maintain control over the sale of private land (Montalbano 2012, 7-9). All these transformations and restrictions in the socio-economic and political scenario of Sicily in the 19th early 20th centuries contributed to shape the very specific character of contemporary rural society in

Sicily, primitive to an extent, yet, fully entrenched in the social and political history of the 19th-20th centuries.

Development of present-day traditional Sicilian pottery production such as Sciacca and Caltagirone wares must inevitably reflect these transformations. These productions are clearly set in a post-industrial background (Lo Giudice et al. 2017, 226), while continuity with the Italian maiolica tradition holds true only formally if we consider the urban economic and social background in which the former Late Medieval production developed (Cox 1949, 354-373). Thus, the link with the local Early Medieval/Arab manufacture is practically inexistent. One may argue for some parallels with Roman pottery production, set in a complex social-agricultural background characterised by the system of *latifundia*. However, when coming to the pre-Greek periods, we enter another transformative cycle, bearing no easy resemblance to the preceding ones.

This does not mean that ethnography should not be grounded in history. As noted by Horden and Purcell (2000, 471), we might guess that 'a vantage point on the *longue durée* is to be found in the period immediately preceding that of the most striking changes that the Mediterranean societies have recently undergone'. That is, we might be taken back to modern pre-industrial societies through a combination of ethnohistoric analysis and 19th century history. However, such evidence is very hard to come by when we turn to examine conditions further back in time. Thus, this strategy might hold true for the reconstruction of a classical society, but major transformations happened in the antiquity that may prevent the assessment of prehistoric agro-pastoral societies using those very parameters, unless we incorporate analyses of ancient ethnohistorians. This would be a strategy similar, to an extent, to that adopted by Bernabò Brea. Ancient Greek literary sources have been employed with the aim of reconstructing the Bronze Age society and cultures of Sicily, yet, with all its limits, as discussed above.

The conclusion that the emergence and development of CA-EBA agro-pastoral societies in Sicily can be easily reconstructed on the basis of an analysis of the ethnographic present – or ancient ethnohistorical accounts – is thus problematic, if not entirely questionable. In this view, as my use of analogy cannot depend on direct historical continuity with agro-pastoral societies in southern Italy and Sicily, I have selected my samples elsewhere from southern Africa and Guatemala. This should not be surprising. In fact, ethnographic parallels with worldwide cultures have long helped in informing interpretations of the archaeological record irrespective of geographic, historical and cultural continuity (Clark 1951, 1953), also in central Mediterranean prehistory (e.g. Robb 2007). Actually, there are issues with this method too and one may object that western colonialism and post-colonial interference have also altered the ethnographic present. In fact, environmental conditions and/or post-colonial rules have led to a certain degree of political and socio-economic marginalisation that may take us effectively back to earlier, stateless, life-ways. As Das and Poole note (2004, ch. 1, 9), 'marginal populations are formed of "indigenous" or "natural" subjects, who are at once considered to be foundational to particular national identities and excluded from these same identities'. In this view, by looking at such cases we can be taken back to stateless life-ways, different yet comparable to an extent with later prehistoric stateless entities such as EBA Sicilian groups. As expounded further below, this will strengthen my choice of approximating differentiation in Castelluccio pottery repertoires through a comparison with size ranges from the selected ethnographic corpora.

4.3.3.2 Ethnographic comparisons

4.3.3.2.1 Introduction

Analysis of these ethnographic corpora stems from a review of ethnographic and ethnoarchaeological literature devoted to pottery making among the Gamo people in southern Ethiopia and the Maya in Guatemala. Both regions have a long history of ethnographic and ethnoarchaeological research on pottery-making (Arnold 1978; Arnold 1991; Gosselain 1992; 1994; 1998; Arthur 2009; Lindahl and Pikirayi 2010; Pikirayi and Lindahl 2013). I shall discuss first the socio-economic and environmental context of these ethnographic productions, then compare each other in terms of scale and mode. I shall draw from this comparison parallels with Castelluccio pottery production. Eventually, I will give a summary of the level of functional differentiation by tabulating ethnographic shapes and size ranges to compare with archaeological pots later in Section 6.5.

4.3.3.2.2 <u>Studied areas</u>

The homeland of the Gamo people in southern Ethiopia is a mountainous region with production of crops limited to distinctive ecological zones (Arthur 2009, 10). This makes the Gamo dependent upon generating an agricultural surplus that can be sold to nearby communities of pastoralists in exchange for meat (Schlee and Watson 2009, 21). In the context of this interaction, a combination of grain – e.g. wheat, barley, sorghum – forms the bulk of the Gamo diet, while meat is limited to certain circumstances, e.g. ritual (Arthur 2009, 18). Local household ceramic inventories reflect this diet, as shown by the variety of shapes schematised in Table 4.1. In fact, the actual number of pots can also be indicative of household wealth. Considering that political power among the Gamo provides access to a different range of consumable resources, including meat, quantity of products can be used as a measure of wealth in certain circumstances, e.g. feasts. In the frame of a patron-client relationship, for example, crafting beer and providing the community with drinking, result in a significant disparity of number of jars when low-ranked (mana) and high-ranked (mala) households are compared (Arthur 2003, 523-524). In fact, the majority of Gamo potting is devoted to the replacement of broken domestic pots for more habitual needs. Production is indeed organised in order to satisfy primarily household consumption, as shown by the small-scale organisation into family workshops. It has been noted how pottery-making is often a family-run form of business in which mothers teach daughters how to make pottery, so that once they have married, can carry on the activity in the husband's family's cluster (Arthur 2009, 30).

Regions/Shapes (Etic name)	Folk classification (Emic names)	Typical uses	Contents	Rim diameter	Height
Southern Ethiopia – Gamo communities (Arthur 2006, 35-44 table 2.2; 2009, 38, table 1)					
Narrow-mouthed small jar	Tsua (n=70)	Drinking	All goods	8	15
Single-handled jar	Jebana (n=51)	Cooking and serving	All goods	8	15
Wide-mouthed small jar	Diste (n=58)	Cooking and serving	All goods	10	12
Wide-mouthed medium jar	Diste	Cooking and storage	All goods	20	20
Narrow-mouthed medium jar	Tsaro (n=145)	Cooking, storing,	All goods	18	40
Large jar	Batsa (n=65)	Cooking, storing	Beer	20.5	57
Bowl	Shele (n=177)	Serving, storing	All goods	25	31
Cup	Sene	Drinking	All goods	7	6
The valley of Guatemala (source Arnold 1978, 357- 369)					
Double-handled narrow-mouthed medium jar	Tinaja	Water transport	Water	7	25
Double-handled wide-mouthed necked jar	Tinaja	Transport	Water	12	25
Single-handled narrow-mouthed necked jar	Jarra	storage	Water	8	26
Large double- handled necked jar	Tinajera	Storage	All goods	48	83

Table 4.1: Comparative classification with size ranges in the examined ethnographic corpora

Similar production strategies have been detected also in Maya traditional pottery-making of Guatemala, while many "traditional" pottery workshops in Mediterranean contexts, e.g. Cypriot, were turned into commercial activities run by specialists affiliated with more than one household. These activities are often devoted to supply the demand of national and foreign markets rather than single households (e.g. Pettus 1993, 28). In comparison, research on the Maya has shown that most potters, especially in Guatemala, tend to work alone or in a family, while a different assembly-line manner organisation has been detected only in few communities (Reina and Hill 1978, 21) which are not examined here. As among the Gamo potters, learning is transmitted within the family (Deal 1998, 27; Hayden and Cannon 1984).

The major concern for these potters – as well as the Gamo potters – is to replace broken domestic vessels for primarily household consumption. In the villages of Sacojito, Durazno and Chinautla, situated on the northern edge of the valley of Guatemala, activities of several pottery-making households were recorded and information collected (Arnold 1978), as schematised in Table 4.1. In this case too, it is possible to observe that shapes are repetitive and simple as among the Gamo.

As further shown below, this system of production can be compared with some archaeological evidence from LCA-EBA Castelluccio Sicily. Yet, one may object that homogeneity in these ethnographic ceramics can be barely compared with the variety of Castelluccio pottery repertoires. The reader should bear in mind, however, that such variety is likely to be the product also of temporal and geographic variation, as examined further in Chapter 7. Moreover, there remain other parallels that can be drawn from the socioenvironmental context in which both Gamo and Maya pottery production developed. Crosscultural similarities between the two areas are evident when considering also the environment and socio-economic context. Since Guatemalan subsistence economy relies mainly on crop cultivation, when this offers an insufficient income, pots can be sold in order to sustain the family economy (Arnold 1978, 344-345). This situation also explains why proximity to clay sources is an important factor. As for the Gamo, it is of paramount importance that clay sources are in the vicinity of the potters' household, so that, if Gamo potters are prevented from exploiting certain sources, they can easily shift to others. Actually, among the Gamo, clay sources are located nearby the potter's house, or in the vicinity of the settlement, often less than 6 km from the village (Arthur 2009, 31).

4.3.3.2.3 Scale and mode of production

In this sense, environment, subsistence strategies and socio-political interaction are all interwoven and reflected in the variety of pottery shape and size in both ethnographic regions, as schematised already in Table 4.1. Development of a household industry scale of production is likely due to these factors, as much as to the lack of municipal or state control over production and distribution. As suggested by Peacock (1982, 13), authorities may well exert some control over the scale and mode of production, triggering the formation, for example, of what Earle defined "attached" specialist producers (Earle 1981, 230). This kind of specialist affiliation is absent in both ethnographic areas. Meanwhile, exploitation strategies, learning processes and evidence of primary domestic use highlight a traditional household industry model that likely endured in marginal frameworks of social interactions,
without the state exerting overwhelming control. This organisation is likely more comparable with Castelluccio's than the ethnographic present in Sicily. It is reflected also in the manufacturing technology used, very simple, devoid of substantial capital investment and of low-rate intensity (Balfet 1965, 162). A combination of coil-and-scrape and paddle-and-anvil techniques are employed by Gamo potters, which usually allows for the production of 70 vessels a week (Arthur 2009, 35-42). As stated, investment in equipment is lacking. For instance, kilns are not used, the bonfire being the most common firing technique. As documented by Arthur (2009, 47), pots are placed on top of a wooden rack after pre-firing treatments of the exterior surface, or place around a small hearth. Similarly, Maya potters arrange a pile of pots, twigs, dried leaves and grass for firing (Arnold 1978, 336-337).

4.3.3.2.4 <u>Conclusions</u>

All in all, the observations stated above suggest that pottery-making was an important subsistence activity, demonstrating how social interaction can be an impinging factor when production is considered, as it likely was in LCA-EBA Sicily. Indeed, cross-cultural comparisons between the Mesoamerican and African examples suggest parallels with Castelluccio socio-economic organisation and environmental background, though only in very broad terms. We have seen the extent to which environmental exploitation and social relations are cross-cultural elements that affected persistence of household industry in pottery-making in the studied regions. A similar case can be argued for LCA-EBA Castelluccio Sicily, having considered in Chapter 3 the possibility that local economic subsistence developed from an active interaction with the environment within a framework of shared practices and social interaction. Archaeometric evidence indicating exploitation of local clay sources for LCA-EBA pottery-making (Fragnoli et al. 2013) points to a similar organisation of pottery production, as suggested also by the paucity of structured kilns at excavated EBA sites. Certainly, this evidence does not exclude the possibility that CA-EBA Sicilian pottery might have been fired in kilns at higher temperature (e.g. Ardesia et al. 2006). As a matter of fact, it strengthens the established parallels with the ethnographic evidence, despite the lack of geographic, cultural and historic continuity.

Because of these comparisons, there is no reason that an approximation of differentiation in Castelluccio assemblages cannot hold true when comparing shape and size variability in the archaeological data with size ranges in ethnographic pottery. This should not be surprising. If recurrent patterns can be defined independently of historical, geographic and cultural continuity, then it is reasonable to assume that the pattern fits human behaviour in general and not only the social and cultural expectations of a particular culture. Rice subsumed under three major functional pottery categories – storage, transfer and processing – what pots were possibly intended for, by highlighting the extent to which certain morphometric characteristics widely occur irrespectively of historical, chronological and regional provenance (Rice 2005, 236-242).

4.3.3.3 Shape and size variability in ethnographic corpora and Castelluccio repertoires

Reviewing size and shape in the ethnographic corpora from the studied areas confirmed Hendrickson and McDonald's predictions that temporary liquid storage vessels are usually noticeably smaller than long-term storage types (Hendrickson and McDonald 1983, 633). Similarly, attributes of size related with rim diameter and height appeared to be significant elements in distinguishing between these former vessels and serving and eating vessels for personal use only. While additional information can be found in the Appendix, shapes, size ranges and function of these vessels are schematised in Table 4.2. Drawing from the ethnographic comparisons above, I shall examine the Castelluccio pots in this vein. That is, considering Castelluccio pots as implements (Braun 1983, 107), I shall approximate differentiation through comparing, in the end, groups of archaeological pottery sharing similar shape and size attributes with ethnographic ranges (e.g. Ericson et al. 1972; Lesure 1995, 32-34; Boudreaux 2010, 10-11).

Table 4.2: Functional categories, types and size ranges corresponding to ethnographic shapes. The impact of size on vessel shape and function is not surprising. Considering how overall size may easily affect more than one use-related property potentially impinging upon the vessel's 'performance', attributes of size are important elements when pottery production is intended for certain purposes. Size simultaneously affects capacity, stability, accessibility and transportability. As pointed out by Rice (2005, 225), the kind of materials that a vessel can contain, their amount and the length of time, e.g. in storage, primarily depends on the size of the vessel. Similarly, overall size and capacity influence a vessel's transportability, thus impinging upon the ways in which containers can be transported, while rim diameter and height may determine specific proportions that may facilitate or not accessibility to its contents (ibid., 225-226). All in all, attributes of size, such as rim diameter, height, base diameter and volume feature as significant elements that approximate a vessel's intended use when shape is examined in storage and transfer vessels.

Ethnographic functional category	Type uses	Shapes	Corresponding size ranges in height
Transfer	Serving and eating	Small sized bowls and narrow-mouthed jars	4-15 cm
Storage, transfer and processing	Serving, cooking, temporary storage	Medium sized wide- mouthed jars and bowls	12-40 cm
	Serving, cooking, temporary storage, transport	Medium sized wide- mouthed and narrow- mouthed jars, bowls	12-40
	Cooking, long-term storage	Large sized jars	40-83 cm

4.3.4 Approaching regional and chronological differentiation

As further shown in Section 6.3, statistical evaluation of variability will be crucial in permitting qualifiable and quantifiable differentiation through an analysis of variance and correlation between shapes and size. Complemented by a comparison with the ethnographic size ranges displayed in Table 4.1, this will permit the arrangement of similarities and differences in pottery into a taxonomic scheme to display levels of functional differentiation. Likewise, a morphometric classification will also permit the exploration of variations in space and time. One may argue that functional variables can hardly be used for temporal and spatial assessment of ceramic variability. In fact, assuming that the use of an item would have had a certain distribution in a determined situation makes this assessment viable. Construction of a functional taxonomy is thus only the first step, while it is necessary to deploy such a differentiation into regional datasets in order to understand how context and time impacted upon the emergence and development of ceramic variability as representative of practices and boundaries. Therefore, analysis of space-time variations will bear upon the morphological types derived from the morphometric study of variability, with the idea of ordering on a relative time scale associations of artefact types and construct regional datasets on the basis of both regional differences and functional similarities. As further shown in Chapter 7, this study will require the implementation of a seriation process, as well as the incorporation of further dating elements, such as radiocarbon determinations. Specific analytical questions, issues and methods developed in this process are expounded in depth in Section 7.1.

4.4 Synopsis

As argued in the sections above, the research presented in this thesis focuses upon a classificatory approach stimulated by a habitus-informed, encompassing view of style to understand similarities and differences in ceramics in terms of boundaries and practices. In this view, classification will remain a fundamental methodological tool in order to approximate, through a functional typology, variability in shape and size as discoverable from the archaeological record of both painted and unpainted EBA ceramics. By enabling a more comprehensive understanding of the boundaries and embedded practices that may have perpetuated or challenged traditional ways of life, this approach will shed light on the reproduction of the cultural and social life of EBA Sicily. Chapter 5 is an assessment of the archaeological evidence that shaped the development of such an approach.

CHAPTER 5: AN ARCHAEOLOGICAL REVIEW OF SITES

Chapter 3 presented a description of landscape features and cultural remains and discussed the extent to which Copper Age-Early Bronze Age (CA-EBA) settlement patterns were affected by environmental changes and other aspects related to the geomorphology of Sicily. This chapter reviews the contextual archaeological evidence; it discusses the quantity and quality of the available architectural evidence which has been published, focusing on domestic environments, funerary landscape and caves. The aim is to evaluate this evidence and describe in outline the most significant sites and assemblages that will be used in the study of pottery variability. Indeed, information regarding the context in which Castelluccio groups emerged and developed can be derived from analysis of these sites when combined with the results of this study, as further shown in Chapter 8.

5.1 Settlement and funerary architecture: scope and purpose of the review

So far, I have examined evidence of prehistoric occupation and activities without considering the places as social environments where practices and interaction can be situated. Instead, drawing on the relationship between distribution of ceramic scatters and structural evidence upon the landscape, I reconstructed economic trends linked with land use, soil and resource exploitation (see Chapter 3). The aim of this investigation was to study how this relationship might have shaped the EBA economic system, looking back at the CA background. I shall now examine EBA sites as constructed social places, analysing architectural features, and how they might have structured the domestic and funerary environment. As stated in Section 4.3.1, this evidence, although limited to few sites, is important as it might aid in the interpretation of prehistoric ways of life and practices connected with the contextual, regional distribution and use of pottery, as expounded in Chapter 8. While reconnaissance activities have been conducted in the last four decades, systematic evaluation of this evidence is virtually absent in most studies of human-landscape interaction discussed so far, in which top-down approaches to economic themes and environmental exploitation are predominant. Future research will need to be conducted through more systematic surveys, combining assessment of long-term transformations in human-landscape interaction with the social, contextual use of space, in order to articulate the interwoven history of these two aspects that certainly affected the formation of the archaeological record.

I shall start with the definition of small-scale domestic features across the entire island through a comparison of the available Sicilian evidence and evidence from southern Italy. Secondly, I shall discuss large-scale architectural features, namely enclosures, compounds and fortifications. Finally, I shall discuss funerary architecture and use of space in caves. As shown in Table 5.1, this examination will lead to the definition of different categories of sites, namely cemeteries, settlements and caves which are associated to specific features. All these categories will be analysed below in detail, starting with evidence of domestic environments in settlement contexts. Then I shall present the evidence of rock-cut tombs and caves, the most complex categories. Some social interpretations stemming from this evaluation are anticipated in Section 5.4 before further discussion in Chapter 8. Finally, Section 5.5 presents an outline of the main assemblages. While the reader can find all the sites mentioned in the text below in Tables 5.2 and 5.3, Section 5.5 will only highlight those sites with ceramics listed in Table 5.2. In both tables, the reader can find numerical reference (site no.) to the exact location which is displayed in Figure 5.1. This assessment has led me to examine 217 sites, including ceramic scatter areas, defining an extensive research area, from the eastern coasts to the westernmost Belice River valley up to the Enna region in central Sicily.

Table 5.1: A table of site categories. This table shows evidence of specific features that will be discussed in detail in the following text, also through comparisons with Bronze Age Pantelleria, the Aeolian Archipelago and southern Italy. These parallels are the most obvious, in particular those with Calabrian and Apulian sites where domestic architecture and evidence of large-scale structures characterised by features similar to the following are well known (i.e. Peroni 2004; Robb 2007). Instead, comparisons with Corsica, Sardinia and the Maltese Islands are far more difficult and may be inappropriate, considering how strong the feeling in scholarship is that development of the local communities might have resulted from local processes driving cultural distinction (Evans 1959, 133, Malone and Stoddart 2009, 377-378; Broodbank 2013, 339-340). This justifies the observation of Malone et al. (2009, 51), of a "remarkably sophisticated" domestic environment for the Temple period when compared with other roughly contemporary CA-EBA cultures in Sicily. Moreover, there is less evidence of domestic architecture in Malta where soil thickness and strong erosion might have devastated the majority of the smaller structures which comprised open-air settlements (Malone, Stoddart and Trump 1988, 297). The table also shows possible interpretations of each feature according to associated evidence of other archaeological materials. In addition, it briefly offers a short description of the shape and size of the relevant features according to the excavation reports, when available, and other relevant published sources. As noted earlier in the text, this information is often fragmentary but still important to consider for a thorough review of the available evidence before further assessment of variations related to chronology and settlement patterns.

Features\Categories	Caves	Rock-cut cemeteries	Open-air settlements	Fortified	Interpretation (see section below)
Ceramics	X (1/2)	X (1)	X (2)		Non-utilitarian (1)/utilitarian (2) assemblages
Human remains	X (1/2)	X (2)	X (3)		Depositions (1); burials (2)/'intramural' burials (3, very rare)
Spaces carved out of rocky formations		Х			Rock-cut chamber/s
Small-scale stone perimeters oval in shape			Х		Stone perimeter enclosing rounded hut surfaces
Interred beaten clay surfaces			Х		Inner hut surfaces
Small, rounded features (less than 20 cm in diameter) formed from beaten clay surfaces			Х		Postholes
Small-scale stone features coated with clay, often rectangular in shape			X		Inner installations characterised by working surface, e.g. 'benches'
Small, rounded pits filled with ash, often associated with a darkish lens of charcoal residue and animal bones			Х		Fire-related installations, e.g. hearths
Large-scale stone features			X		Enclosures, walls, terraced walls

Table 5.2: List of sites with architectural evidence and ceramic materials. The sites listed in this table have structural evidence and correspond to material assemblages that will be analysed in the regional and chronological study through the implementation of an incidence matrix. Each site is characterised by the presence of certain features as explained in Section 5.5, where a detailed description has been arranged according to the site category. In addition to information relevant to these features and, thus, spatial organisation, the description will give more detail of elements regarding the geomorphology of the site locale, and the quantity and distribution of the ceramic assemblages.

Site no.	Location	Site type
29	Piano dell'Angelo	Cemetery
39	Coste di Santa Febbronia	Cemetery
45	Monte San Basile	Settlement
47	Passanatello di Francofonte	Cemetery
48	San Lio	Cemetery
49	Valsavoia	Cemetery
51	Cava della Secchiera	Cemetery
52	Melilli-Cava Bernardina	Cemetery
54	Cava Cana Barbara	Cemetery
57	Castelluccio necropoli-Cava della Signora	Cemetery
59	Castelluccio villaggio-Piano Sella	Settlement
64	Scarico Castelluccio	Settlement
67	Grotta Lazzaro	Cave site
70	Grotta della Chiusazza	Cave site
101	Castiglione	Cemetery
103	Monte Racello	Cemetery
105	Monte Sallia-Cozzo delle Ciavole	Cemetery
106	Monte Tabuto 1	Cave site
107	Monte Tabuto 2	Cave site
108	Santa Croce di Camerina	Cemetery
113	Contrada Forche	Settlement
114	Contrada Paolina	Cemetery
119	Branco Grande	Settlement
125	Poggio Biddine	Settlement
129	Manfria-Case Manfria	Settlement
130	Manfria-I Lotti	Cemetery
131	Marcita	Cemetery
134	La Muculufa sanctuary	Settlement
135	La Muculufa village	Settlement
149	Case Bastione	Settlement
151	Gibil Gabib	Cemetery
157	Sant'Anna	Cemetery
168	Contrada Passarello	Cemetery
169	Grotta di Pietrarossa	Cave site

Site no.	Location	Site type
179	Monte Canticaglione	Cemetery
185	Cantigaglione	Settlement
186	Casalicchio-Agnone	Settlement
193	La Ragusetta	Cemetery
195	Cuminazzi slope	Cemetery
202	Monte Grande	Settlement
204	Naro	Cemetery
205	Canicatti	Cemetery
207	Marianopoli-Valleoscura	Cemetery
208	Grotta Ticchiara	Cave site
209	Altopiano di Pietralonga	Cemetery
210	Contrada Muntagnedda	Cemetery
211	Contrada Grazia	Cemetery
214	Monteaperto	Cemetery
217	Monte Sara	Cemetery
218	Ciavolaro	Cemetery
220	Contrada Pergola	Cemetery
221	Partanna	Cemetery
222	Torre Bigini	Cemetery
223	Torre Donzelle	Cemetery
224	Torre Cusa	Cemetery

Table 5.3: List of scatter areas of potsherds and sites with architectural evidence, yet without published assemblages. These will not be reviewed in detail in Section 5.5. and will not be used in the implementation of the incidence matrix. However, sites with architectural evidence listed below will be considered when results of the pottery analysis are discussed, since structural evidence offers further scope to aid interpretation of the results in terms of social boundaries and practices when combined with results of the pottery analysis.

Site no.	Location	Site type	
31	Camuti	Settlement	
33	Monte Catalfaro	Settlement	
34	Rocchicella	Settlement	
35	Torricella di Ramacca	Settlement	
36	Acqua Amara di Palagonia	Settlement	
42	Dosso Tamburaro	Settlement	
43	Fildidonna	Settlement	
44	Poggio Croce	Cemetery	
50	Valsavoia village	Settlement	
53	Timpa Dieri-Petraro di	Settlement	
	Melilli		
183	Piano Gaffe-Madre Chiesa	Settlement	



Figure 5.1: Map showing distribution of the site categories. Drawn by the author (srtm source: Jarvis A., H. I. Reuter, A. Nelson, E. Guevara, 2008, Hole-filled seamless SRTM data V4, International Centre for Tropical Agriculture (CIAT) http://srtm.csi.cgiar.org).

5.2 Settlements and domestic environments

5.2.1 Introduction

As schematised in Table 5.1, settlement evidence is characterised by a variety of features. The smallest scale evidence is represented, as further discussed below, by features associable with perimeter stone walls, floors, postholes, benches and indoor fire-related structures interpretable as domestic installations. Both benches and indoor fire-related structures are quite clear features. In particular, the latter are often associated with ashes and burnt faunal remains, as further shown below. The largest scale evidence is represented by stone walls, namely, enclosures, fortifications and "terraced walls" that often surround and/or encircle groups of huts, delimiting the boundaries of the inhabited area or maybe compounded areas within the settlement. Interpretation of the small-scale features is, however, much more complex than the latter, often because of the poor degree of preservation of the excavated evidence. In particular, while hut walls, postholes, benches and indoor fire-related structures appear as quite distinct elements, interpretation of surface features is more problematic and open to debate if shape and size are the only defining parameters. In exploring domestic environments in settlement contexts, I shall consider, thus, evidence of stone walls, postholes, benches and indoor fire-related structures first, then discuss the surface features. Then, I will discuss evidence of large-scale stone structures. As stated above, I shall postpone a social interpretation of this evidence until Section 5.4 so as to include also considerations of funerary architecture and caves.

5.2.2 Hut architecture, indoor and outdoor installations

5.2.2.1 Walls and posts

A significant feature of EBA Sicilian settlement architecture is the presence of stone circles (i.e. Doonan 2001, 160-161; McConnell 1992, 28-29; Giannitrapani 2012b, 72-73; Cantisani 2015, 49-51). These are often oval or circular in shape, constituted by one or two rows of stones for which doubtless had a structural role (e.g. Giannitrapani et al. 2014, 188-189). Excavators (McConnell 1992; 1995; McConnell and Bevan 1999; 197-199) have exposed such rounded features, for instance, at La Muculufa (135), where they were ascribed to six huts. Excavations of Case Bastione (149) yielded similar remains to these, suggesting the presence of two huts formed by at least one row of stones (Giannitrapani et al. 2014).

As illustrated in Figure 5.2, similar stone features were exposed in less extensively excavated sites, such as Rocchicella (34) (Maniscalco 2012, 741-750; Bernabò Brea 1965, figs. 14-16). However, there is other evidence, e.g. postholes, that suggest mixed architecture of stone and wood. Indeed, posts also appear to have been another structural element that

characterised EBA architecture, as evident in Figure 5.2. I have already mentioned the village area excavated at La Muculufa. At this site, evidence of beaten clay surfaces was found in both huts 2 and 4, along with evidence of postholes (McConnell 1992, 27, fig. 4). Similarly, excavations at Monte Catalfaro (33) exposed rounded features covered by a burnt clay surface, punctuated by small-sized circular holes (less than 20 cm in diameter) with carbonised wood inside (Maniscalso 2012). The published plan is not detailed and shows quite an irregular oval (ibid., 2012, 743, fig.1). However, it remains possible, in view of its size and the occurrence of a stone perimeter, that the irregular beaten clay feature reflects a hut surface altered by fire.

In comparison to Maltese mud-brick architecture, the Castelluccio huts do not appear to have been constructed using bricks. Mud-brick architecture appears to have been used in Maltese domestic environments, e.g. at Skorba, where two huts (structures 1 and 2) belonging to the Temple Period have been exposed, along with evidence of a central mud-brick pillar (Skeates 2010, 144; Malone et al. 2009, 44-49). Instead, oval rows of stones and beaten clay surfaces were exposed at Camuti (Vacirca 2005), suggesting a mixed stone and wood technique in view of the distribution of postholes along the perimeter. Similarly, excavation of hut 9 at Manfria exposed a surface encircled by at least two rows of stones, with postholes along the internal perimeter and a series of axial holes (Orlandini 1962). Evidence from Fildidonna (43) shows postholes but without an encircling perimeter of stones (Maniscalco 2012, 743, fig. 1). Finally, the site of Camuti presents occurrence of two rows of postholes in one of the apses, suggestive of the presence of a porch. Figure 5.2 offers a synoptic illustration of the variety of this EBA domestic architecture, including published hut plans from some sites mentioned so far.

Further elements to support such a reconstruction are supported by the finds of daub fragments occurring in hut 2 at La Muculufa. Looking at the plans and the impressions of wooden structural elements left these daub fragments, McConnell (1992; 1995, 24-31) suggests that the hut must have used wall-and-daub architecture with a thatched roof. Further contexts characterised by the same features were exposed also at Piano Gaffe-Madre Chiesa (183) (Castellana 2000, 86), and Marianopoli-Contrada Corvo (206) (Nicoletti and Panvini 2015, 119-150). Comparable remains were found at both sites where excavations exposed small-scale stone walls oval in shape with the remnants of fired clay daub within.

In view of this evidence, it seems likely therefore that local domestic architecture made use of stone and wooden materials³. This is not surprising in considering the nature of the vegetational cover that seems to have characterised the island in the EBA (Section 3.2.3). Outside Sicily, EBA parallels can be found in the southern tip of the Italian peninsula where a similar environment and climate existed (Broodbank 2013). The large oval hut of Croce del Papa (Nola, Campania) is one of the most well-preserved examples of EBA architecture in southern Italy. A layer of pyroclastic flow from Vesuvius' eruptions superbly preserved the hut features, made up of an intricate system of postholes set around an oval perimeter (Broodbank 2013, 427, fig. 8.64). In this case, the hut was entirely made of wood.

³ Slightly different is the domestic architecture exhibited by the CG villages on the Aeolian Islands (Bernabò Brea 1980, 510-514), or at the Rodi-Tindari-Vallelunga (RTV) site of Mursia on Pantelleria (Ardesia et al. 2006; Marcucci 2008; Cattani et al. 2012, 648-649; Cantisani 2015) where, in view of their interred position, stone walls also 0.70 m high raised which are largely preserved today. This suggests slightly different house construction techniques.



Figure 5.2: Castelluccio domestic architecture, a: Dosso Tamburaro (42); b: M. Catalfaro (33); c: Rocchicella (34); d: Camuti (31); e: Fildidonna (43); f: daub samples from La Muculufa (135) (after: Maniscalco 2012, 743, fig. 1 (a, b, c, d and e); McConnell 1995, 135, fig. 9.5 (f); a, c, and e have the same scale). There is sometimes an issue with the conservation of these structures, as also stressed in the text. However, the variety of features illustrates an array of domestic environments, characterised sometimes by a mixed architecture of wood and stone which suggests a different exploitation of the natural resources when compared with other roughly contemporary architectures, e.g. Maltese Temple phase.

5.2.2.2 Benches

Within the huts there are other features interpretable as intramural installations, e.g. the socalled benches that are often associated with the stone walls and the postholes described above (Ardesia et al. 2006; Di Gennaro et al. 2012, 1240; Cantisani 2015, 62; Maniscalco 2012, 744-749). Again, a difference with domestic architecture in the Maltese Islands is apparent, where features interpreted as "benches" were carved out of bedrock to function as foundations for mud-brick walls (Malone, Stoddart and Trump 1988, 300). In Castelluccio Sicily, it remains difficult to hypothesise what the purpose of these "benches" was. These features often appear to have been made of accumulations of small-sized stones (10-15 cm in diameter) coated with clay (McConnell 1992, 29; Doonan 2001, 167-168). They form a sort of elevated flat surface. Considering the finds of vessels standing upon these surfaces (i.e. Ardesia et al. 2006, 9; 2012, 1185), we can speculate that an array of activities took place there, from benches on which people could sit to storage shelves. For instance, such a platform occurs at La Muculufa, running around the interior of hut 2 (McConnell 1992). A similar structure, 1.2 m wide, has been found in Coste di Santa Febbronia, where a huge rounded hut, delimited by two rows of stones, was uncovered. The floor of this hut was covered by a compact layer of beaten clay, while the bench was located along the northern wall of the structure (Mentesana 2015, 257-259). In both huts, instrumenta domestica such as grindstones and smaller pestles (ibid. 2015, 259) were found distributed upon or nearby these "benches", raising the possibility that these structures might also have been used as work surfaces.

5.2.2.3 Intramural fire-related structures

Finally, there remain features that can be interpreted as intramural fire-related structures. These are burnt clay surfaces, often rounded in shape, typically with diameters of 30 cm. At the EBA site of Mursia (Pantelleria), excavators found them within huts often with charcoal embedded in the ash lenses, suggesting that that this type of surface might have been used for indoor heating (Ardesia et al. 2006, 27; Marcucci 2008). Similar features have been exposed within the hut at Coste di Santa Febbronia (40) in association with an ash lens and burnt reddish soil (Mentesana 2015).

5.2.2.4 Surface features

These features are quite different from the terracotta rounded features discussed above, as they are typically constituted by rounded ash filled pits (e.g. Maniscalco 2012, 747). Comparable features occur also in the site of Monte Grande (202) where, however, they seem to belong to outdoor spaces (Castellana 1996a, 502; 1998). In this case, whether such rounded surfaces indicate hut floors, intramural fire-related structures or other kinds of

outdoor installations is uncertain. In fact, when there are no other contextual features such as a stone perimeter, *in situ* depositions of tools, daub fragments, postholes or other elements which can strengthen a contextual interpretation, it almost impossible to give a secure interpretation. Experimental studies carried out by Bankoff and Winter (1979) in former Yugoslavia showed that only a small percentage, between 1 and 3%, of burnt clay surfaces is left once the hut has been abandoned. This would suggest caution when size is the only available parameter for discerning these types of features. Some of the fire-related structures mentioned above may be erroneously interpreted, for example, as pit dwelling floors, while it is possible that they were outdoor clay surfaces used for cooking. On the contrary, it is possible that small-sized burnt clay surfaces interpreted as outdoor fire-related installations are, in fact, the remains of house floors, severely altered by post-depositional processes.

However, ethnographic parallels would suggest that associations of small burnt clay surfaces with concentrations of burnt faunal remains, charcoal and reddish soil lenses may indicate outdoor installations. Such concentrations of ashes and burnt faunal remains, associated with outdoor features, are common in ethnoarchaeological studies (e.g. Hayden and Cannon 1983, 126) where they often represent a certain kind of waste product from activities conducted outside dwellings. The site of Torricella di Ramacca (35) was not excavated as extensively as other settlement sites, yet the excavators exposed varied features over a surface of ca. 30 m² (Messina et al. 1975, 561). What is evident at the site is a variety of features, including small, rounded, burnt clay surfaces, huts with a stone perimeter and a large-scale stone curvilinear wall (Figure 5.3). In considering this contextual evidence, interpretation these features as outdoor installations for the former appears to be more convincing than as small pit-dwellings.



Figure 5.3: Outdoor installations at Ramacca, a: hut; b: small circular clay surfaces; c: large-scale stone curvilinear wall (after Messina et al. 1975; a, p.563, fig. 9; b, p.583, fig. 41; c, p.577, fig. 31). As explained above, it is likely that this variety of clay features reveal different structures. In particular, it is likely that, while the oval feature encircled by a stone perimeter marks a hut, it is possible that the smaller, circular burnt clay feature is indicative of an indoor structure. Unfortunately, the excavation report lacks information on associated waste areas or ash lenses, but the absence of an encircling perimeter suggests a different use compared to the larger surface surrounded by the walls.

In view of these considerations, I am more inclined to see also the burnt clay surfaces from the site of Monte Grande (202) as outdoor installations (Figure 5.4). The site lies across different terraces situated along the southern slope of Monte Grande. In particular, the excavators exposed several of these small, circular surfaces across a wide yet well delimited area surrounded by large stone enclosures. As reported by Castellana (1996, 502; 1998), the fire-related structures were found only at Baffo Superiore, where interspersed surfaces of charcoals and faunal remains were also identified in close proximity of these rounded burnt clay surfaces. Castellana interpreted these features as outdoor installations for ritualistic cooking and feasts (Castellana 1998). It is more likely, in view of comparison with the site of Ramacca where further domestic elements were found associated with such surfaces, that they simply represent outdoor cooking structures.



Figure 5.4: Outdoor installations at Monte Grande (Castellana 1998, 55, fig. 34). Observe the similarities in terms of shape and size to the structure of Ramacca (Figure 5.4, b).

5.2.3 Large-scale stone made structures

5.2.3.1 Enclosures and compounds

Communities in southern Italy and Sicily had long built enclosures, at least since the Neolithic (Cipolloni Sampò 2005, 350-352). Large trenches encircling settlements have been exposed, for example, in the Apulian Tavoliere (Skeates 2005, 82). In Sicily, they were found especially in the south-east part of the island where the eponymous Neolithic site of Stentinello was discovered (Bernabò Brea 1956). More recently, Gullì (1993) has identified similar features to these trenches also in the vicinity of Selinunte, western Sicily, suggesting the idea that enclosures were widely distributed in the Middle Neolithic and likely associated with the supra-regional spread of the Stentinello Culture. It is hard to say, however, whether they functioned as defensive sites or worked to create a sense of belonging or both. Meanwhile, for the Castelluccio period, the variety of large-scale stone architecture suggests a differentiation between defensive structures and enclosures.

Regarding enclosures, and compounds, the two largest stone features of such a kind are documented at the sites of Torricella di Ramacca (35) and Monte Grande (202). At Ramacca, we have seen in the section above how a large-scale stone curvilinear wall was exposed (Figure 5.3). Having considered the occurrence of huts and further outdoor installations in the space within this enclosure but also beyond, I am inclined to agree with Procelli's (1997, 345) suggestion that this may have been a compound wall delimiting part of the intra-

settlement space. From this perspective, it is possible that the construction of such walls aimed to prompt the aggregation of huts into small clusters within the settlement, instead of locking foreigners out, although we cannot exclude that it might also have been used in such a way when needed. While this is speculative, ethnographic evidence has showed that aggregation of more than one hut in contexts in common areas are delimited by some kind of boundary in which more than one household can share the use of outdoor installations. In the cited work of Hodder (1982, 139-136), for instance, we find that families of the Moro people in Sudan shared the use of an array of outdoor installations for a variety of purposes, e.g. storage and cooking, while living in separate units within the same compounded area. Gabrilopoulos et al. (2002, 228-232), in an ethnographic study of the Tallensi people in Ghana, documented a similar case. They show the extent to which installations used as structures for grinding were located outside the huts and shared by the different families which live in the same compound enclosed by wooden fences.

These conjectures stem from a preliminary assessment of the available evidence and cannot be taken for granted, especially considering the paucity of structural information and the limitations of ethnographic parallels. Moreover, although the presence of indoor and outdoor installations such as those shown above would suggest a certain degree of social structure at the intra-site level, the evidence is fragmentary and made up of a complex palimpsest of features. The site of Monte Grande does show evidence of features and associated materials which suggest the use of outdoor fire-related structures, but it is almost impossible to link them with domestic activities, communal practices and occupational phases. Likewise, evidence of similar structures at Ramacca cannot be associated with a certain settlement phase. Thus, understanding continuity and/or discontinuity in social practice is almost an impossible task. The lack of studies on the formation of the archaeological deposits, cumulative analysis of sherds, poor radiocarbon dating and absence of full-extent micro-stratigraphic excavations result in structures that float without any relationship to fixed space-time points.

5.2.3.2 Fortifications

The occurrence of large-scale stone structures usually interpreted as fortifications is problematic as well. However, looking at wider socio-cultural scenario in which the local EBA groups developed (Section 3.4) can aid the interpretation of these impressive structures. Indeed, increased interconnectedness, as defined in Section 3.4, especially from the 2nd millennium onwards with the eastern Mediterranean (Marazzi and Tusa 1976; Peroni 1983; Bietti Sestieri 1988; Marazzi 1998; Maran 2007; Broodbank 2013), might have

engendered a need for defense against acts of piracy. This argument makes sense especially when coastal settlements are considered from an inland perspective. Having considered the socio-economic trends which characterised settlement expansion towards the interior in Section 3.3, it is possible that coastal sites representing maritime projections of the upland communities, were the most prone to this phenomenon. From this point of view, structures like those exposed at Branco Grande (119) and the EBA sector of Thapsos might have served for defensive purposes (Figure 5.5). This is suggested also by further comparisons with roughly contemporary fortified coastal sites in the Mediterranean. A comparison with the walls of Kastri and Chalandriani in the Cyclades, for example, shows the presence of similar structural elements to those of Thapsos (Renfrew 1972, 136-137; Broodbank 2000, 212-215). Even though far shorter in length, the EBA fortification line at Thapsos, only 200 m long, is composed of blocks to which were added at least six massive semi-circular buttresses at equidistant intervals (Voza 1972, 192-193) (Figure 5.5c). In military architecture, buttresses such as those illustrated in Figure 5.5c are significant components that can strengthen the defensive potential of a locale⁴.

⁴ Noteworthy in this view is Vitruvius' reference to Homer's famous description of the Scaean Gates of Troy as situated "left to the tower guard" (I, 5, 2), that is, by a buttress from which the defenders might have easily attack the assailants on their undefended side (see also Della Seta 1907, 570).



Figure 5.5: Examples of fortifications in Castelluccio Sicily, a: Branco Grande (source Orsi 1910, 162, fig. 2); b-c: EBA Thapsos (sources: Voza 1972, 192-193, fig. 15 and Castellana 2002, 140, fig. 63 respectively). Both sites are located in proximity to the coast, suggesting that they might have needed defensive structures against occasional raiders from the sea. The remains of buttressed walls could be significant in view of these considerations, also considering further comparisons with other roughly contemporary Mediterranean fortified sites that are located on the coast, such as Kastri and Chalandriani, dated to the Early Cycladic IIB-IIIA (ca. 2450-2150 BC).

Further comparisons with Sicilian structures can be established with the massive EBA fortification of Mursia, on the island of Pantelleria (Figure 5.6). This structure has always been visible since the earliest archaeological explorations on the island (Dalla Rosa 1871; 1872; Cavallari 1874; Orsi 1899). However, only later excavations have uncovered the nature of the building techniques through test-pits along the perimeter of the wall (Orazi 1997; Nicoletti 1997). They revealed the greater defensive potential of these walls, as at least one buttress was added in order to reinforce an entranceway (Figure 5.6). This supports the idea mentioned above that additional structures might have aided the defenders against the assailants. In actual fact, the making of such a huge wall opens the possibility that it was the result of several restoration attempts, posing a question of labour investment. This leads to

further reflections upon the social role of these fortified walls when both social cooperation and competition are considered.



Figure 5.6: The fortification of Mursia (source: Ardesia et al. 2006, p.5, fig. 1). The large-scale stone structure encloses the upper part of the settlement of Mursia, facing the interior of the island. As evident from the site plan, the wall has at least one buttress which is situated on the southern corner, protecting an entranceway to the site. This, and the character of insularity, certainly supports the view of a strong defensive structure. However, the plan also shows the huge thickness of this wall at the bottom, raising also the possibility that it was the outcome of investment in a large workforce and cooperation.

A similar case can be argued for Timpa Dieri-Petraro di Melilli (53) on Sicily. This site yielded a similar structure to the buttressed wall of Mursia (Voza 1968-69), although it is not on the coast (Figure 5.7, see Figure 5.1 for the exact location). Here we might ask why Petraro di Melilli has such a fortification despite its distance from the coast. Indeed, while it is reasonable to assume that proximity to the coast and insularity might have driven the construction of large fortifications (e.g. Cazzella and Recchia 2013), the same cannot be argued for sites located further inland. One may argue this for internal warfare, but there is no such evidence in Castelluccio Sicily when considering, for instance, excavated human remains. Current assessments of skeletal remains have not revealed signs of trauma, or wounds to connect with endemic violence. In fact, that small groups of households still invested considerable amount of time waging war systematically does not seem plausible. Rather, it seems more plausible, in a wider context in which war activities were likely limited to temporary acts of bravery and/or occasional raids (Cazzella and Recchia 2013, 58-59), that inland warfare was limited, if not virtually absent⁵. Therefore, although it is undeniable that increased interconnections in the region might have contributed to shaping local views of an increasingly perilous world, the idea that warfare alone was the cause for these constructions is not convincing. Therefore, it is tempting to consider that constructions as such might have had also a wider social significance in terms of labour investment.



Figure 5.7: The fortification of Petraro (source: Voza 1968).

Instead of passively protecting people from the outside, they might have actively shaped boundary areas through which locals and non-locals might have interacted. They might have served, for instance, to channel workforce in the attempt to accommodate social confrontation between nearby groups. The issue is open to debate.

⁵ Meanwhile, evidence of sieges and large-scale combats are documented for much later periods, and mainly in southern Italy where fortifications have been exposed at MBA-LBA sites such as Coppa Nevigata and Roca Vecchia (Cazzella and Moscoloni 1987, 100; Scarano 2012) where there is also conspicuous evidence of interaction with the Aegean world. Available radiocarbon determinations from the destruction layers of the EBA settlement at Coppa Nevigata support the hypothesis that the earliest line of the massive defensive buttressed walls was built around 1700 cal. BC (Cazzella and Recchia 2013, 47, fig. 2), when occurrence of Aegean imports started to increase. Meanwhile, documented evidence of violence on human remains has been found associated with the destruction layers of Roca Vecchia, dated to the end of the MBA and linked with further evidence of destruction of the local line of fortifications (Pagliara 2003, 79-85). The thickness of this fortification must have been impressive considering that the excavators exposed sections of walls c. 20 m width along all the site perimeter, also characterised by the presence of attached semi-circular buttresses adjacent to a fortified entranceway (Scarano 2010, 241-242). In this case, a comparison with the Homeric Troy's gates mentioned in note (4) sounds more appropriate.

5.2.3.3 Terraced walls

Finally, I shall consider more "atypical" structures such as the so-called "terrace walls". Indeed, the only example of this type comes from the site of La Muculufa (135). As evident in Figure 5.8, the characteristics of this stone structure are not comparable with the those of the other structures discussed above. Preliminary test pits were dug in 1983 (Holloway 1983), but larger trenches were opened only some years later, across five campaigns during which salient features of the settlement and the so-called La Muculufa sanctuary (136) were exposed (Holloway et al. 1991; McConnell 1995). The terrace wall of the so-called 'sanctuary' was one of these features. Remains of a large-scale stone structure were uncovered during the second campaign on the terrace sector (S), situated above the area of the settlement (T). A trench was opened here that reached a depth of 4 m, exposing a stratified deposit constituted of three layers, interpreted as evidence of 'innumerable meals cooked and eaten on the spot' (Holloway et al. 1991, 16). The upper layer (5) was carbonised and contained most of the Castelluccio sherds recovered from the site in association with burnt faunal remains. At the bottom, an irregular feature constituted of stone debris was identified and interpreted as remains of an old collapse of the ancient terrace wall upon which the sanctuary area developed.



Figure 5.8: The terrace wall at the site of La Muculufa (after: Holloway et al. 1991, 18, fig. 14).

This evidence led to the idea that the terraced wall was part of a Castelluccio regional sanctuary – a "Sicilian Delphi" – as claimed by Holloway et al. (1991, 16). It seems more likely, however, that it was designed to organise space on top of an unevenly-shaped surface, as is still done in certain upland areas where the steep slopes are cut by small rectilinear terrace walls in order to create flat surface for farming activities (*muretti a secco*). However, the idea of a sanctuary area has been supported by Cultraro (2005) and may be a viable

hypothesis, even if we need to be cautious, as the deposit represents a palimpsest of different periods of activity that accumulated after the terrace wall was built. Indeed, the ceramic fragmentation and faunal remains has not been questioned properly in terms of how non-cultural factors might have affected its formation. The size and spread of the accumulated sherds – and other remains –, as discussed in Chapter 3 at length, could have been affected by natural processes that might have contributed to the nature of the deposit. In this sense, a more cautious approach is suggested for the interpretation of this deposit in terms of normative, recurrent ritual behaviours, and it is safer to argue that the area, considering the structural similarities with present day terraced walls, was instead a by-product of activities linked with land use, such as farming and/or waste.

5.2.4 Conclusions

The small-scale features in settlements such as the huts and other types of outdoor installations presented above may be representative of a way of structuring activities that partly reflected the interplay between indoor/outdoor activities. It is possible that domestic activities were undertaken at the boundary between houses and communal space. That is, the variety of features encountered can be representative of a certain way of structuring domestic environments which reflects flexible social boundaries. It may be that communities were still organised around independent households, being too small in population size and dispersed across the landscape. Moreover, we cannot rule out the possibility that the occurrence of both indoor and outdoor structures reflects efforts to bring different households together in sharing spaces for food preparation and consumption. This is a possible scenario. Likewise, increased economic specialisation as debated in Chapter 3 might have contributed to shape contexts of increasingly complex social tensions between family units and larger social groups. In this view, construction of the large-scale stone structures might have contributed to ease these tensions in offering wider arenas in which accommodating both competition and cooperation between and within settlements. As stated above, I shall return to these themes further in Section 5.4. The following section is a discussion of other places in which human activities took place, namely funerary architecture and caves.

5.3 OTHER ENVIRONMENTS

5.3.1 Rock-cut funerary evidence and architecture

Rock-cut funerary architecture is widespread in the Sicilian landscape. It mainly consists of chambers carved out of modified calcareous rock outcrops. Thus, landscape characteristics in southeast Sicily might have contributed to the adoption and spread of this architecture especially in the area of the Hyblean Plateau (see Section 3.3.3.1.2), likely as early as the beginning of the EBA. In fact, rock-cut chambers are widespread across the central Mediterranean (Guido 1963, 48-58; Whitehouse 1972, 278-280; Stone 2007, 44-47), their origin and development still a debatable matter. One hypothesis, if we consider parallels with LCA Sardinian and LN-EBA Maltese funerary subterranean architecture, is that rock-cut chambers embellished with sculped façades and portals decorated with spirals might have been introduced on the island as early as the LCA (Procelli 1996, 92; Tusa 1997, 335). Yet, there are scholars who emphasise the specificity of the Maltese funerary architecture (Malone et al. 2009). Considering the subterranean nature of the former, I agree with these scholars that there are important differences in terms of spatial organisation between rock-cut Castelluccio tombs and Maltese hypogea, although some parallels may be established between these hypogea and a few Castelluccio burial caves, as further discussed below.

The organisation of space in Castelluccio rock-cut tombs is indeed different from their Maltese counterparts, as the chambers do not form an intricate and complex system of interconnected alcoves. Rather, they are often single chambers sealed by a rock slab, such as in the cluster of tombs discovered at La Ragusetta (193) and Cuminazzi (195) (Castellana 1982; 1983), where the hill crests are regularly perforated by cuts along their calcareous outcrops. A similar form of landscape use is also documented in the Cignana Valley (Castellana 1982; 1983), while around 200 rock-cut tombs close to the settlement of La Muculufa were identified by Pottino (1981). The same situation was also documented along the course of the Morello River, a tributary of the Salso (Iannì summer 2017, *pers. comm.*), and in the territory of Melilli (52) (Orsi 1891b). Sometimes, however, chambers have a more elaborated entranceway. These tombs generally have an ante-chamber. As in tombs 4 and 5 at Santa Febbronia (40) (Maniscalco 1993-94, 894-895; 1996b, 86; see also Sluga Messina 1991, fig. 13; Orsi 1905, fig. 18; 1906, fig. 2), they are often marked by the occurrence of a façade embellished with false pillars bearing alternating flutes. Such examples are rare, and more often the case for single rock-cut chambers (Figure 5.9).



Figure 5.9: Plans and appearance of rock-cut funerary architecture. Top, the rock-cut tombs of Coste di Santa Febbronia, a: tomb 1; b: tomb 2; c: tomb 4; d: tomb 5 (after Maniscalco 1993-94: a, 891, fig. 5; b, 894, fig. 6; c, 883, fig. 1; d, 885, fig. 2).

Finally, there is evidence of rock-cut tombs which are preceded by an entranceway characterised by a façade and a small corridor. Examples of this type of architecture are even rarer, though spread from south-eastern Sicily to the westernmost boundary area of this study, marked by the Platani River. In all documented cases but one (that of Contrada Paolina (114)), these are single rock-cut chambers, such as Torre Bigini (222) and Torre Donzelle (223) (Figure 5.10). Instead, Contrada Paolina's funerary architecture forms a unique cluster of two tombs with corridors that share the same façade (Procelli 1996, 93, fig. 3), as illustrated in Figure 5.11.



Figure 5.10: Further examples of rock-cut tombs. Top: Torre Donzelle, plan and section Tomba delle Colonne (source: Mannino 1994, 162, fig. 16); bottom: Torre Bigini, plan and section Tomb A (source: Mingazzini 1939).



Figure 5.11: Contrada Paolina, architecture and plans of tomb 1 and 2 (Procelli 1996, 93, fig. 3).

It is difficult to hypothesise what the development of these three different types of rock-cut funerary architecture signifies in terms of mortuary practices, especially because of the poor degree of preservation of grave goods inside and outside the chambers, and reuse of these places through time. As stressed earlier, LCA-EBA rock-cut tombs are known but we also know that similar architecture was used also in the LBA/Iron Age periods and in Medieval times (Leighton 2011, 449; 2015, 190; 2016, 125). In a recent study of the LBA cemetery of Pantalica, for example, Leighton argued that a few rock-cut tombs might have been already

in use during the EBA period and that reuse of some tombs certainly took place in Medieval times, when people reoccupied this place, evinced by cuts for domestic architecture (ibid.). Thus, it is possible that through time a process of reuse led to a reorganisation of the prehistoric rock-cut tombs, causing a substantial loss of archaeological information about their early phases. Moreover, it is clear that many rock-cut tombs suffered looting through the centuries, although some excavated funerary contexts still contained grave goods, including those incorporated in this study. It is quite likely that the occurrence of human remains scattered in a chaotic fashion on the floor in these tombs is, in some cases, the product of these transformations. In this sense, a reconstruction of mortuary practices from the available evidence is a daunting task, requiring a meticulous reconstruction first of the mortuary assemblages. For the same reasons, it is quite problematic to infer general characteristics of social inequality from an assessment of the quality, quantity and distribution of published grave goods associated with architectural remains. Maniscalco (1996b) and Procelli (1997) claimed, for example, a connection between the decorated architecture at Coste di Santa Febbronia and the emergence of elites. This cannot be ruled out, yet it is a hypothesis that deserves caution, in view of issues stated above and the extremely fragmentary conditions of the grave goods in general.

5.3.2 Exploitation of caves

In comparison to funerary architecture and settlements, man-made features are far less evident in caves. As observed in Chapter 3, what geology and topography in certain regions, e.g. south-east Sicily, might have afforded local communities in terms of resource exploitation certainly affected the transformation of the caves into places suitable for human activities. Caves are often characterised by an intricate system of corridors and natural chambers, sometimes suitable for human occupation, funerary use and other economic activities. This was already suggested by Orsi (1898), who documented the cultural remains of human depositions and flint exploitation at the complex of Monte Tabuto (106-107) (Section 3.3.3.1.2). Monte Tabuto, as further shown below, is a site characterised by an intricate cave system of interlinked galleries and natural chambers, in which Orsi discovered hundreds of disarticulated human remains (Orsi 1898). Some remains were grouped in small niches which people had enlarged along the walls of these corridors. The majority were found scattered on the ground, associated with both fragmented and whole Castelluccio vessels, and flint tools. Another example is the complex of Grotta Barriera. According to Orsi (1905), who found hearths, food-related and human remains, the natural galleries of the cave were transformed into an environment suitable for either human occupation or

funerary purposes. Food-related remains such as those identified at Barriera were identified at Grotta Cappuccini (southern Apulia), for example, and may well be related to mortuary practices linked to a cult of the ancestors (e.g. Skeates 2005, 14).

Sometimes caves are characterised by other natural elements, e.g. stalactites and/or stalagmites, which might have affected the development of non-mortuary practices. Explorations of cave sites in the region of Agrigento such as Grotta Palombara near Raffadali, for example, has brought to light the deposition of whole LCA-EBA vessels in proximity to stalactites and stalagmites that were spilling water, suggesting performance of some ritual practice linked with underground water (Gullì 2014, 75). The entrance to this cave is not difficult and one may argue that the place might have been easily accessible. However, occurrence of the pottery deposition is not in the vicinity of the entrance. Considering also the form in which water is manifested within the cave – 'abnormal' to quote Whitehouse (1992, 62-63) –, I am more inclined to agree with Gullì's position. Comparisons can be established, once again, with southern Italian cave sites such as Grotta della Zinzilusa, where LCA-EBA vessels were founded embedded in a stalagmite deposit deep inside the cave (Skeates 2005, 143).

Similarly, the context of ceramic deposition at Grotta del Kronio, Sicily, resembles the former examples, which led Gulli (2018, 416) to speculate about the ritual character of the context. She argues that all elements, including the dark environs, are indicative of a liminal place in which performance of non-mortuary practices might have taken place. Also, at these sites, as in southern Italy, links with earlier CA non-mortuary practices involving use of caves cannot be ruled out, as suggested by further explorations of caves around Etna and nearby the city of Catania. In Grotta Petralia (7), for example, explorers discovered similar examples, structured by the same intricate system of interlinked corridors, chambers and dispersed materials spanning the ECA and EBA in a dark, dim environment (Palio and Privitera 2008, 233-235). Similarly, cave contexts with mixed assemblages have been more recently explored near Marineo (Palio and Turco 2018, 52-53), illuminating a sequence of use from the LN to the MBA.

5.4 Summary

Evidence of domestic environments discussed above shows quite a degree of variability in terms of architectural elements and indoor/outdoor spatial organisation, suggesting a flexible organisation of the spaces given over to domestic activities in settlement sites. At Coste di Santa Febbronia, for example, we have seen that the rounded fired clay surface of terracotta was found inside the structure, while the occurrence of pits filled with ash outside the perimeters of the hut seems to suggest that hearths might have been located outside the house (Maniscalco 1997, 359; 2012, 744-745). Other structural features suggesting an organisation similar to this are porches. The development of porches may have shifted the attention from the inside to the exterior and vice versa (e.g. Parker Pearson and Richards 1993, 43). It is possible therefore that the porch structure exposed in the excavation of the hut at Dosso Tamburaro (Maniscalco 2012, 743) was built with the intention of defining a space for the projection of domestic activities outside. Likewise, evidence of outdoor firerelated structure such as hearths would reflect similar choices in marking spaces where people from different families might have carry on their activities within a context of interaction with other households.

This may be speculative, especially considering the fragmentary state of the available evidence and the lack of understanding of the duration, continuity and discontinuity in settlement occupation. However, the suggestion remains strong if we also consider the presence of the large-scale enclosures and compounds. According to the ethnographic parallels mentioned above, these structures might have delimited spaces in which more than one family could conduct activities, e.g. cooking certain foods in shared contexts of daily-life practices. Indeed, if practices taking place at the intra-settlement level may be considered as instrumental in developing a sense of local belonging, then larger-scale constructions such as the enclosures discussed in Section 5.2.3.1 can be viewed as the product of collective efforts. In fact, having considered the possibility of warfare in Sicily, the collective efforts of more than one community can be certainly posited as another factor that might have determined the construction of these structures.

As further discussed in Chapter 8, it is possible that such actions might have created arenas in which situating both shared daily practices, solving competition and/or stimulating cooperation to cope with change. These efforts can be associated with the involvement of more communities facilitating endurance of a strong, communal sense of belonging yet in a context of recurrent interaction and social permeability. I have already argued in Section 3.4 that continuity in settlement patterns and, to an extent, material culture can reflect to an such a sense of belonging, while the presence of unpainted ware would be indicative of interactive dynamics. Supporting evidence comes from the settlement and funerary architecture discussed in this chapter.

5.5 MAIN ASSEMBLAGES

5.5.1 Introduction

The purpose of the following presentation is twofold. First, it will offer a clear picture of what type of inhabited and uninhabited places are discussed in Chapter 8. Second, it will outline the provenance and context of the pottery repertoires that will be used in the pottery analysis in the following chapter. Evidently, sites listed in Table 5.3 are excluded, since they lack contextual information, while only sites from Table 5.2 will be presented. As stated earlier in Section 5.1, these sites are characterised by the kind of structural evidence discussed above, plus pottery assemblages which have been published to a lesser or greater extent. They will accordingly form the basis for the pottery analysis of the following chapters.

The level of detail regarding the description of each site will vary enormously, since almost every site has been excavated at different times and with different methods and questions in mind, as shown in Chapter 2. I shall organise the description by considering the presence/absence of certain features that signal a more-or-less complex organisation of space. In doing so, I shall present first settlements which lack large-scale stone architecture, then sites with enclosures, indicative of a more complex intra-settlement organisation of the domestic environment. Finally, I will describe fortified settlements. Regarding rock-cut cemeteries, the description will be arranged from less to more complex agglomerations of tombs, while caves will be presented at the end of the section for their specificity. In doing so, I shall signal provenance of the published pottery assemblages in order to facilitate cross-referencing to the Catalogue in the Appendix. Here, the reader may find extensive reference to drawings, single measurements and bibliographic sources. Eventually, a description will follow site distribution from east to west as much as possible (Figure 5.1).

5.5.2 Settlement sites

There are 14 settlements among the 217 sites examined in this thesis. These settlements exhibit quite a varied distribution; some are located in the east, others in central-western Sicily. As examined in Chapter 3, this is likely a reflection of the interplay between human and environmental factors but also a product of *ad hoc*, unsystematic research agendas. Among the sites with published materials, 12 are unfortified while only Branco Grande is characterised by the presence of fortifications. As mentioned above, I shall consider first unfortified sites.

5.5.2.1 Unfortified settlements

Within this category, a distinction is apparent between settlements that are characterised by an open-air layout and compound settlements, also characterised by the occurrence of enclosures. It is possible that open-air villages were typical of small communities while larger groups can be posited for compounded areas in view of the considerations expressed above.

5.5.2.1.1 Open air villages Descriptions Site no. (Figure 5.1) 45.

Monte San Basilio

This site is located on the eastern slopes of mount San Basile, a rocky hill with steep flanks at the edge of the Lentini Valley. Orsi (1928, 79) discovered and excavated the remains of one pit dwelling (Figure 5.12). A set of three ceramics was collected by Orsi. Russo (2001) recovered other ceramic materials during further excavations of the site. Orsi only mentioned the aforementioned findings, thus only one piece of pottery published by Russo is included in this study (Appendix 1, Table I.5, Cat. no. 893).



Figure 5.12: Hut from San Basilio (source: Orsi 1928, 80, fig. 13). The figure illustrates the stone perimeter of the hut in plan. The W-E section (Sez A-B) shows that at least three rows of stone encircled the hut surface. The eroded surface is shown on the plan in the northern part of the structure, while terrain outside the southern walls was overcut, likely in later periods (Orsi 1928, 80-81). The three vessels drawn in the plan are marked by the red arrow.

59. Castelluccio Villaggio-Piano Sella

Castelluccio is located on a saddle linking two rocky hills. Orsi (1892; 1893a) did not identify any kind of pit-dwelling but only deposits of materials which he interpreted as dumps (site no. 64). Voza (1995, 331-332) further excavated the nearby area, finding also the remains of pit dwellings in proximity of the 'dumps'. Voza exposed the remains of two large oval huts (4 and 8), delimited by a stone perimeter of the type discussed in the section above. Hut 8 seems particularly significant, as the occurrence of well-preserved features permitted a reconstruction of the house architecture and its indoor installations.

More recent investigations of both these contexts started an assessment of the archaeological assemblage stored in the regional Museum of Syracuse, where a display of cups, labelled as 'from a large hut in Piano Sella', likely refer to hut 8. However, most of this repertoire is unpublished, except an hourglass pot and a double-handled, pear-shaped amphora (Crispino 2016; Crispino and Chilardi 2017, 101, fig. 2; Crispino 2018, 98, fig. 1). Gennusa (2015) also published other three items from hut 8 (Appendix 1, Table I.5, Cat no. 526, 554, 1015), while other three intact vessels from the dumps were published by Orsi (Appendix 1, Table I.5, Cat. no. 546, 829, 854). Finally, fragments of non-Castelluccio ceramics, possibly related to 'Thermi Ware' (see Section 7.2.3), were found by Orsi in the area of the dumps. A set of six radiocarbon dates from both the structures (Table 7.3) has been collected in later investigations (Crispino 2016; Crispino and Chilardi 2017) and will be used in the following chapter in the seriation of the ceramic materials associated with hut 8 floor.

64. Scarico Castelluccio ('dumps')

See site no. 59.

125. Poggio Biddine

The site has been identified and excavated by Di Stefano (1976-77; 1996, 211; 2002, 20) who exposed the remains of huts and outdoor fire-related structures, likely hearths. Gennusa (2015) published one pedestalled vessel from this settlement that is stored in the town museum of Ragusa (Appendix 1, Table I.5, Cat. no. 516).

129. Manfria-Case Manfria

The site has been identified and excavated by Orlandini (1962). Orlandini exposed the remains of two groups of nine huts on an area of 60 x 45 m, as illustrated in Figure 5.13. The excavator also exposed further outdoor structures likely connected to fire-related activities. The huts have been excavated through artificial cuts rather than following shape of the natural and/or cultural features, exposing several overlapped hut surfaces (Figure 5.14). Moreover, it was impossible for the excavator to understand the stratigraphic sequence of the entire site, as excavations of each hut were carried with the aim to expose only the internal vertical stratigraphy without considering horizontal relationships on a much wider area. A list of finds is offered for each hut but not all the listed items have been published. Thus, I could include only a part of the excavated vessels (32) in my examination and collapse finds from different levels into the same group, labelling each group according to the context of recovery, e.g. hut 9. Examined materials are from huts 3, 5, 8 and 9 (Appendix 1, Table I.5).



Figure 5.13: Settlement plan of Manfria (source: Orlandini 1962). The two groups of structures are identifiable in plan. This distinction made Orlandini consider the possibility of some kind of layout, but it is impossible to ascertain, in view of the lack of enclosures, whether this distinction is due to spatial organisation or, more likely, a lack of more extensive excavations. Interestingly, there remain other structures. As discussed above, the hearths are located outside the hut, suggesting that their use was shared among the inhabitants of this place.


Figure 5.14: Hut 1, artificial cuts and sequence of hut surfaces (Source: Orlandini 1962). Clear-cut, artificial levels are illustrated in the schematised section (*tagli*).

134. La Muculufa sanctuary

See site no. 135.

135. La Muculufa

Two areas were excavated, F and T, as illustrated in Figure 5.15. Five excavations campaigns exposed the remains of six huts, and a terrace wall respectively, the first interpreted as evidence of a village and the second as a regional sanctuary. As discussed in Section 5.2.3.3, this has always been the underlying assumption (Holloway 1986; McConnell 1995). The focus of the second campaign (1987) was the excavation, in the 'sanctuary' area, of a deposit of carbonised materials including faunal remains and ceramic sherds (Figure 5.16). Holloway et al. define this deposit as composed of three different layers interpreted as cumulative evidence of 'innumerable meals cooked and eaten on the spot' (Holloway et al. 1991, 16). The plan of the village area resulted in a more complex layout (Figure 5.17) informing a structural study of the pit-dwellings (McConnell 1995, 14-16; Peterson 1995, 26).

Yet, this study did not consider horizontal stratigraphic connections between the different huts but just vertical stratigraphy, as in hut 3. The outline of this hut was given by the structural elements discussed above, including an extensive floor area of terracotta and the stone perimeter (Figure 5.18). Two postholes belong to the earlier floor level, topped by a second terracotta flooring, also characterised by a stratum of ash and daub fragments (McConnell 1992, 96) (Figure 5.19). However, there is not a clear connection between these occupation phases and the ceramic sequence as elaborated by Maniscalco (1995, 65). This is mostly due to the fact that excavations in the area did not inform the definition of a stratigraphic matrix for the whole settlement. In this sense, published ceramics generally refer to whole contexts, e.g. hut 2. Accordingly, published materials from this site also were grouped only according to hut contexts, e.g. hut 2. I separated this group of material – labelled as 'La Muculufa' – from 'La Muculufa sanctuary' group, having considered the lack of stratigraphic relationship between the two areas (Appendix 1, Table I.5). Finally, a series of 20 radiocarbon dates has been collected in recent excavations (Table 7.3).



Figure 5.15: Topography of La Muculufa sites (source: McConnell 1995, 127, fig. 1.2). The figure shows the excavated areas, F and T, which are enclosed in the rectangle. Area F marks the village sector where the huts were exposed. Area T marks the place where the terrace wall, associated with the deposits of faunal remains and pottery, has been identified. N marks the location of the rock-cut tombs.



Figure 5.16: Stratigraphy of the excavated deposit in area T (after Holloway et al. 1991, 19, fig. 16). In the section the stone structure is evident. It is smaller in comparison to the other large-scale walls that have been examined above, and more similar in size and scale to a terrace wall. The section also shows the deposit of layers which shaped the mound and are mainly associated with human activities. However, as also shown by the section, these layers look very irregular and we cannot exclude the fact that the formation of the deposit was disconnected from the performance of ritual activities, as discussed in Section 5.2.2.3.



Figure 5.17: Area F, settlement plan. The displayed grid has squares measuring 5 m along each side (source: McConnell 1995, 130, fig. 4).



Figure 5.18: Hut 3, plan and structural elements (source: McConnell 1995, 133, fig. 7.1). The figure shows the outline of hut 3 in detail. The floor is only partially preserved but marked by the encircling stones of the perimeter especially on the western side of the structure. The two postholes are also visible (A and B).



Figure 5.19: Stratigraphy of hut 3, N-facing section of the exposed layers (source: McConnell 1992, 30, fig. 7). The section (a-b) cutting the floors describes the two different layers identified during the excavation of the structure. It is apparent that the overlap of the two floors and the reuse of the same stone perimeter show a restoration of the same space and continuity of use, although it is impossible to establish the duration of these activities.

149. Case Bastione

A multi-period site with traces of human occupation as early as the LN (Giannitrapani and al. 2014, 182). A series of excavation campaigns since October 2007 have exposed archaeological remains over a large area (Figure 5.20). A phase of an EBA occupation, dated approximately to the end of the 3^{rd} millennium and the beginning of the 2^{nd} , was the focus of the first excavation campaigns in area β (Figure 5.21), exposing the remains of a pit dwelling marked by a stone perimeter and an oval clay-beaten surface (ibid., 184-185), associated with Castelluccio pottery. Excavations of this structure allowed the definition of two construction phases. Fragmentary and intact vessels were found topped by the collapse of the structure. There is no sherd count from the excavated contexts and published vessels from the hut are only reconstructed or partly reconstructed items. Two items were included in this work and grouped under the label Case Bastione hut 1 (Appendix 1, Table I.5, Cat. no. 1222, 1231).

185

Cantigaglione

The site was identified during a survey by De Miro and Fiorentini (1976-77, 429). During test pit excavations the excavators exposed the remains of two huts surrounded by a stone perimeter. A few fragments of pottery and one bossed plaque bone were published. This work includes two fragmented vessels that were published by Gennusa (2015, 33) (Appendix 1, Table I.5, Cat. nos. 244, 245).

186. Casalicchio-Agnone

The site is located just north of the junction between the provincial highway 7 and 11, close to an old rural building. It is ca. 3 km from the coast and ca. 6 km north-east of Licata. Like Cantigaglione, the excavator (Gnesotto 1982) only opened test pits exposing traces of hut surfaces in trench D alongside fragments of Castelluccio materials. This work includes two intact vessels that have been documented by Gnesotto (Appendix 1, Table I.5, Cat. nos. 247, 248).



Figure 5.20: Case Bastione, excavated areas (source: Giannitrapani et al. 2015, 183, fig. 2). Areas alfa, beta and gamma mark the excavated sectors of the site. Remains of the LCA-EBA period were found in the area beta, while alfa and gamma mainly yielded LN-CA evidence. As at La Muculufa, remains of rock-cut tombs were identified near the settlement on the southern edge of ridge protecting the settlement, on the northern side of the area.



Figure 5.21: Case Bastione, Area β , EBA remains of hut 1 (source: Giannitrapanit et al. 2015, 188, fig. 5). Remains mainly consist of terracotta floors and the remainder of the encircling perimeter stones.

5.5.2.1.2 <u>Villages with enclosures and fortified sites</u>

202. Monte Grande

The site developed on three terraces on the eponymous hill in command of the coastal plain. The upper terrace is Pizzo Italiano, ca. 260 m high and 50 m wide, where Castellana identified the remains of a large-scale stone made wall (Castellana 1998), yet without any evidence of Castelluccio materials. Meanwhile, remains of the Castelluccio period are distributed on Baffo Superiore, and Baffo Inferiore. In between the two, scattered Castelluccio potsherds were also collected from the terrace of Baffo Calcarone where, however, no structural remains survived (Figure 5.22). The excavator exposed a complex system of seven enclosures plus a variety of outdoor fire-related structures as described in Section 5.2.2, suggesting the organisation of domestic-related activities within a compounded area (Figure 5.23). Remains of domestic huts are lacking, but this can be explained by the methods of excavations employed which focused on full extent excavations, paying poor attention to contextual finds. In comparison to La Muculufa excavations, this permitted the definition of a stratigraphic order for Baffo Superiore where the enclosures were embedded in a cultural sequence constituted by three layers (Figure 5.24).

I included in this work the whole published reconstructed vessels from Baffo Superiore. Thanks to the stratigraphy of the terrace and the structural evidence, it was possible to split the pottery into two distinct groups, associated with specific evidence of human activities that will be used in order to implement the incidence matrix and carry out the regional assessment on ceramic variability. In the Catalogue, the Monte Grande repertoire features are thus split into assemblages, labelled as 'Monte Grande 1-1a' and 'Monte Grande 2-2a' (Appendix 1, Table I.5).



Figure 5.22: Plan of the excavated area at Monte Grande 1: Baffo Superiore; 2: Pizzo Italiano; 3: Baffo Calcarone (source: Castellana 2000, 6-7, fig. 3). The figure shows the excavated areas. Pizzo Italia shows to be the highest point with Castelluccio remains while Baffo Superiore is situated between Pizzo Italiano and Baffo Calcarone, on the southern flanks of the SW-NE ridge of the hill.



Figure 5.23: Plan of Baffo Superiore (source: Castellana 1998, 32, fig. 4). The figure shows type of the largescale stone-made structures constituting the enclosures of Baffo Superiore. The numbers identify the enclosures exposed. The outdoor fire-related structures were found within these enclosures, mainly enclosure no. 3.

Figure 5.24: Stratigraphy of Baffo Superiore (source: Castellana 1997, 10, fig. 2). The upper layer (1-1a) contains Castelluccio materials and fragments of Middle Helladic and Late Helladic I-II potsherds. This layer tops layer 2-2a and the enclosure system. Layer 2-2a is associated with Castelluccio fragments and the enclosures. Layer 2-2a overlain the earliest deposit of the site with traces of human activities. This bottom layer is associated with occurrence of LCA materials and remains of a hut. In 1995, Castellana (2000, 42) expanded excavations, leading to the identification two other large-scale stone structures. Castellana was unable to establish any stratigraphic link between the two terraces and the others.

119. Branco Grande

Finally, there remains Branco Grande, where Orsi identified the remains of 40 huts (Orsi 1910) (Figure 5.25). The fortification, ca. 100 metres long, partly protects the village on the eastern side of the settlement, locking in the cluster of huts (Figure 5.26). Published materials examined in this work are from hut 3 (Cat. no. 779. See Table I.5, Appendix 1).



Figure 5.25: Hut 2 plan (source: Orsi 1910, 168, fig. 3a, scale 1:100).



Figure 5.26: Site plan (source: Orsi 1910, p.160, fig. 1, scale 1:500). It is evident that the fortification (the dashed line) encloses the cluster of huts and faces inland. As discussed in Section 5.2.3.2, fortifications usually face inland, despite the dangers likely coming from the sea. It was argued that this arrangement might have also allow local communities to interact through the manner in which constructing the site brought a larger workforce together.

5.5.3 Burial sites and caves

The remainder of the examined contexts consist of 31 rock-cut cemeteries and six caves. Description here will follow the same criteria for the description of the settlement sites. I shall discuss the rock-cut cemeteries first, then the burial caves with traces of cultural remains, including the burial features. The provenance of the published pottery assemblages will also be highlighted. I shall start considering the simplest manifestations of rock-cut cemeteries, then those characterised by embellished architecture.

5.5.3.1 Rock-cut cemeteries

5.5.3.1.1 <u>Rock-cut tombs with slabs</u>

29. Piano dell'Angelo

This site is located on a plateau in the municipality of Caltagirone where the remains of rock-cut tombs were identified by Bergamini (Gennusa 2015, 29). A complete catalogue of the vessels found by Bergamini in his explorations has been published by Seminerio (1996), although it remains impossible to connect the occurrence of this pottery with specific burial contexts (Appendix 1, Table I.5).

47. Passanatello di Francofonte

Only one vessel was published by Bernabò Brea (1973), indicating provenance from a cluster of rock-cut tombs located in Contrada Passanatello, at the southern margins of the Catania plain (Appendix 1, Table I.5, Cat. no. 969).

48. San Lio

Nine ceramics included in this work under the label of San Lio are of uncertain provenance, yet Lagona (1971) associated these vessels with two rock-cut tombs in Contrada San Lio-Ossini di Sotto (Appendix 1, Table I.5).

49. Valsavoia

This cemetery site was identified first by Orsi (1902a) who explored 43 rock-cut tombs. In four of them, Orsi found Castelluccio pottery while the majority held ceramic evidence of later periods. Explored burials with Castelluccio materials were 3, 6, 7 and 22. All five vessels included in my examination come from burials 3, 6 and 7, as the remaining finds from tomb 22 were only described by Orsi (Appendix 1, Table I.5, Cat. no. 508, 794, 811, 815, 974). In the implementation of the incidence matrix, I shall collapse all these contexts under the label of Valsavoia.

51. Cava della Secchiera

The cemetery has 30 tombs that were identified by Orsi (1893b). However, he published only 15 of them describing assemblages of the tombs 1, 3, 6, 7, 10, 12 and 14. Published materials from tombs 1, 10 and 12 are included in this work

(Appendix 1, Table I.5, Cat. no. 547, 606, 674, 971). Further materials, including lithics, stone pendants and decorated bone are also present (Orsi 1893b).

52. Melilli-Cava Bernardina

This cemetery is characterised by single tombs, carved out of the rocky crops, located in the Bernardina district. Fifty tombs were identified by Orsi in the late 19th century but only 35 were explored (Orsi 1891b). As illustrated in Figure 5.27, most of these tombs have a very simple entranceway in the form a small corridor while there are a few with a wider prospect, although this is not decorated or embellished with engravings. Among the 35 tombs explored by Orsi, seven were found completely empty (tombs 1, 4, 8, 13, 15, 29 and 33). In four tombs out of 35 only bones were found, which were interpreted by Orsi as human remains (tombs 7, 9, 21, 23 and 24). In Tombs 18, 26 and 27, only material remains were found, but it is likely they were originally associated with burials, as suggested by the human remains found in the other tombs. The remaining 21 tombs still contained human remains associated with possible grave goods. Among these, 15 appeared to possess intact and/or fragmented pots, but only 7 were published (tombs 5, 6, 14, 17, 22, 31 and 34), showing a panorama of the pottery finds and other materials. This pottery is included in this work, while assemblages from tombs 2, 3, 10, 19, 20, 25, 28 and 32 were only mentioned in the Orsi's report without a drawing (Appendix 1, Table I.5).

54. Cava Cana Barbàra

This cemetery has been identified by Orsi (1902b) who discovered the remains of 30 tombs. Orsi published materials, both whole and fragments, from three tombs. The whole items included in this work are all from the tomb 4 (Appendix 1, Table I.5, Cat. no. 740, 968).

101. Castiglione

The cemetery of Castiglione was identified during the 1970s surveys of the Superintendency of eastern Sicily (Pelagatti 1973). Due to further reuse of the location in the 6th century BC, the Castelluccio cemetery has been modified. More recently. Rovetto (2006) published a group of vessels from the tombs 93, 94 and 98 (Appendix 1, Table I.5, Cat. no. 740, 968).

103. Monte Racello

Nine rock-cut tombs were explored by Orsi (1898) located on the plateau on top of this hill, 600 m asl. Tomb 1 had many deposits of human remains and a rich

assemblage of fragmented and whole vessels and lithics. Bronze items are rare in Castelluccio Sicily. We have seen above how one dagger was found in the tomb 1S at Santa Febronia. Another bronze dagger was found by Orsi in tombs 4 and 5 at Monte Racello, together with other intact ceramics and bronze objects. Published materials examined in this study are from tombs 1 and 5 (Appendix 1. Table I.5).

105. Monte Sallia-Cozzo delle Ciavole

The cemetery was identified by Orsi (1923) on the plateau of Cozzo delle Ciavole, 466 m asl. Published materials examined in this work from the cemetery mostly come from burials 1 and 9 (Appendix 1, Table I.5), as well as other objects such as stone pendants and a sword bone pommel (Figure 5.28).

108. Santa Croce di Camerina

Scrofani (1972-73) published four vessels from a rock-cut tomb which was identified in the modern centre of Santa Croce di Camerina. One vessel is included in this study (Appendix, Table I.5, 1, Cat. no. 989).



Figure 5.27: Mellilli-cava Bernardina, plans and sections (after: Orsi 1891b). The figure shows an array of the rock-cut chambers at Melilli. For the most part, rock-cut tombs have a single chamber and an entranceway, sometimes characterised by a small corridor (e.g. B12). Only a case, B. 18, shows to have small façade as shown in section (S. 18).

130. Manfria-I lotti

Gennusa (2015) published two vessels that are stored in the regional Museum of Gela. I included these in my dataset (Appendix 1, Table I.5, Cat. no. 161, 163).

131. Marcita

Tusa (1997) explored and excavated this cemetery where many tombs appeared to have been looted. Tusa described and published the grave goods of two tombs, A and B, the former also with Bell Beaker vessels (Appendix 1, Table I.5).



Figure 5.28: Monte Sallia, ceramics and other objects found in the tombs (source: Tusa 1999, 328, fig. 43, not to scale).

151. Gibil Gabib

This site is a cemetery of rock-cut tombs located south of Caltanissetta on the plateau of mount Gibil Gabib. There remain vessels displayed in the archaeological museum of Caltanissetta labelled under this provenance that were published by Sedita Migliore (1981) and Iannì (2004) and included in this work (Appendix 1, Table I.5).

157. Sant'Anna

Under this label there are two vessels published by Sedita Migliore (1981) and Iannì (2004) that are associated with a rock-cut tomb located on a hill north of Caltanissetta (Appendix 1, Table I.5).

168. Contrada Passerello

This rock-cut tomb was discovered by Mauceri (1880) who wrote that there were remains of at least 17 individuals in the tomb, associated with animal bones and bronze, but he only described and illustrated the remains of three vessels. It is likely that most of the vessels were already looted at the time of the discovery. I included these three vessels in this work (Appendix 1, Table I.5).

193. La Ragusetta (or C. da Ragusetta)

Two rock-cut tombs, 1 and 2, can be ascribed to this location, discovered by De Miro (1961). De Miro gave us an accurate description of both the graves in terms of plans and grave goods. These were intact and constituted by whole vessels associated, only in the case of tomb 1, with human remains. All materials are displayed in the prehistoric collection of the regional museum of Agrigento. I included all these vessels in my examination (Table I.5, Appendix 1).

195. Cuminazzi slope (or C. da Cuminazzi)

The tomb was discovered by Castellana (1982; 2000) who published also the grave good constituted by whole vessels. All these vessels were examined in this study (Table I.5, Appendix 1).

205. Canicattì

Under this label there is a group of ceramics published by Pacci (1987), today part of the antiquity collection in the Ashmolean Museum of Oxford. There is not exact provenance for these four vessels, all included in this work (Table I.5, Appendix 1). Yet, Pacci noted that the Ashmolean Museum acquired these vessels from a British collector in 1891, C. D. E. Fortnum Esq., who stated a funerary provenance from a rock-cut tomb in the territory of Canicattì.

207. Marianopoli-Valleoscura

Examined materials from this location come from two intact rock-cut tombs, 13 and 14, excavated by Fiorentini (1985-86) in a large area along the flanks of Mount Balate, where there remain traces of a cemetery dated to the Hellenistic period. Fiorentini published an accurate plan of these tombs showing the position of the grave goods which also included RTV-like materials. I included these ceramics in my classification of the available published evidence (Appendix 1, Table I.5).

209. Altopiano di Pietralonga

The cemetery was identified by Mauceri (1880). Following Mauceri, the vessels here examined and grouped under this label are from this cemetery, although it was impossible to relate them to a specific tomb (Appendix 1, Table I.5).

214. Monteaperto

There is no accurate description for the provenance of the vessels. Yet Orsi (1897) described them as funerary items from a cemetery of rock-cut tombs near Agrigento in the Piano dei Morti district. I included three vessels from this location under this label (Appendix 1, Table I.5).

217. Monte Sara

In this work are included two vessels published by Orsi (1895) and described as funerary items from a rock-cut tomb located in the territory of Cattolica Eraclea (Appendix 1, Table I.5).

222. Torre Bigini

This is another rock-cut tomb in which the occurrence of both Bell Beaker and Castelluccio materials was documented (Figure 5.11, top). It was explored by Mingazzini (1939) who published the grave goods. In this work, I included only the Castelluccio pottery (Appendix 1, Table I.5).

223 Torre Donzelle

Mannino (1994) identified and excavated this rock-cut tomb, recovering grave goods constituted by Castelluccio pottery and Bell Beaker vessels. Published materials from the tomb included in this work are only Castelluccio vessels (Appendix 1, Table I.5).

224. Torre Cusa

Under this label are grouped three whole vessels from a rock-cut tomb with two burials, excavated during the work of the Superintendency of Trapani in the 90s (Tusa 1998a, 214, Tusa 1998b). The grave goods of the tomb also included Bell Beaker pottery which were not included into this work (Appendix 1, Table I.5).

5.5.3.1.2 Tombs with embellished entranceway

39. Coste di Santa Febronia

This cemetery has many tombs but only four were explored – tombs 1, 2, 4 and 5 (Maniscalco 1993-94; 1996a; 1996b; 1997). As seen in Figure 5.10, all of them have plans characterised by an ante-chamber, and the latter ones also an embellished façade. I included four items from the tomb 1S in my dataset (Appendix 1, Table I.5). Also, other types of items were found in the exploration of the three graves, such as one triangular dagger and a few stone pendants (Figure 5.31).



Figure 5.29: Further non-ceramic grave goods from the cemetery of Santa Febronia, a, b: calcareous and greenstone pendants from tomb 1; c: greenstone pendant form tomb 5; d: dagger from tomb 5 (source: Maniscalco 1996b, 85, fig. 6).

57. Castelluccio necropoli-Cava della Signora

The cemetery was identified by Orsi (1892; 1893b). With its 200 rock-cut tombs, it extends along the steep flanks of Cava della Signora near the excavated settlement. Evidently, the location and number of tombs in this site is suggestive of a long-term funerary use. Some of these tombs also have an elaborated façade as illustrated in Figure 5.30, originally closed by slabs decorated with engravings. Published materials included in this work are from the tombs 2, 9, 13, 15, 16, 22 and 34 (Appendix 1, Table I.5).



Figure 5.30: Cava della Signora, an example of an embellished façade (source: Tusa 1999, 315, fig. 30). Together with the embellished façades documented at Santa Febbronia, this and a few other cases with a similar engraved portal represent the only examples of elaborated funerary architecture from Castelluccio contexts.

114. Contrada Paolina

Procelli (1981) excavated two rock-cut tombs at this site. Tomb 2 was intact at the moment of the discovery, so that it was possible an accurate publication of the grave good including the 13 vessels examined in this work (Appendix 1, Table I.5). Plan and section were already shown in Figure 5.12.

220. Contrada Pergola

Seven vessels are included under this label that were published as part of grave goods of a rock-cut tomb by Mannino (1971) (Figure 5.31) (Appendix 1, Table I.5). The tomb is characterised by a monumental façade and Mannino identified the human remains of ca. 200 individuals.



Figure 5.31: Contra Pergola, plan and section (source: Mannino 1971, 53, fig. 1).

67. Grotta Lazzaro

This site is located within Lazzaro Valley in the municipality of Rosolini. Unlike other tombs in the area, the tomb is carved out from a wall in a cave and preceded by a monumental façade sculpted at the entrance, as illustrated in Figure 5.32. I included into this work the vessels that Di Stefano (1979) published and attributed to this karstic cave (Appendix 1, Table I.5).



Figure 5.32: Grotta Lazzaro, sketch of the monumental façade and plan (source: Tusa 1999, 322, fig. 37).

5.5.3.2 Caves

70. Grotta della Chiusazza

Tinè (1965) excavated this site exposing a stratigraphic sequence from the LN to the MBA (Figure 5.33). Castelluccio fragments and materials were found in the middle of the sequence, in particular during excavations of the layer III in trench R. Trench R is the deepest in the cave deposit with a fill 3.5 m deep. Crucially, Tinè noted that the layer III in this trench sealed layers with LCA materials while it was covered by other layers with MBA materials (Thapsos grey ware cordoned pottery). Published ceramics included in this work are those from the layer III in the trench R and few Castelluccio items from the trench Q (Appendix 1, Table I.5).



Figure 5.33: Stratigraphic sequence of the cave of Chiusazza (after: Tinè 1963).

106. Monte Tabuto 1 (or Colle Tabuto)

Monte Tabuto is a hill 985 m asl (Figure 5.34, a). The site is a complex system of interconnected caves, first explored by Pennavaria (1895) who identified seven caves and collected ten vessels that were later published by Tusa 1990. These vessels are stored in the 'Luigi Pigorini' Ethnographic and Prehistoric Museum. Yet, the extensive system of tunnels and galleries was properly explored by Orsi who found, besides whole and fragmented vessels, a large quantity of sherds and lithic fragments (Orsi 1898). Orsi interpreted these lithic finds primarily as evidence of mining activities, contending that only later were the caves used for funerary purposes. He identified two groups of caves, the group of caves 1-4, and, separately, cave 5 (Figure 5.34, b-c). This former cave is a vast subterranean area in which artificial chambers were carved out of the inner walls of the rock. In one of these chambers, Orsi discovered a single intact burial associated with grave goods constituted by a flint knife, a pierced shell and a cup. Depositions of many human remains were found in another nearby chamber together with remains of many fragmented and intact vessels that Orsi published partly. Other published

fragments and intact vessels are those from caves 1-4. Materials included in this work are from both the group of finds (Appendix 1, Table I.5).

107. Monte Tabuto 2

See site no. 106.



Figure 5.34: Monte Tabuto, location and cave plans, a: general topography of the site (Orsi 1923, 4, fig. 1); b: cave 5 (Orsi 1898, 178, fig. 8); c: caves 1-4 (source: Orsi 1898, 174, fig. 4).

169. Grotta di Pietrarossa

This cave was discovered by Mauceri (1880) with the remains of three human skeletons and fragmented vessels. Some of these vessels were then sent to Rome and are today part of the prehistoric collection of Luigi Pigorini Ethnographic and Prehistoric Museum. More recently, Tusa and Pacci (1990) published this set of materials that I have included in this work (Appendix 1, Table I.5).

204. Naro

Under this label is a group of 64 vessels published by Tusa and Pacci (1990) (Appendix 1, Table I.5). Tusa and Pacci (1990) could not reconstruct the exact provenance of the vessels forming this collection but, after extensive archive research, they established a funerary provenance, most likely from the province of Agrigento.

208. Grotta Ticchiara

Castellana (1997) explored this cave where human remains were found associated with a large number of intact vessels. The cave has three different rooms, a-b-c. Room c alone held 49 of the vessels at the moment of discovery (Castellana 1997). Another 41 vessels were found a year later in the rooms a and c. Eighteen depositions were then defined by Tinè (1997, 202-203). The vessels examined in this work are grouped in the 18 'burials' defined by Tinè (Appendix 1, Table I.5).

5.5.4 Other anthropogenic remains

218. Ciavolaro

The site was identified by Castellana and excavated over two years in 1987-1988 (Castellana 1996b). Castellana defined stratigraphy of the deposit characterised by different layers, 1, 2, 3a and 3. The first was the upper layer of humus and the second was a burnt soil sealing the archaeological deposit. Layers 3a and 3 were the richest in terms of archaeological materials and contained several deposits of human remains and a large number of intact vessels. Castellana also noted the occurrence of burnt human bones associated with animal remains that accumulated through the deposit (Castellana 1996b, 35-36) (Figure 5.35), even though there is no a plan of the excavated areas showing the relationship between the different exposed surfaces of the extensive deposit. It therefore remains and associated vessels in terms of a clear-cut sequence, although it remains apparent how the deposit was formed through the deposition of several individuals accompanied by whole vessels. The 84 published vessels are all included in this thesis (Appendix 1, Table I.5).



Figure 5.35: Deposits of human remains and pottery at the sites of Ciavolaro (source: Castellana 1996b).

5.6 Synopsis

This chapter presented the complex array of architectural evidence and natural sites in which Castelluccio people inhabited, buried their dead and likely did other kind of activities, including also potential ritual practices. Quality and quantity of this evidence enormously varied, engendering the necessity to undertake a preliminary assessment of the excavated features in order to arrange the record into readable sources of information in support of the pottery analysis. This has also offered scope for describing main assemblages in which these features were better exposed, and thus signal provenance of pottery. Analyses of the ceramics and contexts of recovery in the two following chapters will rely on this general review, especially the implementation of the incidence matrix through which the study of association between sites and pottery types will be developed. Similarly, a discussion of the contexts of shared practices, interaction and boundaries stemming from evaluation of these characteristics will also be expounded in Chapter 8, and discussed in combination with the results of the pottery analyses.

CHAPTER 6: A FUNCTIONAL TYPOLOGY OF MORPHOMETRIC VARIABILITY

This chapter presents a morphometric analysis of ceramics. The study is classificatory in itself but with the purpose of understanding variability reflected in the dataset from a statistical standpoint. The aim will be to class the different shapes and forms into a functional taxonomy. As explained in Section 4.3.4, this shall provide scope for further arrangement of the morphometric types into a chrono-typological sequence with the purpose of deploying both morphometric differences and functional similarities into regional datasets. Accordingly, I shall argue that these characteristics are representative of social practices and boundaries. First, I will repeat the central ideas on how to approach functional differentiation through analysis of ceramic variations in shape and size. Then, I will introduce the terminology adopted to describe the shapes and the variables used to explore variations in shape and size. This will be crucial in order to approach formally-defined aspects of pottery function. When compared with the ethnographic ranges in the end, these aspects will be arranged into the taxonomic scheme. Finally, I shall discuss the implications of this functional typology before engaging in a further examination of chronological and regional variability.

6.1 REPEATING CENTRAL IDEAS ON DIFFERENTIATION, VARIABILITY AND REPRESENTATION

Current interpretations of the ceramic evidence through which researchers defined Castelluccio regional groups as described in Sections 2.2.4 warrant re-examination in the light of the considerations expressed in Chapter 4. To do so, a methodology was devised in Section 4.3 to explore similarities and differences for what they might represent in terms of social practices and boundaries. This approach stemmed from the necessity of linking material culture with society. Accordingly, a typological study of the pottery evidence is needed first in order to explore engendered differences and similarities to arrange into a taxonomic scheme. For this purpose, I shall pursue a classification of the formally-defined aspects of pottery variability related to functional differentiation. While function and morphometric variations remain strictly interlinked, it is worth noting that such a study does not aim to infer actual function. In fact, it just adopts the notion of functional differentiation as a heuristic tool to qualify and quantify engendered similarities and differences irrespective of ware types and surface colours. As argued in Section 4.3.2, this strategy is more appropriate than focusing on decorative motifs and patterns, as my dataset is constituted by both painted and unpainted vessels.

6.2 TERMINOLOGY AND DATASET COMPOSITION

6.2.1 Structural and anatomical descriptors, and definitions

With this in mind, I reviewed a number of ethnographic corpora to get information about shape, size and intended function, and I shall arrange morphometric variability in Castelluccio repertoires in the following sections on the basis of this. Terminology will be set out which incorporates use of several structural and morphological descriptors, in particular the following:

- Corner, end and inflection points.
- Orifice/mouth, rims, necks, collars, lower body and base.

In addition to these descriptors, the following terminology also incorporates definitions of secondary elements of attachment, or appendages, to the main ceramic body, such as stems/feet and handles. I will not consider spouts because there are no attested examples on Castelluccio vessels. The vast array of these elements should not be surprising when compared with the limited variety of vessels described in ethnographic corpora. The latter include vessels, as stressed already in Section 4.3.3, likely used within a limited span of time, while both chronology and regionality are likely to be reflected in the composition of the examined Castelluccio repertoires. This may seem a simplistic assertion but is not, since it implies the fact that ceramic variability, when pin down with reference to context can be potentially associated with a variety of social aspects and situations, as further discussed in Chapter 8.

Corner, end and **inflection points** can be defined as characteristic points that define vessel contour in term of curvature and angling (Shepard 1976, 226) (Figure 6.1). End points are located at the top and bottom of the vessel silhouette. Corner and inflection points can be located instead between the two end points on the vessel contour. They mark changes in the contours, and can be defined as points where the tangent of the curvature is vertical (Rice 2005, 218). A corner point marks an abrupt change in defining a distinct angle. Inflection points mark a gentler change of direction in the vessel profile.

From this perspective, corner, end and inflection points are key structural descriptors that can help to define the form given to a vessel, in observing the extent to which they structure a more or less complex, continuous or composite ceramic body. The **orifice**, or **mouth opening** are usually subject to a great deal of elaboration, but if there are only endpoints then other distinctive elements such as rims, collars or necks cannot be defined (Figure 6.1). Instead, when angles and curves marked by corner and inflection points respectively can be identified, then the profile continuity is broken by further elements that give shape to more complex forms such as rims, necks and collars.

Vessels with a globular form, for example, may not have significant corner points along the profile but be characterised by a gentle inflection that may give shape to elaborated rims, collars of necks. Depending on the degree of angularity, **rims** can develop a variety of profiles, i.e. everted, straight, or inverted, often related to the manufacturing process. In this case, a rim can be defined as the most superficial restriction of the mouth, since it may directly affect the mouth opening of the vessel (Rice 2005, 212). **Necks** can be defined as a restriction of the mouth rising from above the point of maximum diameter (Rice 2005, 212). When this passage is marked by an inflection point, it can be defined as an indistinct neck, while the neck is distinct when marked by a carination point. A neck can also be characterised, as much as the rim, by a variety of profile developments such as everted and inverted. Finally, a **collar** is a restriction of the mouth corresponding to the point of the maximum diameter (Rice 2005, 212). In this sense, collars may not affect the mouth opening as much as rims and necks.

The main ceramic body is affected by the occurrence of inflection/corner points which can give shape to shouldered and carinated vessels. A shoulder can be defined as the upper part of a ceramic body which is split in half by a gentle change of direction following the point of maximum diameter. Carinated vessels are usually defined instead by the occurrence of a corner points. All these structural elements contribute to the overall anatomy of a vessel, that is, they determine whether a vessel is open or more or less restricted, with a straight-sided profile or complex, as schematised in Figure 6.1.



Figure 6.1: Schematisation of salient structural points affecting vessel morphology and profile development. a: complex profile marked by a corner point from which a collar raises up; b: shouldered vessel more restricted in mouth and characterised by a neck which is marked by an inflection of the profile above the point of maximum expansion; c: open vessel characterised by a complex profile development; d: vessel with continuous profile development and rim marked by an inflection point (drawings not to scale).

Regarding **stems**, they can be defined as the standing support for the main body of the vessel (Rice 2005, 214), usually a bowl in Castelluccio repertoires. Also in this case, corner and inflection points can help in defining certain shapes of stems. For example, stems separated from the bowl through a corner point are usually conical in shape, while inflection points marking the passage often determine the development of trumpet-shaped stems.

Finally, handles are appendages to facilitate holding, although their occurrence in folk classifications often reveal the equivocal nature of their relationship to shape and size (Kempton 1981, 46). Handles can be described in terms of their occurrence, orientation, cross-section shape, form and termination. For instance, there may be containers with more than one handle. In terms of orientation, handles can be vertically or horizontally attached to the main ceramic body. The cross-section may be angular, round or oval in shape, and we can usually discern the form of a loop or a ring looking at the handle profile. Certain handles are characterised by terminations that are more or less elaborated. Castelluccio handles are mostly vertically attached, while there is a great deal of variety of shape, form and terminations in handles. Similarly, there is a variety of stem shapes as illustrated in Figure 6.2.



Figure 6.2: Appendage types. The figure illustrates the range of variation in the shape, form and termination of handles, and in the shape of the stems which will be encountered in the morphological study of Castelluccio ceramics. The terminology adopted aims to be as descriptive as possible (drawings not to scale).

Shape	Definitions	Sketches
Beaker	Handleless waisted shape. Castelluccio beakers may have waisted profiles marked by a strong or smooth carination.	
Cup	Open shape characterised by either continuous or composite profile developments. In Castelluccio repertoires cups always have handles.	
Bowl	Rounded, deep shape, shallower than jars. In Castelluccio repertoires, rounded bowls may have collars, and may or may not have handles.	
Hourglass vessel	Double-handled vessel characterised by a composite profile marked by a severe corner point halfway up the total height.	
Jar	Closed shape, taller and deeper than bowls. Castelluccio jars are composite vessels, often necked and carinated. They usually have two handles but there are jars with one handle.	
Pedestalled vessel	Open-mouthed vessel with pedestal. Castelluccio pedestalled vessels may be divided into a variety of handled and handleless forms and sub-varieties.	

Table 6.1: Description and sketches of the main shapes (drawings not to scale).

All of these elements provide the basis for a descriptive system of shapes as presented in Table 6.1, which gives definitions of the main shapes that I have identified in the Castelluccio repertoires. However, the range of shapes defined in outline in Table 6.1 cannot account for the entire range of variation which is embedded in the Castelluccio repertoires. For that, a study of morphological variability will be presented below, which expands the definitions described above into sub-variations in shapes and groups of shapes through the development of shape profile. This variety is schematised in Table 6.2, which also shows the adoption of geometric descriptors to facilitate the explanation of such variability. The aim of Table 6.2 is to offer a concordance with the Italian terms, in support of an understanding of the complex terminology adopted to describe shapes and forms. Consequently, my terminology should be regarded not as a direct translation from the local nomenclature but a way of clarifying the definitions of shape. Anglophone scholars may be more familiar with my definitions, which are simpler than those adopted in local specialist nomenclatures. As

shown above, I tried to make choices as neutral as possible with the intent of minimising the impact of semantics on the establishment of definitions for the containers. I did not employ the term *olla*, for example, although the term is frequently used in Italian nomenclatures for Bronze Age pottery. In fact, I found that this term in the Anglophone world is most common in archaeological and ethnographic studies of South American cultures defining cooking pots. Instead, I used the neutral term 'jar'.

Table 6.2: Terminology for the examined repertoires. The table shows the terms adopted in the definition of shapes, plus further geometrical descriptors that will be used in the following study of morphological variability in order to describe the variety of forms within shapes, and between. The table also offers a concordance with the Italian terminology in order to facilitate understanding of the text for non-Anglophone scholars.

Shape	Italian terminology (after Cultraro 1996; Adamo 1999; Iannì 2004; 2009; Gennusa 2015)	Form	Illustration (not to scale)
Beaker	Tazza/boccale	Handleless waisted vessel	
Bowl	Olla semi-ovoide	Globular bowl	
Bowl	Brocca/boccale	Globular bowl with everted rim profile	
Bowl	Tazza/ciotola	Semi-spherical collared bowl	
Bowl	Cratere tri-ansato ad anse lunate	Rounded bowl with stem	
Сир	Tazza a profilo sinuoso con orlo estremamente svasato	Bell-shaped cup	
Cup	Tazza/boccale/boccaletto biconico	Bi-conical cup	

	Italian terminology (after Cultraro		T11
Shape	1996; Adamo 1999; Iannì 2004;	Form	inustration (not to
	2009; Gennusa 2015)		scale)
Сир	Tazza carenata	Carinated cup	
Cup	Tazza/bicchiere con ansa sopraelevata bifora	Conical cup with inverted curved wall profile	
Сир	Tazza/bicchiere/tazza con ansa a ponticello	Conical cup with straight rim profile	Wo
Сир	Tazza/boccale/boccaletto	Globular cup	
Сир	Tazza	Semi-spherical cup	
Hourglass pot	Anforetta a clessidra/bicchiere a clessidra bi-ansato	Double-handled hourglass pot	AID
Hourglass pot	Brocchetta/boccale/boccaletto	Single-handled hourglass pot	TZ)
Jar	Orcio	Barrel jar	
Jar	Anfora	Expanded bi- conical jar with everted rim profile	
Jar	Anfora/dolio/orcio	Bi-conical jar, with straight rim profile	

Shape	Italian terminology (after Cultraro 1996; Adamo 1999; Iannì 2004; 2009; Gennusa 2015)	Form	Illustration (not to scale)
Jar	Anfora/anforetta	Bi-conical jar with everted neck	
Jar	Anfora/anforetta globosa/anforetta globulare/anforetta piriforme	Expanded globular jar with indistinct neck	
Jar	Anfora	Oval jar	
Jar	Anfora piriforme	Pear-shaped jar	
Jar	Brocca/broccale bi conico	Elongated bi- conical jar	
Pedestalled bowl	Vaso a clessidra/vaso su piede/coppa su piede	Vessel with pedestal lower than the height of the bowl	
Pedestalled bowl	Vaso a clessidra/vaso su piede/coppa su piede	Vessel with pedestal as high as the height of the bowl	
Pedestalled bowl	Vaso con piede a tromba/vaso su piede/coppa su piede/fruttiere	Vessel with pedestal higher than the height of the bowl	

6.2.2 Composition of the funerary repertoires

The funerary subset has 439 intact vessels comprised of mostly pedestalled bowls (37%) followed by cups (28%), jars (24%), hourglass pots (6%) and bowls (5%). Beakers are virtually absent (Figure 6.3). There are no fragments included in this sample, while the settlement subset is mostly constituted by reconstructed items.



Figure 6.3: Composition of the funerary subset.

6.2.3 Composition of the settlement repertoires

This subset contains 213 reconstructed vessels, sherds and unscaled items. Sherds are diagnostic fragments for which it has been possible to identify the corresponding shape. However, I was unable to recover measurements from publications for 63 out of 213 items. As listed in the appendix catalogue, these items are unscaled reconstructed vessels or diagnostic fragments having only one linear measurement, e.g. maximum diameter. As shown in the section below, I included these items in the classification of shape, yet it was impossible to include them in the study of size. I shall further discuss the dataset composition when outcomes of the integrative pottery analysis are debated in Section 7.4, since the fragmented character of the settlement subset in particular impinged upon the final results and interpretations. As observable in Figure 6.4, the settlement subset is constituted by cups (44%), followed by jars (23%), bowls (12%) and pedestalled bowls (11%). Beakers also occur (8%) while hourglass pots are virtually absent. In general, a more heterogeneous composition in qualitative terms can be observed compared to functional dataset.



Figure 6.4: Composition of the settlement subset.
6.3 VARIABLES AND METHODS

6.3.1 Attributes of size and shape

As mentioned earlier, understanding actual function is not an objective of this study, but approaching functional differentiation does remain relevant in order to qualify, quantify and arrange variability into a taxonomic scheme. The dataset, constituted by both funerary and settlement repertoires, shows a good deal of variability, suggesting a certain level of functional differentiation. In the following sections, understanding the relationship between morphology and size will be therefore crucial in approaching and quantifying this differentiation. Indeed, we have seen in Section 4.3.3.3 that if we consider pots as implements (Braun 1983, 107; Skibo 1994; Skibo and Schiffer 2013, 27), then functional differentiation can be approximated through a study of the relationship between attributes of shape and size (e.g. Lesure 1995; Boudreaux 2010).

However, there is no one attribute related to size. Instead, the ethnographic review has demonstrated that values for the measurement of size are diverse, and that different kinds of measurable attributes may express a vessel's size. Volume would have been a good proxy for size to consider in the present study, yet information about volume is not present in publications of the examined repertoires. It would have been impossible to measure volume in an accurate way, since I did not have direct access to the vessels. I will focus instead on attributes of size, for which will it be possible to get linear measurements directly from published drawings or text. In fact, the quality of illustrations would not have been good enough to approximate volume calculation. Also, the complexity of Castelluccio shapes would have complicated the adoption of methods such as that of the stacked-cylinder calculation to discern volume from geometric patterns (Senior et al. 1995). I will thus consider mainly metric attributes of size such as total height, height of stems, maximum and rim diameters. I will also consider base diameters only in pedestalled bowls and certain forms of jars, as most jars have rounded bottoms. An illustrated summary of these variables is in Figure 6.5.



Figure 6.5: Summary of the measurements taken for the metric variables (items not to scale).

Regarding shape, all the developments that stem from a description of the structural and anatomical elements defined in Section 6.2.1 will be considered. In this sense, the general morphological elements for a broader distinction between shapes have already been provided. Considering the presence/absence of corner/inflection points and other morphological elements will offer scope to introduce further levels of morphological differentiation at the sub-group level. In considering corner/infection points, it will be possible to determine whether a shape profile is continuous, angular or composite (e.g. Shepard 1976, 231-232). I will examine also the development of the upper and/or lower part of the vessel body by looking at the type of rim, and the presence/absence of other structural elements that affect restriction of the mouth orifice, such as necks and collars. As described above, rims and necks may have an everted, straight or inverted profile. These variations will be examined in the attempt to arrange shape variations into sub-groups of forms and, if necessary, formal varieties. For this purpose, I shall also consider the presence/absence and

type of appendages. Stems may have different profiles, as defined in the section above, and handles also can be different in terms of occurrence, shape, form and terminations. For these reasons, an examination of the presence/absence and type of handles will be conducted even if handles do not feature as significant elements associated with size, intended function and functional differentiation.

6.3.2 Statistics and procedure

The following sections will present a morphological study of the Castelluccio vessels and a study of variance and correlation with the metric variables of size. Dataset composition already suggests a certain degree of variance and correlation at the level of the settlement and funerary subsets, but we cannot exclude at this level the possibility that chronological and regional factors are also embedded in them. Therefore, I shall examine the problem in statistical terms, assuming as a null-hypothesis the reverse, that is, that there is no such differentiation. I will do so in order to arrange shapes in groups and sub-groups of artefacts to ascribe to use types and functional categories, provided that such a differentiation is statistically significant. The adoption of this method is needed because dataset composition certainly has some biases. However, it is also inextricably linked with the necessity of questioning the relationship between metric and non-metric variables in a way that acknowledges the non-uniform character of the relationship between shape, size and functional differentiation. Hence, the null-hypothesis can be applied as follows: that there is no difference in the relationship between size and shape across the whole dataset. For clarity, I shall split this inquiry into three parts: i) if the relationship between shape and size, as expressed by variations in the assembled dataset, does not vary significantly within the sample and ii) correlation between shape and size remains constant throughout the whole dataset, then iii) it is impossible to identify any functional differentiation.

That is, the null-hypothesis assumes that no difference would be found when shape and size are considered across the whole sample. As it is, this will permit to test and, eventually, reject the validity of this assumption. In other words, examining variance and correlation between pairs of shapes and formal varieties testing the null-hypothesis will permit to explore the degree of differentiation by i) splitting shapes and groups of shapes in accordance with their metric characteristics, and ii) ascribing to them types and functional categories. The line between the two steps is subtle but significant in terms of approaching functional differentiation, since it is through the combination of different attributes of shape and size that function can be determined (Miller 1985, 60-62). In the following sections, a full description of shapes will be arranged first according to the definitions established in Section 6.2.1. Then, I will undertake a study of the metric variables in order to investigate the degree to which it is possible to split the sample at the level of shape and form by examining the relationship with size. First, I will measure variations in attributes of size to examine the degree of variance within the sample. Second, I will examine the correlation between pairs of variables across and within shapes. Third, I shall equate size with function and compare them with ethnographic size ranges, generating a general taxonomy scheme displaying the levels of differentiation.

As further shown in Section 6.4.2, for this purpose I shall first construct frequency distribution histograms in a preliminary assessment of the shape distribution of the sample, e.g. asymmetrical or symmetrical/normal. A distribution is symmetrical when the mean, mode and median correspond (Drennan 1996, 59-64). It can be argued that small archaeological samples as the examined one are usually asymmetrical in distribution (Orton 2012, 40), mostly because of the representative biases that are inherent in their composition. Since the statistical calculation of variance depends upon the mean (Drennan 1996, ch. 3), examining the shape of a distribution is the first step towards calculating the degree of variation and its interpretation from a statistical and archaeological perspective.

Secondly, I will run multiple Kruskal-Wallis tests in order to investigate variance and its meaning in statistical terms. The Kruskal-Wallis is a non-parametric method for testing whether two sets of independent variables, from equal or different size samples, belong, in fact, to the same distribution. That is, unlike the ANOVA test, the Kruskal-Wallis is suitable for exploring the degree of variance in samples and sub-samples which are *not* normally distributed by looking at two variables each time (Fletcher and Lock 1991, 85-86; see also Michelaki 2006). As further expounded in Section 6.4.2., this is not a measure of the correlation between the two variables; rather, it is a measurement of the degree of variance between the two when means in the frequency distribution of specific metric attributes, e.g. height, are considered. That is, it does not identify how many differences occur but indicates that at least one of the samples in the pair is different from the other (Corder and Foreman 2009, 100). In this sense, using this procedure will permit testing of null-hypothesis, notwithstanding the asymmetrical distribution of the sample.

6.4 A MORPHOMETRIC STUDY OF VARIABILITY

6.4.1 A study of shape variability

This section examines shape variability, including the 63 items devoid of measurements yet diagnostic in shape and part of the dataset. As defined in Table 6.2, geometric descriptors are henceforth used in order to arrange shape variability into coherent groups of forms.

Similarly, the presence/absence of further structural elements that modify the contour of the forms are examined. This will arrange forms into other sub-groups, named formal varieties and sub-varieties, *only if* certain elements are found recurrent in *more than one* item belonging to the putative sub-group. The schematic structure of this morpho-typology is tabulated in Table 6.3. It incorporates beakers, bowls, cups, hourglass pots, jars and pedestalled vessels. The following sections offer a detailed description of each formal-varieties and sub-varieties by presenting a selection of drawings from Appendix 2, where, the reader can find a complete illustrated typology of shapes with full reference to provenance and illustration sources.

Table 6.3: Structure of the morphological typology. The table shows the different groups of artefacts arranged into shapes, forms, formal varieties and sub-varieties. A type code has been defined which will also be used as a reference in the implementation of the incidence matrix and the illustrated typology.

Shares	Earma	Variation (mumbor)	Sub-varieties	True o
Snape	Form	varieues (number)	(letters)	туре
Beakers	Handleless	Smooth carination		1
Deuliero	waisted vessel	onioour cumuton		1
		Marked carination		2
Bowls	Globular	Wide-mouthed		3
2000	Globular	globular bowl		ý
		Expanded body and		4
		distinct neck		
		Everted rim profile		5
	Semi-spherical			6
	Rounded bowl			7
	with stem			'
Cups (s-				
shaped	Bell-shaped			8
profile)				
	Globular	Collared cup with		9
		hooked handle		
		Rounded walls	Cup with loop	10A
			handle	
			'Equine ears'-	
			termination	10B
			handle	
(continuous	Conical	Curved-walls	With loop handle	11A
development)			1	
			With ring handle	11B

Shape	Form	Varieties (number)	Sub-varieties (letters)	Туре
		Inverted, curved- walls		12
		Straight-sided walls	Straight-sided, everted-walled Cup with loop handle	13A
			With axe-shaped termination	13B
(with corner points)	Carinated	Taller upper walls	Everted profiles and marked carination	14
		Lower upper walls	Everted profiles and smooth carination	15
		Equal upper and lower walls	Slightly straight profiles	16A
			Everted profiles	16B
	Bi-conical			17
	Semi-spherical			18
Hourglass pots	Hourglass	Double-handled hourglass vessels		19
		Upper restricted vessels with loop handle		20
Jars	Barrel	Flat barrel		21
		Elongated barrel		22
	Oval			23
	Pear-shaped	Double-handled		24
		Single-handled		25
	Globular	Jar with distinct neck	Cylindrical neck	26A
			Jar with expanded body and shoulders, restricted hy a small cylindrical neck	26B

Shape	Form	Varieties (number)	Sub-varieties	Type
			(letters)	
			Jar with distinct	
			neck and hooked	26C
			handle	
		Jar with indistinct neck	Double-handled	27A
			Jar with hooked	
			handle attached	
			to the point of	27B
			maximum vessel	
			diameter	
		Elongated body with	Elongated body,	
	Bi-conical	upper walls rising to	smoothly	28A
	Di comea	indistinct neck	carinated double-	2011
		mensuret neek	handled jar	
			Elongated body,	
			marked carinated	28B
			single-handled jar	
			Marked	
			carinated jar	
			with indistinct	
		With expanded body	neck and hooked	29A
			handles attached	
			at maximum	
			vessel diameter	
			Marked	
			carinated jar	
			with indistinct	20B
			neck, everted rim	290
			and two ribbon	
			handles	
			Marked	
			carinated jar	
			with indistinct	
			restricted neck,	29C
			everted rim and	
			two ribbon	
			handles	
			Smooth carinated jar with	29D

Shape	Form	Varieties (number)	Sub-varieties	Туре
			indistingt upph	
			three-handled	
Pedestalled	Stem lower than			
vessels	the height of the			
	bowl			
		Handleless curved-		
		walled bowl with		30
		ring-shaped stem,		
		lower than the bowl		
		Handleless everted-		
		walled bowl with		
		stem with marked		31
		inflection between		51
		the bowl and the		
		stem		
		Handleless everted-		
		walled bowl with		22
		ring-shaped stem,		52
		lower than the bowl		
		Double-handled		
		everted-walled bowl,		22
		with stem lower than		33
		the bowl		
		Single-handled		
		everted-walled bowl,		
		with stem lower than		
		the bowl. Handle's		34
		lower attachment		
		starts from the stem		
		rising up to the bowl		
		Handleless everted-		
		walled bowl with		
		flaring rim (a tesa).		35
		The stem is lower		
		than the bowl		
		Single-handled		
		everted bowl with		27
		flaring rim (a tesa)		30
		and trumpet-shaped		

Shape	Form	Varieties (number)	Sub-varieties	Type
onape	1 01111	valiences (number)	(letters)	турс
		stem. The stem is		
		lower to the bowl.		
		Handle's lower		
		attachment starts		
		from the stem rising		
		up to the bowl		
		Three-handled		
		everted bowl with		
		out-flaring rim (a		
		tesa). The stem is		
		lower than the bowl.		37
		Handle's lower		
		attachment starts		
		from the stem rising		
		up to the bowl		
		Handleless everted-		
	Equal to	walled bowl with		38
		continuous profile		
		Everted-walled bowl		
		as high as the stem.		20
		It may have two		39
		handles		
		Handleless everted		
	Stem higher	bowl with trumpet-		
	than the height	shaped stem. The		40
	of the bowl	stem is higher than		
		the bowl		
		Everted-walled bowl		
		with flaring rim (tesa).		
		The stem is higher		41
		than the bowl. It may		
		have three handles		
		Everted-walled bowl		
		with flaring rim (tesa)		
		and fenestrated stem.		10
		The stem is higher		42
		than the bowl. It may		
		have handles		

Shape	Form	Varieties (number)	Sub-varieties (letters)	Туре
		Everted bowl with		
		flaring rim and		42
		handle with axe-		45
		shaped termination		

6.4.1.1 Beakers

As evident in Table 6.3, beakers can be categorised by just one form, which can be classed into two formal varieties. Waisted beakers may have a strong corner point or a smooth one, as illustrated in Figure 6.6. Considering the development of the upper part of the body, inverted or slightly inverted rim profiles occur in both the varieties, making it impossible to discern sub-groups in this respect. Beakers occur in settlements in both of the two forms (Figure 6.6). Only one item is documented in funerary assemblages.



Figure 6.6: Beaker forms and varieties. Type 1: 120; Type 2: 135 (not to scale. See Appendix 2, p. 110, Figure II.1 for a complete typology of beakers to scale and full reference to provenance and sources. Alternatively, refer to the Cat. no. directly in Appendix I, Table I.3). The formal repertoire of the beakers is poorly differentiated from a morphological viewpoint, as shown by the selection of items.



Figure 6.7: Distribution of beakers in settlement and funerary repertoires.

6.4.1.2 Bowls

Bowls are deep rounded shapes, as defined in Table 6.1. Looking at Table 6.3, we find that Castelluccio bowls can be split into three forms: globular, semi-spherical and rounded with stem. All three forms are composite in profile development because of the presence of inflection and/or corner points. According to profile developments, only globular bowls can be split into three different varieties (Figure 6.8), while semi-spherical and rounded bowls with stem do not show any internal variation (Figure 6.9). Bowls occur in both settlement and funerary repertoires (Figure 6.10).



Figure 6.8: Formal varieties in globular bowls. Type 3: 1108; Type 4: 139; Type 5: 892, (not to scale. See Appendix 2, 112-114, Figures II.3-4-5, for a complete typology of globular bowls to scale and full reference to provenance and sources. Alternatively, refer to Cat. no. directly in Appendix I, Table I.3). When the angle is not marked in globular bowls, they may have an expanded body with a wide mouth, often characterised by a pair of horizontal handles (Type 3); alternatively, they may have everted rim profiles and a loop handle (Type 5). When the angle is marked, then this engenders a distinct neck above and expanded globular body which raises from a shoulder from which a vertical handle also develops (Type 4).



Figure 6.9: Semi-spherical and rounded bowls with stem. Type 6: 756; Type 7: 1065 (not to scale. See Appendix 2, 114-115, Figures II.5-6, for a complete typology of semi-spherical bowls and bowls with stem to scale and full reference to provenance and sources. Alternatively, see Appendix I, Table I.3)



Figure 6.10: Distribution of bowls in settlement and funerary repertoires.

6.4.1.3 Cups

Cups can be defined as an open shape – smaller in size than bowls – and characterised by a greater variety in terms of forms and sub-varieties. As shown in Table 6.3, cups can be split into six forms depending on whether their profile development is s-shaped, continuous, or marked by a strong corner point. Therefore, a cup may or may not have handles but all cups in Castelluccio repertoires do, some of them even two, characterised by different shapes, forms and terminations as defined in Figure 6.2. For the sake of clarity, I grouped, described and illustrated together forms and sub-varieties that share the same general profile development. First, cups may be distinguished considering presence/absence of corner points. As stated above, these cups may have an s-shape or continuous profile development and can, thus, be divided into bell-shaped and globular (Figure 6.11), conical (Figure 6.12) and semi-spherical forms (Figure 6.13), characterised by further varieties and sub-varieties.

Cups marked with corner points have, instead, a composite profile and can thus be grouped, described and illustrated separately. As shown in Figure 6.14, they can be split into carinated and bi-conical cups. Carinated cups can then be split into further varieties and sub-varieties. As noted earlier, a carination is a corner point that divides the vessel walls into upper and lower profiles, engendering further variability at the sub-group level. Like the bowls, cups also occur in both settlement and funerary repertoires (Figure 6.14).



Figure 6.11: Forms and varieties in cups with s-shaped and continuous profile development, sampled bellshaped (Type 8) and globular formal varieties (Types 9 and 10A and B): Type 8: 117; Type 9: 245; Type 10A and B: 84 and 762 respectively (Not to scale. See Appendix 2, 116; Figures II.7, for a complete typology of bell-shaped cups to scale and full reference to provenance and sources. For globular varieties see 116-121, Figure II.7-12. Alternatively, refer to Cat. no. directly in Appendix I, Table I.3). As observable in the figure, globular cups have an angle point up the height which, in Type 9, signals the change of direction between the body and the rim in defining a small collar; Type 9 usually has hook handles. Types 10A and B are characterised instead by less inflected s-shaped profiles and everted rim developments; Type 10A has loop handles while Type 10B has a handle with 'equine ears' termination.



Figure 6.12: Forms and varieties in cups with s-shaped and continuous profile development, conical forms with curved wall sub-varieties (Type 11A and B), inverted, curved walls (Type 12) and straight-sided wall sub-varieties (Type 13A and B). Type 11A and B: 162 and 805 respectively; Type 12: 829; Type 13A and B: 812 and 822 respectively (not to scale. See Appendix 2, 122-124, Figure II.13-16 for a complete typology of conical cups to scale and full reference to provenance and sources. Alternatively see Appendix 1, Table I.3). As shown in the figure, curved wall and straight-sided wall sub-varieties can be distinguished in terms of the handle's form. Type 11A has loop handle while Type 11B has a small ring-shaped handle; Type 13A has a loop handle and Type 13B has an axe-shaped handle termination.



Figure 6.13. Forms and varieties in cups with an s-shaped and continuous profile development, semi-spherical cups. Type 18 (not to scale. See Appendix 2, 122-124, Figure II.13-16 for a complete typology of conical cups to scale and full reference to provenance and sources. Alternatively see Appendix 1, Table I.3).



Figure 6.14: Forms and varieties of cups with corner points and composite profile developments. Carinated varieties with upper walls taller than the lower walls (Type 14), with lower walls taller than the upper walls (Type 15), carinated sub-varieties of cups with upper and lower walls equally developed (Type 16A and 16B); bi-conical form (Type 17). Type 14: 146; Type 15 746; Type 16A and B: 787 and 674 respectively; Type 17: 855 (not to scale. See Appendix 2, 125-128; Figure II.17-20 for a complete typology of carinated cups to scale and full reference to provenance and sources. For bi-conical cups, see 129-130, Figure II.21-22. Alternatively, refer to Cat. no. directly in Appendix I, Table I.3). As this figure shows, cups with a corner point may have a bi-conical or carinated form, in which the lower and upper walls may have different or equal height, and different developments giving shape to different varieties and sub-varieties. Type 14, for example, has upper taller walls than the lower walls, while Type 15 is the reverse. Type 16B has full everted profile development.



Figure 6.15: Distribution of cups in settlement and funerary repertoires.

6.4.1.4 Hourglass pots

Hourglass pots appear to be typical Castelluccio vessels in EBA Sicily. Variability is limited to sub-varieties of the same form if we consider the occurrence of handles. As shown in Figure 6.16, sometimes it occurs as a double-handled hourglass shape, and sometimes not. In single-handled examples, the inflection point is located in the upper part of the vessel but double-handled vessels too may have a similar restriction, although there remain few pots as that illustrated in the figure below with a strong inflection point halfway up the height. They occur in both settlement and funerary assemblages, as shown in Figure 6.17.



Figure 6.16: Hourglass forms, double-handled (Type 19), and upper restricted form with loop handle (Type 20). Type 19: 996; Type 20: 907 (not to scale. See Appendix 2, 132-133, Figure II.24-25 for a complete typology of hourglass pots to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.17: Distribution of hourglass vessels in settlement and funerary repertoires.

6.4.1.5 Jars

As defined in Table 6.1, jars are deeper and closed in mouth compared to bowls. As schematically illustrated in Table 6.3, Castelluccio jars are also composite vessels and can be split into a variety of forms according to the position of corner and/or inflection points along their profile. That is, jars may have continuous, yet inflected, profiles or profiles marked by both corner points and inflections. As shown in Table 6.3, I divided jars with inflected profile into four forms: barrel, oval, pear-shaped, globular, while only a bi-conical form can be distinguished in jars with profiles marked by a strong corner point. As illustrated in Figure 6.18, barrel jars can be split in a flat and elongated barrel variety, while the oval jars have a very simple form (Figure 6.19); pear-shaped jars can be divided into double- and single-handled varieties (Figure 6.20). Globular forms are more complex and can be split

into a wider range of varieties and sub-varieties according to the developments above the maximum diameter. Following these developments, there are globular jars with distinct necks, marked by an inflection point at the junction just above the shoulders (Figure 6.21), and jars with an indistinct neck (Figure 6.22). As shown in these figures, globular jars with distinct necks can be split into three sub-varieties, while jars with an indistinct neck occur in two sub-varieties.



Figure 6.18: Flat barrel jars (Type 21) and elongated barrel jars (Type 22). Type 21: 1022; Type 22: 1028 (not to scale. See Appendix 2, 134-135, Figure II.26-27 for a complete typology of barrel jars to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.19: Oval jars, Type 23 (not to scale. See Appendix 2, 136, Figure II.28 for a complete typology of oval jars to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.20: Pear-shaped, double-handled jars (Type 24) and single-handled jars (Type 25). Type 24: 1001; Type 25: 917 (not to scale. See Appendix 2, 137-138, Figure II.29-30 for a complete typology of pear-shaped jars to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.21: Varieties and sub-varieties in globular jars with distinct neck. Jars with cylindrical neck (Type 26A), jars with expanded body, restricted by a small cylindrical neck (Type 26B) and jars with distinct neck and hook handle (Type 26C). Type 26A: 1012; Type 26B: 272; Type 26C: 261 (not to scale. See Appendix 2, 139-141; Figure II.31-33 for a complete typology of globular jars with distinct neck to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.22: Varieties and sub-varieties in globular jars with indistinct neck. Double-handled jars (Type 27A) and jars with hook handles attached to the point of maximum vessel diameter (Type 27B). Type 27A: 1007; Type 27B: 1044 (not to scale. See Appendix 2, 142, Figure II.34-35 for a complete typology of globular jars with indistinct neck to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).

Finally, bi-conical jars can be split into two varieties. This type has elongated bodies is characterised by upper walls raised to an indistinct neck, while the expanded body type has inflections at different points of the upper profile. The variety with elongated bodies can then be split in other two sub-varieties according to the degree of smoothness of the corner points and occurrence of handles, as shown in Figure 6.23. Likewise, according to similar criteria, the second variety with expanded body can be split into four sub-varieties, as illustrated in Figure 6.24. Finally, jars also occur in both settlement and funerary repertoires (Figure 6.25).



Figure 6.23: Varieties and sub-varieties of biconical jars with elongated body and indistinct neck. Doublehandled jars with elongated body and smooth carination (Type 28A) and single-handled jars with elongated body and marked carination (Type 28B). Type 28A: 1034; Type 28B: 940 (not to scale. See Appendix 2, 143-146, Figure II.36-39 for a complete typology of bi-conical jars with elongated body to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.24: Varieties and sub-varieties of biconical jars with expanded body and indistinct neck. Marked carinated jar with hook handles (Type 29A), marked carinated jars with everted rims and ribbon handles (Type 29B), marked carinated jars (Type 29C) and three-handled, smooth carinated jars (Type 29D). Type 29A: 1050; Type 29B: 969; Type 20C: 1016 and Type 29D: 1053 (not to scale. See Appendix 2, 147-149, Figure II.40-42 for a complete typology of bi-conical jars with expanded body to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.25: Distribution of jars in settlement and funerary repertoires.

6.4.1.6 Pedestalled bows

As defined in Table 6.1, pedestalled bowls are all characterised by a stem which supports the bowl. However, there is a wide variety which can be grouped under three forms – vessels having a stem height lower than the height of the bowl; vessels with stem as high as height of the bowl; and vessels with the stem higher than the height of the bowl, a proportion which is independent from absolute size. As schematised in Table 6.3, these three forms may be further divided into several varieties, based on the shape of the stem, profile development of the upper bowl as usual and occurrence and form of handles. Following these criteria, and starting with the simplest variety, pedestalled vessels with stem lower than the height of the bowl can be split into eight varieties, as illustrated in Figure 6.26. Pedestalled vessels with stem equal to the height of the bowl can be divided into two varieties, as shown in Figure 6.27. Eventually, as presented in Figure 6.28, pedestalled vessels with stem higher than the height of the bowl can be split into four varieties. As shown in Figure 6.29, pedestalled bowls occur in both settlement and funerary contexts.



Figure 6.26: Forms and varieties in pedestalled vessels, pedestalled vessels with stem lower than the height of the bowl. Handleless curved-walled bowls with ring-shaped stem (Type 30); handleless everted-walled bowls with marked inflection between the bowl and the stem (Type 31); handleless everted-walled bowl with ring-shaped stem (Type 32); single or double-handled everted-walled bowl (Type 33); single-handled everted-walled bowl and handle's lower attachment from the stem rising up to the bowl (Type 34); handleless everted-walled bowl with flaring rim (Type 35); single-handled everted bowl with flaring rim, trumpet-shaped stem and handle's lower attachment from the stem rising up to the bowl (Type 36); three-handled everted bowl with flaring rim and handle's lower attachment from the stem rising up to the bowl (Type 37). Type 30: 1082; Type 31: 502; Type 32: 1084; Type 33: 112; Type 34: 518; Type 35: 490; Type 36: 507; Type 37: 589 (not to scale. See Appendix 2, 150-158, Figure II.43-51 for a complete typology of pedestalled vessels with stem lower than the height of the bowl to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.27: Forms and varieties in pedestalled vessels, pedestalled vessels with stem equal to the height of the bowl. Handleless everted bowl with continuous profile development (Type 38); everted wall bowls (Type 39). Type 38: 542; Type 38: 569 (not to scale. See Appendix 2, 159-160, Figure II.52-53 for a complete typology of pedestalled vessels with equal to the height of the bowl to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.28: Forms and varieties in pedestalled vessels, and pedestalled vessels with stem higher than the height of the bowl. Handleless everted bowl with trumpet-shaped stem (Type 40); everted walled bowls with flaring rim and sometimes three handles (Type 41); everted bowl with flaring rim and perforated stem (Type 42); everted bowl with flaring rim and handle with axe-shaped termination (Type 43). Type 40: 548; Type 41: 597; Type 42: 608; Type 43: 623 (not to scale. See Appendix 2, 161-164, Figure II.54-57 for a complete typology of pedestalled vessels with stem higher than the height of the bowl to scale and full reference to provenance and sources. Alternatively, see Appendix 1, Table I.3).



Figure 6.29: Distribution of pedestalled vessels in settlement and funerary repertoires.

6.4.2 A study of size variability

As mentioned in Section 6.3.2, I shall now investigate the variance and correlation in metric variability which combines morphology with attributes of size. This will quantify differentiation in terms of size ranges, thus leading towards the definition of a taxonomic scheme to arrange and display such differentiation. To this end, I will consider all the shapes with the aim of discerning metric similarities and differences at the level of shape and form. I will recognise proportions, if any, across the sample to equate with size, intended function and thus functional differentiation. I will include in this analysis the measurements of all items in the settlement and funerary subsets (n=588), except those devoid of scale or with a single linear measurement. These items, numbering 63, were only considered in the shape classification, because they are unquantifiable in terms of variance and correlation. In so doing, I will present first the results of the analysis of variance, then those of the correlation analysis.

As shown in Figures 6.30 and 6.31, there is an asymmetrical distribution of the sample, showing that the majority of vessel heights and rim diameters fall in the lower size ranges.

As explained in Section 6.3.2, analysis of frequency distribution is important to determine first shape distribution of the sample and run the most appropriate test in order to explore the variance. In this case, considering the shape of the sample distribution, this test will be the Kruskal-Wallis test, a parametric test, as already noted above, that will permit the exploration of the variance in samples that are not normally distributed, yet providing meaningful results from a statistical point of view.

However, it is likely that the same ranges of values displayed by the histograms in Figures 6.30 and 6.31 are still potentially informative of some degree of non-random distribution patterning that is related with levels of differentiation. Having considered the variety of shapes and forms, this seems a good working hypothesis, unless accepting *a priori* the null-hypothesis of absolute lack of differentiation. For this reason, I will start investigating the degree of variation in rim diameter and height through multiple Kruskal-Wallis tests of each variable per pair of shapes in all possible pairs.



Figure 6.30: Frequency distribution in height in all pots (bin-width=4 cm). The graph illustrates the general frequency distribution in height, showing the asymmetric distribution of the sample highlighted by a right tale. Because my measuring of the items was not on a continuous scale, but clustered to the nearest 1 cm, I choose a bin-width=4 to reduce such clustering to the nearest 1 cm. Alternatively, a smaller bin-width would have produced too many peaks and troughs, while larger bin-width would have obscured any trend.



Figure 6.31: Frequency distribution in rim diameter in all pots (bin-width=4 cm). The graph illustrates the general frequency distribution in rim width, showing the asymmetric distribution of the samples.

6.4.2.1 A study of variance

As mentioned earlier, the Kruskal-Wallis test is a non-parametric test suitable for exploring the degree of variance in samples which are not normally distributed (e.g. Michelaki 2006). I will use it to investigate the degree of variance without necessarily assuming that the variation in height and rim diameter was normally distributed. To do so, the test will measure the extent to which variation from the mean of continuous variables, e.g. rim diameter and/or height, is statistically significant when the distribution is examined in pairs of pottery shapes and forms. This is important. Indeed, it is necessary to divide the sample into sub-samples when variance in categorical variables, e.g. shapes and forms, is to be explored by looking at continuous variables, such as linear measurements (Drennan 1996, 179).

Tables 6.4 and 6.5 report the results of this test. They show only the categorical groups – in this case, all pairs of shapes on the left; the numbers on the right represent the probability value (P. value) that the variance between the paired groups of shape (in rim diameter and height measurements respectively) is statistically significant. Probability values are important as they offer a level of significance for arguing how likely it is possibility that the encountered difference is due to a random sample composition. If the values on the right are equal to or lower than 0.05, then the probability is more likely that variance in terms of distance from

the corresponding means is indicative of a significant difference between the two categorical groups, offering scope to reject the null-hypothesis.

There are no particular reasons for choosing a significance level of 0.05, as it simply means that the probability that 'the difference is just due to the vagaries of the sampling is less than the 5% threshold' (Drennan 1996, 161). In other words, there is a 95% probability that the variance is confidently significant, had the calculation given a P. value signalling 0.05. In this sense, a pair of shapes characterised by a P. value of 0.05 is likely to be characterised by significant variances, while greater values would show lack of variance. Looking at Tables 6.4 and 6.5, the results highlight significant differences only for few pairs of category groups. In particular, we find P. values less than 0.05 only when looking at the relationship between cups and jars, hourglass pots and jars, and, then, between pedestalled vessels and all the other shapes. That is, in comparing the results from both tables, we can see that there are no statistically significant degree of variance crosscutting all the sample, but just few pairs.

Table 6.4: Results of multiple Kruskal-Wallis tests per pair of shapes in rim diameter. Evidently, considering the p. values listed in the right-hand column, there are differences only between hourglass pot and jars; cup and jars; pedestalled bowls and all the other shapes. This and the following tables present all the possible pairs. The pairs are order simply from higher to lower P. values for clarity and does not imply any cladistic organisation of the sample at this level of the analysis.

Comparison in rim diameter	P. values
Beaker - Bowl	1
Beaker - Cup	1
Bowl - Cup	1
Beaker - Hourglass pot	1
Bowl - Hourglass pot	1
Cup - Hourglass pot	1
Beaker - Jar	0.9249964
Bowl - Jar	0.07919941
Hourglass pot - Jar	0.000939401
Beaker - Pedestalled bowl	3.33206E-06
Cup - Jar	2.34744E-09
Jar - Pedestalled vessel	1.52907E-13
Bowl - Pedestalled vessel	1.57432E-15
Hourglass pot - Pedestalled vessel	9.51515E-17
Cup - Pedestalled vessel	4.03588E-57

0 1 1 1	D 1
Comparison in height	P. value
Beaker - Cup	1
Beaker - Hourglass pot	1
Bowl - Hourglass pot	1
Jar - Pedestalled bowl	1
Beaker - Bowl	0.219962
Bowl - Pedestalled bowl	0.01256
Hourglass pot - Pedestalled bowl	0.001468
Cup - Hourglass pot	0.001313
Bowl - Jar	0.000206
Hourglass pot - Jar	2.91E-05
Beaker - Pedestalled bowl	2.68E-05
Beaker - Jar	8.41E-07
Bowl - Cup	4.28E-08
Cup - Jar	1.11E-50
Cup - Pedestalled bowl	2.83E-52

Table 6.5: Results of multiple Kurskal-Wallis tests per pair of shapes in height. The test in this case also shows that there are differences especially between jars and the other shapes; and pedestalled bowls and the other shapes. In addition, there are differences between cups and hourglass pots, and bowls and cups.

The test results suggest that metric differences between jars and the other shapes are unlikely due to the possible limitations of the sample, and very unlikely in the case of differences between pedestalled bowls and the other shapes. This suggests some level of differentiation in terms of size and, thus, intended function. Proceeding with the study of size by testing the null-hypothesis, I shall therefore split pedestalled bowls and jars from the rest of the dataset in order to examine more closely whether formal varieties within shapes can be similarly split according to significant variances or not. To repeat, this process is not just splitting per se but it aims to explore the extent to which shapes and forms vary in terms of size and build thus a functional taxonomy by comparing identified ranges in shapes and forms with the ethnographic size ranges. To do so, a study of variance needs to be accomplished at the level of the form also.

As observable in Figures 6.32 and 6.33, frequency distributions in rim diameters and height show the occurrence of a central tendency distribution in jars partially overlapping with that of the beakers, bowls, cups and hourglass pots, however, characterised by a tail on the right. Meanwhile, shape distribution of pedestalled vessels largely differs from all the other distributions, showing only a very small overlap on the left tail with jars and to some degree with bowls. Such a poor overlap with pedestalled vessels' variability range strengthens the perception of a strong difference between the former and all the other shapes. This suggests a certain level of uniformity in terms of function between jars, beakers, bowls, cups and hourglass vessels but also some level of differentiation, especially considering the upper ranges if we equate function with size.

The probability that this level of differentiation is due to vagaries of the sample is extremely low, as suggested by further splitting of the sample in pairs of forms in running another Kruskal-Wallis test of variance. This highlights a substantial lack of variation between cups, beakers, bowls and hourglass pots (Tables 6.6-6.7). When degree of variance is tested for both height and rim diameter (Tables 6.6 and 6.7 respectively), we can observe a low degree of variance which is similar to that in Tables 6.4 and 6.5. Similarly, multiple Kruskal-Wallis tests of rim diameters (Table 6.8) and heights (Table 6.9) in jars per pair of forms highlights significant difference between barrel and globular jars, although only in terms of rim diameter (P. value=0.04487013). As further shown below, this anticipates the importance of the height size in jars to discern different use types.

This is not strange if we consider that all shapes except jars and pedestalled bowls appeared to be characterised by stronger, less variable, templates. Observing minimum and maximum values in all shapes, cups are between 4-16 cm in height, beakers 4.8-16 cm, and hourglass pots 8-17 cm, while only bowls present a wider range – between 4-42 cm (Table 6.8). Considering these measurements, the fact that only globular bowls with stems show differences which tested as significant through an examination of variance at the level of forms within shape is once more significant, as shown in Tables 6.7 and 6.8. All in all, the former assessment of variance may indicate that distribution in height and rim diameter frequencies in the lower ranges of the examined forms is representative of real differentiation, notwithstanding the asymmetric shape of the sample.



Figure 6.32: Combined histograms of rim diameters of all shapes: comparisons of these frequency distributions shows partial overlap between cups, bowls, hourglass pots and jars, setting aside instead pedestalled vessels. It also shows a tail in jars, suggesting that there may be a certain level of differentiation. In general, it shows poor levels of differentiation except for pedestalled bowls.



Figure 6.33: Combined histograms of heights of all shapes. In this case also, comparison of the graphs supports the hypothesis of lower level of differentiation showing substantial levels of overlap, although jars and pedestalled vessels appear to differ in this case a bit more than in rim diameter distribution.

Table 6.6: Multiple Kruskal-Wallis results. The table shows the comparison between pairs of categorical variables in height measurements, in this case between pairs of each form considering beakers, bowls, cups and hourglass pots. Also in this case, the P. value in the right column does not show significant levels of differentiation except for certain forms of bowls.

Comparisons of height	P. value
Bell-shaped beaker - Bi-conical bowl	1
Bell-shaped beaker - Bi-conical bowl	1
Bell-shaped cup - Bi-conical bowl	1
Bell-shaped beaker - Carinated beaker	1
Bell-shaped cup - Carinated beaker	1
Bi-conical cup - Carinated beaker	1
Bell-shaped beaker - Carinated bowl	1
Bell-shaped cup - Carinated bowl	1
Bi-conical bowl - Carinated bowl	1
Bi-conical cup - Carinated bowl	1
Carinated beaker - Carinated bowl	1
Bell-shaped cup - Carinated cup	1
Bi-conical-cup - Carinated cup	1
Carinated beaker - Carinated cup	1
Carinated bowl - Carinated cup	1
Bell-shaped cup - Conical cup	1
Bi-conical cup - Conical cup	1
Carinated beaker - Conical cup	1
Carinated bowl - Conical cup	1
Carinated cup - Conical cup	1
Bell-shaped beaker - Globular bowl	1
Bi-conical bowl - Globular bowl	1
Carinated bowl - Globular bowl	1
Bell-shaped beaker - Globular cup	1
Bell-shaped cup - Globular cup	1
Bi-conical cup - Globular cup	1
Carinated beaker - Globular cup	1
Carinated bowl - Globular cup	1
Carinated cup - Globular cup	1
Conical cup - Globular cup	1
Bell-shaped beaker - Hourglass pot	1
Bi-conical bowl - Hourglass pot	1
Carinated bowl - Hourglass pot	1
Globular bowl - Hourglass pot	1
Bell-shaped beaker - Semi-spherical cup	1

Comparisons of height	P. value
Bell-shaped cup - Semi-spherical cup	1
Bi-conical cup - Semi-spherical cup	1
Carinated beaker - Semi-spherical cup	1
Carinated bowl - Semi-spherical cup	1
Carinated cup – Semi-spherical cup	1
Conical cup - Semi-spherical cup	1
Globular cup - Semi-spherical cup	1
Hourglass pot - Semi-spherical cup	0.7157418
Bell-shaped beaker - Conical cup	0.5291991
Bell-shaped beaker - Carinated cup	0.4810515
Bell-shaped beaker - Bell-shaped cup	0.4423161
Globular bowl - Semi-spherical-cup	0.3838528
Bi-conical cup - Hourglass pot	0.3382636
Bi-conical bowl - Semi-spherical cup	0.2205803
Bi-conical bowl - Bi-conical cup	0.1894791
Bi-conical cup - Globular bowl	0.1379913
Carinated beaker - Hourglass pot	0.09681784
Bi-conical bowl - Carinated beaker	0.0525563
Carinated beaker - Globular bowl	0.04546412
Bi-conical bowl - Globular cup	0.01638022
Bell-shaped-cup - Bi-conical bowl	0.001753606
Bi-conical bowl - Conical cup	0.001499378
Bi-conical bowl - Carinated cup	0.001278886
Globular cup - Hourglass pot	0.000113021
Bell-shaped cup - Hourglass pot	5.93897E-05
Bell-shaped cup - Globular bowl	1.0621E-05
Globular bowl - Globular cup	6.34821E-06
Conical cup - Hourglass pot	3.84677E-07
Carinated cup - Hourglass pot	1.35755E-07
Conical cup - Globular bowl	1.24352E-08
Carinated cup - Globular bowl	3.21386E-09

Table 6.7: Multiple Kruskal-Wallis results. Rim diameter comparisons between forms in beakers, bowls, cups
and hourglass pots. The results parallel those of Table 6.6 and strengthen the hypothesis of poor differentiation
at the level of formal varieties when size – and therefore intended function – is considered.

Comparison of rim diameter	P. value
Bell-shaped cup - Bi-conical cup	1
Bell-shaped cup - Carinated beaker	1
Bi-conical bowl - Carinated beaker	1
Bi-conical cup - Carinated beaker	1
Bell-shaped cup - Carinated bowl	1
Bi-conical bowl - Carinated bowl	1
Bi-conical cup - Carinated bowl	1
Carinated beaker - Carinated bowl	1
Bell-shaped cup - Carinated cup	1
Bi-conical cup - Carinated cup	1
Carinated beaker - Carinated cup	1
Carinated bowl - Carinated cup	1
Bell-shaped cup - Conical cup	1
Bi-conical cup - Conical cup	1
Carinated beaker - Conical cup	1
Carinated bowl - Conical cup	1
Carinated cup - Conical cup	1
Bell-shaped cup - Globular bowl	1
Bi-conical cup - Globular bowl	1
Carinated beaker - Globular bowl	1
Carinated bowl - Globular bowl	1
Carinated cup - Globular bowl	1
Conical cup - Globular bowl	1
Bell-shaped cup - Globular cup	1
Bi-conical cup - Globular cup	1
Conical cup - Globular cup	1
Globular bowl - Globular cup	1
Bell-shaped cup - Hourglass pot	1
Bi-conical cup - Hourglass pot	1
Carinated beaker - Hourglass pot	1
Carinated bowl - Hourglass pot	1
Carinated cup - Hourglass pot	1
Conical cup - Hourglass pot	1
Globular bowl - Hourglass pot	1
Globular cup - Hourglass pot	1
Bell-shaped cup - Semi-spherical cup	1

Comparison of rim diameter	P. value	
Bi-conical bowl - Semi-spherical cup	1	
Carinated beaker - Semi-spherical cup	1	
Carinated bowl - Semi-spherical cup	1	
Carinated bowl - Globular cup	0.897463296	
Carinated beaker - Globular cup	0.787664264	
Carinated cup - Semi-spherical cup	0.757274098	
Bi-conical cup - Semi-spherical cup	0.299353091	
Carinated cup - Globular cup	0.246444357	
Bell-shaped cup - Bi-conical bowl	0.204591782	
Bi-conical bowl - Carinated cup	0.182212445	
Globular bowl - Semi-spherical cup	0.171071508	
Hourglass pot - Semi-spherical cup	0.099239984	
Bi-conical bowl - Bi-conical cup	0.075088355	
Conical cup - Semi-spherical cup	0.06282898	
Bi-conical bowl - Globular bowl	0.056547065	
Bi-conical bowl - Hourglass pot	0.036413965	
Bi-conical bowl - Conical cup	0.028220201	
Bi-conical bowl - Globular cup	0.002850942	
Globular cup - Semi-spherical cup	0.001837629	

Table 6.8: Multiple Kruskal-Wallis results. Rim diameter comparisons between jar forms.

Comparison in rim diameter	P. value
Bi-conical jar - Oval jar	1
Globular jar - Oval jar	1
Barrel jar - Pear-shaped jar	1
Bi-conical jar - Pear-shaped jar	1
Oval jar - Pear-shaped jar	0.97697562
Bi-conical jar - Globular jar	0.77838808
Globular jar - Pear-shaped jar	0.56961713
Barrel jar - Bi-conical jar	0.39779307
Barrel jar - Oval jar	0.16344456
Barrel jar - Globular jar	0.04487013

Comparison	P. value
Barrel jar - Bi-conical jar	1
Barrel jar - Oval jar	1
Bi-conical jar - Oval jar	1
Globular jar - Oval jar	1
Barrel jar - Pear-shaped jar	1
Bi-conical jar - Pear-shaped jar	1
Oval jar - Pear-shaped jar	1
Bi-conical jar - Globular jar	0.5144034
Globular jar - Pear-shaped jar	0.3101265
Barrel jar - Globular jar	0.2058202

Table 6.9: Multiple Kruskal-Wallis results. Height comparisons between jar forms.

	Height	Rim diameter	Height	Rim diameter
CUPS			BEAKERS	
Mean	8.621429	10.4238776	9.305263	10.485
Median	8	10	8	10.15
Mode	8	10	8	12
Standard Deviation	2.314758	2.92297587	2.767565	1.712885
Sample Variance	5.358103	8.54378796	7.659415	2.933974
Skewness	0.601755	0.71488547	0.63595	0.013447
Range	12	16	11.2	6
Minimum	4	4	4.8	8
Maximum	16	20	16	14
Sum	1689.8	2043.08	176.8	209.7
Count	196	196	19	20
BOWLS			HOURGLASS POTS	
Mean	16.95526	15.0512195	12.62	10.13
Median	13.75	11.5	12	10
Mode	14	10	12	10
Standard Deviation	9.886045	10.1400967	2.416095	1.746751
Sample Variance	97.73389	102.821561	5.837517	3.051138
Skewness	1.568718	1.86524422	0.248505	-0.36493
Range	38	41	9	8.4
Minimum	4	4	8	5.4
Maximum	42	45	17	13.8
Sum	644.3	617.1	378.6	303.9
Count	38	41	30	30
JARS			PEDESTALLED VESSELS	
Mean	25.89636	15.9415929	20.83777	25.10753
Median	22.5	14	18	24
Mode	42	12	12	20.4
Standard Deviation	12.92458	7.51275969	9.07596	8.553883
Sample Variance	167.0448	56.4415582	82.37306	73.16892
Skewness	1.952689	0.99326822	0.891338	0.735152
Range	94	32	46.6	59.4
Minimum	6	4	1.4	6.6
Maximum	100	36	48	66
Sum	2848.6	1801.4	3917.5	4670
Count	110	113	188	186

Table 6.10: Summary of statistics of all the shapes.
6.4.2.2 A study of correlation in beakers, bowls, cups, hourglass pots and jars

The results above demonstrate the existence of a certain variance between and within shapes when certain size ranges are considered, yet they are mostly limited to certain shapes. This raises the possibility of a correlation study in order to understand shared proportions between and within shapes. Furthermore, equating size with proportions and function will qualify the level of differentiation/homogeneity, between and within shapes permitting their final arrangement into a functional taxonomy. In the attempt to equate size with proportions and function, I will investigate coupled distribution of variables looking at the degree of correlation between and within the groups of shapes examined above. Having considered the low degree of variance, my expectations are of a substantial correlation between attributes of size, especially in groups characterised by a wider range of variation (e.g. jars). This assumes that proportions will be retained in the event of a lack of substantial differences between formal varieties. In presenting the results of this further study of size, I shall consider pedestalled vessels separately. In fact, pedestalled vessels showed to be significantly different from all the other shapes in terms of height and rim diameter based on the Kruskal Wallis test. Clearly, this has to do with the specificity of their morphological features and, for the sake of clarity, will be discussed separately below.

First, I will present the correlation analysis for all the other shapes. I shall undertake this analysis by extrapolating the coefficient of correlation. For this purpose, Microsoft Excel[®] offers data analysis packages that permit the Pearson's coefficient (R) to be calculated instead of the simple coefficient of determination (r). Unlike (r), (R) is a measurement of the degree of correlation between two examined variables, with results ranging from -1 to 1, where 1 indicates the strongest positive correlation, -1 the strongest negative correlation and 0 a lack of correlation (Drennan 1996, 216). Values between 1 and 0.7 and -1 and -0.7 are usually considered indicative of quite a strong correlation (ibid., 216). To calculate these values, I constructed separate contingency tables by forms for each shape, given the sample with a known distribution of its variables.

The correlation between rim diameters and height in jars yields quite a strong and positive result, with an (R) value of 0.7101. The positive correlation is evident in Figure 6.34. In the graph, data from the contingency table have been combined into one scatterplot highlighting a good fit to the regression line across all forms. (R) values for the correlation between maximum diameter and height also show a strong positive correlation of 0.9302, as shown by the good fit of the regression line illustrated in Figure 6.35. In this sense, jars responded

quite well to the expectations outlined above, showing that it is possible to define proportions which denote different size ranges and functions.



Figure 6.34: Scatterplot of the correlation between rim diameter and height in jars by forms. Correlation patterns show that forms maintain their proportions in general, irrespective of varieties and sub-varieties, raising the possibility of equating size with one attribute and function in order to approach differentiation.



Figure 6.35: Scatterplot of the correlation between maximum diameter and height in jars by forms. This plot shows a similar pattern to that displayed in Figure 6.34, suggesting the same interpretation, although in a few cases, e.g. oval, measurements are too few to account for statistically significant meaning.

Correlation analysis of the same variables in the other shapes gives, however, results of moderate to weakcorrelation. As argued earlier, this confirms that forms different from jars, although sharing size ranges, are characterised by slightly different morphological modifications that evidently affect overall proportions. This is particularly evident in cups. When splitting cups into their formal varieties, we can note how poorly the distribution of variables in each corresponding variety fits the line of regression. Before interpreting these results below, consider the data points in the correlation graphs. The (R) value for the distribution in globular cups, for example, is 0.251 (Figure 6.36), showing a lack of correlation. Bi-conical and conical cups have (R) values of 0.5835 and 0.6107 respectively (Figure 6.37), defining just a moderate degree of correlation. An (R) value of 0.8036 features in semi-spherical, while an (R) value of 0.0439 for bell-shaped cups highlights a lack of correlation (Figure 6.38). The (R) value in carinated cups is 0. 4394, exhibiting a poor level of correlation (Figure 6.39).



Figure 6.36: Correlation between rim diameter and height in globular cups. In comparison to jars, this graph shows that cups, globular in particular, fit poorly to the regression line, highlighted by a value of (\mathbf{R}) close to 0, suggesting a lower level of correlation. This also anticipates the possibility of a lower level of differentiation considering the difficulty of equating size with a specific proportion and one intended function.





Figure 6.37: Correlation between rim diameter and height in biconical and conical cups. The (R) value also shows a poor correlation in bi-conical and conical cups. This is consistent with a wide range which is certainly connected to formal varieties and sub-varieties described above. A poor level of differentiation is therefore plausible for these forms.



Figure 6.38: Correlation in rim diameter and height in semi-spherical and bell-shaped cups. There seems to be a higher level of correlation in semi-spherical cups in comparison to the other forms of cups. However, we cannot exclude biases inherent in the composition of the subsets of semi-spherical cups, numbering fewer than 10 items and therefore more subject to error when compared to the other forms of cups. Bell-shaped cups present a similar pattern to the other cups.



Figure 6.39: Correlation in rim diameter and height in carinated cups. In this case, the (R) coefficient indicates a poor correlation, as observable in the graph. A low level of differentiation is plausible also in this case.

The correlations suggest that there is a great variety of proportions, as shown by the scatterplots (Figures 6.36-6.39), which are likely to represent a poor level of functional differentiation when considering size linked to intended use. A similar case can be argued for the hourglass pots and the beakers, as further shown below. Indeed, hourglass pots show a moderate degree of correlation, as illustrated by the coefficient in the graph of Figure 6.40. A value of 0.0017 features in beakers, although the measurements may not be enough to interpret such a correlation in a statistically significant way, as presented in Figure 6.41. Bowls, except those rounded with stem, seem to retain their proportions more easily instead (Figure 6.42-6.43). However, data points in Figure 6.42 are so few that I would not trust the trend.

From an interpretative viewpoint, the results of this analysis lead to two considerations. First, they suggest that many vessels retain their proportions in different sizes. This is evident if we observe the scatterplots for jars above. Figure 6.34 and Figure 6.35 show, for instance, that the distribution of necked and neckless jars, such as globular and bi-conical forms, is not restricted but largely spread along the entire regression line. This permits size to be equated with proportions and for one variable to be chosen as a proxy of size to group vessels into functional categories with which to explore differentiation. The other observation is that proportions, in the other shapes, seem instead to be more variable when

we consider height and rim diameter, making it problematic to adopt the same procedure in ascribing vessels to functional categories and types.



Figure 6.40: Correlation between rim diameter and height in hourglass pots.



Figure 6.41: Correlation between rim diameter and height in beakers.



Figure 6.42: Correlation between rim diameter and height in bi-conical and collared bowls.



Figure 6.43: Correlation between rim diameter and height in globular bowls.

This is particularly evident as far as cups and hourglass vessels are concerned. In both cases, a poor or very poor correlation poses issues should overall size be equated with function to explore differentiation at the sub-category level. Besides, beakers, cups and hourglass vessels share similar size ranges when either height or rim diameter are considered. I anticipated this possibility in commenting on the frequency distributions in rim diameter and height in the combined histograms observed in Figure 6.32 and Figure 6.33, characterised by strong modal distributions. Overlapping ranges in height for beakers, cups and hourglass vessels can indicate a high degree of functional overlap, as better shown in Figure 6.44. The plot clearly highlights the extent to which frequency distributions of heights in beakers, cups and hourglass pots, although characterised by slightly different peaks, still have largely overlapping shapes. These shared modal distributions suggest a high level of functional overlap irrespective of slight morphological variations.

As far as bowls are concerned, there seems to be instead a certain level of differentiation at the formal level in terms of proportions, but the paucity of data hindered further considerations, even though a size differentiation between forms is apparent, particularly between rounded bowls with stem and other forms. These results parallel those from the analysis of variance, showing the extent to which lower size ranges partly overlap those of other examined shapes.

All in all, the results open the possibility of splitting jars by size, using any one of the measured variables. Taking height as proxy of size, I was not able to define more than two ranges, although would be unwise to hypothesise a bi-modal distribution having considered the variety of forms crosscut by these size ranges. Looking at Figure 6.45, it is possible to discern a lower size range between 6 and 30 cm, and upper one between 30 and 50 cm. Similarly, if we observe frequency distribution in maximum diameters in Figure 6.46, we obtain two quite distinct peaks possibly indicative of two size ranges cross-cutting the variety of forms: a lower one between 4 and 28 cm and an upper one between 28 and 48 cm.



Figure 6.44: Density plot of height distribution in beakers, bowls, cups and hourglass pots. A substantial overlap is shown by the graph in height measurements, suggesting also a poor level of functional differentiation.



Figure 6.45: Height size ranges in jars. The graph shows two peaks. The occurrence of at least two peaks is not surprising also in view of the fact that, despite the fact that all vessels seem to maintain their proportions, there is a variety of forms. Having equated size with function, this suggests in this case a certain level of functional differentiation which was not apparent in other vessels such as cups.



Figure 6.46: Maximum vessel diameter size ranges in jars. Two peaks are evident also considering the maximum diameter, supporting the hypothesis of a certain level of differentiation to be associated with overall size.

As presented above, height (and thereby size) ranges in beakers, cups and hourglass vessels span from 4.8 to 17 cm, showing a certain level of overlap with the lower size ranges in jars. This may suggest a degree of functional overlap which, however, is only partial when jars with heights > 17 cm are considered. I shall examine below this overlap in terms of function by comparing identified ranges in beakers, bowls, cups, hourglass pots and jars with ethnographic examples. First, however, I shall consider variance and correlation in pedestalled bowls.

6.4.2.3 A study variance and correlation in pedestalled bowls

As stated above, I shall treat pedestalled bowls separately because of their specific characteristics following preliminary results of the Kruskal-Wallis test of variance in rim diameter and overall height. A study of morphology showed that three main forms split into several sub-varieties, which could be organised on the basis of the relationship between height of the stem and height of the bowl, and further developments of the stem and upper bowl in terms of profile. The frequency distribution in height measurements shown in Figure 6.33 may be indicative of a tri-modal distribution. However, I realised that the shape of this frequency distribution does not correspond with the normal distribution illustrated in the frequency histogram for rim diameters in Figure 6.32. In my study of variance and correlation, I therefore decided to separate pedestalled vessels from the other shapes, given the possibility of a more complex relationship between the two size variables and, thus, between size, form, function and differentiation. I shall now further explore the frequency distribution in overall height and rim diameter in each form. As illustrated in the combined histograms in Figure 6.47 and Figure 6.48, overlapping distributions feature in both height and rim diameter respectively in all of the forms.







Figure 6.47: Height frequency distribution combined in all pedestalled forms. The graph shows a very poor level of overlap in terms of distribution of shape. This may signal some problems of the dataset's representativity.







Figure 6.48: Rim frequency distribution combined in all pedestalled forms. The graph shows a similar pattern to that of height frequency distribution with a poor level of overlap in terms of shape distribution.

Frequency distributions in height seem to be particularly difficult to compare, considering their different shapes in terms of a central tendency distribution. These distributions may indicate quality issues that are inherent to the dataset in terms of population representativity. Besides, measurement of the correlation between each variable shows some non-random patterns which can be related to a level of differentiation. Significantly, the correlation between overall height and rim diameter is the strongest in all of the groups, while the fit to the regression model is less strong in all of the other examined relationships with rim diameter. This is shown by the graphs in Figure 6.49 and Figure 6.50. The result of this comparison signals that Pearson's coefficient in the relationship between rim diameter and bowl height in low pedestalled vessels is only of 0.59, while correlation between the height of the foot and rim diameter is virtually absent. Similarly, the Pearson's coefficient values are low for the same measurements in vessels with stems as high as the bowl height and in high-pedestalled vessels (Figure 6.51). Meanwhile, the correlation between overall height and rim diameter all across the sub-sample remains always strong.







Figure 6.49: Correlation between coupled variables in pedestalled vessels with stem lower than the height of the bowl. Evidently, correlation between overall height and rim diameter is the strongest in the whole sample.







Figure 6.50: Correlation between coupled distribution of variables in pedestalled vessels with stem as high as the height of the bowl.







Figure 6.51: Correlation between coupled distribution of variables in pedestalled vessels with stem higher than the height of the bowl.

Correlation analysis confirms observations from the preliminary analysis of shape distributions in rim diameter and overall height, in suggesting the extent to which formal variations seem to be mainly related to the overall height of the vessel rather than specific developments in the stem and bowl profiles. This is particularly evident in vessels with stems as high as the height of the bowl (Figure 6.50) and in vessels with stems higher than the bowl (Figure 6.51). In these cases, coupled distributions in rim diameter and height of the stem, and in rim diameter and overall height held the strongest (R) values in the sample. In view of the possibility of equating overall size with proportions and intended use, I shall split vessels with a stem lower the bowl height from the other two groups, where proportions can instead be equated with overall height. Indeed the rim diameter frequency distribution only shows one peak between 21.6 and 26.6 cm (Figure 6.52), while the height in both forms significantly signals two peaks, one between 22.8 and 27.8 cm and one between 32.8 and 37.8 cm (Figure 6.53).



Figure 6.52: Frequency distribution in rim diameter of both pedestalled vessels with stem higher and as high as the bowl. The presence of one peak is apparent.



Figure 6.53: Frequency distribution in height of both pedestalled vessels with stem higher and as high as the bowl. In comparison to the rim diameter, frequency distribution in height shows at least two peaks. This strengthens the result of the previous analysis of the correlation between size variables in acknowledging the importance of having considered overall height in the phase of splitting. This also strengthens the hypothesis of a certain level of differentiation. Like in jars, the emergence of these peaks suggests a certain level of differentiation when overall height is considered.

There is no evidence of such a peak in vessels with stem lower than the bowl height. Instead, both rim diameter and overall height frequency distributions show only one peak, located at a lower size range. As observable in Figure 6.54, rim diameter has a peak between 17 and 25 cm, while height is between 10 and 15 cm, as shown in Figure 6.55.



Figure 6.54: Frequency distribution in rim diameter in pedestalled vessels with stem lower than height of the bowl.



Figure 6.55: Frequency distribution in height of pedestalled vessels with stem lower than height of the bowl. A comparison of histograms of height frequency distribution between the former group of pedestalled vessels and vessels with stem lower than the height of the bowl would show that at least two size ranges can be defined in observing the distribution of peaks. It is possible, looking at overlapping distributions patterns in Figure 6.56, that two size ranges exist, a lower one between 7.8 and 32.8 cm and an upper one between 32.8 and 52.8 cm. If we consider height as a proxy of size in this category too, then we may equate the function of the bowl with overall height, and consider different ranges identified in height variation to be informative of some functional differentiation.





Figure 6.56: Combined histogram in overall height in both groups of pedestalled vessels. Comparison between the two distribution shapes highlights the overlap in the lower size ranges, suggesting the occurrence of at least two size ranges. This also raises the possibility of differentiation when height is equated with size when considering morphological variability.

6.5 DEFINING FUNCTIONAL DIFFERENTIATION. A TAXONOMY OF THE EXAMINED CASTELLUCCIO REPERTOIRES

The results of the morphometric analysis show a certain level of differentiation from a morphometric standpoint. In addition, the analysis of beakers, cups, hourglass and bowls and their formal varieties - especially shows also a certain level of overlap in terms of size, suggesting a poor level of functional differentiation cross-cutting both the funerary and settlement datasets. Indeed, it was impossible to establish clear-cut size ranges that anticipate high levels of functional differentiation. Rather, the study of variation and correlation extrapolated blurred patterns possibly suggestive of either functional homogeneity and morphometric variability. In order to facilitate interpretation of this pattern also from a chronological and regional point of view, I shall therefore arrange both functional similarities and morphometric differentiation in a schematic taxonomy through ascribing use types and functional categories to the shapes and forms. To do so, I will compare archaeological size ranges with ethnographic ones. This arrangement will permit the exploration of the extent to which different forms within the same group of shapes are crosscut by similar ranges and display the level of functional uniformity and morphometric variability through the taxonomy scheme. I shall demonstrate that such a taxonomic scheme is indicative of a poor level of differentiation in showing the extent to which functional overlap is not only present at the sub-category level (within shapes and forms) but also at the level of categories (between shapes and forms). For a summary of the functional categories and type uses identified see Table 6.11, where the corresponding ethnographic ranges and functions are also compared. It is useful to follow the discussion below by looking at the following table.

Table 6.11: Comparison of functional categories, use-types and size ranges. Evidently, the archaeological dataset reflects a very low level of functional differentiation while showing the highest degree of morphometric variability when compared to the ethnographic corpora. As discussed earlier, this higher degree of formal differentiation likely reflects also chronological and regional variability. Therefore, a final study of these dimensions is necessary in order to pin down engendered similarities and differences with reference to specific contextual and geographic coordinates and explore effectively displayed variability as representative of social boundaries and practices.

Ethnographic functional category	Type uses	Shapes	Corresponding size ranges in height	Castelluccio shapes and forms	Size ranges in height ⁶
Transfer	Serving and eating	Small-sized bowls and narrow- mouthed jars	4-15 cm	Beakers (all forms)	4.8-16 cm
				Cups (all forms)	4-16 cm
				Hourglass pots	8-17 cm
				Globular and collared bowls	
				Globular jars	
Storage, transfer and processing	Serving, cooking, temporary storage	Medium- sized wide- mouthed jars and bowls	12-40 cm	Bowls (all forms)	4-42 cm
	Serving, cooking, temporary storage, transport	Medium- sized wide- mouthed and narrow- mouthed jars, bowls	12-40	Jars (lower size range)	6-30
	Cooking, long-term storage	Large-sized jars	40-83 cm	Jars (upper size range)	30-50

6.5.1 Size ranges and function in beakers, cups, and hourglass pots

The overall height of beakers, cups an hourglass pots ranges from 4.8 to 17 cm, as highlighted in the previous study of shape and size and reported in Table 6.11. Looking at Table 6.11, I would also argue that the variety of beakers, cups and hourglass pots can be ascribed a transfer function, in particular serving and eating when archaeological size ranges are compared with ethnographic ones. This degree of overlap between shapes when use types are considered is not strange. In fact, the morphometric analysis in the section above has demonstrated that all of these shapes usually shared quite a strong modal distribution in both rim diameter and height. The occurrence of handles typical of certain forms of cups can hardly be considered in functional terms from this viewpoint. Rather, considering the

⁶ Refer to Table 5.6 for a summary of the statistics.

level of functional overlap, it seems likely that handles might have served as additional manufacturing elements to facilitate serving and eating, perhaps in certain circumstances. It is possible, for example, that they might have facilitated grasping of the pot when containing hot substances. In this vein, we can speculate how handleless drinking pots such as beakers might have served to hold, serve or drink cold or warm substances while cups and hourglass pots could also be used to serve and eat hot substances.

6.5.2 Size ranges and function in bowls

As noted earlier, bowls have a wide size range in height – between 4 and 42 cm, as reported in Table 6.11. When compared with the ethnographic cases, we may see that such a wider range cross-cut serving, cooking and storing use types when wide-mouthed open shapes are considered. Among the Gamo, for example, a variety of wide-mouth jars used as cooking, serving and storage vessels. Similarly, wide mouth jars and bowls used for cooking in Guatemalan Maya traditions share similar ranges. Review of the cases showed in particular an overlap between cooking and serving vessels when the height is <19 cm, while vessels suited for cooking or storing, or both, appeared usually to be higher. Likewise, considering the wider range in Castelluccio bowl sub-varieties, it is possible that this range indicates some degree of functional differentiation. On the one hand, it is possible that semi-spherical and globular bowls were intended for serving and cooking purposes when comparing their lower size ranges with the ethnographic bowls and wide-mouth jars. On the other, if we look at the upper size range of other bowls, particularly those with stem, then the best comparison in terms of size is with the ethnographic jars used also for storage.

6.5.3 Size ranges and function in jars

Regarding jars, their frequency distribution in height exhibited two size ranges, one between 6 and 30 cm and an upper one between 30 and 50 cm in a few cases, as discussed above and reported in Table 6.11. Similar ethnographic size ranges in narrow-mouthed shapes, are typical of serving, transport and storing use-type vessels. Narrow-mouthed jars sharing similar ranges are also present that are used mostly as transport vessels, as witnessed especially by the corpora collected by Arnold (1978). In this case, we have seen that Arnold managed to distinguish a three-mode distribution in height sizes of *tinajas, jarros* and *tinajeras*, the former often immobile when full and mostly used for long-term storage. As stressed earlier, I could not identify size classes in Castelluccio jars, yet comparison with the ethnographic ranges suggests at least a distinction between jars suited for transport and short-term storage and jars suited for long-term storage, the former located in the upper size range between 30 and 50 cm. This distinction is corroborated by having looked at

ethnographic cases where long-term storage is usually associated with large-sized jars, often the largest in the corpus (e.g. Arthur 2003; 2006; 2009; Combes and Combes 1967). For example, among the Gamo jars used to store beer for a long time are the largest in the repertoire.

In view of these observations, it is possible to argue for some degree of functional differentiation at the sub-category level so far as jars are concerned, although we have seen how the same proportions are often retained by different forms. This may suggest the existence of different size classes at the level of the sub-variety, that is, within each form, yet, it was impossible to define clear-cut size categories, as stated above. Only frequency distribution in height in bi-conical jars exhibits two peaks, as illustrated in Figure 6.57, one between 16 and 21 cm and another one between 41 and 26 cm, suggesting a bi-modal distribution to link with some degree of differentiation.



Figure 6.57: Frequency distribution of height in bi-conical jars: Two clear peaks are evident from the graph, strengthening the hypothesis of a functional differentiation in bi-conical jars when size is equated with function. The existence of these two peaks may be related with two size classes.

This could be anticipated if we consider the extent to which jars located in the lower size range might have been best suited for, as argued above, transport and short-term storage. What is also apparent from looking at Figure 6.57 is that the majority of the bi-conical vessels located in the lower size ranges (between 6 and 30 cm) in jars distributed between 16 and 21 cm, in partial overlap with the range exhibited by the bowls. A similar case can be argued for globular jars when observing height frequency distribution in Figure 6.58.



Figure 6.58: Frequency distribution of height in globular jars. In this case, two peaks are observable, suggesting a certain degree of functional differentiation within globular jars, but also an overlap with cups, beakers and hourglass pots.

Indeed, most of the globular jars located in the lower size ranges are distributed between 8.5 and 13.5 cm, showing a substantial degree of overlap with size ranges in beakers, cups and hourglass pots. It is thus possible that globular jars were also used for serving and eating purposes, besides transport and short-term storage.

Handles feature as accessory elements on jars, some being single handled or double-handled in both the size ranges identified. I could not find any correlation between, for instance, number of handles and scale of transport. The extent to which both vessels with handles and without handles might serve transport purposes seems to depend on aspects that are more related to the context of transport itself. In some cultures, i.e. Kalinga (Philippines) and Papago (Arizona) (Fontana et al. 1962), handleless containers are transported above the head. People in the valley of Guatemala carry water only in double-handled containers. The occurrence of handles seems mostly to be due to cultural habits rather than functional expectations associated with the morphology of the vessels, as reflected in the examination of the Castelluccio jars.

6.5.4 Size ranges and function in pedestalled vessels

Finally, three ranges in height are identified in pedestalled bowls, two ranges cross-cutting vessels with stem higher and equal to height of the bowl and one range typical of vessels with lower stems, partially overlapping with the lower size range of the former group. In the

latter group, height ranges from 6 to 30 cm and from 30 to 50 cm, while in the former height ranges from 10 to 15 cm. As discussed earlier, this may indicate some degree of differentiation between vessels with stems lower than the bowl on the one hand, and pedestalled vessels when overall height is considered on the other. There are no comparable ethnographic ranges, yet if we consider the bowl resting upon the stem then we may equate its function with overall height. We have seen above how bowls may serve a variety of purposes including serving, storage and cooking. While in this case cooking seems quite unlikely because of the presence of the stem that would not have facilitated food transfer in processing activities, we may hypothesise that pedestalled vessels were mostly used as serving bowls. The occurrence of the stem in this case may be highly functional if we think of it, in view of the results of the size analysis, as a mean to increase the overall standing capacity of the bowl.

Thus, in equating overall height with size, we may hypothesise that variations in vessel height correspond to variations in serving purposes. From this point of view, I am inclined to think that pedestalled vessels with the stem higher or equal to the height of the bowl belonging to the lower size ranges might have been intended for individual use as receptacles. In these vessels, rim diameters of the bowl range from 6.6 to 29.4 cm, showing a large overlap indeed with wide ranges in ethnographic serving and eating bowls for personal and family use (e.g. Henrickson and McDonald 1983, 632). We may hypothesise for the same reasons a certain degree of functional overlap between these vessels and the vessels with the stem lower than the height of the bowl. Meanwhile, those vessels belonging to the upper range have rim diameters ranging from 24.6 to 49.8 cm, showing a large overlap with ethnographic examples of serving and eating bowls for communal use (ibid., 632).

6.5.5 Conclusions

The arrangement of the classificatory scheme is reported in Table 6.12. As shown by the table, there is a higher degree of morphometric variability when compared to functional homogeneity. As stated above, this pattern strikes when compared to the ethnographic corpora (Table 6.11). However, it is likely that the blurred archaeological pattern of similarities and differences cross-cutting the overall dataset is also suggestive of some degree of chronological and regional variability. For this reason, it is necessary, as explained in Section 4.3.4, to explore the latter dimensions also in order to pin down the set of similarities and differences with reference to regional contexts. This will permit an interpretation of the inherent blurred pattern of variability as a potential representation of past social boundaries and practices.

6.6 Synopsis

Analysis of the morphometric changes in ceramics has led to the definition of an open taxonomy in which it is possible to observe different shapes belonging to one and the same type use and functional category. I already stressed the possibility of random and geographical factors impinging upon this pattern. Yet, having considered statistical testing and ethnographic cases for reference, it is safe to argue that, independent of such factors, the probability that this scheme would only reflect random patterned distribution is quite unlikely. On the contrary, it remains fairly likely that compositions of the examined dataset express low levels of functional homogeneity that are not due to the vagaries of sampling only, but likely representative of shared practices. Yet, and for the same reasons, it is likely that morphometric differentiation represents some degree of chronological variability and regional differentiation attached to certain areas, as further discussed in the following chapter. The latter presents an analysis of such variability through a chrono-typological seriation, before discussing both functional similarities and regional differences as representative of social boundaries and practices.

Morphometric			Storage		Transfer		Processing
Shapes	forms	Codes	Long- term storage	Short- term storage	Transport	Serving and eating	Cooking
Beakers	Smooth waisted beaker	1				Х	
	Marked waisted beaker	2				Х	
Bowls	Semi- spherical	6				Х	Х
	Globular	3, 4 and 5				Х	Х
	Rounded with stem	7	Х				Х
Cups	Bell- shaped	8				Х	
	Bi-conical	17				Х	
	Carinated	14, 15, 16A, 16B				Х	
	Conical	11A, 11B, 12, 13A, 13B				Х	
	Globular	9, 10A, 10B				Х	
	Semi- spherical	18				Х	
Hourglass pots		19, 20				Х	
Jars	Barrel	21, 22	Х				
	Bi-conical	28A, 28B, 29A, 29B, 29C, 29D, 29E		Х	Х	Х	
	Globular	26A, 26B, 26C, 27A, 27B,		Х	Х	Х	
	Oval	23		Х	Х		
	Pear shaped	24, 25		Х	X		
Pedestalled vessels	Height of the foot < height of the bowl	30-37				Х	
	Height ≥ height of the bowl	38-43				Х	

Table 6.12: A functional taxonomy of the Castelluccio repertoires.

CHAPTER 7: A CHRONOLOGICAL AND REGIONAL STUDY OF MORPHOMETRIC VARIABILITY

This final analytical chapter examines the chronological significance of ceramic variability with the aim of constructing the regional subsets. Therefore, a contextual analysis of the morphometric variability will be undertaken, followed by an analysis of functional uniformity and regional distribution. In addition, a reassessment of morphometric variability in the light of radiocarbon dates and further chrono-typological relationships to non-Castelluccio materials will also be undertaken.

7.1 REGIONAL VARIABILITY AND REPRESENTATION

While understanding morphometric changes and functional differentiation was the main objective in the preceding chapter, central to the ensuing analysis is the understanding of these aspects from a chronological and geographical point of view. There is an attempt, in the understanding of these dimensions of change, to contextualise emergence and developments of variations in pottery assemblages that may help to define subsets of data socially-meaningful and potentially representative of boundaries and practices. Indeed, one should be able to argue a stronger case for what similarities and differences in ceramic variability signify in social terms if variations are explored by encompassing large-scale distributions in space-time systematics, as debated in Section 4.2.4. Accordingly, the primary set of questions regarding the study of morphometric variations in pottery that may be representative of the emergence and development of regional assemblages can be broken down into the following:

- What are the key morphometric characteristics and decorative patterns in Castelluccio ceramics that can be associated with the emergence and development of assemblages in chronological terms?
- Can these characteristics be associated with the geographic distribution of certain assemblages?
- Is it possible to separate temporal from geographic aspects connected with these variations in pottery?
- What are the relationships between these variations and pottery that belong to local and external EBA ceramic traditions?

The second set of questions concerns the composition of the regional subsets in terms of functional similarities and differences, again with the aim of investigating patterned regional differentiation and functional homogeneity:

- What is the composition of the regional datasets? Are different regional datasets distinguishable from a morphological point of view?
- Are domestic and funerary subsets of data distinguishable from a functional standpoint?
- Does composition of all these subsets vary through time?

These are significant questions needed for extrapolating distribution patterns from the regional analysis of the ceramic assemblages and discussing the kind of boundaries and practices potentially reflected in the composition of regional subsets. As further shown in the following chapter, this will offer scope to discuss changes bringing together other kinds of material culture evidence, leading to further considerations of discontinuity, continuity and trajectories of development. Indeed, what kind of social scenario the analysis of these differences/similarities opens up represents the ultimate research question as posed in Section 1.2.2.

7.1.1 Dating Castelluccio sites

Dating is a complex task when available sites contain poorly stratified contexts only partly excavated and without a clear association with a master stratigraphic sequence for the EBA on Sicily. As shown in Section 5.5, the reviewed Castelluccio sites are beset with these problems. Associations between radiocarbon dates, published materials and contexts of recovery are fragmentary, offering a picture of site distribution which is extremely reduced when compared to Figure 5.1, as illustrated in Figure 7.1. Among the sites displayed in Figure 7.1 – and used in this chapter for the analysis – several have been excluded from the review as they do not yield enough information in order to implement an incidence matrix.



Figure 7.1: Castelluccio sites. The map shows the distribution of settlement, funerary and cave sites on the basis of those reviewed in Chapter 5. They have been identified with enough contextual information in order to support the implementation of an incidence matrix for the chronological and regional study of ceramic variability. In fact, not all of the sites which have been noted in Chapter 5 would have been useful in this task because some of them were published without any reference to ceramic materials and/or structural remains. The sites shown in this map, including those listed in Table 5.2, will be used instead in the following analysis.

Among these sites, only six have yielded radiocarbon determinations, as illustrated in Table 7.1. While this generally highlights the need for more extensive excavations and sampling for dates in order to build a stronger chronology of sites, it also explains the impossibility of conducting chronological analysis only through a radiocarbon-based assessment. Indeed, available dates from the contexts listed in Table 7.1 show that they cannot account for the entire lifespan of the site from which they have been collected. Instead, most of them can only account for single contexts. I have already mentioned the site of La Muculufa, but a similar case can also be argued for Castelluccio and Case Bastione, where excavators have more recently sampled single huts which have yielded determinations. Although these dates were obtained through accelerator mass spectrometry (AMS), resulting in more secure chronological evaluations of provenance contexts, the majority display traditional ranges and errors. This hindered a Bayesian calculation to approach chronology from a regional perspective, AMS dates being too few when compared to the reminder of dates. In fact,

more AMS determinations from the same context are needed, in order to evaluate carefully the probability that certain events, such as those linked to the settlement life-cycle, happened within a certain range (e.g. Alberti 2013, 2506-2509). Since the excavated deposits no longer exist and further determinations would have been costly, I opted for an assessment of ceramic variability through an incidence matrix supported by the available published radiocarbon determinations, as further expounded below.

Table 7.1: Published radiocarbon determinations. The table shows a list of 45 dates in total, including the sample number, the conventional date and the calibrated age in ranges of both 1σ and 2σ . Calibration has been carried out using OxCal and the IntCal09 dataset for the northern hemisphere. The order is alphabetical by location and from the latest to earliest calibrated age (2σ).

	Sample	Conventional date (BP)	Calibrated	Calibrated	
Location			age (2σ) BC	age (10) BC	Original source
			95.4%	68.2%	
Case Bastione	R_Date	3445 +/- 40	1883-1662	1871-1691	Giannitrapani
	Rome-2053				2012a, 35-36
Case Bastione	R_Date	3505 ± 40	1934-1699	1886-1771	Giannitrapani
	Rome-2052	3303 17 10			2012a, 35-36
Case Bastione	R_Date	3511 +/- 45	1952-1695	1892-1769	Giannitrapani et
	LTL3654A				al. 2014, 194
Case Bastione	R_Date	3530 +/- 40	1963-1745	1921-1776	Giannitrapani et
	Rome-2056				al. 2014, 194
Case Bastione	R_Date	3540 ± -40	2009-1751	1941-1777	Giannitrapani et
Gase Dastione	Rome-2050	,			al. 2014, 194
Case Bastione	R_Date	3550 ± -40	2016-1756	1950-1780	Giannitrapani et
Case Dastione	Rome-2060	,			al. 2014, 194
Case Bastione	R_Date	3552 +/- 35	2013-1771	1951-1781	Giannitrapani et
Case Dastione	LTL-3655A				al. 2014, 194
Case Bastione	R_Date	3585 +/- 40	2113-1777	2011-1890	Giannitrapani et
	Rome-2051	,			al. 2014, 194
Case Bastione	R_Date	3600 +/- 40	2126-1784	2020-1905	Giannitrapani et
	Rome-2061				al. 2014, 194
Case Bastione	R_Date	3610 +/- 40	2131-1881	2026-1921	Giannitrapani et
	Rome-2057	,			al. 2014, 194
Case Bastione	R_Date	3612 +/- 35	2121-1886	2025-1927	Giannitrapani et
	LTL-3656A	,			al. 2014, 194
Case Bastione	R_Date LTL-3653A	3625 +/- 50	2141-1833	2115-1918	Giannitrapani
		,			2012a, 35-36
Case Bastione	R_Date	3645 +/- 35	2136-1921	2118-1952	Giannitrapani et
	Rome-2055				al. 2014, 194

		C	Calibrated	Calibrated	
Location	Sample	date (BP)	age (2σ) BC 95.4%	age (1 5) BC 68.2%	Original source
Case Bastione	R_Date Rome-2059	3650 +/- 40	2140-1916	2123-1954	Giannitrapani et al. 2014, 194
Case Bastione	R_Date LTL-3657A	3699 +/- 45	2205-1951	2191-2029	Giannitrapani et al. 2014, 194
Case Bastione	R_Date LTL-3658A	3830 +/- 45	2460-2146	2410-2201	Giannitrapani 2012a, 35-36
Castelluccio villaggio-Piano Sella	R_Date MAMS- 22286	3586 +/- 23	2020-1885	1961-1896	Crispino 2016, 85
Castelluccio villaggio-Piano Sella	R_Date MAMS- 22285	3610 +/- 23	2030-1901	2020-1937	Crispino 2016, 85
Castelluccio villaggio-Piano Sella	R_Date MAMS- 29137	3620 +/- 29	2115-1896	2023-1945	Crispino and Chilardi 2017, 100
Castelluccio villaggio-Piano Sella	R_Date MAMS- 29138	3629 +/- 30	2106-1888	2019-1927	Crispino and Chilardi 2017, 100
Castelluccio villaggio-Piano Sella	R_Date MAMS- 29136	3635 +/- 30	2130-1911	2032-1951	Crispino and Chilardi 2017, 100
Castelluccio villaggio-Piano Sella	R_Date MAMS- 22920	3689 +/- 25	2191-1980	2134-2033	Crispino 2016, 85
La Muculufa sanctuary	R_Date A- 3956	3600 +/- 100	2275-1691	2132-1779	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3955	3600 +/- 130	2344-1621	2138-1772	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3964	3610 +/- 120	2339-1641	2140-1776	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3962	3610 +/- 150	2457-1621	2196-1756	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3959	3640 +/- 80	2276-1771	2135-1911	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3960	3650 +/- 90	2288-1771	2187-1901	Holloway 1991, 64
		0	Calibrated	Calibrated	
--------------------------	---------------------------	--------------	----------------------	----------------------	------------------------
Location	Sample	date (BP)	age (2σ) BC 95.4%	age (10) BC 68.2%	Original source
La Muculufa sanctuary	R_Date A- 3954	3670 +/- 110	2435-1750	2202-1900	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3966	3690 +/- 120	2461-1772	2280-1915	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3961	3690 +/- 130	2464-1756	2284-1899	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3968	3720 +/- 120	2471-1776	2291-1949	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3967	3730 +/- 90	2457-1914	2286-1981	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3951	3760 +/- 130	2569-1781	2431-1981	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3963	3760 +/- 200	2860-1686	2469-1926	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3965	3770 +/- 130	2573-1785	2453-2027	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3958	3790 +/- 150	2832-1775	2460-2036	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3953	3810 +/- 120	2576-1922	2461-2062	Holloway 1991, 64
La Muculufa sanctuary	R_Date A- 3957	4080 +/- 180	3264-2050	2895-2351	Holloway 1991, 64
La Muculufa village	R_Date F25L60 A1+A2	3590 +/- 210	2565-1447	2278-1684	Holloway 1991, 64
La Muculufa village	R_Date F25L60 B1+B2	3630 +/- 210	2581-1461	2294-1696	Holloway 1991, 64
La Muculufa village	R_Date A- 5284	3680 +/- 100	2432-1772	2202-1927	McConnell 1995, 99
La Muculufa village	R_Date A- 5283	3790 +/- 60	2457-2038	2339-2065	McConnell 1995, 99
La Muculufa village	R_Date A- 6546	3960 +/- 70	2835-2209	2573-2346	McConnell 1995, 100
La Muculufa village	R_Date A- 6547	3990 +/- 60	2837-2299	2620-2368	McConnell 1995, 99

7.1.2 The incidence matrix

The first step will consist of incorporating the available radiocarbon determinations into an incidence matrix for carrying out the pottery seriation. Seriation is a method for studying combinations of artefacts of different varieties associated with contexts that can help to establish a sequence of sites and materials that can be linked to radiocarbon dates. Reviewed sites with architectural evidence and associated ceramics will therefore be central in this chapter. However, a crucial point to understand is that there is no complete certainty that the sequence reflects an actual chronological sequence. The basic assumption is that a certain moment in time is characterised by an abundance of a variety of artefacts having certain characteristics, and that this abundance starts to increase and decrease at the beginning and the end of every new phase (Dunnell 1971, 308; Rouse 1972, 127-128; Adams and Adams 1991, 209; Lyman et al. 1997; Peroni 1998; O'Brien and Lyman 2000, 291). There is no guarantee that the extrapolated relative sequence would follow such a principle, as the degree of fit with the model is not indicative per se of the chronological accuracy of the order as defined by the relative sequence itself. In fact, it is not always true that archaeological models derived from this principle are expressive of the same trajectory (McNutt 2005, 212-214), while it is plausible that distribution of well-known historical artefact types would follow the so-called popularity model just outlined. On the contrary, there remains a problem of setting the order of the sequence unless one incorporates elements such as radiocarbon determinations. Other elements I shall incorporate in this investigation are derived from a review of the Late Copper Age elements, Rodi-Tindari-Vallelunga ceramic occurrence and Thermi ware imports (LCA, RTV and TM, henceforth).

A first step in defining phases will be to incorporate an array of constraints in the implementation of the incidence matrix which are linked to elements of absolute chronology and cross-dating. In practice, this will be achieved through implementation of a constrained contingency table of sites and artefacts – that is, the matrix. The best way of combining rows and columns within the matrix will provide a visual grid that is reliable, even if not entirely secure, for establishing broader chronological phases to connect with variations in pottery types (e.g. Peroni 1998). These types are represented by those morphological variations that were encountered in the analysis of vessel morphology. As argued in Section 4.3.4, there is no need to treat temporal variations that may be related to function and form by using different variables, since form, as much as function, may be based on traditions that shared similarities and differences over larger time/space units.

My concern here is with reviewing the shared context in which Castelluccio groups emerged and developed. The occurrence of non-Castelluccio ceramics in Castelluccio contexts may offer, besides supporting the dates, further elements to associate with the regionallyconstructed dataset and to contextualise variability, as shown in Section 7.2.2. We may presuppose a variety of other factors that might have impinged upon patterned variations of ceramic distribution in regional subsets, such as interaction, exchange and use-practices, including also consumption and discard behaviours. From this point of view, incorporating an external constraint, such as that of relationships to other pottery traditions, is a way to approach the issue of emergence and development of social boundaries, by situating pottery changes within a scenario of multiple interrelationships.

In the following sections, I shall first review the definitions of pottery types in the light of the radiocarbon determinations and then consider the occurrence of non-Castelluccio ceramics in Castelluccio assemblages. I will then examine LCA connections, namely Bell Beaker and Sant'Ippolito-Malpasso elements (Sections 7.2.2.1-7.2.2.2). Analysis of Castelluccio relationships to RTV artefacts will follow in Section 7.2.2.3. Finally, I shall analyse the occurrence of TM ceramics in Section 7.2.3. As outlined in Section 2.1.2, the latter two are both material manifestations external to the Castelluccio pottery tradition yet informative of further chronological cross-links and potentially suggestive of interactive dynamics (e.g. Gori et al. 2018; Cattani et al. 2015). Finally, in the concluding sections of the chapter, I shall explore differentiation in the regional datasets discerned from this chronological study in order to discuss regional variability in terms of representativeness, social boundaries, practices and change.

7.2 CHRONO-TYPOLOGICAL ANALYSIS AND CROSS-LINKS

7.2.1 Introduction

In this section, a study of the associations between pottery types and styles is undertaken. As shown below, two chronological phases -a formative and a mature phase - can be discerned from this analysis with the support of the radiocarbon determinations which were picked up in association with contexts yielding the following ceramic style groups⁷:

- Early Castelluccio
- Classic Castelluccio
- Late Castelluccio

⁷ Definition of these styles follows the traditional scheme as summarised in Table 2.4.

Table 7.2 summarises the associations between sites, pottery style and morphology. I shall demonstrate that, despite the occurrence of the three distinct styles, there is a certain degree of continuity, especially between Early and Classic style developments, for which it is impossible to establish clear-cut stages when looking at occupation in dated sites with these materials. This is already evident in looking at the general list of dates and contexts associated with ceramics provided in Table 7.3. Here, certain contexts are shown to be characterised by the co-occurrence of Early-Classic assemblages associated with certain ranges, such as at Case Bastione hut 2.

Table 7.2: Pottery style, morphological types and decorative patterns. The table shows the association with the sites reviewed in Chapter 5. Associations between morphology and decorative patterns follow traditional schemes as defined in Chapter 2, Table 2.4.

Ceramic	Morphology	Decorative patterns	Sites
styles			
Early/Naro	Shapes are characterised by continuous profiles	Wolf tooth decorative motifs are	Altopiano di Pietralonga, Canicatti, Casalicchio-Agnone, Case Bastione, Contrada
style	whilst marked corner points rarely occur. Cups	widespread, along with patterns	Garrasia, Contrada, Contrada Grazia, Contrada Muntagnedda, Contrada Passerello,
	are usually globular in shape while jars may have	of vertical lines and dots, and	Contrada Pergola, Cuminazzi slope, Gibil Gabib, Grotta di Pietrarossa, Grotta
	more angular profiles. Bell-shaped profiles are	chevrons.	Lazzaro, Grotta Petralia, Grotta Ticchiara, La Muculufa sanctuary, La Muculufa village,
	also common. Pedestalled vessels are		La Ragusetta, Manfria-Case Manfria, Manfria-I Lotti, Marcita, Monte Calvario, Monte
	characterised by rounded bowls with poorly		del Gesso, Monte Grande, Monte San Basile, Monto Tabuto 1, Monte Tabuto 2, Naro,
	everted rims. Handles may have axe-shaped		Partanna, Pizzo San Giuseppe, Poggio Biddine, Poggio dell'Aquila, Poggio Monaco,
	terminations although most of them are simply		Torre Cusa, Torre Donzelle
	ribbon-shaped.		
Classic	Profiles may have a complex development; cups	Butterfly motifs; metopal	Branco Grande, Case Bastione, Castelluccio necropolis-Cava della Signora,
	and jars may be more angular and characterised	schemes.	Castelluccio Villaggio-Piano Sella, Castiglione, Cava Cana Barbara, Cava della
	by the occurrence of inflection and corner		Secchiera, Contrada Forche, Contrada; Contrada Paolina, Contrada Pergola, Grotta
	points engendering marked distinctions between		della Chiusazza, Grotta Ticchiara, Manfria-Case Manfria, Manfria-I Lotti, Melilli-Cava
	the lower and upper part of the vessel. In this		Bernardina, Monte Calvario, Monte del Gesso, Monte Grande, Monte Racello, Monte
	style, necks as well as stems may be more distinct		Sallia-Cozzo delle Ciavole, Piano Gaffe-Madre Chiesa, Pizzo San Giuseppe, Roba
	from the rest of the body.		Vecchia Galasse, Rocca Messana, Santa Croce di Camerina, Torre Bigini, Monteaperto
Late	Shapes are usually characterised by angular	Cordons are typical, besides	Castelluccio necropolis-Cava della Signora, Cava Cana Barbàra, Cava della Secchiera,
	profiles. Cups may be bi-conical in shape and are	traditional decorative patterns	Ciavolaro, Contrada, Coste di Santa Febbronia 1, Coste di Santa Febbronia 2, Deposito
	often carinated. Bowls also are often carinated.	that do not encompass the vessel	Sapiena, Grotta della Chiusazza, La Montagna, Marianopoli-Valleoscura, Mellilli-Cava
	Pedestalled vessels usually have high trumpet-	body in its entirety.	Bernardina, Monte del Gesso, Passanatello di Francofonte, Piano Gaffe-Madre Chiesa,
	shaped stems and shallow bowls with everted		Rocca Messana, San Lio, Torre Bigini, Valsavoia, Villaggio Garofalo
	walls.		

Location	Sample no.	Conventional date (BP)	Calibrated age (2σ) 95.4%	Calibrated age (10) 68.2%	Context	Associated materials/style
Case Bastione (W)	R_Date Rome-2053	3445 +/- 40	1883-1662	1871-1691	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2052	3505 +/- 40	1934-1699	1886-1771	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL3654A	3511 +/- 45	1952-1695	1892-1769	Hut 2	Early-Classic
Case Bastione (W)	R_Date Rome-2056	3530 +/- 40	1963-1745	1921-1776	Hut 2	Early-Classic
Case Bastione (W)	R_Date Rome-2050	3540 +/- 40	2009-1751	1941-1777	Hut 2	Early-Classic
Case Bastione (W)	R_Date LTL-3655A	3552 +/- 35	2013-1771	1951-1781	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2060	3550 +/- 40	2016-1756	1950-1780	Hut 2	Early-Classic
Case Bastione (W)	R_Date Rome-2051	3585 +/- 40	2113-1777	2011-1890	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3656A		2121-1886	2025-1927	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2061	3600 +/- 40	2126-1784	2020-1905	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2057	3610 +/- 40	2131-1881	2026-1921	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2055	3645 +/- 35	2136-1921	2118-1952	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2059	3650 +/- 40	2140-1916	2123-1954	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3653A	3625 +/- 50	2141-1833	2115-1918	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3657A	3699 +/- 45	2205-1951	2191-2029	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3658A	3830 +/- 45	2460-2146	2410-2201	Hut 1	Early
Castelluccio villaggio-Piano Sella (E)	R_Date MAMS-29138	3629 +/- 30	2106-1888	2019-1927	Hut 8	Classic
Castelluccio villaggio-Piano Sella (E)	R_Date MAMS-22286	3586 +/- 23	2020-1885	1961-1896	Hut 8	Classic
Castelluccio villaggio-Piano Sella (E)	R_Date MAMS-29137	3620 +/- 29	2115-1896	2023-1945	Hut 8	Classic
Castelluccio villaggio-Piano Sella (E)	R_Date MAMS-22285	3610 +/- 23	2030-1901	2020-1937	Hut 8	Classic
Castelluccio villaggio-Piano Sella (E)	R_Date MAMS-29136	3635 +/- 30	2130-1911	2032-1951	Hut 8	Classic
Castelluccio villaggio-Piano Sella (E)	R_Date MAMS-22920	3689 +/- 25	2191-1980	2134-2033	Hut 2	Early-Classic
La Muculufa sanctuary (W)	R_Date A-3956	3600 +/- 100	2275-1691	2132-1779	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3959	3640 +/- 80	2276-1771	2135-1911	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3960	3650 +/- 90	2288-1771	2187-1901	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3964	3610 +/- 120	2339-1641	2140-1776	Layered deposit	Early/Naro style

Table 7.3: Comparative list of dated sites in alphabetic order. The list shows the association between ceramic style and sites in reporting the site context from which radiocarbon determinations were collected. Since the sites are few, and some of them show more than one dating spot, the table has also been sorted from the latest to earliest age (2σ) for each site. It is also shown whether the site is located west of the Gela plain (W) or east (E)

Location	Sample no.	Conventional date (BP)	Calibrated age (2σ) 95.4%	Calibrated age (1σ) 68.2%	Context	Associated materials/style
La Muculufa sanctuary (W)	R_Date A-3955	3600 +/- 130	2344-1621	2138-1772	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3954	3670 +/-110	2435-1750	2202-1900	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3962	3610 +/- 150	2457-1621	2196-1756	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3967	3730 +/- 90	2457-1914	2286-1981	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3966	3690 +/- 120	2461-1772	2280-1915	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3961	3690 +/- 130	2464-1756	2284-1899	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3968	3720 +/- 120	2471-1776	2291-1949	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3951	3760 +/- 130	2569-1781	2431-1981	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3965	3770 +/- 130	2573-1785	2453-2027	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3953	3810 +/ 120	2576-1922	2461-2062	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3958	3790 +/- 150	2832-1775	2460-2036	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3963	3760 +/- 200	2860-1686	2469-1926	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3957	4080 +/- 180	3264-2050	2895-2351	Layered deposit	Early/Naro style
La Muculufa village (W)	R_Date A-5284	3680 +/- 100	2432-1772	2202-1927	Area external to the huts	Early
La Muculufa village (W)	R_Date A-5283	3790 +/- 60	2457-2038	2339-2065	North of hut 2	Early
La Muculufa village (W)	R_Date F25L60 A1+A2	3590 +/- 210	2565-1447	2278-1684	Hut 1	Early
La Muculufa village (W)	R_Date F25L60 B1+B2	3630 +/- 210	2581-1461	2294-1696	Hut 1	Early
La Muculufa village (W)	R_Date A-6546	3960 +/- 70	2835-2209	2573-2346	Hut 4	Early
La Muculufa village (W)	R_Date A-6547	3990 +/- 60	2837-2299	2620-2368	Hut 3	Early

7.2.1.1 Early style assemblages

Despite the occurrence of Early style assemblages in the eastern regions (Figure 7.2), there is only one dated site in the east with Early style ceramics. Meanwhile, most of the Early style pottery with associated ¹⁴C determinations is in the region of Agrigento and the River Salso to the west. If we examine only those sites with Early style materials in Table 7.3, we can note that all the dated Early style assemblages – except Castelluccio hut 2 –, are western sites, namely Case Bastione and La Muculufa village and sanctuary. A sequence of calibrated dates from the western region can be extrapolated accordingly as reported in Table 7.4. and displayed in the multiplot in Figure 7.3.



Figure 7.2: Distribution of Early style assemblages. Plots and annotations by the Author (base map source: Esri, HERE, Garmin© OpenStreetMap contributors, and the GIS use community). In Section 2.2.3, I explained that what is known as Early Castelluccio/Naro style is seen to be representative of the earliest assemblages characterising the chronological development of the Castelluccio culture. To repeat, the label 'Naro' is used to define this sub-phase in the western region, but assemblages that are viewed as expressive of an Early style development also feature in the eastern regions. Here, we have also seen that this ceramic style is considered by Cultraro to be an expression of the earliest development following later LCA local manifestations (Cultraro 1991-92; 1996). This map shows that there are sites potentially datable to an earlier sub-phase of development which is spread all across the island, despite the occurrence of a few blank spots likely due to patterns of survey and excavation. It also anticipates a transition to the Classic phase which spanned across the whole island, likely without discontinuity.

Location	Samela no	Conventional date	Calibrated age	Calibrated age	Contort	Associated
Location	Sample no.	(BP)	(2σ) 95.4%	(1σ) 68.2%	Context	materials/style
Case Bastione (W)	R_Date LTL-3655A	3552 +/- 35	2013-1771	1951-1781	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2051	3585 +/- 40	2113-1777	2011-1890	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3656A		2121-1886	2025-1927	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2061	3600 +/- 40	2126-1784	2020-1905	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2057	3610 +/- 40	2131-1881	2026-1921	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2055	3645 +/- 35	2136-1921	2118-1952	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2059	3650 +/- 40	2140-1916	2123-1954	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3653A	3625 +/- 50	2141-1833	2115-1918	Hut 1	Early/Naro style
Case Bastione (W)	R_Date LTL-3657A	3699 +/- 45	2205-1951	2191-2029	Hut 1	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3956	3600 +/- 100	2275-1691	2132-1779	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3959	3640 +/- 80	2276-1771	2135-1911	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3960	3650 +/- 90	2288-1771	2187-1901	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3964	3610 +/- 120	2339-1641	2140-1776	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3955	3600 +/- 130	2344-1621	2138-1772	Layered deposit	Early/Naro style
La Muculufa village (W)	R_Date A-5284	3680 +/- 100	2432-1772	2202-1927	Area external to the huts	Early
La Muculufa sanctuary (W)	R_Date A-3954	3670 +/-110	2435-1750	2202-1900	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3962	3610 +/- 150	2457-1621	2196-1756	Layered deposit	Early/Naro style
La Muculufa sanctuary (W)	R_Date A-3967	3730 +/- 90	2457-1914	2286-1981	Layered deposit	Early/Naro style
La Muculufa village (W)	R_Date A-5283	3790 +/- 60	2457-2038	2339-2065	North of hut 2	Early
La Muculufa sanctuary (W)	R_Date A-3966	3690 +/- 120	2461-1772	2280-1915	Layered deposit	Early/Naro style

Table 7.4: Summary of the key date ranges discussed in this section and plot in Figure 7.3. Dates are presented from the latest to the earliest, as arranged in Figure 7.3.



Cal v4.3.2 Bronk Ramsey (2017); r:5 IntCal09 atmospheric curve (Reimer et al 2009

Calibrated date (calBC)

Figure 7.3: Multiplot of calibrated dates including La Muculufa village (A-5284, A-5283), 'sanctuary' (A-3956, A-3959, A-3960, A-3964, A-3955, A-3954, A-3962, A-3967, A-3966) and Case Bastione hut 1 spots (R_Date LTL 3655A, Rome 2051, LTL-3656A, Rome-2061, Rome-2057, Rome-2055, Rome-2059, LTL 3653A, LTL 3657A). There are stronger overlaps between all La Muculufa spots and Case Bastione hut 1, in particular dates associated with the hut 1 lower floor and its abandonment (R_Date LTL-3656A, R_Date Rome-2057, R_Date Rome-2055, R_Date LTL-3653A, R_Date LTL-3657A). Meanwhile, the upper floor level of hut 1 shows a date (Rome-3655A) characterised by a slightly later range, yet, continuing from the earliest ranges. The

calibration has been made using OxCal v.4.3.2 using the calibration curve IntCal09 for the northern hemisphere.

More interesting is the western overlap with the only available date from east Sicily. If we consider the combination of dates from the earliest occupation of Case Bastione hut 2 in the west, as shown in Figure 7.4, then the given range of ca. 2115-1942 cal. BC which overlaps with the earliest range of ca. 2191-1980 from Castelluccio hut 2 in east Sicily, as expressed by the R_Date MAMS 22920 (Table 7.3). Thus, while the set of western dates may facilitate a refinement of the chrono-typological sequence in the west (i.e. Ianni 2009; Giannitrapani et al. 2014, 195-196), the comparison with the east would suggest an occupation of Early style contexts in both regions that is roughly contemporary.



Figure 7.4: Single plot of combined dates. The graph shows the result of the combined dates coming from the floor level of hut 2 in Caste Bastione (LTL 3654, Rome-2056, Rome 2050, Rome-2060). Since the radiocarbon determinations were from samples belonging to the same context, the combination has been performed before calibration of each sample, by using the tool 'R_Combine', provided by the OxCal software v.4.3. Combined dates show a range of ca. 2115-1942 cal. BC, which is in partial overlap with the date R_Date MAMS-22920 for the Early style context of Castelluccio hut 2.

7.2.1.2 Classic style assemblages

Hut 1 and associated Early style ceramics appear to have been still in use at Case Bastione when Classic style materials appeared, at least for a while, as shown by list of radiocarbon determinations reported in Table 7.5 and plotted in Figure 7.5. Indeed, we may note quite a smooth sequence of dates from the earliest hut 1 phase to hut 2 spots without abrupt discontinuity in the former figure. In fact, when comparing dates from the upper floor of hut 1 with those from hut 2, the endurance of the former and associated Early style materials

is noteworthy. This suggests a persistence of the preceding tradition, if not a use of both styles in the same time span.

Location	Sample no.	Conventional date (BP)	Calibrated age (2σ) 95.4%	Calibrated age (1σ) 68.2%	Context	Associated materials/style
Case Bastione (W)	R_Date LTL3654A	3511 +/- 45	1952-1695	1892-1769	Hut 2	Early-Classic
Case Bastione (W)	R_Date Rome-2056	3530 +/- 40	1963-1745	1921-1776	Hut 2	Early-Classic
Case Bastione (W)	R_Date Rome-2050	3540 +/- 40	2009-1751	1941-1777	Hut 2	Early-Classic
Case Bastione (W)	R_Date LTL-3655A	3552 +/- 35	2013-1771	1951-1781	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2060	3550 +/- 40	2016-1756	1950-1780	Hut 2	Early-Classic
Case Bastione (W)	R_Date Rome-2051	3585 +/- 40	2113-1777	2011-1890	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2061	3600 +/- 40	2126-1784	2020-1905	Hut 1	Early/Naro style
Case Bastione (W)	R_Date Rome-2059	3650 +/- 40	2140-1916	2123-1954	Hut 1	Early/Naro style

Table 7.5: Summary of the key date ranges discussed in this section and plot in Figure 7.5. Dates are presented from the latest to the earliest, as arranged in Figure 7.5.



Calibrated date (calBC)

Figure 7.5: Multiplot of calibrated dates, all from Case Bastione. In particular, the graph shows calibrated dates from hut 1, upper floor (R_Date LTL 3655A, R_Date Rome-2051, R_Date Rome-2061, R_Date Rome-2059) and hut 2 (R_Date LTL3654A, R_Date Rome-2056, R_Date Rome-2050, R_Date Rome-2060,). It highlights a substantial overlap in the sequence suggesting continuity in occupation and persistence in the use of older style shapes and decorative motifs when the Classic style emerged.

Similarly, looking at the site distribution in Figure 7.6, we may see a persistence of occupation in places in the eastern region. As stated above, radiocarbon determinations are from one site only, Castelluccio, as reported in Table 7.6. Five new dates come from hut 8. Unfortunately, the ceramic repertoire is largely unpublished but the authors contend it has markers of the Classic style (Crispino and Chilardi 2017, 100; Crispino 2018, 98). The five determinations coming from this context show a partial overlap with hut 2 in the earliest ranges (Figure 7.7). Therefore, we may argue that occupation of Castelluccio hut 2 endured at least for a while when hut 8 came into existence, supporting the hypothesis of a broad contemporaneity and/or a persistence of the old early style tradition in this phase.



Figure 7.6: Distribution of Classic style assemblages. Plots and annotation by the author (base map source: Esri, HERE, Garmin[®] OpenStreetMap contributors, and the GIS use community). As explained in Chapter 2, aspects of ceramic variability intended to be representative of this style concern the development of more angular shapes, also characterised by the occurrence of new decorative patterns. We have seen in Section 2.3.2 that Bernabò Brea defined the pottery from the western cemeteries of Montesara and Montedoro as expressive of this style, in stark contrast with La Muculufa sanctuary Early style design and, in general, the so-called Naro style. The scholar argued for a stylistic development from the early Naro style motifs to more schematic, finely organised decorative patterns, as also more recently suggested by Cultraro (2004)⁸. These differences notwithstanding, we can still observe some persistence at the level of places, such as the inhabited sites of Monte Grande (202), Case Bastione (149), Manfria (129) Castelluccio (59), but also funerary sites like Manfria I Lotti (130) and Contrada Pergola (220).

⁸ In Section 2.1.2, we have seen how, in the absence of radiocarbon dates, Cultraro's eastern sequence relied on comparing Montesara-Montedoro-like decorative patterns with pottery from the stratified deposits of the cave sites of Grotta Maccarone and Grotta Pietralunga di Adrano (Table 4.2).

Location	Sample no.	Conventional date (BP)	Calibrated age (2σ) 95.4%	Calibrated age (1σ) 68.2%	Context	Associated materials/style
Castelluccio villaggio- Piano Sella (E)	R_Date MAMS- 29138	3629 +/- 30	2106-1888	2019-1927	Hut 8	Classic
Castelluccio villaggio- Piano Sella (E)	R_Date MAMS- 22286	3586 +/- 23	2020-1885	1961-1896	Hut 8	Classic
Castelluccio villaggio- Piano Sella (E)	R_Date MAMS- 29137	3620 +/- 29	2115-1896	2023-1945	Hut 8	Classic
Castelluccio villaggio- Piano Sella (E)	R_Date MAMS- 22285	3610 +/- 23	2030-1901	2020-1937	Hut 8	Classic
Castelluccio villaggio- Piano Sella (E)	R_Date MAMS- 29136	3635 +/- 30	2130-1911	2032-1951	Hut 8	Classic
Castelluccio villaggio- Piano Sella (E)	R_Date MAMS- 22920	3689 +/- 25	2191-1980	2134-2033	Hut 2	Early-Classic

Table 7.6: Summary of the key date ranges discussed in this section and plot in Figure 7.7. Dates are presented from the latest to the earliest, as arranged in Figure 7.7.



Figure 7.7: Multiplot of calibrated dates from Castelluccio hut 8 (MAMS-29138, MAMS-22286, MAMS-29137, MAMS-22285, MAMS-29136) and hut 2 (MAMS-22920). The diagram shows the overlap between hut 2 and hut 8 in the lower ranges (MAMS-22920 and MAMS 29136).

All in all, considering both groups of dates from Case Bastione and Castelluccio, it is possible to hypothesise a range for the emergence of the Classic style vessels across Sicily from ca. 2018-1898 to 1932-1775 cal. BC, which still saw production of older style vessels, suggesting not only a lack of discontinuity but also similar trajectories of development across Sicily.

7.2.1.3 Late style assemblages

Poorly decorated vessels characterised by very angular shapes are seen as being expressive of Late style production, often considered as the endpoint of the Castelluccio potting tradition (Cultraro 1991-92; 1996). Such a perspective was mostly informed by considerations of the distribution of carinated pots (Cultraro 2004, 105-106). In addition, surfaces characterised just by red slip, with only few black brushed-on lines, are considered typical of this Late style (Castellana 2000), during which the decorative efforts of the Naro and Montesara-Montedoro style ceramics apparently ceased to define local ceramic products in favour of nearly plain pottery designs. Marked discontinuity is also seen in the development of very tall pedestalled vessels with a trumpet-shaped stems and everted profiles. These are usually described as 'very high, slender pedestalled bowls with everted profiles' anticipating the grand developments of the stemmed bowls of the MBA Thapsos repertoires (Cultraro 1991-92; 1996).

Unfortunately, radiocarbon dates directly associated with the distribution of this style are not available to my knowledge. In this case, research agendas are primarily responsible for this situation relying, since the earliest contemporary studies on the Castelluccio culture, only on the use of cross-cultural comparisons. More recently, Castellana dated a class of poorly decorated pottery characterised by a red slip found in the layer 1-1a of Monte Grande to a later period through the occurrence of fragments interpreted as MH and LH I-II pottery (Castellana 1998, 110)⁹. Nevertheless, the context from which they were recovered shows a mix of Early and Classic style pottery, making it difficult to establish a clear-cut sequence. In spite of this problem, I tend to agree with Castellana about the date of the red-slipped pottery, primarily considering the external typological links with MBA Thapsos ceramics, characterised by red-slipped surfaces.

A further element of discontinuity that supports a stronger connection with MBA prototypes is the foundation of more new sites rather than continuity of older ones, as shown in Figure 7.8. The majority of the stratified deposits with Late style ceramics are concentrated in the eastern region (Cultraro 1996; 2004, 105). In the south-east, for example, most sites are burials such as those reviewed in Chapter 5, e.g. Cava Cana Barbara (54) Coste di Santa Febbronia (39) and Castelluccio-Cava della Signora (57). Here also, the occurrence of Classic style ceramics would suggest a longer use of some of these cemeteries. However, there are other burials with only Late style pottery, such as burial 9 at Monte Sallia, all burials from Ossini San Lio and those of Coste di Santa Febbronia, which strengthen the idea of a certain discontinuity. When Late style ceramics occur at these single-phase sites, they are often associated with RTV-like pottery, as in the anthropogenic deposit at Ciavolaro (218).

⁹ Identification of the provenance of eastern Mediterranean imports found at Monte Grande has been the focus of sustained scholarly examination since the early 1990s. This discussion is not central to the development of this thesis. The reader is, therefore, advised to refer directly to relevant sources, in particular Blake (2008), for a comprehensive, if not exhaustive, recent synthesis on studies of the early and late Mycenaean connections (LH I-II and LH IIIA, IIIB and IIIC) with the central Mediterranean. For a less 'minimalist' approach, see also Marazzi (2003); Marazzi and Tusa (2005). See Belardelli et al. (2005) and Jones et al. (2015) for further references to the so-called 'Roman School' of protohistoric studies, focused on a peninsular view of socio-economic changes, encompassing especially the study of settlement planning and local imitation of Mycenaean pottery in southern Italian MBA-LBA communities. For local contributions, see also Tanasi (2004); La Rosa (2005); Alberti (2007, 374), who focused on other aspects of life, i.e. funerary customs, architecture, discussing acculturation phenomena and hybridisation especially during the local Late Bronze Age (Pantalica Nord phase). Bietti Sestieri (1988) developed quite an original 'colonialist' view of LBA Sicily. Similarly, Militello (2005) hypothesised the presence of Mycenaean architects working for the local LBA elites. Here it is important to remember that proper Mycenaean imports, i.e. LH IIIA-B pottery, are absent from Monte Grande, while the occurrence of early Mycenaean LH I-II imports is limited to very few examples (Graziadio 2000, 253).



Figure 7.8: Distribution of Late style assemblages. Plots and annotations by the author (base map source: Esri, HERE, Garmin[©] OpenStreetMap contributors, and the GIS use community). There were many new sites founded at this time, with few old ones continuing in occupation. This suggests a certain degree of discontinuity, although the lack of radiocarbon determinations associated with these contexts prompts caution in interpretation.

7.2.2 Further chrono-typological links with older and roughly contemporary local traditions

The sequences of dates previously discussed from Case Bastione and Castelluccio may offer a terminus ante quem for when the distribution of Early to Classic style pottery was replaced by the Late style. In this view, these observations raise the possibility of thinking about continuity and persistence of older styles within a framework of shared developments, while arguing for some kind of discontinuity only for the later phase. This also anticipates the possibility of looking at connections with local LCA-EBA traditions in order to establish further chronological links, and addresses issues regarding long-term trajectories and hybridisation. As discussed already in Section 3.4, there seems to be a great deal of inheritance when local Copper Age economic trends are considered, but this is not enough to explain EBA societal developments when considering the complex contexts of interconnections in which the Castelluccio groups emerged and developed. Therefore, it is possible that the Castelluccio potting tradition inherited a great deal from ECA-MCA local traditions, but the changes which occurred in the LCA period – as discussed in Chapter 3 – certainly affected the way this inheritance might have been transmitted and perceived. Before constructing regional datasets in order to explore EBA ceramic variability in terms of social boundaries, I shall first review the relationships to LCA traditions. Besides the well-known relationship to Sant'Ippolito-Malpasso ware, as discussed in Section 2.1.3, the discussion will include an examination of connections with the Sicilian beaker phenomenon (Figure 7.9), the former spread across much of Sicily, the latter especially in central-western regions. Bell Beaker ceramics, particularly the typical beakers characterised by horizontal cordoned decoration, are part of a package entailed in a wider and multifaceted complex phenomenon affecting Europe in the 3rd millennium and possibly expressive of local adaptations of broader cultural, political and ideological changes (Vander Linden 2007, 346-348). In Sicily, similar manifestations were recognised early on by scholars in the distribution of the so-called *Bicchiere di Carini*, the beaker of Carini (Bovio Marconi 1964-65; Tusa 1998, 220-224). Other occurrences found elsewhere in central Sicily (Giannitrapani 2009), suggest important changes in the socio-cultural and political sphere which potentially affected local LCA groups.



Figure 7.9: Bell Beaker pottery (source: Giannitrapani and Iannì 2011b, 479, fig. 1, scale: ca. 1:3).

Another link to consider is the one pertaining to RTV artefacts (Figure 7.10) and the occurrence of TM (Figure 7.11). Both traditions are manifested in certain mixed Castelluccio contexts but they have not received sustained scholarly examination in Castelluccio ceramic studies. RTV pottery assemblages are distributed especially in north-western Sicily¹⁰.

¹⁰ Ardesia (2013-14) wrote a comprehensive synthesis which, however, does not consider aspects related to sources and production and only focuses on an insular perspective. Ardesia argues for a north-western Sicilian

Nevertheless, as discussed in Section 2.1.2, there is also evidence of typological connections with other EBA southern Italian traditions (Marino and Pacciarelli 1996). This suggests that the actual distribution of RTV pottery may also reflect circulation of models, ideas and practices entailed in wider and more complex central Mediterranean scenarios, including the spread of Cetina-like materials (e.g. Cattani et al. 2015; Gori et al 2018). The same significance may be argued for the occurrence of TM, which some scholars connected with the wider spread of Maltese imports in the central Mediterranean in the last three centuries of the 3rd millennium BC (Cazzella 1999; 403; Cazzella and Recchia 2015, 147; Cazzella and Recchia 2012, 29-32).



Figure 7.10: RTV pottery (source: Procelli 2004, 384, fig. 1, not to scale).

origin for the RTV groups on a purely typological basis (cf. Veneziano 2012). Recently, there have been attempts to reassess Ardesia's hypothesis by eliciting the peculiarities of some local insular manifestations, e.g. the style of Mursia. Tusa (1997, 394; 1999) first highlighted this peculiarity through comparison with other Sicilian RTV manifestations, such as those outlined in Section 2.1.2, yet also underlining links with the other unpainted grey wares circulating especially outside Sicily during the EBA, in particular Capo Graziano and Tarxien Cemetery pottery. This was stressed more recently by scholars (Ardesia et al. 2006, 3; Tusa and Marazzi 2005, 172-173). In a recent publication, Cattani et al. (2015, 17-18) overtly refers to Cetina and wider spheres of interaction.



Figure 7.11: Thermi ware pottery distribution (After Cazzella and Recchia 2015, 143, fig. 2). The figure shows the distribution of TM in the eastern and central Mediterranean. A few Castelluccio EBA contexts are also present in which TM pottery has been identified. 1. Troy; 2. Thermi; 3. Emporio; 4. Poliochni; 5. Dikili Taş; 6. Sitagroi; 7. Hotovo; 8. Radomir; 9. Cetina; 10. Pelagosa; 11. Naveli; 12. Popoli; 13. Rodi Garganico; 14. Coppa Nevigata; 15. Fantanarosa; 16. Atena Lucana; 17. Casal Sabini; 18. Pipistrello Solitario; 19. Steno; 20. Olympia; 21. Lerna; 22. Corazzo; 23. Zungì; 24. Milazzo; 25. Curci; 26. Novaluccello; 29. Castelluccio; 30. Cava del Prainito; 31. Gozo; 32. Malta.

7.2.2.1 The Sant'Ippolito-Malpasso connection reviewed

In Section 7.2.1, the relationship between Castelluccio assemblages was reviewed, showing a certain degree of continuity between Early and Classic style wares. It is argued here that this continuity can be traced back to the ECA-MCA period through the LCA phase during which the formation of the Early style Castelluccio template was initiated, as further shown below. The distribution of LCA Sant'Ippolito-Malpasso ware is widespread across Sicily (Alberghina 2012, 668). An LCA phase, characterised by the distribution of Sant'Ippolitostyle ceramics, is documented, for example, at the Castelluccio site of Case Bastione. Here, continuity between LCA and Early style Castelluccio pottery is quite clear, with evidence of Early style pottery on top of the LCA levels (Giannitrapani et al. 2014, 194). A similar situation is also attested at Monte Grande, where layer 2, containing Naro-style pottery, lies above an LCA level with remains of a hut floor and Sant'Ippolito pottery (Castellana 1998). The same continuity is also attested at the settlement of La Muculufa. La Muculufa has two sites, as reviewed in Chapter 5, the settlement and the so-called sanctuary. The distribution of Early style ceramics in the sanctuary somewhat follows that of the village (Iannì 2009), which is characterised by the occurrence of Sant'Ippolito LCA pottery (McConnell 1995). This evidence clearly indicates a period during which Early style Castelluccio and Sant'Ippolito-Malpasso pottery might have coexisted; a period during which communities in the area might have re-elaborated old LCA traditions.

7.2.2.2 Bell Beaker connections reviewed

Beaker complexes are attested especially in central-western Sicily (Bernabò Brea 1957, 86; 1958; Tusa 1999; Leighton 2005; Giannitrapani 2009; Giannitrapani and Iannì 2011; Giannitrapani 2012a). Specific decorative patterns in pottery were then identified, including vertical and horizontal linear incisions, pointillé and criss-cross motifs (Figure 7.9), as typically expressive of the Sicilian beaker manifestation (Tusa 1999, 238). Nevertheless, the most recent discoveries of this kind at Case Bastione, Tornambe (Giannitrapani and Iannì 2011), and other sites along the southern Imera River valley (Iannì 2016) suggest an expanded area for the circulation of beakers¹¹. These new territories also expanded to the LCA-EBA settlements of Case Bastione and Tornambè, located in the upper Salso River valley, but also areas in the province of Agrigento (Naro and Serraferlicchio) and at La Muculufa, along the lower Salso River valley.

This evidence has led some authors to hypothesise a new, more expanded distribution of the Sicilian Bell Beaker phenomenon than previously thought (Giannitrapani 2009; Giannitrapani and Iannì 2011, 271-278). However, what is of interest to me is the distribution of beaker elements in LCA contexts also characterised by Early style Castelluccio pottery. At sites such as Case Bastione and La Muculufa, Sant'Ippolito-Malpasso, beaker and Castelluccio ceramics apparently occur in the same assemblages. Such mixed contexts may not be surprising for an earliest phase of development during which old and new elements might subsequently have been mixed together.

LCA hybrid contexts made up of Sant'Ippolito-Malpasso traditions may have occurred in Sicily, and significant examples appear at Grotta della Palombara, where the same pottery shapes are attested decorated in both Malpasso and Sant'Ippolito styles (Gulli 1997, 380-381). This is the sole context, to my knowledge, where this kind of hybridisation is overtly manifested, but we cannot exclude the possibility that LCA-EBA contexts with Bell Beaker pottery were also places where experimentation might have been conducted. We are short of archaeometric data to say something more about pottery production practices in this

¹¹ More recent discoveries and surveys include other finds mostly along the southern Imera valley, at sites such as La Fastuchera and Marcato del Re (Iannì 2016, 63-65). These finds were added to the previously known LCA beaker site of Marcita near Trapani, calling for a wider expansion of beaker elements all through central, western and north-western Sicily.

period, but it is interesting that recent provenance analysis of Sant'Ippolito-Malpasso, Bell Beaker and Castelluccio pottery fabrics from the site of Tornambè showed the use of local clay sources for all of the styles mentioned (Fragnoli et al. 2013, 147). It seems therefore that Bell Beakers might have been locally produced, suggesting practices entailed in quite creative contexts, potentially open to innovation, and that this trend endured until the full development of Classic style Castelluccio artefacts. In this sense, as suggested above, it is possible that sites like these are have contexts in which re-elaboration of traditions actually took place, informing the emergence of the earliest Castelluccio assemblages.

7.2.2.3 Rodi-Tindari-Vallelunga connections reviewed

Whether the distribution of RTV pottery is a local expression distinct from Castelluccio or a manifestation connected with the spread of southern Italian Cetina-like grey ware pottery is still a matter of discussion. Yet, it is still important to appreciate the distribution of RTV pottery in Castelluccio contexts for the same reasons as expressed above. In fact, the distribution of RTV ceramics, concentrated in north-western Sicily, is also attested further inland at sites where Castelluccio materials have been recovered from stratified contexts. This offers scope for further contextualisation of the emergence and development of Castelluccio assemblages, especially those characterised by the presence of Late style ceramics.

The occurrence of RTV pottery in stratified contexts associated with Castelluccio materials is a discovery of the early 1990s. Previously, RTV-Castelluccio contexts were largely unknown. The first RTV finds were recovered by Orsi between 1894 and 1895 from the settlement site of Mursia on the island of Pantelleria. Orsi could not relate them to an RTV cultural manifestation (Orsi 1899). Instead, Bernabò Brea did so after the discovery of grey ware pottery at sites such as Vallelunga, Tindari and the cemetery of Longane (Bernabò Brea 1958, 114-115), where the presence of painted Castelluccio ceramics was already known and widespread. Focusing, thus, on the similarities within this group of grey ware on the one hand, and the differences with the Castelluccio painted pottery on the other, Bernabò Brea isolated RTV from the roughly contemporary emergence and development of Castelluccio material culture (Bernabò Brea 1958, 114-115). Later, Cavalier (1970, 75) stressed the existence of this new RTV cultural group, defining the loop handles with 'equine ear' terminations, which became a traditional typological marker.

Later discoveries of RTV-like materials at stratified sites with Castelluccio pottery occurred in the early 1990s, advocating a more cautious approach to the meaning of RTV-like materials. Particularly important were excavations at the sites of Serra del Palco and Ciavolaro where, in both cases, RTV-like materials were found associated with Castelluccio pottery. Serra del Palco di Milena is a site with a long occupational sequence going back to the Neolithic (La Rosa and d'Agata 1988). The EBA levels are at a hilltop settlement that has been only partly excavated. The excavation report was published by La Rosa and D'Agata (1988, 10-15), who noted how the local Castelluccio production seems to have incorporated RTV-like elements, especially in the upper levels of the settlement, whereas painted pottery only prevails in the lower levels. RTV pottery was also found at Ciavolaro where, as discussed in Chapter 5, it was associated with deposition of human remains, interpreted by the excavator as evidence of ritual activities. The excavator identified three stratigraphic levels in which painted pottery characterised by RTV elements was found associated with unpainted ceramics bearing RTV traits. There remain issues regarding interpretation of the function of this site. However, it seems likely that such a mixed context is chronologically late, in view of the association between RTV and Late style Castelluccio, which is similar to that occurring at the stratified site of Serra del Palco. This kind of information suggests that assemblages in which RTV elements appear associated with Castelluccio materials are of a later phase.

7.2.2.4 Long-term developments and hybridisation

The reviewed relationships in ceramic assemblages clearly suggest the possibility that the Castelluccio culture emerged and developed in a local context in which persistence of an older LCA tradition stresses continuity. This continuity is far more evident when trying to expand connections back to the earlier CA phases. As shown in Chapter 3, the typical black-on-red brushed-on pottery can also be found in the Serraferlicchio MCA phase, suggesting a persistence of MCA elements during the LCA. This aspect has not been sufficiently interrogated in current scholarship, which is still focused on the 'autochthony versus external influence' debate, and the establishment of finer-grained relative sequences. Yet, considering these elements of continuity, it is legitimate to hypothesise a long-term history of development in material culture without wholly rejecting the presence of innovation in the early Castelluccio phase.

The persistence of old traditions themselves might have triggered innovative behaviours, as suggested by the hybrid pottery evidence of Grotta della Palambara and the spread of Bell Beaker pottery in the Sant'Ippolito-Malpasso area mentioned above. Evidence of the persistence of LCA materials in the Castelluccio Early style may be indicative of the fact that this overall elaboration was still active at the beginning of the Castelluccio period, what we

conventionally call the EBA. In this sense, the emergence of the earliest Castelluccio style can be seen as a combination of innovation and continuity of older local traditions. One may object that the pottery evidence is not enough. In fact, we have seen in Section 3.3.4, that during the CA, besides elements of continuity in material culture, settlement trends and economic specialisation also endured into the Castelluccio period. Throughout the centuries that oversaw these trends the persistence of old traditions was accompanied by further experimentation combined with increased economic specialisation. This is supported by the chronological evidence discussed above of a certain degree of continuity in settlement occupation, also documented by the occurrence of Early style pottery in settlements where the Classic style is also present.

In this sense, the co-occurrence of LCA pottery and the Early-Classic style can be used as a proxy to define an initial phase of development during which Castelluccio pottery came to a mature stage. In contrast, association of Late style Castelluccio with RTV materials can be seen as indicative of a late stage, characterised also by a certain degree of discontinuity. The following section will discuss the occurrence of TM imports in order to provide further chronological elements to refine the proposed scheme and implement a more reliable incidence matrix for defining regional subsets. It will offer further contextual elements in which to situate the emergence and development of Castelluccio groups within a shared context of interaction, in which external influence might also have been incorporated in creative processes, triggering local innovations.

7.2.3 Thermi Ware occurrence in Castelluccio sites. Further dating elements and connections with non-local traditions

TM is currently interpreted as evidence for the distribution of LN-EBA Maltese products outside the archipelago. It is worth mentioning that this TM must not be confused with the Thermi Ware first identified in the excavations of Thermi on the island of Lesbos. These excavations yielded the remains of five successive EBA towns (towns I-V) (Lamb 1936, 7-55). The excavated EBA pottery was described in three classes: A, B and C (ibid. 73). It was Trump who first identified stylistic similarities between this Thermi Ware and some incised grey ware ceramics found at Malta and Gozo (Trump 1966).

There are authors who currently associate the Maltese TM with the occurrence of a type of thickened-rim bowl with incised decorative patterns (Cazzella and Recchia 2012b, 1002-1003). It is known today, however, that these thickened-rim bowls are also typical components of Cetina 'packages' for which a wider distribution is commonly acknowledged across the western Balkans, the Peloponnese and Apulia in southern Italy, e.g. at Rodi

Garganico, Coppa Nevigata and Fontanarossa (Nava 1985; Recchia 2002; Gori et al. 2018). It is fair to say that there is no complete agreement between authors dealing with the chronology of the Cetina phenomenon (Della Casa 1995; Maran 2007) and development of a TM phase in Malta. Malone et al. (2009, 239) tend to date TM as still belonging to the Tarxien phase (LN) and as a transitional phase to Tarxien Cemetery period. These studies draw on Trump's excavations at the site of Skorba, where TM fragments were found in LN levels (Evans 1971, 22) and on further radiocarbon determinations dating to 2500 cal. BC (Trump 2002, 10-11; 2004, 230). Cazzella tends to link the emergence of TM in Malta with emergence of the Tarxien Cemetery phase around 2300 cal. BC (Cazzella 1999, 403; Cazzella and Recchia 2012b, 29; Copat et al. 2012, 50; Cazzella and Recchia 2015, 142-144).

On the whole, it is hard to establish a consensus. One may argue that earliest radiocarbon determinations associated with TM in LN contexts would suggest that TM was already in Malta before 2300 cal. BC. In fact, one of its most important diagnostic vessels, which also occurs in Malta, the thickened-rim bowl, is widespread in the central Mediterranean and the Balkans, sometimes associated with beaker elements (Della Casa 1995, 568). These cross-links would suggest that the distribution of TM has more to do with a wider cultural and social phenomenon encompassing different geographic areas, rather than the emergence and development of certain cultures.

Indeed, the occurrence of TM is also documented in Castelluccio assemblages. This was quite a recent discovery, since the occurrence of incised grey ware was first interpreted as evidence of Tarxien Cemetery imports. Sherds remarkably similar to TM were discovered by Bernabò Brea on the islet of Ognina, which he considered to be evidence of a Tarxien Cemetery trading colony (Bernabò Brea 1966-67, 41-42). This can now be certainly ruled out as the core assemblage from Ognina, particularly that collected from excavations of the areas D and E (ibid. 44), is mostly characterised by the well-known thickened-rim bowls (see Bernabò Brea 1966-67, pls. XLII, 3, 4; 5; XLIII, 1, 2, 4; XLV, 3) associated with Early style Castelluccio pottery. This character was later recognised by Evans (1971, 223), who highlighted the similarities with thickened-rim bowl fragments from Ognina and LN Maltese sites. More recently, Procelli has related them to a Cetina-type EBA manifestation of Calabrian origin, the so-called Zungri facies (Procelli 2004).

Chronological debates regarding the emergence and development of TM thus remain open, although what seems likely, also in view of these Sicilian find spots, is that 2300 cal. BC seems to represent a *terminus ante quem* for the distribution of TM-like pottery across the

central Mediterranean. The occurrence of TM fragments in Castelluccio contexts may therefore be significant when we come to understand the chronology of local assemblages. In particular, considering 2300 cal. BC as a *terminus ante quem*, the spread of TM fragments at Castelluccio sites such as Ognina, but also Castelluccio itself, signal a broad contemporaneity with the earliest western material manifestation associated with Bell Beakers. This is supported by the Ognina finds, where TM fragments were found associated with Early style materials in an area of the plateau where features interpreted as 'hearths' were exposed (Bernabò Brea 1966, 46).

Unfortunately, there are no other remains to my knowledge of TM fragments at Castelluccio sites. Other incised fragments, characterised by triangles and dots, were found at the sites of Grotta Curci and Nuovaluccello (Palio 2007). Yet, in the absence of diagnostic elements identifiable with thickened-rim bowls, more caution is necessary. Similarly, grey ware was also found at Grotta Chiusazza. The occurrence of forms similar to those found at Ognina has been noted by Palio (2007) but cannot be confidently attributed to TM. For example, a jar found with engraved square-patterned decoration (Tinè 1965, 223, fig. 15) may be vaguely comparable to other Cetina-type materials, but the presence of rhombus patterning strongly recalls Tarxien Cemetery products (see Evans 1972, pl. 52, 14). Likewise, it remains impossible verify the presence of thickened-rim bowls with certainty.

Similarly, it remains difficult to ascertain whether the incised and impressed fragments found at Nuovaluccello and Curci are to be related with TM, as the small size of these fragments does not permit certain identification of a corresponding shape. Palio (2007, 86) claimed a similarity between the decorative motifs on the fragment from Nuovaluccello and decorated fragments from Ognina, yet there remains the possibility of a southern Italian origin connected with the already mentioned Cetina-type Calabrian manifestation of Zungri. The same can be argued for a fragment found at Curci (Marino and Pacciarelli 1996, fig. 1, 17). Finally, there is sporadic evidence of incised fragments from the site of Case Bastione which may resemble TM sherds (Giannitrapani and Iannì, July 2018, *pers. comm.*), but doubt remains for the same reasons expressed above.

7.2.4 Conclusions

Analysis of the cross-links reviewed above suggests that the Castelluccio culture emerged and developed within a context of both shared practice and interaction. Combined with the results of Chapter 3, analysis of these cross-links points to both persistent traditions and hybridisation processes in the re-production of local material culture. Looking ahead to a comprehensive discussion of practices, boundaries and change in the following chapter, it is my intention here to anticipate some ideas that will be further developed there. First, it seems likely that the local Castelluccio boundaries were prone to a certain degree of porosity. In fact, considering both the persistent CA habits and links with non-Castelluccio material culture, boundaries might have been substantially permeable. We can interpret this contrast between tradition and hybridisation as the evidence of a formative phase during which the emergence and development of local boundaries between groups was embedded in complex mechanisms of inter-group interaction. Identification of TM fragments would suggest that this inter-group interaction might have been embedded in even greater networks. These might also have affected the emergence and development of local groups, and the local character of their pottery production, especially during the last three centuries of the 3rd millennium BC.

Second, identification of RTV connections has shown that during these centuries, there was a progressive disappearance of earlier LCA elements, while Castelluccio assemblages became increasingly characterised by the presence of RTV pottery. In this sense, the last century of the 3rd millennium appears to signal a change in the stylistic variability of local assemblages, although without strong discontinuity. Discontinuity remains difficult to assess, yet the end point of these developments is characterised either by contexts with Late style materials overlying deposits with Early and Classic pottery, or Castelluccio sites with RTV elements, like Ciavolaro. Thus, the end of the 3rd millennium seems to be identifiable as a turning point in the development of this scenario, during which time boundaries may have become less permeable. It is my contention that this scenario is represented by the general functional homogeneity encountered in the morphometric analysis of the Castelluccio repertoire in Chapter 6, cross-cutting the formal differences which are potentially embedded in the regional datasets. I shall construct these datasets in the following section through the implementation of the incidence matrix.

7.3 SERIATION

7.3.1 Introduction

The radiocarbon-based assessment of ceramics and sites in the context of phylogenetic relations to LCA materials, Bell Beaker presence and external connections anticipates the possibility of splitting the development of local assemblages into two phases, a formative and a mature phase, as argued above. The following section tests this working hypothesis in an attempt to express phasing in graphic terms, through the implementation of an incidence matrix and the construction of regional subsets. Indeed, we cannot assume with complete

certainty that changes in artefact types are expressive only of chronological variations. Rather, we shall also consider the possibility that the hypothetical sequence expresses concatenations of sites and artefact types reasonably representative of regional assemblages. In this sense, as argued in Section 4.3.4, implementation of a seriation process through an incidence matrix is an important step. The objective of this analysis is to explore the extent to which boundaries and entailed practices are potentially reflected in the composition of these regional subsets. For this purpose, I will use the artefact types defined in Chapter 6 (see Table 6.3 for the type code used in the matrix figures).

7.3.2 Implementations

The implementation process will consist of many attempts to construct the incidence matrix. Each intermediate step in the process is an attempt to reach the best combination of sites and artefact types in every implemented table. These steps assume that an optimal sequence of sites and artefacts will be one expressing combinations of artefact types reflecting the average of a minimum duration of use in all the possible associations with sites. As stated above, this strategy is based on the principle that, within a determined spatial, chronological and cultural frame, groups of similar artefacts occupy a similar, if not coincidental, temporal position for only a short period due to their popularity. The first attempt in this direction was carried out by Petrie (1899) in his attempts to define the chronological sequence of Naqada pottery belonging to the first Predynastic period of Egypt. Kroeber (1916), using surface collection data in the Pueblo region of Zuni, built a sequence based on the same assumptions. In addition, I shall use further elements such as radiocarbon determinations and relationships to the other ceramic traditions discussed in the sections above in order to further aid the construction of the matrix.

My first attempt is displayed in Figure 7.12. In this arrangement, a basic relative ordering in the sequence of sites has been set up manually based on the association of combinations of artefact types anchored to radiocarbon determinations. Sites with the earliest radiocarbon determinations are placed at the beginning of the sequence, that is, located in the upper rows, as shown in Figure 7.13. Similarly, sites associated with the latest radiocarbon determinations are placed at the bottom (Figure 7.14).



Figure 7.12: First attempt at constructing the incidence matrix. An expanded picture is available on the accompanying CD.

A concatenation of sites stems from this first attempt that exhibits a promising, yet still a work-in-progress, pattern in the distribution of artefact types, as evident from the scattered distribution in Figure 7.12, which shows quite loose combinations of artefact types. Assuming the principle that popular combinations of artefact types tend to concentrate together, the high number of loose combinations suggests that the exhibited pattern is still very poorly representative of roughly contemporary type groups, notwithstanding the establishment of a relative order on the basis of absolute anchor points.

Calibrated age (10) BC 95.4%		26C	4	-	26B	₽	168	10A	•	8	34	4	2	28A	31	41	14	6	9	27A	9	20	38	23	26A	12	39	29A	27B	17	25	8	298	13A
. ,	Sites\Artefact's types																														\square		\square	\vdash
2837-2299	La Muculufa hut 3																																	
2835-2209	La Muculufa hut 4																																	
2196-1981	La Muculufa sanctuary			5			5		7	1							3																	
2016-1893	Case Bastione hut 1												3																					
	La Muculufa F 70																																	
	La Muculufa F 74																																	
	La Muculufa F 75				1																													\square
	La Muculufa F 110																																	
	La Muculufa F 134																																	
	La Muculufa F 182																																	
	La Muculufa F 200																																	
	La Muculufa F 71																																	
	La Muculufa F 80																																	
	La Muculufa hut 1																																	
	La Muculufa hut 2	6								2																								
	La Muculufa F 102																																	
	La Muculufa F 130																																	
	La Muculufa F 133																																	
	La Muculufa F 161																																	
	La Muculuía F 171																																	
	Cantigaglione																																	
	Monte Grande 2-2a												2																					
	Passarello																																	
	Casalicchio Agnone																																	
	Manfria I Lotti T. 21	+																															\vdash	
	Branco Grande																																	
	Manfria test pit 6	+																															\vdash	
	Grotta Ticchiara a-c, 14																																	
	Monte Grande 1-1a	+		<u> </u>				3	2											3													\vdash	
	Manfria test pit 9	+					<u> </u>	2			<u> </u>		<u> </u>	<u> </u>	<u> </u>						-												\vdash	
	Castelluccio cerneteru T. 2	+																															\vdash	
	Monte Bacello T.1	-		<u> </u>					<u> </u>	-				-	<u> </u>																		\vdash	
	Cava Canabarbara T. 4	+						-																							$ \vdash $			
	Manfria hut 1	+			-					-				-																	<u> </u>	\vdash		<u> </u>
	Manfria hut 3	+	-	-				2		-	-			-																			\vdash	<u> </u>
	Contrada Bagusetta 2	+	-	-	-			_	-	-	-			-						3											<u> </u>	\vdash	\vdash	<u> </u>
	Manfria test pit 16	+	<u> </u>			+	<u> </u>		<u> </u>	<u> </u>																		\vdash	\vdash	<u> </u>				
	Canicatti	+		<u>├</u>	-	-	-	2			<u> </u>		-	<u> </u>					-														\vdash	<u> </u>
	Gebel Gabib	+	 	•—	<u> </u>	<u> </u>	<u> </u>				<u> </u>		<u> </u>	<u> </u>					<u> </u>													\vdash	\vdash	<u> </u>
	Manfria hut 8	+	-	<u> </u>	<u> </u>					-			<u> </u>																				\vdash	<u> </u>
	Manfria test nit 8	+		-				2		-				-																	┝──┦	\vdash	\vdash	-
	Manfria test pit 10	+											-																			\vdash	\vdash	<u> </u>

Figure 7.13: Introduction of the earliest radiocarbon determinations.

	Castiglione esterno 93																																		
	Grotta Ticchiara a-c, 3		\square									?																							
	Grotta Ticchiara a-c, 4		<u> </u>	1																															<u> </u>
	Grotta Ticchiara a-c, 10		-																																
	Grotta Ticchiara a-c, 11		+	1	-	<u> </u>			<u> </u>			-	+	<u> </u>		<u> </u>							<u> </u>							\square		\vdash			<u> </u>
	Castiglione esterno 98		+	1									+								2												-		<u> </u>
	Contrada Forche		+	-	-	<u> </u>			-			-	+	<u> </u>	<u> </u>	<u> </u>					_	-	<u> </u>							\vdash	<u> </u>	+	\vdash	\vdash	<u> </u>
	Marcita T. A		+	-	-	-			-	-	-	-	+	<u> </u>	-	<u> </u>						<u> </u>	<u> </u>					<u> </u>	\vdash	\vdash	<u> </u>		\vdash	\vdash	
	Marcita T.B.		+	-	-				-	-	-	-	+	-		-							-					<u> </u>		\vdash	<u> </u>	+	\vdash	\vdash	<u> </u>
	Marianonoli T. 17	<u> </u>	+	-	-		-			-	<u> </u>		+	<u> </u>	<u> </u>	<u> </u>				<u> </u>		<u> </u>	<u> </u>			<u> </u>		┢──┘	\vdash	\vdash	<u> </u>	┝─┦	\vdash		<u> </u>
	Malilli T 17	 	+	-	-	-			-	-	-	-	+	<u> </u>	-	<u> </u>				<u> </u>			-			-		┢──┘	\vdash	\vdash	H	┝─┦	\vdash		
	Molilli T. 22	<u> </u>	+	-	-		<u> </u>		-	-	<u> </u>	-	+	<u> </u>	-	-						<u> </u>	<u> </u>			<u> </u>		\vdash	──	\vdash	\vdash	┝─┦	\vdash	\vdash	<u> </u>
	Molilli T. 24	├──	+	-	+		-			<u> </u>		 _	+	<u> </u>	<u> </u>	<u> </u>						<u> </u>	<u> </u>			<u> </u>		┢━━┛	\vdash	\vdash	\vdash	┝──┦	\vdash	\vdash	─
	Mobili T. C		-		-						<u> </u>	-	-	-		-						<u> </u>	-					\vdash	<u> </u>	\vdash	\vdash	\vdash	\vdash	\vdash	<u> </u>
	Contrations a start a 04			-	-		<u> </u>		-	<u> </u>	<u> </u>	-	-	<u> </u>	-	-													\vdash	\vdash	⊢_'	\vdash	\vdash	\vdash	<u> </u>
	Castiglione esterno 34	┣──		-		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>			<u> </u>			<u> </u>			–	\vdash	⊢'	\vdash	\vdash	\vdash	─
	Grotta Ticchiara a-c, iz				-				<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>							<u> </u>							\vdash	\vdash	\vdash	\vdash		_
	Monteaperto	L		-	-	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>						<u> </u>				<u> </u>			└─ '	\vdash	\vdash	\vdash	\vdash		_
	Torre Donzelle T. A	└──		-	-	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>						<u> </u>				<u> </u>		⊢'	<u> </u>	\vdash	⊢'	\vdash	\vdash	$ \square$	—
	Monte Sallia T. 1		<u> </u>										<u> </u>															\vdash		\vdash	\vdash		\vdash		
	Montesara																											<u> </u>		\square	\vdash		\square		
	Palagonia T. 1S																											2		\square					
	Poggio Biddine																																		
	Rocca Messana																													\square					
	Sant'Angelo Muxaro																										3								
	Sant'Anna																																		
	Torre Bigini T. A																																		
	Torre Cusa																											\square		\square	\square		\square		
	Monte Tabuto grotte miniere																											\square		\square	\square		\square		
	Piano dell'Angelo 2																											\square	1		\square				
	Santa Croce di Camerina																			4								\square		\square			\square		
	Melilli T. 19																																		
	Valsavoia T. 3																																		
	Valsavoia T. 6		\square										\square																						
	Piano dell'Angelo		<u> </u>										<u> </u>																						
	Passanatello		-										-											_											<u> </u>
	Valsavoia T. 7		+		<u> </u>	<u> </u>			<u> </u>			<u> </u>	+	<u> </u>		<u> </u>							<u> </u>					2		\vdash	2		-		<u> </u>
	San Lio		+	1	-							-	+	-														4		\vdash	3		-	\vdash	<u> </u>
	Grotta Lazzaro		+	1						-			+	<u> </u>																			-		<u> </u>
	Ciavolaro strato 3a inferiore		+	-	+	<u> </u>			-			-	+	<u> </u>	<u> </u>	<u> </u>						-						<u> </u>			<u> </u>	\vdash	13	\square	<u> </u>
	Marianopoli T. 14		+	1	+	<u> </u>			<u> </u>	<u> </u>		-	+	1		-										-				\vdash		\vdash			
	Ciavolaro strato 3 inferiore	-	+	-	-		-		-	-	-	-	+	<u> </u>		-				-						-		2		\vdash	<u> </u>		\vdash		+
	Grotta Ticchiara ambiente b	I	+	+	+	 	<u> </u>	-	 	<u> </u>			-	-				\vdash	<u> </u>			3			3				1	\vdash	<u> </u>	\vdash		\vdash	
	Ciauolaro strato 3		+		-	-			-				-	-		-				-		-			-	-			\vdash	4	-		2		-
	Grotta Ticchiara ambienti a.o. 7	-	+	+	+	<u> </u>	<u> </u>	-	<u> </u>	<u> </u>	-	-	+	-					<u> </u>	<u> </u>		<u> </u>	-			-		تسر	⊢		<u>ا</u> ـــــا		P		
	Ciauolaro strato 3a	├──	+	-	+		-			-			+	<u> </u>		<u> </u>				<u> </u>		<u> </u>	<u> </u>			<u> </u>		┢──┘	\vdash	\vdash	\vdash	┝─┦	6		-
	Ciauolaro strato 2	<u> </u>	+	+	+	-	<u> </u>	-	-	<u> </u>	-	-	+	-	-	-			<u> </u>	-		<u> </u>	-			-		<u> </u>	\vdash	\vdash	<u> </u>	\vdash	— °		
	Ciavolaro strato z	<u> </u>	+	-	+		-	-	<u> </u>	<u> </u>	<u> </u>	-	+	-	-				<u> </u>	<u> </u>						<u> </u>				2	<u> </u>	\vdash		\vdash	2
	Ciavoiaro superi. 1 Chiuceane trippee 0	 	+	+	+		-	-	<u> </u>	<u> </u>	<u> </u>	-	+	-	-			\vdash	<u> </u>	<u> </u>			<u> </u>			<u> </u>		لتسم	┥──┤		<u> </u>	\vdash		+	- 2
	Chiusazza tincea O	<u> </u>		+	-		<u> </u>			<u> </u>	<u> </u>	-		-	-	-			<u> </u>			<u> </u>	-			<u> </u>		<u> </u>	<u> </u>	\vdash		\square	\vdash	\vdash	<u> </u>
	Chiusazza trincea Q	<u> </u>		-	-		-	-	<u> </u>	<u> </u>		-		-	-		-		<u> </u>			-			-	-		<u> </u>		\vdash		\square	\vdash	\vdash	
	Naro Datasa	<u> </u>	-	-	-		-		<u> </u>		2	-	-	-	8		2					2			2	<u> </u>		<u> </u>		\vdash	<u> </u>		\vdash	\vdash	-
40.04.40.00	Partanna			-	-		<u> </u>	<u> </u>	 	<u> </u>	3	-		-	11	<u> </u>			<u> </u>											\vdash	<u> </u>		\vdash	\vdash	<u> </u>
1981-1898	Castelluccio settlement			-	-	—			 			L				<u> </u>												لکم	←_'	\vdash	<u> </u>	\vdash	\vdash	\vdash	<u> </u>
1932-1775	Case Bastione hut 2												3																						

Figure 7.14: Introduction of the latest radiocarbon determinations.

Given these results, I present another attempt, shown in Figure 7.15. In this, I have worked manually to reduce the space between the earliest and latest occurrence of each artefact type in terms of cells with the aim of yielding slightly different combinations in the sequence. This step exemplifies a pattern possibly illuminating a more reliable concatenation of sites and artefact types, potentially reflective of roughly contemporary assemblages. Yet further issues regarding concatenation of specific sites and associated artefacts emerge that are evident upon careful examination of the matrix. In fact, it is likely that this distribution expresses, besides a clearer pattern, issues of sites with long-term occupation and the occurrence of enduring pottery types. A review of the archaeological evidence in Chapter 5 showed a variety of sites, some possibly reflective of short-term use; the majority, however, do not have enough information to posit internal occupation sequences. Both situations are therefore likely to be exhibited by the pattern displayed in Figure 7.15, and particularly evident is the latter case, when the occurrence of single artefact types and association between different types are both examined. Indeed, when the distribution of single artefact types is observed, a couple of columns show several occurrences of the same type associated with a variety of sites likely related to different phases.



Figure 7.15: Second attempt at constructing the incidence matrix. An expanded picture is available on the accompanying CD.

This issue is particularly evident when observing how certain types, mainly concentrated at the right edge of the chart, occur in different assemblages belonging to the same site. This suggests that the same site probably had a long period of occupation, perhaps divisible into different sub-phases. This is apparent especially when sites such as La Muculufa and Manfria are considered (Figure 7.16) alongside the distribution of the single types 26C, 14 and 18 (Table 6.3). Similarly, if we look horizontally at the distribution of *more than one* artefact type, a case can be argued for widespread associations of ceramics that refer to single assemblages. For these assemblages it may be more difficult to posit long-term use since information about the relative order of the sequence of types is not as apparent as in the previous case. Yet, if we follow again the statistics behind this construction, it is likely that the order of artefact types expressed by the matrix top row in Figure 7.15 is closer than before to a better sequence. In this view, it is logical to contend that assemblages corresponding to single sites, yet characterised by different widely distributed pottery types, indicate long-term contexts. This is evident through looking horizontally at the bottom of the matrix (Figure 7.17), as shown by the assemblages of Naro and Partanna.

Calibrat					1	1	1	1	1	1			I	I	I		1
ed age	_																1
(1o) BC	п	Sites/artefact types															1
95.4%		Sites		4	1	26B	18	16B	10A	8	33	34	42	2	28A	31	41
	1	La Muculufa F 110															
	2	La Muculuía F 200															
	3	La Muculufa F 133															
	4	La Muculufa F 171															
	7	La Muculufa F 182															
	8	La Muculufa F 80															
	9	La Muculufa F 130															
	10	La Muculuía E 102															
	11	La Muculuía E 74															
	12	La Muculuía E 75				1											
	13	La Muculuía E 70														<u> </u>	
	14	Contrada Grazia														<u> </u>	<u> </u>
	15	Contrada Muntagnedda															<u> </u>
2837-22	16	La Muculufa but 3															
2835-22	17	La Muculufa but 4															<u> </u>
2033-22	19	La Musuluía F181															├ ───
	10	La Musuluía Internet															├ ──
	13	La Muculura nut i															<u> </u>
	20	La Muculura F 154															<u> </u>
	2	Marcita I. D															├ ──
2100, 100	22				-			-		7							├ ──
2136-138	23	La Muculura sanctuary			5			5			<u> </u>						
	24	Contrada Ragusetta I							3								L
	25	Passarello															
	26	Contrada Cuminazzi	_						6								
	27	La Muculufa hut 2	6								2						L
	28	Branco Grande															L
	29	Casalicchio Agnone															<u> </u>
	30	Cantigaglione															
	31	Contrada Paolina est. T. 2															
	32	Monte Grande 2-2a												2			
	33	Grotta Ticchiara a-c, 4															
	34	Cava di Pietrarossa							2								
	5	Cava Canabarbara T. 4															
	36	Manfria hut 1															
	37	Manfria hut 3							2								
	38	Contrada Ragusetta 2															
1981-189	39	Castelluccio settlement															
2016-189	40	Case Bastione hut 1												3			
1932-177	41	Case Bastione hut 2												3			
	42	Canicatti							2								
	43	Monte Grande 1-1a							3	2							
	44	San Giuliano															
	45	Gebel Gabib															
	46	Contrada Paolina T. 2															
-																	

Figure 7.16: Left edge of the graphic in the second attempt. Clustering of sites for which several occupational phases and a long-term occupation have been posited.
Calibrat																				
ed age																				
(1o) BC	n	Sites/artefact types																		
95.4%		Sites	С	4	1	26B	18	16B	10A	8	33	34	42	2	28A	31	41	14	9	6
	103	Marcita T. A									1									
	104	Grotta Ticchiara a-c, 12																		
	105	Grotta Ticchiara a-c, 14																		
	106	Grotta Ticchiara a-c, 10																		
	107	Grotta Ticchiara a-c, 11																		
	108	Grotta Ticchiara a-c, 3											?							
	109	Grotta Ticchiara a-c, 2																		
	110	Grotta Ticchiara a-c, 8																		
	111	Grotta Ticchiara a-c, 1																		
	112	Grotta Ticchiara a-c, 13																		
	113	Grotta Ticchiara a-c, 15																		
	114	Grotta Ticchiara a-c, 17																		
	115	Grotta Ticchiara a-c, 18																		
	116	Grotta Ticchiara a-c, 5																		
	117	Grotta Ticchiara a-c, 9																		
	118	Rocca Messana																		
	119	Manfria hearth C																		
	120	Gela																		
	122	Contrada Garrasia																		
	123	Chiusazza trincea O																		
	124	Chiusazza trincea Q																		
	125	Manfria test pit 6																		
	126	Contrada Pergola														3				
	127	Marianopoli T. 17																		
	128	Manfria test pit 16																		
	129	Contrada Favara																		
	130	Gela Molino a Vento																		
	131	Valsavoia T. 6																		
	132	Torre Donzelle T. A																		
	133	Manfria test pit 9							2											
	135	Sant'Anna																		
	136	Ciavolaro strato 2																		
	137	Ciavolaro stipe T. 1																		
	138	Naro										2				8			2	
	139	Partanna										3				11				
	140	Grotta Ticchiara ambiente b																		
	141	Grotta Ticchiara ambienti a-c, 7																		
	142	Grotta Ticchiara ambiente a-c, 6																		

Figure 7.17: Assemblages likely reflecting the distribution of ceramics in contexts characterised by long-term use occur at the bottom of the graphic, as shown by several associations. Particularly significant is the occurrence of artefact types related to the assemblages of Naro and Partanna. Both assemblages are presumably constituted, as reviewed in Chapter 4, by objects from different cemeteries in the region of Agrigento. Similarly, the associations with Colle Tabuto and Scarico di Castelluccio may be reflective of mixed contexts.

These assemblages are characterised by artefact types possibly belonging to different phases, as also suggested by the occurrence of artefact types known to be associated with sites that certainly had a long occupation, such as the earlier mentioned type 18. Another significant association is with the artefact type 38 that, as further shown below, occurs in later assemblages, such as Ciavolaro, marked by the presence of RTV elements. There remain combinations of artefact types with a more concentrated distribution that are associated with assemblages often corresponding to single sites, save a few exceptions. If we highlight columns representing long-lasting types such as those mentioned above, and rows of assemblages characterised by long-term use in the upper part of the graphic (Figure 7.18), we can see the extent to which the resulting space is occupied by groups of sites and artefacts that appear to be more concentrated. As observable in Figure 7.18, these are assemblages from La Muculufa sanctuary or closed contexts (mainly burials). This is not surprising because, as noted earlier, it is more likely that single burials are reflective of short-term periods of use, although it may be possible that reuse over long periods took place. If we look again at single artefact types associated with these latter contexts – such as 8, 15, 27A, and 6 (Table 6.3) -, their occurrence seems to be limited in comparison to other more enduring types. We can argue thus how the process of phasing in this second attempt has engendered, in view of the considerations stated above, a more reliable pattern potentially reflective of roughly contemporary assemblages, intermingled with certain 'anomalies' related to issues of long-term occupation.

I shall further consider below these anomalies in another attempt to address the underlying issues and incorporate them within the matrix. It is important now to consider another issue that impacts on the reliability of the sequence as expressed by the second attempt in Figure 7.15. Although this matrix may show a concatenation of sites and artefacts reflective of a combination of types possibly suggestive of roughly contemporary assemblages, we cannot assume with certainty that the corresponding sequence of sites is an expression of combinations in the correct order; that is, from the earliest to latest. This is partly due to the issues stated above but it is also related to more practical matters. Until now, I have considered a relative sequence as anchored to an earliest and latest date. That the combinations of artefact types and sites distributed *in between* the available dates must necessarily follow the same progressive order is something that cannot be taken for granted, considering the substantial lack of interlocking long-term stratified contexts anchored to absolute dates.

Calibrate d age (1σ) BC 95.4%	Context	Sites/artefact types	26C	4	1	26B	18	16B	10A	8	33	34	42	2	28A	31	41	14	9	6
		Marcita T. B																		
		La Muculufa F 71																		
2196-1981		La Muculufa sanctuary			5			5		7								3		
	burial	Contrada Ragusetta 1							3											
	burial	Passarello																		
	burial	Contrada Cuminazzi							6											
	hut	La Muculufa hut 2	6								2									
		Branco Grande																		
		Casalicchio Agnone																		
		Cantigaglione																		
	burial	Contrada Paolina est. T. 2																		
		Monte Grande 2-2a												2						
		Grotta Ticchiara a-c, 4																		
	burial	Cava di Pietrarossa							2											
		Cava Canabarbara T. 4																		
		Manfria hut 1																		
	hut	Manfria hut 3							2											
	burial	Contrada Ragusetta 2																		
1981-1898		Castelluccio settlement																		
2016-1893		Case Bastione hut 1												3						
1932-1775		Case Bastione hut 2												3						
		Canicatti							2											
		Monte Grande 1-1a							3	2										
		San Giuliano																		
		Gebel Gabib																		
	burial	Contrada Paolina T. 2																		
		Manfria hut 8																		
	burial	Castelluccio cemetery T. 22																		
	burial	Castelluccio cemetery T. 9																		
	burial	Cava della Secchiera T. 12																		
	burial	Cava della Secchiera T. 3																		
		Contrada Forche																		

Figure 7.18: Central part of the sequence. The graph shows the concentrations of closed-contexts in the upper-central part of the sequence.

This is suggested by a further examination of the distribution of sites along the rows in Figure 7.15. At a closer look, the sequence of these sites exhibits an order that may resemble that of a regional clustering. This is evident at the beginning of the sequence, where most concatenations of artefact types are associated with the distribution of western sites (Figure 7.19), but also in the centre of the sequence (Figure 7.20), mostly characterised by the occurrence of eastern sites.

Calibrated						
calibrated	Basion					
195.4 V	riegion	Sites Artefact's tupos				
33.47.	Western	Lis Muculuís E 110				
	Western	La Muculuía E 200				
	Western	La Muculuía E 122				
	Western	La Muculuía E 171				
	Western	La Muculuía E 192				
	Western	La Musuluía E 90				
	Western	La Musuluí a E 120				
	Western	La Musuluía E 102				
	Western	La Musuluía E 74				
	Western	La Muculuía E 75				
	Vestern	La Muculura F 70				
	Western	Cantuda Casia				
	Western	Contrada Grazia				
0007 0000	Western	Contrada Muntagnedda				
2837-2299	Western	La Muculura nut 3				
2835-2209	western	La Muculura nut 4				
	western	La Muculura F 161				
	western	La Muculura hut 1				
	Western	La Muculuta E 134				
	Western	Marcita T. B				
	Western	La Muculufa F 71				
2196-1981	Western	La Muculufa sanctuary				
	Western	Contrada Ragusetta 1				
	Western	Passarello				
	Western	Contrada Cuminazzi				
	Western	La Muculufa hut 2				
	Eastern	Branco Grande				
	Western	Casalicchio Agnone				
	Western	Cantigaglione				
	Eastern	Contrada Paolina est. T. 2				
	Westrn	Monte Grande 2-2a				
	Westrn	Grotta Ticchiara a-c, 4				
	Westrn	Cava di Pietrarossa				
	Eastern	Cava Canabarbara T. 4				
	Western	Manfria hut 1				
	Western	Manfria hut 3				
	Western	Contrada Ragusetta 2				
1981-1898	Western	Castelluccio settlement				
2016-1893	Western	Case Bastione hut 1				
1932-1775	Western	Case Bastione hut 2				
	Western	Canicatti				
	Western	Monte Grande 1-1a				
	Western	San Giuliano				
	Western	Gebel Gabib				
	Eastern	Contrada Paolina T. 2				
	Western	Manfria hut 8				
	Eastern	Castelluccio cernetery T. 22				
	Eastern	Castelluccio cernetery T. 9				
	Eastern	Cava della Secchiera T. 12				

Figure 7.19: Concatenations of regional assemblages at the top of the graphic. Almost all of the sites represented here are located in central-western Sicily. The only exception is represented by the sites of Cava Cana Barbàra and Branco Brande, situated in the east.

Eastern	Cava della Secchiera T. 12
Eastern	Cava della Secchiera T. 3
Eastern	Contrada Forche
Eastern	Melilli T. 34
Eastern	Santa Croce di Camerina
Western	Manfria test pit 10
Eastern	Monte Racello T. 5
Western	Torre Cusa
Western	Manfria test pit 7
Western	Manfria hut 9
Eastern	Castiglione T. 94
Eastern	Melilli T. 6
Western	Manfria I Lotti T. 21
Western	Manfria hut 5
Eastern	Monte Racello T.1
Eastern	Castiglione esterno 98
Eastern	Monte Tabuto miniere 1-2-4
Eastern	Monte Tabuto miniera 5
Eastern	Cava della Secchiera T. 10
Western	Montesara
Eastern	Castiglione esterno 93
Eastern	Castiglione T. 93
Western	Manfria test pit 8
Western	Monte Calvario
Eastern	Piano dell'Angelo
Eastern	Palagonia T. 1S
Eastern	Monte Sallia T. 9
Eastern	Grotta Lazzaro
Eastern	Contrada Paolina T. 1
Eastern	Melilli T. 17
Western	Sant'Angelo Muxaro
Eastern	Monte Sallia T. 1
Eastern	Passanatello
Western	Ciavolaro strato 3
Eastern	Castelluccio cemetery T. 13
Western	Monteaperto
Eastern	San Lio
Eastern	Valsavoia T. 7
Western	Ciavolaro strato 3 inferiore
Eastern	Piano dell'Angelo 2
Western	Ciavolaro strato 3a
Western	Ciavolaro strato 3a inferiore
Eastern	Castelluccio cemetery T. 2
Eastern	Cava della Secchiera T. 1
Eastern	Melilli T. 22
Eastern	Castiglione esterno 94
Western	Torre Bigini T. A
Eastern	Monte Tabuto grotte miniere
Eastern	Melilli T. 19
Eastern	Valsavoia T. 3
Western	Marianopoli T. 14
Western	Marcita T. A

Figure 7.20: Concatenations of regional assemblages at the centre of the graphic. Almost all of the sites represented here are located in eastern Sicily.

In order to address this issue, I split the second matrix into two different regional tables. A sustained reduction of the space between cells corresponding to the occurrences of the same type in different contexts was achieved through this step in the western matrix, as shown in Figure 7.21, yet, without exhibiting a very different pattern of distribution. For example, we can still posit a long endurance for the artefact types mentioned above, in particular types 26C, 18, and 16B (Table 6.3). The establishment of such a regional matrix also exhibits a closer concatenation of the short-term sites previously mentioned, engendering at the same time a substantial reduction in the vertical space between the cells corresponding to the occurrence of short-term artefact types. This suggests that the pattern exhibited by the concatenation of sites in the western regional clustering may be representative of an ordered temporal sequence. In this view, a manual attempt was undertaken to refine the concatenation of short-term sites and artefact types, introducing the remaining constraints extrapolated in the preceding sections.



Figure 7.21: Matrix including only western sites in the third attempt of constructing the relative sequence. See expanded picture on the accompanying CD.

In this attempt, I moved enduring artefact types towards the right margins of the graphic, presupposing, as argued above, a wider chronological distribution cross-cutting more than one phase in the entire sequence. For the same reasons, the Naro-Partanna assemblages were left at the bottom of the sequence, being constituted of artefact types presumably occurring in more than one phase, as stated above. This intermediate step is illustrated in Figure 7.22, showing in yellow the types that likely endured. Refinement of the sequence, built upon the intermediate attempt and exhibited in Figure 7.23, has not been a linear process. That is, sites and artefact types have been moved backward and forward in accordance with the steps described until this point, trying to isolate short-term and longterm assemblages. The matrix illustrated in Figure 7.23 exhibits another intermediate attempt. As observable from this picture, those enduring types that possibly cross-cut more than one phase have been isolated at the centre of the graphic. Other enduring types, marked in red, have been extrapolated during the phasing process to sit beside those already identified in the first attempts. Likewise, associations of artefact types have been unfolded in the process that permitted the identification of other assemblages presumably informative of longer use and located, thus, at the bottom of the matrix.



Figure 7.22: Intermediate step in the construction of the western regional matrix. See expanded picture on the accompanying CD.



Figure 7.23: A further intermediate step in the construction of the western regional matrix. The types marked in red represent other enduring types that, as shown in the figure, are associated with several sites along the entire sequence, as many as the yellow ones. At this stage, therefore, there is no distinction between the types marked in red and yellow. Both represent enduring types that have just been identified in two different implementations. See expanded picture on the accompanying CD.

The matrix illustrated in Figure 7.23 suggests the existence of at least two phases, corresponding to mutually-exclusive assemblages of artefact types separated by the occurrence of the types at the centre of the graphic. This confirms preliminary ideas discussed in Section 7.2.4. However, in the attempt to investigate whether it would have been possible to articulate the presence of multiple sub-phases, another matrix was produced by moving the enduring types – those marked in yellow and red – from the centre to the far-right of the graphic. Associations between different artefact types were expressed in the process that exhibited a clearer concatenation of short-term sites interlocked with sites likely characterised by longer periods of occupation, yet not entirely cross-cutting the whole graphic. This is shown by their associations of short-term sites were limited, however, to the bottom-right and upper-left of the graphic, where associations between artefact types are most evident.



Figure 7.24: The western regional matrix and hypothetical chronological phases that are reflected in the intertwined sequence of short-term and longer-term assemblages, exhibited by the former concatenations of sites and artefact types extrapolated in the process. The less long-enduring types likely crosscut only two sub-phases (marked in green), while reminder of enduring types – those previously identified and marked in red and yellow – are situated at the far right of the graphic. See expanded picture on the accompanying CD.

Attempts at constructing an eastern matrix started from the same sequence of artefact types on the top row as expressed by the western matrix. In the process, associations of artefact types were therefore examined following the same strategy described above, trying to discern assemblages corresponding to the distribution of short-term and long-term sites. Associations of artefact types were extrapolated that also occur in the western matrix, particularly in the central part of the graphic, while most of the earliest associations seemed to be lost. Some may argue for a case of regional differentiation, but it is more likely that the pattern extrapolated in Figure 7.25 is representative of the dataset composition and the paucity of Early style materials in published eastern assemblages, as noted earlier in the chapter.



Figure 7.25: Attempt at construction of the eastern matrix. There remain few types, among the enduring and less enduring ones, that have a wider distribution across the island. See expanded figure on the accompanying CD.

An integrated view of merged sequences was therefore implemented. The first integrated attempt is illustrated in Figure 7.26 and generally resembles the outcome of the western matrix, suggesting thus the existence of a middle phase, significantly exhibited by few interlocked assemblages from eastern sites and Manfria. However, extrapolation of a clearer pattern is hindered by the loose connections between eastern and western sites, likely because eastern contexts with Early style materials are poorly documented. I shall now consider further constraints in order to overcome, at least partly, this issue. Particularly helpful from this point of view will be the associations between artefact types in the east corresponding to assemblages from the radiocarbon-dated site of Castelluccio. Available dates from Castelluccio overlap to an extent with dates from western sites such as Case Bastione and La Muculufa sanctuary. This overlap, as well as the occurrence of TM fragments at the site of Castelluccio, provides the link in the sequence with the earliest western assemblages where LBA-beaker connections are also documented.



Figure 7.26: A further attempt at the construction of the incidence matrix. The graphic shows an integrated view of the western and regional sequence in an attempt to construct a unique sequence, having considered all the issues related to long-term versus short-term assemblages and regionality. The graph shows the existence of a middle phase, displayed in the centre of the graphic, which however does not exhibit a clear pattern. See expanded picture on the accompanying CD.

A further arrangement of the sequence built upon this connection yields a group of assemblages corresponding to multi-period sites in both regions, such as Manfria, Grotta Ticchiara, Monte Tabuto and Castelluccio. Previous arrangements of the concatenations based upon establishment of the connections between the radiocarbon-dated sites of La Muculufa, Case Bastione and Castelluccio brought these multi-period assemblages to the centre of the graphic. This step produced a sequence characterised by the occurrence of at least two mutually-exclusive concatenations of sites and artefacts, as illustrated in Figure 7.27 Evidently, multi-period sites show chrono-typological connections with both mutually exclusive concatenations. Significantly, assemblages from these multi-period sites are constituted by less enduring types from one mutually exclusive concatenation or the other. I marked these assemblages in yellow in order to distinguish them from the others. Then, I marked in green those assemblages associated with concatenations of pottery types that may belong to one concatenation or another, that is, assemblages that were impossible to situate.



Figure 7.27: Final attempt at constructing the incidence matrix. See expanded picture on the accompanying CD.

Concatenations of both eastern and western short-term sites were found in this marking procedure. They related to mutually exclusive associations of artefact types on the one hand, suggesting the existence of at least two phases cross-cutting the overall dataset. On the other hand, it is apparent that the existence of assemblages corresponding to multi-phase sites, in which types from both concatenations occur, which suggests that certain settlements were more or less continuously occupied. Within this former group of multi-phased sites it was impossible to discern further sub-phases, as associations of types related to stratified contexts was not enough to undertake a further refinement of the sequence. Significant, however, was the fact that stronger LCA and TM connections can be posited for assemblages related to sites in the upper rows of the graphic. Conversely, typologically different assemblages correspond to sites which are located at the bottom of the sequence, where these connections are replaced by RTV elements in both western and eastern sites such as Ciavolaro and Valsavoia respectively.

7.4 COMBINED RESULTS

7.4.1 Introduction

Implementation of the incidence matrix confirms the results of the assessment of chronotypological connections by exhibiting a pattern in which ceramic variability is likely representative of two distinct chronological phases, a formative and a mature phase. Chapter 6 has highlighted ceramic variability in shape and size, allowing for an interpretation of the *overall dataset* in terms of uniformity and differentiation. The following step will be to identify uniformity and differentiation in the *regional subsets* which are derived from the outcomes of the incidence matrix. As discussed in Chapter 4, both similarities and differences in ceramic variability can represent the construction of social and cultural boundaries. Therefore, a combined examination of similarities and differences is needed, which includes temporal and regional variations.

This final assessment shall investigate the extent to which uniformity is shared across the regional subsets, but also the emergence of differences that may signal some changes. It will be a crucial step in examining the constructed regional subsets, with the aim of evaluating non-random patterned variability. This pattern will be used, in view of the considerations expressed in Section 7.2.4, as a proxy for understanding social boundaries in a context of shared practices and interaction. As outlined in Chapters 2 and 3, the emergence and development of socio-cultural boundaries has never received sustained scholarly examination in Castelluccio studies. Yet it is of paramount importance, as a more comprehensive understanding of the mechanisms of social and cultural reproduction depends upon an understanding of the nature of these boundaries.

For example, while variations in eastern and western regional subsets may reflect broader distinctions between regional groups, functional uniformity may reflect social porosity from a habitus-informed theoretical perspective. As discussed earlier, this porosity is anticipated by the context of interaction in which Castelluccio groups likely emerged and developed. Assessment of patterned variability will permit further development of this point when similarities and differences in ceramic variations are considered, providing more scope to explore mechanisms of socio-cultural reproduction linked to the distribution and use of the examined pottery. As discussed in the following chapter, this will be an essential step in exploring the theoretical implications of the results of my pottery study, which can provide further elements with which to reassess current models of socio-cultural and political developments in EBA Sicily.

7.4.2 Variability dimensions, regional datasets, and boundaries

As has emerged in the preceding analysis, early connections in the western regions were expressed by significant concatenations of La Muculufa settlement assemblages and many sites located around the River Salso and the Palma Valley, showing also the strongest relationships to LCA-beaker artefacts. To the east, sites expressing such connections with LCA materials were not identified. Besides, early connections between eastern and western assemblages were constructed through the incorporation of radiocarbon-dated sites and TM. Consideration of the radiocarbon-dated site of Castelluccio-Pianno Sella was important because of its contemporaneity with Case Bastione's EBA levels in huts 1 and 2, and because of the occurrence of TM imports. This facilitated the establishment of an indirect link between eastern assemblages connected with Castelluccio and western assemblages connected with Case Bastione, unfolding in the process a series of Early and Late assemblages cross-cutting the entire sequence. The overall dataset as it is, therefore, includes:

- Two subsets of data representative of chronologically distinct phases.
- One subset constituted by assemblages which are characterized by types occurring in both the phases.
- One group of sites belonging either to a phase or to another, as further shown below.

Examination of the external ceramic relationships offers scope to contextualise the emergence of these associations within a complex framework of roughly contemporary interrelations. In this sense, the dataset is representative of at least two chronologically distinct subsets expressing a formative phase (EBA 1) – suggested also by the occurrence of stylistically mixed assemblages in the earliest phase that are characterised by a persistence of CA elements – and a late phase (EBA 2).

For the sake of clarity, identified phases, regions, assemblages and ceramic types are reported in Table 7.7. Looking at the table, it is evident that every subset of chronologically uniform data is potentially also representative of variations related to roughly contemporary regional aspects. In this sense, each regional subset may therefore be representative of ceramic groups that can be attached to two broader geographic areas, as illustrated in Figure 7.28. Table 7.7: Phases, regions, artefact types and the corresponding regions. Consider the classificatory scheme in Table 6.12 for the artefact type codes with the corresponding shapes, forms, use-types and functional categories. Types cross-cutting the regional subsets are marked in red. Importantly, artefact types from multiperiod assemblages (EBA 1-2) that are exclusive of a certain chronological phase are considered as if they were part of the corresponding chronological subset. Ceramics from assemblages belonging to either one phase or the other will not be included in the constructed regional subsets of artefact types, as it was impossible to determine whether they occurred in EBA 1 or EBA 2 phases, or both.

Phase	Region	Assemblages	Artefact type codes				
		Contrada Cuminazzi; Contrada Ragusetta 1;					
		Contrada Ragusetta 2; Canicattì; Cantigaglione;					
		Casalicchio Agnone; Contrada Pergola; Contrada	2, 4, 8, 9, 15, 17, 18, 23, 30,				
FRA 1	West	Grazia; Contrada Muntagnedda; Gibil Gabib;	31, 32, 33, <mark>41</mark> , 42, 10A, 11B,				
LDAI	west	Grotta Ticchiara (burials 3, 4, 5); La Muculufa	<mark>16A</mark> , 26B, 26C, 27A, 28B,				
		settlement; Manfria (test pit 16, 9); Marcita (burial	29D.				
		B); Monte Grande (layer 2-2a); Passarello; San					
		Giuliano; Sant'Anna; Torre Donzelle (burial A)					
	East	Piano dell'Angelo; Branco Grande; Castelluccio	2 10 10 01 20 41 1/4				
	East	(burial 13)	<i>J</i> , 12, 17, 21, <i>J</i> 0, 41, 10 A				
		Ciavolaro; Grotta Ticchiara (burials, 8, 9, 12, 15, 17,					
		18); Marianopoli-Valleoscura; (burials 17, 14);	7, <mark>17</mark> , <u>22, 2</u> 3, 34, 35, <mark>36</mark> , 37,				
EBA 2	West	Monte Calvario; Monte Grande (layer 1-1a);	38, 39 <mark>, 43</mark> , 10A, 10B, 11A,				
		Monteaperto; Montesara; Torre Bigini (burial A);	28B, <mark>29A</mark> , 29D,				
		Torre Cusa					
		Castelluccio (burials 2, 9, 22); Castiglione; Cava					
		della Secchiera (burials 1, 10, 12); Contrada Paolina					
		(burials 1 and 2); Grotta della Chiusazza; Grotta	5 7 17 18 10 20 24 31				
	Fast	Lazzaro; Melilli (burials, 17, 19, 34); Monte Racello	$3, 7, \frac{17}{12}, 10, 19, 20, 24, 51,$				
	Last	(burials, 1 and 5); Monte Sallia (burial 1); Palagonia	$16B_{20}A_{28B}^{-28B} 29C_{28B}^{-20C}$				
		(burial 1s); Passanatello di Francoforte; Piano	10D, 27A, 20D, 29C				
		dell'Angelo 2; San Lio; Santa Croce di Camerina;					
		Valsavoia (burials 3, 6 and 7)					
EBA 1		Case Bastione (hut 1); Grotta Ticchiara (burials 2,	It includes types that occur				
and	West	10, 14; ambiente b); La Muculufa sanctuary;	in both phases				
EBA 2		Manfria (huts, 3, 5, 9); Naro; Partanna	in bour phases				
	East	Contrada Paolina; Castelluccio village; Colle Tabuto	It includes types that occur				
	Last	(Grotta Miniera 5, grotte miniere 1-2-4)	in both phases				



Figure 7.28: Main ceramic types associated with their geographic areas. The map shows a selection of mutually-exclusive EBA 1 and EBA 2 types that, in being attached to a certain area, may be informative of regional variability and links. These links are shown by the lines between the groups of sites. Evident connections between the area of Agrigento and the Platani boundary areas are marked by the red line linking the different groups of sites in which ceramics have been found with shared traits in either morphological or decorative elements, as mapped in the figure. Likewise, links between groups of sites in the eastern corner of the island are highlighted by the black lines. Differences between the two groups of vessels attached to these areas are apparent when decorative motifs and profile developments in shapes are observed.

Figure 7.28 shows some ceramic groups attached to particular regions. However, the extent to which these regions are informative of specific cultural groups remains uncertain, especially because of the presence of pottery types, listed in Table 7.4 (marked in red), that are shared between assemblages from the two different regions. From this point of view, it is safer to argue for general cultural homogeneity. In Section 4.1.4, we have seen the extent to which uniformity in pottery may be informative of shared practices, such as daily life activities, and that these practices may be reflective of shared habitus, crucial in mechanisms of cultural and social reproduction. Homogeneity from a functional standpoint, as discussed in Chapter 6, anticipated such porosity. It is possible, in view of these considerations, that the cross-cutting types in Table 7.4 indicate functional uniformity in the composition of the settlement and funerary repertoires across the region that, as further discussed below, may represent practices that were shared, irrespective of putative regional differences.

Bearing this in mind, I shall examine the composition and degree of functional differentiation of the regional subsets by chronological phase. Bringing together evidence of stylistic, regional, chronological and functional differentiation related to ceramic variability, the following sections aim to highlight the emergence of both similarities and differences in the composition of regional datasets. It is my suggestion, as further shown below, that despite some differences, functional uniformity remains typical of all subsets through time, and that this uniformity may thus represent a certain degree of social permeability within and between groups.

7.4.3 Composition of the regional subsets

When starting to examine the composition of constructed regional subsets from a general quantitative standpoint in order to assess homogeneity and differentiation, the first issue to consider is that ceramics from the western subset represent the absolute majority (79%) of the overall sample (Figure 7.29). Thus, comparison between the two datasets would be substantially flawed unless sustained by a broader contextual discussion of further archaeological evidence, as presented in the following chapter.



Figure 7.29: Percentage distribution of ceramic repertoires in the western and eastern regions. The graph shows that assemblages in the western regions represent the majority of the examined repertoires. This situation carries further issues of representativeness when making a comparison between patterned variability from the regions, and when the distribution of settlement and funerary items by shapes, forms and functional categories is considered.

Moreover, as illustrated in Figures 7.30 and 7.31, we can see the different percentages of settlement and funerary items in the composition of both eastern and western subsets. This should not be a surprise, because in the seriation process a strong concatenation was extrapolated that mostly relied upon the occurrence of burial contexts and only few settlement sites, such as La Muculufa, Case Bastione and Manfria. This relationship between settlement and funerary assemblages is particularly evident when the distribution of shapes is broken down by phases in the eastern subset (Figure 7.32). Meanwhile, when considering the distribution of different shapes in the western chronological subsets, the situation appears to be more comparable, as evident in Figures 7.33 and 7.34.



Figure 7.30: Percentage distribution of ceramics in the eastern subset of data irrespective of chronological phasing. This graph shows a higher percentage of funerary items in the eastern subset, which is already under-represented when compared to the western subset in Figure 7.30. This situation reflects issues of overall under-representation for eastern items in which funerary sites are preponderant.



Figure 7.31: Percentage distribution of ceramics in the western subset of data irrespective of chronological phasing. The data show a similar pattern to that of the eastern assemblages. Yet the lower percentage in funerary items in comparison to that of the eastern assemblages is significant. This is likely to be due to the general preponderance of western items in the overall dataset, and also to more of them coming from settlement sites.



Figure 7.32: Quantitative distribution of shapes per chronological subset in the eastern regions. The quantitative preponderance of certain shapes over others is likely to be due to the under-representation issues in the eastern sample, as shown by the preceding graphs.



Figure 7.33: Quantitative distribution of shapes per chronological subset in the western regions. Unlike in the eastern subset, we can see here that the distribution of shapes in both phases is more comparable, suggesting a better degree of representation regarding the distribution of items in the western subset.



Figure 7.34: Percentage distribution of shapes per chronological subset in the western region. More than the quantitative data graphs, this graph shows a high level of comparability between the two different chronological subsets in the western region, presenting similar percentage distributions of shapes in both columns.

In view of these differences, from a quantitative viewpoint, as seen in Figures 7.32-7.34, it is likely that variations reflected in the composition of the two regional western subsets, EBA 1 and EBA 2, may be informative of some kind of non-random patterned distribution, which has a better degree of confidence when compared to the eastern subsets. To confirm this, we can see that equally comparable distribution patterns are obtained when shapes represented in each western chronological subset are broken down according to functional categories. This suggests the possibility of non-random patterned distribution being reflected in the composition of these assemblages that can be expressed in terms of functional differentiation. In Figure 7.35 we may note slight variations in the composition of the storage category while there is no substantial change in the others, confirming previous suppositions of general homogeneity. The same pattern is reflected in the distribution of the functional types per chronological subset (Figure 7.36).





Figure 7.35: Percentage distribution of shapes per functional categories and chronological subsets in the western regions. The graph shows a certain degree of comparability and supports the hypothesis of a non-random pattern linked to actual differentiation, although errors related to dataset biases cannot be totally excluded.



Figure 7.36: Quantitative distribution of functional types and varieties of shapes in the western subsets. This graph also shows good comparability between the two chronological sets, suggesting a non-random patterned distribution linked with actual differentiation.

7.4.4 Functional uniformity and regional differences

As stated above, eastern subsets are more prone to a biased random patterned distribution when differentiation is explored in comparison to the western subsets. In the latter, a poor level of differentiation has been detected, which can be linked to non-random patterned variability. Results of this first evaluation confirm preceding expectations of a certain degree of homogeneity in terms of functional differentiation that encompasses both EBA 1 and EBA 2 western subsets. Moreover, they also highlight issues that are inherent to dataset biases. This is clearer when looking further at formal variability. Evaluating the distribution of shapes suited to serving and eating by forms in both EBA 1 and EBA 2 western subsets, we may generally note low levels of differentiation. Nevertheless, the extent to which the preponderance of pedestalled vessels likely affects the overall picture is also noticeable, as shown in Figure 7.37. A similar case can be argued for the distribution of storage and transport vessels. If we look at the distribution of these vessels more in detail, there is quite a low level of functional differentiation, as illustrated in Figure 3.38. In fact, we may note also a preponderance of jars that may affect the overall picture.

Having, in the previous chapter, examined the composition of the overall dataset in terms of functional differentiation, this is not surprising. Quantitative composition of the regional subsets has exhibited, however, significant issues, in particular those related to the over-representation of jars and pedestalled vessels. Jars are the most common components of the storage category. The extent to which funerary sets yield the highest percentage of storage vessels is evident in Figure 7.39. Similarly, the extent to which serving and eating vessels – mostly characterised by the occurrence of pedestalled vessels – are more represented in funerary sets is evident in Figure 7.40. In this sense, it is evident how the examined subsets are affected by the preponderance of certain items in funerary contexts.





Figure 7.37: Quantitative distribution of serving and eating vessels. In splitting shapes intended for drinking and eating by formal varieties, the over-representation of certain shapes is apparent, such as in pedestalled vessels.





Figure 7.38: Quantitative distribution of storage and transport vessels. Also in this case, the graph seems to show an over-representation of jar distribution.



Figure 7.39: Percentage distribution of storage, transport and cooking vessels per type of assemblages. The graph confirms the possibility of an over-representation of funerary assemblages that might have determined an over-representation of jars in the storage and transport categories.



Figure 7.40: Percentage distribution of serving and eating vessels per type of assemblages. The over-representation of pedestalled vessels in the western subset may derive from the over-representation of serving vessels in funerary assemblages, as shown by this graph.

The issue of over-representation of funerary assemblages is even stronger in the eastern subsets when composition is further examined in terms of differentiation. The EBA 1 subset has too few items to be examined, while composition of the EBA 2 subset shows there is an under-representation of settlement assemblages. (Figure 7.41). In view of this, the lower degree of differentiation which is apparent when composition of the functional categories are broken down by shapes cannot be fully trusted as an expression of a non-random patterned distribution.



Figure 7.41: Percentage distribution of settlement and funerary assemblages.

7.4.5 Conclusions

The above analysis shows funerary assemblages to be over-represented and settlement assemblages as under-represented in the dataset. This certainly indicate biases which cannot be overcome. Nevertheless, it is not a problem. In fact, it opens up the possibility to discuss cross-over practices considering the low degree of functional differentiation which is common to both funerary and settlement assemblages. This does not mean that the deposition of funerary ceramics is a symbolic representation of domestic sets. Instead, it raises the possibility that certain domestic items were (re)used in funerary contexts, as further discussed in the following chapter. That is, while we cannot rule out the possibility that a predominance of certain types in EBA 2 contexts is reflective of a biased composition of the dataset, the co-occurrence of different forms potentially suited for similar purposes remains apparent and well represented. The probability that the emergence of similarities and differences in the regional datasets is relatable to non-random patterned variability linked to certain use-practices is therefore fairly good. In particular, functional homogeneity cross-cutting the formal varieties typical of the regional assemblages would confirm the argument that representation of the regional subsets is indicative of shared use-practices through which the deposition of domestic items in funerary contexts might have shaped local identities, boundaries and social relations. In the following chapter, this shall lead to further discussion about the structuring and structured role of material culture especially in mortuary practices in order to re-produce local boundaries and identities.

7.5 Synopsis

This chapter provided the fundamental elements for an assessment of Castelluccio ceramic variability as representative of social boundaries and practices. Chronological assessment explored the variability linked to temporal changes, while a review of connections with other traditions provided further chronological and contextual elements with which to construct regional datasets in order to explore variability and representation in social terms. This permitted the construction of two large regional datasets. A comparison between the two sets opened the possibility that domestic items were reused in funerary contexts in both the eastern and western regions, suggesting some kind of shared practice within a regional context of interaction. This would counter current ideas of regional groupings developed in isolation and driven only by external factors. On the contrary, relations between local groups, in view of this scenario – substantiated by the identified links with other traditions – must have developed in the framework of high social porosity and traditional continuity. The following chapter will expand this argument to inter-community cooperation, hybridisation, mortuary practices and a sense of belonging, by combining these results with a discussion of the architectural evidence and the background landscape.

CHAPTER 8: TRADITIONS, PRACTICES AND PERMEABLE BOUNDARIES IN CASTELLUCCIO SICILY

In relation to the regional datasets, I have interpreted the engendered differences and similarities in the composition of settlement and funerary subsets as representative of practices related to pottery (re)use that were shared across the many groups of the island. This chapter connects the discussion of these results to the evidence of architecture reviewed in Chapter 5 and issues of long-term economic trends. First, I shall discuss material culture variability, habitus and representation, then the ceramic and architectural evidence. I shall stress the role of the distribution of domestic ceramics and inter/intra-community cooperation and competition through a reinterpretation of the cross-over depositions and settlement architecture. The aim is to debate the structuring and structured role of material culture in shaping and being shaped by social boundaries. I will do this by looking at use-practices and hybridisation as potentially reflected in the regional Early Bronze Age (EBA) 1 and EBA 2 assemblages, recursively representative of those boundaries and practices. Finally, I shall address issues of continuity and discontinuity by looking back to the persistence of earlier Copper Age (CA) economic strategies, offering some concluding remarks for a new interpretation of the emergence and development of Castelluccio Sicily.

8.1 MATERIAL CULTURE VARIABILITY AND HABITUS

8.1.1 Introduction

The potential of material culture to represent, define, reproduce and contest social boundaries is exploited by people engaged in the construction and manipulation of personal and community identities, and social and power relations (Hodder 1982; Skeates 2010, 115-122; Knapp and Van Dommelen 2008). As stressed in Chapter 4, Bourdieu's notion of habitus has been foundational in this regard. A variety of positions developed in material culture studies which place emphasis upon the centrality and embeddedness of the objects in socio-cultural processes, what they might have symbolised and represented for those very people and groups (e.g. social relations, identities). Before engaging in the interpretation of what similarities and differences in regional ceramic subsets in Castelluccio Sicily may represent, I shall discuss first some of these positions, namely focusing on social boundaries, social relations and identities. This will raise possibilities for stressing the link between society, pottery variability and what it might have represented in terms of social boundaries, practices and interaction.

8.1.2 Object representation, social relations, boundaries and identities

The role of material culture is important in the process of creating and manipulating social relations. Portable objects, for example, when being circulated and/or displayed act as a means of conveying information, or can they be ascribed with meaning themselves, acting as symbolic carriers which, in turn, structure relations in which they are embedded. In this context, objects can be defined as being aesthetic (Riegel 1996), in the sense that their function may not be just utilitarian but symbolic also. As stated in Section 4.2, the symbolic aspect of material culture was recognised in culture-historical approaches which disregarded, however, the active role played by the objects themselves. In fact, the visual display of certain objects can contribute to shape the relations in which they are embedded. Significant here are studies that elucidate how individuals define their identities and are defined by others, for example, through bodily engagement with material culture (e.g. Meskell 2001).

It has been noted, for instance, that, when displayed on human bodies, certain objects could have acted as visual stimuli contributing to extend self-consciousness when looking at each other. These objects could have been mobilised, as Gamble noted (1999), during social events triggering social coalescence between normally dispersed people. While this hypothesis works well for the Palaeolithic, it can also be applied to more recent prehistoric periods. Skeates, for example, regards the variety of Late Neolithic (LN) fineware, greenstone axe-blades and cherts in southern Italy as examples of portable objects able to convey, when displayed and visualised, the status of individuals ascribed by their social groups (Skeates 2005, 131-132).

This latter point is not central *per se* to the following discussion of artefact variability and representation, but it makes the point that self-representation cannot be easily separated from the social context. This bring us to the question of how individuals, or small groups of individuals, efficiently construct and manipulate the social framework and their own identities through the material world. In Barker's view, for example, 'the capacity of individuals to act independently and to make their own free choices' (Barker 2005, 448) is foundational to shaping reality. Barker's argument harks back to processualist strands in which ambitious agents may provide the motor for social change in pursuing personal prestige and power (e.g. Earle 2002). In fact, in view of the considerations expressed above, it is more the way in which individuals engaged in networks of relationships with the objects that seem to define the boundaries from which identities can be formed. Or, as noted also by Wobst (2000, 40-41), human agents' choices are informed by their context, history and social structure.

8.1.3 Conclusions

Leading on from this, the importance of addressing the contingent meaning that engendered differences and similarities in artefact variability represent becomes apparent. This can be achieved through pinning down the embedded significance by referencing the spatial and temporal context (Knapp and Van Dommelen 2008, 23). In practice, such an approach seeks patterned similarities and differences framed within a web of contextual associations made out of temporal and geographic coordinates. From this standpoint, the differences and similarities represented in the Castelluccio regional datasets open up possibilities of linking ceramic distribution with the manipulation of material culture involving use-practices that shaped and were shaped by social boundaries and relations. That is, we can produce more reasonable speculations with regard to social boundaries, identities and practices when considering formal, regional and temporal material culture variability in context.

8.2 ENGENDERED CERAMIC SIMILARITIES AND DIFFERENCES IN CASTELLUCCIO SICILY

8.2.1 Introduction

This bring us back to the results of the preceding pottery analysis, and to the argument that both regional differences and cross-cutting functional uniformity represent social boundaries. These were created and modified through practices by households and/or larger groups, and through this, different individuals could have interacted. Functional differentiation has often been regarded as direct reflection of some kind of social status in processual approaches (Binford 1972). In fact, objects acquire meaning because people use them to perform certain actions in certain circumstances, endowing those actions with meaning and vice versa (Maquet 1993). That is, it is the suitability of an object to serve social actors in determined circumstances that endows the object itself with meaning, which recursively affects social relations and boundaries. This raises the opportunity to discuss similarities and differences in Castelluccio pottery assemblages in terms of shared usepractices, social relations and boundaries. I shall first consider the similarities and usepractices.

8.2.2 Ceramic similarities and shared practices

In view of the considerations expressed above, functional uniformity represented by the fact that pottery suitable for domestic purposes largely appears in funerary contexts would suggest the existence of shared use-practices encoding domestic items with new meaning when reused in funerary depositions. Examples of this cross-over are not limited to Sicily. In her study of MBA ceramics at the settlement of Százhalombatta (Hungary), Sofaer (2015, 47-48) noted, for instance, that funerary pits were filled with the same pottery shapes found in the huts of the settlement. Jars, bowls, cups of different types were found stratified in these pits. She suggests that the same objects suitable for domestic purposes were reused to create votive deposits, reproducing sets used in daily life activities. A similar case was identified at Pitten (Austria), where an offering of domestic vessels was made to the deceased (Sørensen and Rebay 2008).

Turning to the central Mediterranean LCA-EBA, we may note accumulations of vessels, especially in cave contexts, suggesting a case similar to that described above. In the cave burials of Mirabella Eclano (Apulia), for example, coarse, semi-fine and fine red-black and grey ware vessels were located, which are also found in settlement contexts (Skeates 2005, 140-143). Skeates regards depositions of these vessels less as a representation of cross-over practices than reflecting attempts to display status, however, both cases stress the structuring role of material culture to ensure local mechanisms of social reproduction. Noteworthy from this point of view is the observation that in both the Apulian and Sicilian contexts there is evidence of such practices since the LN period, stressing, as anticipated in Section 5.3.2, a certain degree of continuity.

In this sense, I argue that the representation of domestic items in Castelluccio funerary contexts is linked to the manipulation of material culture in order to ensure reproduction of norms and stress social ties perhaps to enduring group identities. If we consider the possibility that there was no clear-cut dichotomy between ritual and domestic life in the LCA-EBA period, then it is reasonable to argue that represented variability in the examined Castelluccio domestic and funerary subsets is indicative of such practices. From this point of view, the deployment of Castelluccio pottery suitable for domestic purposes in funerary sets would be indicative of shared dispositions, perhaps ritual prescriptions that ensured reproduction of local group identities anchored to a strong sense of belonging.

8.2.3 Ceramic differences, interaction and social porosity

Similar arguments to these have been posited for the evidence of material culture accumulations in some megalithic monuments of the Temple Period phase on Malta, including ceramic figurines and vessels, some of which echo objects deposited in dwelling places (Skeates 2010, 181). However, we cannot rule out the possibility that these depositions were part of more complex strategies associated with the construction of these monuments in which playing out ritual consumption practices was linked to the resolution of fluctuating inter and intra-community rivalries (Malone and Stoddart 1998). Indeed, the development of shared practices embedded in a strong sense of belonging does not rule out the possibility

of incorporating changes to stress or ease social tensions embedded in the same network of relations and/or wider networks of social interaction.

That is why, in the process of interpreting represented variability, we cannot exclude the variety of pottery categories and shapes that characterise the constructed assemblages. For instance, we can regard formal differences as an example of the variety of portable objects that might have been distributed and displayed. Considering the possibility that the development of Castelluccio groups was likely embedded in a context of supra-regional networking as discussed in Section 2.1.3, this is not surprising. As seen in Section 3.3.4, this variety is also deployable with regards to the fabric, Castelluccio assemblages being constituted by coarse ware and painted fine ware. In this case, such variability, when displayed, might have served to ascribe individuals and groups with social status and identities in the attempt to stress tensions and boundaries (e.g. Skeates 2005, 132-133). Likewise, the occurrence of non-Castelluccio pottery such as TM and RTV raises the possibility that this process was negotiated through both local and supra-regional interaction. We have seen, for example, that in certain EBA 2 assemblages (e.g. Ciavolaro), RTV-like forms with painted decorations occur. We have also seen occurrence of TM and beaker-like sherds at EBA 1 Castelluccio sites. Perhaps, certain occurrences of RTV and TM in Castelluccio sites, instead of being indicative of imports, represent creative attempts to incorporate and assimilate external traditions.

Such materials might have been considered 'exotic' and would have attracted a greater exchange value among groups. We cannot exclude the possibility that reproduction and circulation of these objects might have facilitated developments of local networks of exchange (e.g. Skeates 2005, 132). Likewise, we cannot rule out that the same objects might then have circulated and promoted inter-cultural assimilation, perhaps in specific circumstances, e.g. ritual ceremonies, gift exchange. The occurrence of this variety in domestic settings should not be a surprise. Again, ritual and domestic activities might not have necessarily been distinctive aspects of the social life among these people, as stated above. In examining the variety of clay objects in the Carpathian basin in the EBA, Bátora found that ritual objects were used in domestic settings, arguing for creative behaviour at play (Bátora 2018, 162). Perhaps the occurrence of "atypical" RTV and TM pottery in Castelluccio assemblages represents the entire process of acquisition, incorporation and reproduction – in a creative way in domestic contexts – of external traditions to lessen increased social tensions when perpetuating local traditions.

8.2.4 Conclusions

From this point of view, engendered differences in the Castelluccio regional dataset can be representative of permeable social boundaries, when contrasted with functional uniformity, possibly representative of social practices expressing a strong sense of local belonging. Evidently, one situation does not exclude the other. On the contrary, production, distribution and reuse of ceramics in Castelluccio Sicily seems to have been focal to the construction, manipulation and alteration of local social boundaries. These, in turn, shaped social identities through innovative behaviours that challenged, perhaps, those very traditional practices linked to the funerary sphere. Looking at the examined evidence from this angle, we may argue that the constructed dataset represents such a past reality. From this point of view, we can posit complex mechanisms underlying the emergence and development of local groups, when assessing both similarities and differences in the regional Castelluccio subsets. This brings us to the next step: incorporating social porosity, interaction and practice in the interpretation of the architectural evidence examined in Chapter 5.

8.3 THE ROLE OF ARCHITECTURE: INTER-COMMUNITY INTERACTION, POWER RELATIONS AND INEQUALITIES

Can we compare these patterns with current scholarly definitions of the local regional groups? What kind of social scenarios does the discussion of these differences/similarities raise when compared to the current views? The previous section's intent was to answer the former question, suggesting that patterned variability, instead of being reflective of discrete regional groupings, represents both traditional ways of using domestic pots and social porosity, in contexts of shared practices and interaction. While this opens up scenarios with far more permeable social and cultural boundaries, what it signals in terms of socio-political organisation it is hard to say, unless we consider other archaeological evidence. This evidence, as reviewed in Chapter 5, is extremely fragmentary. For example, the hypothesis that certain sites, e.g. La Muculufa and Monte Grande, might have been regional central places, influencing shared practices and normative behaviours, remains controversial. In fact, evidence of accumulations at La Muculufa 'sanctuary' might simply indicate a waste area or a deposit used as a platform to build the terrace wall, as argued in Section 5.5.2.1. For Monte Grande, it is safer to presume that evidence of enclosures is indicative of compound areas where use of certain outdoor structures, e.g. hearths, might have been shared between different households.

Nevertheless, further structural elements, e.g. porches, were identified that suggest the hypothesis of a tendency towards social coalescence, as discussed in Section 5.2.1. Remains of large-scale stone structures as those discussed in Section 5.2.3 offer further support to this hypothesis, as I argued for their potential role in cooperative and/or competitive efforts involving more than one community. I made the point that a considerable investment of time in the construction of large-scale stone structures would have been better justified within a framework of cooperative efforts and interaction. It is likely that the practices discussed above created a particular form of group organisation, which, in turn, might have easily provided arenas for those practices by facilitating both social competition and cooperation.

The lack of outstanding differences in patterned variability, that might be linked overtly to the display of power and prestige, complements this hypothesis. Of course, this does not mean that the scenario suggested above reflects no inequalities within and between groups. Considering the distribution of artefacts in cemetery context in this section, the evidence of portable artefacts found in the tombs may reflect how the living represent themselves in the dead. A detailed examination of Castelluccio grave goods was not undertaken in this work, however, as reviewed in Section 5.5.3.1, not only ceramics are included, but also lithics, pendants and greenstones, which appear widely distributed and unconnected with specific funerary architectures or types of burial, such as individual. Stone pendants occur, for example, at several cemeteries such as Cava della Secchiera and Monte Sallia (Figure 8.1), associated with pottery and the accumulation of human remains. From this perspective, a lack of substantial differences in the representation of the dead may mask actual differences in life.

It is possible, for example, that differentiated access to local resources might have provided scope for the development of inequalities among different groups, although certain resources might have been exchanged with others. For example, animal resources might have been exchanged with crops between upland and lowland communities. In this sense, I am more inclined to see such a lack of differentiation in grave goods not as a direct reflection of an egalitarian society, but as a reflection of some degree of actual inequality triggered by the complex strategies of social interaction, manipulation of identities, boundaries and power negotiation.


Figure 8.1: Examples of grave goods from cemeteries and burial caves. Top: Cava della Secchiera, a: ceramics; b: decorated bones; c: flint blades; d: stone pendants and rings (after Orsi 1893b). Bottom: Monte Sallia, ceramics and other objects found in tombs (After Tusa 1999, 328, fig. 43).

8.4 CONTINUITY, DISCONTINUITY AND ADAPTATION TO THE ENVIRONMENT

Having considered the results of the pottery analysis in the light of further contextual evidence, the next question is how long-term dynamics affected the Castelluccio practices, boundaries and social organisation discussed above. To what extent have long-term adaptive strategies influenced societal transformations? In Chapter 3 we saw that there is a certain continuity of earlier CA ways of life, at least in terms of economic strategies. In particular, it seems likely that the transition into the Castelluccio period was marked by the transition to a fully-fledged agro-pastoral system. There seems to have been continuity also in the

occupation of certain places, as seen in Section 5.5.3.2. This poses the issue of the extent to which the practices discussed above represent persistent CA traditions. Were they new practices embedded in new contexts of increased central Mediterranean interconnectedness, or were they remnants of a dying tradition in competition with new ways of life more disposed to social coalescence and hybridisation to cope with greater external pressure?

In very general terms, we have seen in Section 7.4.4 that EBA 1 and EBA 2 pottery subsets do not exhibit substantial changes when comparing the two regional groupings. On the contrary, the examined patterns are insufficient to argue for a clear-cut discontinuity between the two phases, suggesting the possibility that, at least in terms of traditional representation, Castelluccio groups maintained their general habits for almost a thousand years. For example, increased morphological differentiation is not truly apparent in EBA 2 assemblages, while angular shapes occur also in the EBA 1 subsets, even if with less frequency. Considering the context of increasing interaction in which this variety of shapes developed, we cannot exclude the possibility that local traditions incorporated and assimilated those changes in an attempt to cope with both internal and external pressures. This would make local EBA groups extremely resilient and therefore representative of persistent remnants of an earlier CA world.

In current scholarship, the occurrence of angular shapes in the Castelluccio period is viewed as indicative of increased cultural homogeneity towards the end of the Castelluccio period (Gennusa 2015), assuming a unilineal straight trajectory of development. This trajectory involves progressive integration of all the regional groups into one social entity anticipating the social and cultural homogeneity of the MBA culture of Thapsos (Cultraro 1996; 1997). Considering the capacity demonstrated by the CA-EBA groups to cope with environmental issues of increased aridity as discussed in Section 3.3 in developing an efficient mixed system of farming and husbandry, I am inclined to reject this position in favour of the one I set out above. That is, the recursive interplay between practices and innovation, tradition and change, continuity and discontinuity, would suggest a strong discontinuity between the MBA and the Castelluccio period, profoundly linked not only to LCA but earlier CA life-ways, despite increased interaction and inter-cultural cross-fertilisation. Although it is evident that such an answer to this dilemma remains to be explored further, it certainly opens up alternative scenarios for a renewal of Castelluccio studies and, more broadly, the later prehistory of Sicily.

8.5 Synopsis

In this chapter, I attempted to link the variations in material culture with social dynamics. In combining the results of the pottery analysis with architectural evidence, I proposed a reconstruction of what Castelluccio society might have actually resembled by incorporating assessment of possible reuse practices, local interaction, settlement architecture, representation of the dead and – to a lesser extent – human-landscape interaction. Evidently, there is much more to debate and issues like power negotiation, social inequalities, environmental exploitation and economic resilience have been barely touched on. However, the discussion of cultural continuity, change and innovation in practices, which were entailed in a scenario of inter-community competition and cooperation, has been crucial in initiating such a debate by proposing an alternative understanding of social developments in Castelluccio Sicily.

CHAPTER 9: THE WAY FORWARD

The overall aim of this work was to study ceramic variability and its ability to articulate social boundaries and practices in Castelluccio Sicily on the basis of a series of questions and issues in terms of what both the similarities and differences represent. In spite of the sustained scholarly examinations of pottery variability over the years, I felt it important to look for its wider social significance informed by Bourdieu's notion of habitus and other practice-theory oriented approaches in archaeology. In reassessing both the similarities and differences in the local ceramic repertoires, my work challenged current models of socio-cultural transformations, despite quality issues with the data that prevent an exhaustive understanding of these themes. In fact, tying things together represents a far more challenging task, and this is too broad an aim for one thesis. Not only because of the variety of other materials that remain substantially unexplored, but also because further data collection is needed, especially regarding unpainted pottery and environmental record to better define adaptive strategies, resilience attitudes and the impact of climate change. From this standpoint, the outcomes of the integrated analysis are still insufficient to provide an exhaustive synthesis. Yet, they initiate such a reassessment, as demonstrated in the previous chapter, by opening up alternative understandings of the mechanisms underlying reproduction of material culture, identities, boundaries and social organisation. This chapter is a summary of the key points and questions addressed, stressing the unfinished issues as well as outlining future lines of enquiry in view of what has been achieved.

9.1 The social significance of ceramic differences and similarities: Answering the research questions

As outlined in Section 1.2, my work has been condensed into five key research questions.

- What are key characteristics in Castelluccio ceramic variations from a formal standpoint?
- What are key functional, chronological and regional aspects of variations embedded in these characteristics?
- Are there regional differences and/or similarities?
- Can we compare these patterns with current definitions of the local regional groups?
- What kind of cultural and social scenarios does discussion of these differences/similarities open up?

Chapters 6 and 7 showed that formal differences are as important as functional uniformity in determining a blurry pattern of variations that can be linked with representation of practices, social boundaries and interaction. Chapter 7 shows that these variations are also important in order to explore chronological and regional variation and constructed regional dataset representative of those practices, social boundaries and interaction. Likewise, the construction of these datasets permitted an investigation of similarities and differences, and defined patterned variability that could represent practices and boundaries linked to specific regional contexts. This discourse has been developed in terms of domestic/funerary crossover representation, having argued for a reuse of domestic items in funerary contexts. This step led to the hypothesis of the existence of use-practices linked with an assertion of a strong sense of belonging and reproduction of local identities. Engendered differences were interpreted instead as representative of attempts to incorporate and assimilate external unpainted traditions such as RTV and TM, when compared with the functional uniformity cross-cutting both painted and unpainted pottery. As I have argued, one thing should not exclude the other. In fact, it suggests how the manipulation of local material culture might have created and modified local identities and boundaries.

Understanding social boundaries and practices was central to this work in view of the general aims presented in Section 1.1. Analysis of what ceramic variability represents in terms of social boundaries and practices opened up alternative understandings of local group identities and social organisation. Crucially, the result demonstrated how dynamic these elements were by showing the extent to which contextualised variability is likely representative of social porosity, daily life practices and innovative behaviours. Combined with a new interpretation of the architectural evidence, this study revealed the possibility that Castelluccio society was not characterised by a stable hierarchy. In fact, it opened up the possibility that conflicts linked to inequalities of some degree might have been solved in social arenas in which competition and cooperation were played out.

While this is speculation, it is very likely when considering architectural evidence of largescale works and ceramic representation in context. Evidence of large-scale remains of inhabited places is not unusual in the local panorama of later prehistory, including Neolithic structures in both southern Italy (Tinè 1983) and Sicily (Gullì 1993). A number of studies (e.g. Brown 1991; Rapoport 1991; Parker Pearson and Richards 1993, 44-47; Skeates 2000) have defined social processes behind architectural transformations in structuring living spaces for the social and behavioural needs of the inhabitants. An attempt to explore these aspects in Sicilian EBA architecture was undertaken by Doonan (2001), who privileged intrasettlement and household organisation. Given the wider framework in which these processes were acted out, it is not unlikely that the possibility of transformation in the architectural features was also anchored to the local practices and arenas.

This view of the Castelluccio social organisation and boundaries is in open contrast with current definitions of the local regional group and sequences which saw the emergence of the MBA culture of Thapsos as a direct product of increased cultural and social homogeneity in the preceding period. Actually, this model can be strongly contrasted with my analysis which set out a more complex scenario in which social relations, local interaction and practice must have actively shaped the emergence and development of the Castelluccio groups.

9.2 LONGUE DURÉE, TIME AND TRAJECTORIES: AN UNFINISHED BUSINESS

As noted in Section 8.4, the possibility of such an alternative scenario raises further issues regarding continuity and discontinuity over longer periods of time. Considering the evidence of continuity in settlement patterns and economic subsistence, as discussed in Chapter 3, I argued that use-practices in Castelluccio Sicily were also representative of earlier CA lifeways. Continuous practices of manipulation in reusing domestic pots in funerary contexts might have been at the centre, for example, of traditional lifestyles, while increased interconnections with external traditions, seen in the evidence of mixed contexts in both EBA 1 and 2, might have contributed to the inception of a relative amount of innovation. In view of these considerations, I have argued for a strong discontinuity between the MBA period of Thapsos and the Castelluccio period, in which CA ways of life would have still been persistent. In this sense, I argued for the presence of resilient communities, strongly adapted to the surrounding environment yet prone to interaction and cross-cultural fertilisation. As stated above, this hypothesis stresses a very different view when compared with current unilineal models of socio-cultural transformations. In fact, it opens up alternative understandings of social transformations in Castelluccio groups in terms of resilience and long-term adaptive strategies that stress the importance of the impact of the longue durée on later MBA developments. This, however, is largely an unfinished research agenda.

9.3 FUTURE STUDY DIRECTIONS

While highlighting the role of long-term processes in shaping social organisation, there still remains much to reflect on, especially in terms of resource exploitation. In Chapter 3, we have seen that scholarship has focused on farming and herding activities, while mineral sources have been largely neglected. Nevertheless, the geological landscape could have afforded local communities a variety of resources, impinging therefore on a variety of practices. For instance, the extent to which the selection of clay and pottery making might have affected social developments in promoting/being affected by differentiated access to resources and increased inequalities appears to have been ignored in current studies of local pottery. In fact, one may argue that the persistence of mixed painted/unpainted assemblages from the ECA to Castelluccio periods may account for EBA clay exploitation strategies similar to ECA human-clay engagements, despite the environmental changes discussed in Section 3.2.4. This offers further scope to contextualise development of RTV-Castelluccio assemblages and also discuss the extent to which this hybridisation was, in fact, linked with ancestral behaviours in pottery-making.

Similarly, while mineral ore exploitation is discussed in more detail, copper sources are very limited in the island (Giardino 1997; Giardino, *pers. comm.* November 2017), usually hindering investigations of local production practice while often highlighting the role of long-distance exchange, especially in the framework of contacts with the early Mycenaean world and entrepreneurship in the local late EBA phase (Cultraro 2004; Palio 2007). Interesting, however, is the fact that, while there is no evidence for copper smelting in the EBA, there seems to be some evidence of local copper smelting in the LCA (Giannitrapani et al. 2014), although few bronze objects were found in EBA tombs, especially in eastern Sicily (Leighton 1999, 125; Maniscalco 1996). Moreover, copper smelting is also attested during the ECA period on Lipari, where a slag has been found associated with the local Diana pottery (Bernabò Brea and Cavalier 1980, 339, 490). Thus, copper exploitation and production should also be the focus of more sustained scholarly investigation in order to address these issues and fill potential gaps regarding the continuity/discontinuity in resource exploitation and landscape use.

All in all, how social transformations occurred in CA-EBA Sicily requires further critical evaluation, especially in view of the fact that production activities such as pottery-making and ore smelting have not been incorporated within current landscape approaches over longer time periods. I would argue that further studies on this subject will substantially enhance our understanding of the social transformations that occurred in Sicily at the end of the EBA.

Volume II: Appendices and bibliography

I.	AP	PENDIX 1. CATALOGUES	2
I.	1	CATALOGUE OF POTTERY	2
I.	2	CATALOGUE OF SITES	101
II.	AP	PENDIX 2. TYPOLOGY OF THE POTTERY REPERTOIRES	109
I	[.1	INTRODUCTION	109
I	[.2	SCHEMATISED STRUCTURE OF THE ILLUSTRATED MORPHO-TYPOLOGY	109
I	[.3	ILLUSTRATED TYPOLOGY	110
	Bea	ıkers	111
	Boy	wls	111
	Cup	ps	117
	Но	urglass pots	
	Jars	5	
	Ped	lestalled vessels	149
III.	A	APPENDIX 3. ETHNOGRAPHIC CORPORA: SUPPLEMENTUM	165
IV.	F	3IBLIOGRAPHY	169

Table of Content

APPENDIX 1. CATALOGUES

I.1 CATALOGUE OF POTTERY

As stressed in the main text of this thesis, 589 items constitute the dataset of this study, the analysis of which has been undertaken according to specific purposes, questions, objectives and strategy. The aim of this section is to provide detailed information on qualitative and quantitative aspects of this dataset, including use types, provenance and relevant bibliographic sources. For this reason, information has been organised into five interlinked Tables (I.1, I.2, I.3, I.4 and I.5) with the aim of providing a catalogue of pottery to follow and refer to, while reading the descriptions of pottery shapes, forms and sub-varieties in Section 6.4.1 and the illustrated typology in Appendix 2. Table I.1 shows a list of fields and abbreviations that are used in Table I.2 and Table I.3 in order to present the list of catalogued items and their characteristics. However, while information in either Table I.2 and I.3 is sorted by the Catalogue number, information in Table I.4 is sorted by the type code identifying pottery forms and sub-varieties (Section 6.4, Table 6.3). Table I.4 is, therefore, a concordance Table which can enable the reader to pick up information regarding morphometric and functional aspects listed in Table I.2 and provenance and relevant bibliographic sources in Table I.3 while following descriptions in Section 6.4.1 and Appendix 2. This task is facilitated by the figures in the main text of Section 6.4.1 which incorporate captions and refer back to these tables. Finally, Table I.5 lists pottery finds by provenance following alphabetic order, in order to enable the reader to engage with the catalogue from a different perspective, when reading descriptions of sites in Section 5.5. This organisation of the catalogue wants to provide quite a complete, if not exhaustive, overview of the Castelluccio pottery repertoires which have already been published, with the aim of leading the foundations for an illustrated and comprehensive corpora of Castelluccio ceramics.

f abbreviations for these aspects.									
List of t	fields and abbreviations used in the Catalogue tables								
Cat. N.	Catalogue number given by the author to the ceramic item.								
Trench	Sector/Area of the site								
Related feature	Specific feature associated with the item								
Shape	Shape of the item								
Location	Site location								
HF	Height of the foot in cm (only for pedestalled vessels)								
Н	Overall height in cm								
HB	Height of the bowl in cm (only for pedestalled vessels)								
RM	Rim diameter in cm								
BD	Base diameter in cm								
MD	Maximum diameter in cm								
Type code	Code of the artefact type as defined in Table 6.3								
Functional category	Functional category as defined in Section 6.5								

Use types as defined in Section 6.5

Referenced sources

Use types

Bibliography

Table I.1: List of fields and abbreviations. In accordance with the proposed taxonomical system, every item has been listed in such a way to display i) the full range of contexts, ii) the morphometric variables that have been assessed, iii) the functional groups to which they have been ascribed iv) relevant information regarding provenance and bibliographic references. This table show the list of abbreviations for these aspects.

Table I.2: List of pottery finds sorted by Catalogue number. This table lists all the pottery finds that have been used in the classification of pottery shapes in Section 6.4.1. It includes relevant information regarding morphometric and functional aspects of the examined repertoires, while further information regarding provenance and related bibliographic sources can be found in Table I.3. The reader can engage with this table from a different perspective by using Table I.4 and I.5. While Table I.4 enables to pick up relevant information in following descriptions of pottery types in chapter 6 and Appendix 2, Table I.5 can be used while reading descriptions of the main assemblages in Section 5.5.

Cat.N.	Shape	HF	Η	HB	RM	BD	MD	Functional category	Use types
11	Jar		12	11,5	10		12	Transfer	Serving, eating, transport and short- term storage
77	Jar		11	11	8,9		12,5	Transfer	Serving, eating, transport and short- term storage
78	Cup		8	8	10			Transfer	Serving and eating
79	Cup		8	8	10			Transfer	Serving and eating
81	Cup		8	8	9,2			Transfer	Serving and eating
82	Cup		8,5	8,5	7			Transfer	Serving and eating
83	Cup		8	8	8,2			Transfer	Serving and eating
84	Cup		8	8	10			Transfer	Serving and eating
85	Cup		8	8	10,5			Transfer	Serving and eating
86	Cup			0	9,2			Transfer	Serving and eating
87	Jar		20	19,5	11,3		10,3	Transfer and storage	Transport and short- term storage
88	Cup		6,9	6,9	10,3			Transfer	Serving and eating
89	Cup		8	8	9			Transfer	Serving and eating
91	Jar		42	42			14	Storage	Long-term storage
92	Jar		30	30			4	Storage	Long-term storage
100	Jar		10	10	7		10	Transfer	Serving, eating, transport and short- term storage
101	Jar		8,5	8,5	6		9,2	Transfer	Serving, eating,

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
									transport and short-
									term storage
102	Cup		8	8	10			Transfer	Serving and
10.3	Cup		6	6	7			Transfer	Serving and
10.0	C		6	6	7				eating Serving and
104	Cup		0	0	/			Iransier	eating Serving and
105	Cup		6,5	6,5	10		10,5	Transfer	eating
106	Cup		6	6	7,8			Transfer	Serving and eating
107	Jar		13	12,5	7		10	Transfer	Serving, eating, transport and short- term
									storage
108	Jar		14	13,5	10		16	Transfer	Serving, eating, transport and short- term storage
110	Pedestalled_bowl		16	16	25,5	12		Serving and eating	
111	Pedestalled_bowl		17	16,5	25,5	12		Serving and eating	
112	Pedestalled_bowl		19	19	32	12,5		Serving and eating	
113	Cup		4	4	10,5		11	Transfer	Serving and eating
114	Cup		8	8	12		9	Transfer	Serving and eating
115	Cup		6	6	10		6,5	Transfer	Serving and eating
117	Cup		6	6	9,2		8	Transfer	Serving and eating
118	Cup		7,5	7,5	9		10	Transfer	Serving and eating
119	Cup		9	9	8		11	Transfer	Serving and eating
120	Beaker		8	8	12			Transfer	Serving and eating
121	Cup		6	6	10,5		12	Transfer	Serving and eating
122	Cup		6	6	10,5		10	Transfer	Serving and eating
123	Cup		8	8	10		11,2	Transfer	Serving and eating

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
124	Cup		6	6	16			Transfer	Serving and eating
125	Cup		12	12	14		14	Transfer	Serving and eating
126	Cup		9,2	9,2	10		12	Transfer	Serving and eating
127	Cup		8	8	8			Transfer	Serving and eating
128	Cup		5,8	5,8	11			Transfer	Serving and eating
129	Cup		8	8	9			Transfer	Serving and eating
131	Cup		9	9	6,5			Transfer	Serving and eating
132	Cup		8	8	8			Transfer	Serving and eating
133	Cup		8	8	10			Transfer	Serving and eating
134bis	Beaker		6	6	9,6			Transfer	Serving and eating
135	Beaker		10	10	12		12	Transfer	Serving and eating
135bis	Beaker		8	8	10			Transfer	Serving and eating
136	Cup			0	12			Transfer	Serving and eating
137	Beaker		8	8	10		13,5	Transfer	Serving and eating
138	Cup		10	10	11,2		12	Transfer	Serving and eating
139	Bowl		10	10	11,8		14	Transfer and processing	Serving, eating and cooking
140	Cup		11	11	14		16	Transfer	Serving and eating
141	Beaker		12	8	12			Transfer	Serving and eating
142	Cup		8,4	8,4	12		12	Transfer	Serving and eating
143	Cup		6,4	6,4	7,2		12	Transfer	Serving and eating
145	Beaker		8	8	14			Transfer	Serving and eating
146	Cup		10	10	16			Transfer	Serving and eating
147	Cup		6	6	8		13,6	Transfer	Serving and eating
148	Cup		10	10	16			Transfer	Serving and eating
149	Beaker		8	8	12			Transfer	Serving and eating
150	Cup		8	8	12			Transfer	Serving and eating

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
151	Cup		10	10	14			Transfer	Serving and eating
152	Cup		11	11	13,5			Transfer	Serving and eating
153	Cup		12	10,5	10		31,2	Transfer	Serving and eating
154	Beaker		12	8	8			Transfer	Serving and eating
155	Beaker		16	12	10			Transfer	Serving and eating
156	Cup		10	9	9		30,6	Transfer	Serving and eating
157	Cup		10	10	10,5		24	Transfer	Serving and eating
158	Cup		11	11,1	11,4			Transfer	Serving and eating
159	Beaker		12	12	12			Transfer	Serving and eating
160	Cup		12	12	12		12	Transfer	Serving and eating
161	Cup		12	11,6	13,6			Transfer	Serving and eating
162	Cup		9,2	9,2	10			Transfer	Serving and eating
163	Cup		11	11,2	13,6			Transfer	Serving and eating
164	Cup		8	8	8			Transfer	Serving and eating
165	Cup		9,6	9,6	6,6			Transfer	Serving and eating
166	Cup		14	14	10			Transfer	Serving and eating
167	Cup		14	14	10			Transfer	Serving and eating
168	Bowl		14	14	9		8	Transfer and processing	Serving, eating and cooking
169	Bowl		14	14,1	13,8		8,5	Transfer and processing	Serving, eating and cooking
170	Hourglass pot		8,4	8,4	5,4			Transfer	Serving and eating
171	Hourglass pot		12	11,6	9			Transfer	Serving and eating
172	Hourglass pot		10	10,4	10			Transfer	Serving and eating
173	Bowl		12	11,6	8		12	Transfer and processing	Serving, eating and cooking
174	Cup		9	9	6,5			Transfer	Serving and eating
175	Cup		10	10	9,2			Transfer	Serving and eating

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
176	Cup		9	9	9,6			Transfer	Serving and eating
177	Jar		14	13,6	8		10	Transfer	Serving, eating, transport and short- term storage
178	Jar		12	12	5,6		42	Transfer	Serving, eating, transport and short- term storage
179	Jar		16	16			10,5	Transfer	Serving, eating, transport and short- term storage
180	Jar		12	12	8		16	Transfer	Serving, eating, transport and short- term storage
182bis	Pedestalled_bowl	2,5	6,5	4	9	5,5		Serving and eating	0
184	Pedestalled_bowl	9	20	11,4	22,2	14,4		Serving and eating	
186	Pedestalled_bowl	9	27	18	29,4	18		Serving and eating	
187	Pedestalled_bowl	9	27	18	29,4	18		Serving and eating	
188	Pedestalled_bowl	7,8	25	17,4	31,2	16,2		Serving and eating	
189	Pedestalled_bowl	15	31	16,2	43,8	18		Serving and eating	
190	Pedestalled_bowl	7,8	35	27,2	33	15		Serving and eating	
191	Pedestalled_bowl	16,2	27	10,8	30,6	13,8		Serving and eating	
196	Cup		8	8	11,5			Transfer	Serving and eating
197	Cup		8	8	12			Transfer	Serving and eating
198	Cup		8	8	12			Transfer	Serving and eating
199	Cup		9,6	9,6	15,2			Transfer	Serving and eating
244	Cup		8	8	10			Transfer	Serving and eating
245	Cup		4	4	4			Transfer	Serving and eating

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
247	Cup		9	9	9			Transfer	Serving and eating
248	Jar			20	13,5	7,8	33,6	Transfer and storage	Transport and short- term storage
249	Cup		8	8	10			Transfer	Serving and eating
251	Bowl		10	10	10		10	Transfer and processing	Serving, eating and cooking
252	Cup		6	6	7,2			Transfer	Serving and eating
253	Cup		12	12	14			Transfer	Serving and eating
254	Cup		8,4	8,4	8			Transfer	Serving and eating
257	Beaker		12	12	12			Transfer	Serving and eating
258	Cup		12	12	13,5			Transfer	Serving and eating
259	Jar		19	18,8	8		8	Transfer	Serving, eating, transport and short- term storage
260	Jar		18	17,6	8		8	Transfer	Serving, eating, transport and short- term storage
261	Jar		19	18,8	9,6		13	Transfer	Serving, eating, transport and short- term storage
262	Jar		18	18	6,4		11,5	Transfer	Serving, eating, transport and short- term storage
263	Jar		15	14,8	8,4		7,5	Transfer	Serving, eating, transport and short- term storage
267	Jar		20	20	14,4	15,6	18	Transfer and storage	Transport and short-

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
									term
268	Jar		35	34 5	14		24	Transfer	Long-term
200	Jai		55	0	17		27	and storage	storage
209	Jar		25	15.5	14	105	23,4	Transfer	Long-term
212	Jai		55	15,5	14	12,3	22,2	and storage	storage
343	Cup		8	8	11,8			Transfer	eating
368	Cup		0	0	10			Transfer	Serving and eating
465	Pedestalled_bowl	4,2	17	12,6	34,2			Serving and eating	
466	Pedestalled_bowl		5,2	5,2	13,8			Serving and eating	
467	Pedestalled_bowl	3	15	12	26,5			Serving and eating	
468	Pedestalled_bowl	3	11	7,8	24	12		Serving and eating	
469	Pedestalled_bowl	3,6	13	9	25,2	13,2		Serving and	
470	Pedestalled_bowl	3,6	14	10,2	35	15,6		Serving and	
471	Pedestalled_bowl	4,8	14	9,6	20,4	10,2		Serving and	
472	Pedestalled_bowl	4,8	12	7,2	20,4	12		Serving and	
474	Pedestalled_bowl	3	12	9	18	9		Serving and	
475	Pedestalled bowl	3	12	9	21	11.4		Serving and	
176	Dedestalled bowl	4.2	16	11.4	10.2	Q /		eating Serving and	
4/0	Fedestalled_bowl	4,2	10	11,4	19,2	0,4		eating Serving and	
478	Pedestalled_bowl	6	15	9	24	11,4		eating	
479	Pedestalled_bowl	6	15	9	23,4	12		eating	
481	Pedestalled_bowl	3,6	12	8,4	22,2	10,8		Serving and eating	
482	Pedestalled_bowl	4,8	17	12	27,6	12		Serving and eating	
483	Pedestalled_bowl	7,8	22	14,4	39	16,2		Serving and eating	
484	Pedestalled_bowl	3,6	18	14,4	33	15		Serving and eating	
485	Pedestalled_bowl	5,4	17	12	36	16,2		Serving and eating	
486	Pedestalled_bowl	3	12	9	15	9		Serving and eating	
487	Pedestalled_bowl	3	11	7,8	16,8	12,6		Serving and eating	
488	Pedestalled_bowl	4,8	14	9,6	18	10,8		Serving and eating	
489	Pedestalled_bowl	5,4	14	9	19,8	12,6		Serving and eating	
490	Pedestalled_bowl	6	17	10,8	30,6	12,6		Serving and eating	

Cat.N.	Shape	HF	Η	HB	RM	BD	MD	Functional category	Use types
491	Pedestalled_bowl	7,8	19	11,4	33	13,8		Serving and eating	
492	Pedestalled_bowl	6	19	12,6	33,6	13,8		Serving and eating	
493	Pedestalled_bowl	7,2	16	8,4	28,2	15		Serving and eating	
494	Pedestalled_bowl	8,4	22	13,8	39,6	22,2		Serving and eating	
495	Pedestalled_bowl	5,4	16	10,8	23,4	12,6		Serving and eating	
496	Pedestalled_bowl	6	26	19,8	39	15,6		Serving and eating	
497	Pedestalled_bowl		11	10,9	14,6			Serving and eating	
498	Pedestalled_bowl	6	16	9,6	20,4	8,4		Serving and eating	
499	Pedestalled_bowl	6,6	17	10,2	19,8	6,6		Serving and eating	
500	Pedestalled_bowl	5,4	13	7,8	16,2	8,4		Serving and eating	
501	Pedestalled_bowl	5,4	13	7,9	15,6	7,8		Serving and eating	
502	Pedestalled_bowl	6	15	9	21	11,4		Serving and eating	
503	Pedestalled_bowl	7,2	18	10,8	21,6	10,2		Serving and eating	
504	Pedestalled_bowl	6,6	14	7,8	20,4	10,8		Serving and eating	
505	Pedestalled_bowl	7,8	16	7,8	22,2	12		Serving and eating	
506	Pedestalled_bowl	3	12	9	20,4	12		Serving and eating	
507	Pedestalled_bowl	4,2	16	12	25,2	16,8		Serving and eating	
508	Pedestalled_bowl	4,2	12	7,8	28,8	12		Serving and eating	
509	Pedestalled_bowl	4,2	11	7,2	26,4	17,4		Serving and eating	
510	Pedestalled_bowl	6	17	11,4	24	13,8		Serving and eating	
511	Pedestalled_bowl	6,6	15	8,4	24,6	13,8		Serving and eating	
512	Pedestalled_bowl	6	23	16,8	42	20,4		Serving and eating	
513	Pedestalled_bowl	10,2	24	13,8	30	15		Serving and eating	
514	Pedestalled_bowl	9	18	9	25,2	14,4		Serving and eating	
515	Pedestalled_bowl	4,2	14	9,6	18	12		Serving and eating	
516	Pedestalled_bowl	5,4	12	6,6	20,4	8,4		Serving and eating	
517	Pedestalled_bowl	6	15	9	22,8	11,4		Serving and eating	
518	Pedestalled_bowl	6	14	8,4	22,2	9,6		Serving and eating	
519	Pedestalled_bowl	7,2	19	12	26,4	13,2		Serving and eating	

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
520	Pedestalled_bowl	7,2	16	9	20,4	10,8		Serving and eating	
521	Pedestalled_bowl	3,6	15	11,4	22,2	9		Serving and eating	
522	Pedestalled_bowl	11,4	25	13,8	36	15,6		Serving and eating	
523	Pedestalled_bowl	8,4	17	9	18	12		Serving and eating	
524	Pedestalled_bowl	4,8	16	10,8	21,6	9,6		Serving and eating	
525	Pedestalled_bowl	7,2	16	9	19,8	10,2		Serving and eating	
526	Pedestalled_bowl	20,4	48	27,6	66	28,2		Serving and eating	
527	Pedestalled_bowl	6,6	23	16,2	32,4	18		Serving and eating	
528	Pedestalled_bowl	6	18	12	32,4	15		Serving and eating	
529	Pedestalled_bowl	11,4	24	12,6	22,2	18		Serving and eating	
530	Pedestalled_bowl	8,4	17	9	16,2	12,6		Serving and eating	
531	Pedestalled_bowl	9,6	19	9	19	12,6		Serving and eating	
532	Pedestalled_bowl	9,6	19	9,6	19,2	12,6		Serving and eating	
533	Pedestalled_bowl	12	26	13,8	25,2	14,4		Serving and eating	
534	Pedestalled_bowl	12	26	14,4	32,4	16,2		Serving and eating	
535	Pedestalled_bowl	10,2	21	10,8	26,4	13,2		Serving and eating	
536	Pedestalled_bowl	7,8	18	10,2	37,8	12		Serving and eating	
538	Pedestalled_bowl	14,4	29	14,4	21,6	14,4		Serving and eating	
539	Pedestalled_bowl	10,2	20	9,6	24	14,4		Serving and eating	
540	Pedestalled_bowl	2,4	9	6,6	9	6		Serving and eating	
541	Pedestalled_bowl	16,8	27	10,2	24	15,6		Serving and eating	
542	Pedestalled_bowl	9	18	9	21	9		Serving and eating	
543	Pedestalled_bowl	7,8	19	10,8	18	10,8		Serving and eating	
544	Pedestalled_bowl	12	22	9,6	18	14,4		Serving and eating	
544bis	Pedestalled_bowl	20,4	31	10,2	28,8	17,4		Serving and eating	
545	Pedestalled_bowl	17,4	28	10,8	26,4	16,8		Serving and eating	
546	Pedestalled_bowl	9	38	29,4	32,4	20,4		Serving and eating	
547	Pedestalled_bowl	8,4	14	6	15	6		Serving and eating	
548	Pedestalled_bowl	24	34	9,6	24,6	18,6		Serving and eating	

Cat.N.	Shape	HF	Η	HB	RM	BD	MD	Functional category	Use types
549	Pedestalled_bowl	25,2	35	10,2	24	18,6		Serving and eating	
550	Pedestalled_bowl	4,2	11	6,6	12	9		Serving and eating	
551	Pedestalled_bowl	8,4	18	9,6	15	13,2		Serving and eating	
552	Pedestalled_bowl	12	24	12	24	15		Serving and eating	
554	Pedestalled_bowl	13,2	25	12	32,4	14,4		Serving and eating	
555	Pedestalled_bowl	6	14	8,4	13,2	6,6		Serving and eating	
556	Pedestalled_bowl	9	18	9	19,2	10,8		Serving and eating	
557	Pedestalled_bowl	13,2	18	4,8	15	11,4		Serving and eating	
558	Pedestalled_bowl	6	17	11,4	19,2	10,2		Serving and eating	
559	Pedestalled_bowl	6	19	12,6	21,6	12		Serving and eating	
560	Pedestalled_bowl	12	13	1,2	16,2	9,6		Serving and eating	
561	Pedestalled_bowl	7,8	14	6,6	18,6	7,8		Serving and eating	
562	Pedestalled_bowl	15	26	11,4	22,8	16,2		Serving and eating	
563	Pedestalled_bowl	13,8	25	11,4	25,8	13,8		Serving and eating	
564	Pedestalled_bowl	7,2	14	6,6	15	10,2		Serving and eating	
565	Pedestalled_bowl	21,6	39	17,4	28,2	22,2		Serving and eating	
566	Pedestalled_bowl	14,4	26	11,4	21	15,6		Serving and eating	
567	Pedestalled_bowl	16,8	26	9	27	13,2		Serving and eating	
568	Pedestalled_bowl	10,8	26	15,6	28,2	12		Serving and eating	
569	Pedestalled_bowl	18	35	16,8	32,4	17,4		Serving and eating	
569bis	Pedestalled_bowl	14,4	35	20,6	21,6	19,8		Serving and eating	
569tris	Pedestalled_bowl	7,2	28	20,4	27	16,2		Serving and eating	
570	Pedestalled_bowl	12	23	10,8	25,2	15		Serving and eating	
571	Pedestalled_bowl	17,4	29	11,4	32,4	18		Serving and eating	
572	Pedestalled_bowl	15	36	21	35,4	16,8		Serving and eating	
573	Pedestalled_bowl	12	23	10,8	29,4	16,2		Serving and eating	
574	Pedestalled_bowl	13,2	25	12,1	24,4	12,6		Serving and eating	
575	Pedestalled_bowl	19,8	32	12,6	29,4	16,2		Serving and eating	
576	Pedestalled_bowl	18	34	15,6	33,6	16,8		Serving and eating	

Cat.N.	Shape	HF	Η	HB	RM	BD	MD	Functional category	Use types
577	Pedestalled_bowl	12	26	14,4		10,8		Serving and eating	
578	Pedestalled_bowl	16,8	38	21	36,6	19,8		Serving and eating	
579	Pedestalled_bowl	24	48	24	49,8	22,2		Serving and eating	
580	Pedestalled_bowl	20,4	39	18,6	42	24		Serving and eating	
581	Pedestalled_bowl	14,4	27	12,6	28,2	18		Serving and eating	
582	Pedestalled_bowl	13,2	34	20,4	36,6	16,2		Serving and eating	
583	Pedestalled_bowl	14,4	26	11,4	31,2	13,2		Serving and eating	
584	Pedestalled_bowl	4,8	13	8,4	19,8	10,8		Serving and eating	
585	Pedestalled_bowl	6	26	19,8	36	14,4		Serving and eating	
586	Pedestalled_bowl	8,4	28	19,8	39	18		Serving and eating	
587	Pedestalled_bowl	7,2	27	19,8	35	14,4		Serving and eating	
588	Pedestalled_bowl	15	23	7,8	29,4	14,4		Serving and eating	
589	Pedestalled_bowl	7	25	18,2	35	15		Serving and eating	
590	Pedestalled_bowl	7,2	29	22,2	33	15		Serving and eating	
592	Pedestalled_bowl	6	35	29	38,4	15		Serving and eating	
593	Pedestalled_bowl	6	35	29	35,4	17,4		Serving and eating	
594	Pedestalled_bowl	6	29	22,8	39	14,4		Serving and eating	
595	Pedestalled_bowl	4,8	12	7,2	14,4	7,8		Serving and eating	
596	Pedestalled_bowl	28,8	42	13,2	36			Serving and eating	
597	Pedestalled_bowl	25,2	37	12	39			Serving and eating	
598	Pedestalled_bowl	33	46	12,6	30			Serving and eating	
599	Pedestalled_bowl	26,4	42	15,6	36			Serving and eating	
600	Pedestalled_bowl	24	44	20,4	33			Serving and eating	
601	Pedestalled_bowl	12	35	23	28,2	19,2		Serving and eating	
603	Pedestalled_bowl	18,6	28	9,6	20,4	19,2		Serving and eating	
606	Pedestalled_bowl	10,8	16	5,4	7,2	11,4		Serving and eating	
607	Pedestalled_bowl	17,4	28	10,2	21	15,6		Serving and eating	
608	Pedestalled_bowl	22,2	37	15	28,8	17,4		Serving and eating	
609	Pedestalled_bowl	29,4	42	12,6	28,2	18		Serving and eating	

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
610	Pedestalled_bowl	21,6	40	18	31,2	18,6		Serving and eating	
611	Pedestalled_bowl	4,2	12	7,8	18	9		Serving and eating	
612	Pedestalled_bowl	6	14	8,4	18	9,6		Serving and eating	
613	Pedestalled_bowl	9,6	16	6	27	12		Serving and eating	
614	Pedestalled_bowl	4,2	12	7,8	19,2	10,2		Serving and eating	
615	Pedestalled_bowl	6	13	6,6	21,6	9		Serving and	
616	Pedestalled_bowl	6	13	7,2	18,6	7,8		Serving and	
617	Pedestalled_bowl	4,8	13	8,4	17,4	7,8		Serving and	
618	Pedestalled_bowl	7,8	16	8,4	11,4	11		Serving and eating	
619	Pedestalled_bowl	4,8	13	8,4	10,2			Serving and	
620	Pedestalled_bowl	5,4	14	9	13,8	9,6		Serving and eating	
621	Pedestalled_bowl	5,4	1,4	-4	12	9		Serving and eating	
622	Pedestalled_bowl	10,2	18	7,8	14,4	9,6		Serving and eating	
623	Pedestalled_bowl	7,2	16	9	13,8	10,2		Serving and	
624	Pedestalled_bowl	3,6	7,8	4,2	6,6	4,2		Serving and eating	
626	Pedestalled_bowl	8,4	17	9	19,2	13,2		Serving and eating	
627	Pedestalled_bowl	16,2	27	10,8	21,6	13,8		Serving and eating	
628	Pedestalled_bowl	7,8	22	14,4	22,2	15,6		Serving and eating	
629	Pedestalled_bowl	7,8	12	4,2	14,4	12		Serving and eating	
630	Pedestalled_bowl	7,8	10	2,4	10,2			Serving and eating	
649	Cup		7,8	7,8	12,5			Transfer	Serving and eating
650	Cup		10	10	16			Transfer	Serving and eating
651	Cup		9	9	12			Transfer	Serving and eating
652	Cup		10	10	16			Transfer	Serving and eating
653	Cup		8	8	12			Transfer	Serving and eating
655	Cup		6	6	8			Transfer	Serving and eating
656	Cup		8	8	12			Transfer	Serving and eating
657	Cup		10	10	12			Transfer	Serving and eating

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
659	Cup		8	8	12			Transfer	Serving and eating
660	Cup		6	6	9,8			Transfer	Serving and eating
661	Cup		7,2	7,2	12			Transfer	Serving and eating
662	Cup		8	8	8			Transfer	Serving and eating
663	Cup		7,5	7,5	11,8			Transfer	Serving and eating
664	Cup		15	15	20			Transfer	Serving and eating
665	Cup		8	8	9			Transfer	Serving and eating
666	Cup		6	6	10			Transfer	Serving and eating
667	Cup		6	6	10			Transfer	Serving and eating
668	Cup		5,8	5,8	8,2			Transfer	Serving and eating
669	Cup		10	10	14			Transfer	Serving and eating
670	Cup		8	8	8			Transfer	Serving and eating
671	Cup		8	8	9,5		12	Transfer	Serving and eating
672	Cup		11	11	12			Transfer	Serving and eating
673	Cup		8	8	13			Transfer	Serving and eating
674	Cup		5	5	10		11	Transfer	Serving and eating
675	Cup		10	10	14			Transfer	Serving and eating
677	Pedestalled_bowl		10	10				Serving and eating	
709	Pedestalled_bowl		18	17,5	29			Serving and eating	
710	Pedestalled_bowl		16	16	25,5			Serving and eating	
716	Pedestalled_bowl		8,5	8,5	32			Serving and eating	
717	Pedestalled_bowl		8	8	14			Serving and eating	
719	bowl		14	14	8,5		8,5		
735	Cup		6	6	10			Transfer	Serving and eating
736	Cup		6,4	6,4	12		10,2	Transfer	Serving and eating
737	Cup		6	6	16			Transfer	Serving and eating
738	Cup		10	10	8			Transfer	Serving and eating

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
739	Cup		6,5	6,5	9		8	Transfer	Serving and eating
740	beaker		12	8	8		10	Transfer	Serving and eating
741	Cup		6,8	6,8	7,2		8	Transfer	Serving and eating
742	Cup		7,6	7,6	11,2			Transfer	Serving and eating
743	Cup		10	10	10			Transfer	Serving and eating
744	Cup		12	12	12			Transfer	Serving and eating
745	Cup		10	10	12		13	Transfer	Serving and eating
746	Cup		16	16	18,8			Transfer	Serving and eating
747	Cup		9	9	10			Transfer	Serving and eating
748	Cup		7,7	7,7	8,88			Transfer	Serving and eating
749	Bowl		14	14	16		20	Transfer and processing	Serving, eating and cooking
750	Cup		7	7	6,5			Transfer	Serving and eating
751	Cup		10	10	9			Transfer	Serving and eating
754	Cup		12	12	14,5			Transfer	Serving and eating
755	Cup		8	8	8			Transfer	Serving and eating
756	Bowl		10	10	14		14	Transfer and processing	Serving, eating and cooking
757	Cup		8	8	8			Transfer	Serving and eating
758	Cup		10	10	10			Transfer	Serving and eating
759	Bowl			0	12		12	Transfer and processing	Serving, eating and cooking
760	Cup		14	13,5	14			Transfer	Serving and eating
761	Cup		9	9	11			Transfer	Serving and eating
762	Cup		8	8	10			Transfer	Serving and eating
764	Bowl		8	8	10,5		10,5	Transfer and processing	Serving, eating and cooking
765	Cup		6	6	8		9,8	Transfer	Serving and eating

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
766	Cup		7	7	10		12	Transfer	Serving and eating
767	Cup		7	7	8		11	Transfer	Serving and eating
768	Cup		12	12	16			Transfer	Serving and eating
769	Cup		6	6	8			Transfer	Serving and eating
770	Cup		7	7	8			Transfer	Serving and eating
771	Cup		4	4	7			Transfer	Serving and eating
772	Cup		10	10	16			Transfer	Serving and eating
773	cup		10	10	16		16	Transfer	Serving and eating
774	Cup		8	8	16			Transfer	Serving and eating
778	Cup		6	6	8			Transfer	Serving and eating
779	Cup		8	8	12			Transfer	Serving and eating
780	Cup		6	6	10			Transfer	Serving and eating
781	Cup			0	21			Transfer	Serving and eating
782	Cup		6,4	6,4	10			Transfer	Serving and eating
783	Cup		9,5	9,5	13,5			Transfer	Serving and eating
784	Cup		10	10	16			Transfer	Serving and eating
786	Cup		6	6	10			Transfer	Serving and eating
787	Cup		8	8	10			Transfer	Serving and eating
788	Cup		7,8	7,8	8			Transfer	Serving and eating
789	Cup		6	6	7,5			Transfer	Serving and eating
790	Bowl		4	4	10		10	Transfer and	Serving, eating and
791	Cup		12	12	16			processing Transfer	cooking Serving and
792	Cup		6.8	6.8	7.6			Transfer	eating Serving and
793	Cup		12	12	12		23.4	Transfer	eating Serving and
794	Cup		6	6	6		9	Transfer	eating Serving and
795	Cup		5.8	5.8	6.5		22.5	Transfer	eating Serving and
195	Cup		5,0	5,0	0,5		22,5	114115101	eating

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
796	Cup		10	10	12		14,5	Transfer	Serving and eating
797	Cup		6,4	6,4	8,4			Transfer	Serving and eating
798	Cup		6	6	8			Transfer	Serving and eating
800	Cup		13	12,5	13			Transfer	Serving and eating
801	Cup		7	7	9,2			Transfer	Serving and eating
803	Cup		8	8	14,4			Transfer	Serving and eating
804	Cup		8	8	10,2			Transfer	Serving and eating
805	Cup		8	8	10			Transfer	Serving and eating
806	Cup		8	8	10			Transfer	Serving and eating
807	Cup		9	9	12			Transfer	Serving and eating
808	Cup		6	6	10			Transfer	Serving and eating
810	Cup		12	11,6	15,2			Transfer	Serving and eating
811	Cup		15	15	18			Transfer	Serving and eating
812	Cup		6,7	6,7	8			Transfer	Serving and eating
813	Cup		6	6	8			Transfer	Serving and eating
814	Cup		5	5	5			Transfer	Serving and eating
815	Cup		5	5	5			Transfer	Serving and eating
817	Cup		10	10	10			Transfer	Serving and eating
818	Cup		8	8	8			Transfer	Serving and eating
821	Cup		6	6	12			Transfer	Serving and eating
822	Cup		7,5	7,5	8			Transfer	Serving and eating
823	Cup		9,3	9,3	10			Transfer	Serving and eating
824	Cup		8	8	11			Transfer	Serving and eating
825	Cup		8	8	10,2			Transfer	Serving and eating
827	Cup		12	12	10			Transfer	Serving and eating
828	Cup		9,7	9,7	8,3			Transfer	Serving and eating

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
829	Cup		12	12	14			Transfer	Serving and eating
831	Cup		13	12,8	20			Transfer	Serving and eating
834	Cup		4	4	4			Transfer	Serving and eating
836	Cup		8	8	9			Transfer	Serving and eating
838	Cup		11	11	13,2			Transfer	Serving and eating
842	Jar		16	16,4	12,4	8		Transfer and storage	Transport and short- term storage
845	Bowl		14	14	12		33	Transfer and processing	Serving, eating and cooking
846	Bowl		14	14	11,2		24	Transfer and processing	Serving, eating and cooking
847	Cup		7,5	7,5	6		18	Transfer	Serving and eating
848	Cup		8	8	6,5		27	Transfer	Serving and eating
849	Cup		8	8	8		18	Transfer	Serving and eating
850	Cup		10	10	11,2		17,4	Transfer	Serving and eating
851	Cup		11	11,2	12		20	Transfer	Serving and eating
852	Cup		9	9	6		19	Transfer	Serving and eating
853	Cup		8	8	8		20,4	Transfer	Serving and eating
854	Cup		12	12	10,2		16,4	Transfer	Serving and eating
855	Cup		8	8	6		15,2	Transfer	Serving and eating
856	Cup		10	10	8		12,6	Transfer	Serving and eating
859	Cup		12	12	12		18	Transfer	Serving and eating
860	Cup		13	12,8	11,2		24	Transfer	Serving and eating
861	Cup		10	10	8		22,6	Transfer	Serving and eating
862	Cup		11	11,2	10		20	Transfer	Serving and eating
864	Cup		6,4	6,4	8		9,2	Transfer	Serving and eating
865	Cup		7,2	7,2	6,4		8	Transfer	Serving and eating

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
866	Cup		10	10	10		9,6	Transfer	Serving and eating
867	Cup		8	8	10		8	Transfer	Serving and eating
868	Cup		14	14	12		10	Transfer	Serving and eating
889	Cup		8	8	8			Transfer	Serving and eating
890	Jar		12	12	10		13,6	Transfer and storage	Serving, eating, transport and short- term storage
892	Bowl		24	24	23		24,4		·
893	Bowl		15	14,8	12,4		27	and processing	Serving, eating and cooking
896	Jar		22	22,2	12		20	Transfer and storage	Transport and short- term storage
897	Jar		18	18	10	6	21	Transfer and storage	Transport and short- term storage
898	Jar		21	20,5	12	8		Transfer and storage	Transport and short- term storage
899	Bowl		14	13,5	10		10	Transfer and processing	Serving, eating and cooking
900	Jar		14	14	10		30	Transfer	Serving, eating, transport and short- term storage
903	Hourglass pot		12	12	10			Transfer	Serving and eating
904	Hourglass pot		10	10	8			Transfer	Serving and eating
905	Hourglass pot		12	12	10			Transfer	Serving and eating
906	Hourglass pot		14	13,9	13			Transfer	Serving and eating
907	Hourglass pot		12	12	10,3			Transfer	Serving and eating
908	Hourglass pot		11	11,2	8			Transfer	Serving and eating
909	Hourglass pot		17	16,8	13,8			Transfer	Serving and eating

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
911	Hourglass pot		12	11,5	8			Transfer	Serving and eating
912	Hourglass pot		12	11,5	10,1			Transfer	Serving and eating
914	Jar		23	23,4	12	8	16	Transfer and storage	Transport and short- term storage
915	Jar		13	13,2	10,1		10,1	Transfer	Serving, eating, transport and short- term storage
916	Hourglass pot		14	13,5	10			Transfer	Serving and eating
917	Jar		23	23	14		22	Transfer and storage	Transport and short- term storage
919	Jar		23	23	14	9,2	18	Transfer and storage	Transport and short- term storage
920	Jar		15	15	10		14	Transfer and storage	Transport and short- term storage
921	Jar		12	12	10		10	Transfer	Serving, eating, transport and short- term storage
922	Jar		12	11,5	8		8	Transfer	Serving, eating, transport and short- term storage
923	Jar		13	13,2	13		13	Transfer	Serving, eating, transport and short- term storage
924	Jar		13	13,4	11,5		11,5	Transfer	Serving, eating, transport and short- term storage

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
925	Bowl		10	10	7,5		7,5	Transfer and processing	Serving, eating and cooking
928	Bowl		14	14	12		43,2	Transfer and processing	Serving, eating and cooking
929	Bowl		12	12	14		14	Transfer and processing	Serving, eating and cooking
932	Jar		12	12	8		12	Transfer	Serving, eating, transport and short- term storage
934	Jar		23	23	16	8	20	Transfer and storage	Transport and short- term storage
935	Jar		18	18	12	8	18	Transfer and storage	Transport and short- term storage
936	Jar		23	22,8	13,6		18,4	Transfer and storage	Transport and short- term storage
937	Jar		30	30	16	10	24	Storage	Long-term storage
939	Jar		28	28	12	8	20	Transfer and storage	Transport and short- term storage
940	Jar		29	29	13,5	48,8	24	Transfer and storage	Transport and short- term storage
941	Jar		20	20	11,6		14	Transfer and storage	Transport and short- term storage
942	Jar		28	28,2	14	8	24	Transfer and storage	Transport and short- term storage
943	Jar		28	28	16	8	24	Transfer and storage	Transport and short- term storage
945	Jar		11	11,2	8		12	Transfer and storage	Serving, eating, transport and short-

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
									term storage
946	Jar		42	42	21	12	36	Storage	Long-term
947	Jar		46	45,6	23,4	12	39,6	Storage	Long-term
948	Jar		20	20	11,5	6	19,6	Transfer and storage	Transport and short- term storage
949	Jar		24	24	15,7		24	Transfer and storage	Transport and short- term storage
950	Jar		16	16	11,3	4	15,2	Transfer and storage	Transport and short- term storage
951	Jar		19	19	13,2	6	20	Transfer and storage	Transport and short- term storage
952	Cup		11	10,8	9,2		10	Transfer	Serving and eating
953	Jar		34	34,2	14,2		26	Storage	Long-term storage
954	Jar		36	36	15,2	9,6	28,8	Storage	Long-term storage
955	Jar		26	26,1	13,8	8	22	Transfer and storage	Transport and short- term storage
956	Jar		22	21,5	12	8	17,2	Transfer and storage	Transport and short- term storage
957	Jar		40	39,6	26			Storage	Long-term storage
959	Jar		28	28,2	11,6	8	19,2	Transfer and storage	Transport and short- term storage
960	Jar		17	17	13	9	15,2	Transfer and storage	Transport and short- term storage
962	Cup		11	11,2	9,2		12	Transfer	Serving and eating
963	Jar		24	24	14,5		20	Transfer and storage	Transport and short- term storage

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
964	Jar		16	16	8,8		12	Transfer and storage	Transport and short- term storage
965	Jar		15	15	10,2	6	12	Transfer and storage	Serving, eating, transport and short- term storage
966	Jar		16	16	11		16	Transfer	Serving, eating, transport and short- term storage
967	Jar		10	10	8		10	Transfer and storage	Serving, eating, transport and short- term storage
968	Jar		6	6	4		6,4	Transfer and storage	Serving, eating, transport and short- term storage
969	Jar		20	20	12	8	16,8	Transfer and storage	Transport and short- term storage
970	Jar		20	20	12	8	18	Transfer and storage	Transport and short- term storage
971	Jar		16	16	12	8	16	Transfer and storage	Transport and short- term storage
973	Jar		27	26,8	20				
974	Jar		18	18	16		18	Transfer and storage	Transport and short- term storage
977	Hourglass pot		15	14,5	11,5		11,5	Transfer	Serving and eating
978	Hourglass pot		16	15,6	12			Transfer	Serving and eating
979	Hourglass pot		12	12	12			Transfer	Serving and eating
980	Hourglass pot		10	10	8			Transfer	Serving and eating

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
981	Hourglass pot		10	10	8			Transfer	Serving and eating
984	Hourglass pot		11	11,2	9			Transfer	Serving and eating
985	Hourglass pot		8	8	10			Transfer	Serving and eating
986	Hourglass pot		12	12	11			Transfer	Serving and eating
989	Hourglass pot		14	14	11			Transfer	Serving and eating
991	Hourglass pot		14	14	11			Transfer	Serving and eating
992	Hourglass pot		13	13	10			Transfer	Serving and eating
993	Hourglass pot		16	16	10			Transfer	Serving and eating
994	Hourglass pot		16	15,5	12			Transfer	Serving and eating
995	Hourglass pot		12	12	10			Transfer	Serving and eating
996	Hourglass pot		12	12	9,8			Transfer	Serving and eating
997	Hourglass pot		17	17	12			Transfer	Serving and eating
998	Hourglass pot		17	17	11			Transfer	Serving and eating
999	Jar		42	42	27,6		40,8	Storage	Long-term storage
1000	Jar		46	46	32		33	Storage	Long-term storage
1001	Jar		38	38	20		36	Storage	Long-term storage
1003	Jar		45	45	32		36	Storage	Long-term storage
1004	Jar		21	21	15		22,8	Transfer and storage	Transport and short- term storage
1005	Jar		12	12	9		12	Transfer	Serving, eating, transport and short- term storage
1006	Jar		12	12	8		10,8	Transfer	Serving, eating, transport and short- term storage
1007	Jar		15	14,5	10		16	Transfer	Serving, eating, transport

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
									and short- term storage
1008	Jar		43	43	28		40		0
1012	Jar		26	26	15		22	Transfer and storage	Transport and short- term storage
1013	Jar		24	24	8	20	20	Transfer and storage	Transport and short- term storage
1014	Jar		24	24	8		19,6	Transfer and storage	Transport and short- term storage
1015	Jar		26	26	16		24	Transfer and storage	Transport and short- term storage
1016	Jar			0	14		25,6		
1017	Jar			0	17		38,8		
1018	Jar			0	16		40		
1019	Jar			0	16		30		T.
1020	Jar		42	42	30	18	38,4	Storage	Long-term storage
1021	Jar		34	34,2	28			Storage	Long-term storage
1023	Jar		30	30	18	12	25,8	Storage	Long-term storage
1026	Jar			0	26,4		39,6	Storage	Long-term storage
1027	Jar		12	12	10,8	6	13,2	Transfer and storage	Transport and short- term storage
1028	Jar		38	37,8	16,8		24	Storage	Long-term storage
1029	Jar		40	39,6	19,2	9	33	Storage	Long-term storage
1030	Jar		36	39,6	24		35	Storage	Long-term storage
1031	Jar		49	49,2	27	15	36	Storage	Long-term storage
1032	Jar		41	40,8	25		38,4	Storage	Long-term storage
1033	Jar		43	43,2	22,2		36	Storage	Long-term storage
1034	Jar		22	21,6	9,6	6	13,8	Transfer and storage	Transport and short- term storage

Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
1035	Jar		22	21,6	9		18	Transfer and storage	Transport and short- term storage
1036	Jar		22	21,6	14,4	6	18	Transfer and storage	Transport and short- term storage
1037	Jar		13	12,6	9	6	12	Transfer and storage	Serving, eating, transport and short- term storage
1038	Jar		27	27	16,8		30	Transfer and storage	Transport and short- term storage
1041	Jar		19	18,6	12,6		20,4	Transfer and storage	Transport and short- term storage
1044	Jar		22	22,2	19,2	9	21	Transfer and storage	Transport and short- term storage
1046	Jar		21	22,2	19		24	Transfer and storage	Transport and short- term storage
1047	Jar		22	21,6	19,2		24	Transfer and storage	Transport and short- term storage
1050	Jar		17	16,8	13,2		22,2	Transfer and storage	Transport and short- term storage
1051	Jar		35	35	24	9,6	27		
1052	Jar		26	25,8	20,4	12	24	Transfer and storage	Transport and short- term storage
1053	Jar		18	18	19,8		24	Transfer and storage	Transport and short- term storage
1054	Bowl		27	27	21		17,2		
1055	Jar		20	19,8	16,8		22,8	Transfer and storage	Transport and short- term storage

Cat.N.	Shape	HF	Н	HB	RM	BD	MD	Functional category	Use types
1056	Jar		35	35	23,4	12	30,6	Storage	Long-term storage
1057	Jar		49		28,2	12	33	Storage	Long-term storage
1058	Jar		32	32,4	27		33	Storage	Long-term storage
1059	Jar		42	42	34,8		45	Storage	Long-term storage
1061	Jar		45	45	33		45	Storage	Long-term storage
1062	Jar		43	43,2	33		45	Storage	Long-term storage
1063	Jar		30	30	31,8		39	Storage	Long-term storage
1065	Bowl		41	41,4	30		30	Processing and storage	Cooking and long- term storage
1066	Jar		33	33	24		33	Storage	Long-term storage
1067	Bowl		36	36	45		45	Processing and storage	Cooking and long- term storage
1068	Jar		34	34	34,2			Storage	Long-term storage
1070	Bowl		36	36	33		33	Processing and storage	Cooking and long- term storage
1072	Bowl		28	28,2	27		27	Processing and storage	Cooking and long- term storage
1073	Bowl		40	40,2	43,2		43,2	Processing and storage	Cooking and long- term storage
1079	Pedestalled_bowl	5,4	19	13,8	36			Serving and eating	
1080	Pedestalled_bowl	3,6	16	12,6	27,6			Serving and eating	
1081	Pedestalled_bowl	3	16	13	36,6			Serving and eating	
1082	Pedestalled_bowl	5,3	18	12,7	31,8			Serving and eating	
1084	Pedestalled_bowl	3,6	12	8,4	24,6	25,2		Serving and eating	
1086	Pedestalled_bowl	3,6	12	8,4	20,4	10,2		Serving and eating	
1087	Pedestalled_bowl	3	14	10,8	25,2	10,8		Serving and eating	
1089	Pedestalled_bowl	9,6	14	4,2	19,2	9		Serving and eating	
Cat.N.	Shape	HF	н	HB	RM	BD	MD	Functional category	Use types
--------	------------------	-----	-----	-----	------	------	------	-------------------------------	-----------------------------------
1090	Pedestalled_bowl	7,2	15	7,8	19,8	8,4		Serving and eating	
1092	Pedestalled_bowl	6	14	7,8	18	10,2		Serving and eating	
1108	Bowl		42		42		42		
1109	Bowl		15	15	17		18	Transfer and processing	Serving, eating and cooking
1110	Bowl		12		10,8		13,8	Transfer and processing	Serving, eating and cooking
1111	Bowl		18	18	16,8		24	Transfer and processing	Serving, eating and cooking
1115	Beaker		10	8,9	10,3			Transfer	Serving and eating
1116	Jar		100		36		54		
1117	Jar		44				36		
1125	Bowl				4		4		
1222	Pedestalled_bowl		17		20			Serving and eating	
1231	Cup		14		8,8			Transfer	Serving and eating

Table I.3: List of pottery finds sorted by Catalogue number. This table lists all the pottery finds that have been used in the classification of pottery shapes in chapter 6. It relates to the previous Table and includes the reminder of information regarding provenance of the items and bibliographic sources. The reader can engage also with this table from a different perspective by using Table I.4 and I.5. While Table I.4 enables to pick up relevant information while following descriptions of pottery types in chapter 6 and Appendix 2, Table I.5 can be used while reading descriptions of the main assemblages in chapter 5.

Cat.N.	trench	Related feature	Location	Bibliography
11			Monte Grande/Baffo Superiore	Castellana 1998, p.151, fig. 78.35c
77			C. da Cuminazzi	Castellana 2000, p. 62 fig. 1
78			C. da Cuminazzi	Castellana 2000, p.65, fig. 5a
79	Strata 1-1a		Monte Grande/Baffo Superiore	Castellana 1996a, p.505, fig. 2
81			Monte Grande/Baffo Superiore	Castellana 1996a, p.505, fig. 2
82			C. da Cuminazzi	Castellana 2000, p.65, fig. 5a
83			C. da Cuminazzi	Castellana 2000, p.63, fig. 3a
84			C.da Cuminazzi	Castellana 2000, p. 65, fig. 4c
85			C. da Cuminazzi	Castellana 2000, p.65, fig. 5b
86			C. da Cuminazzi	Castellana 2000, p.63, fig. 3b
87			C.da Cuminazzi	Castellana 2000, 63, fig. 2
88			C. da Cuminazzi	Castellana 2000, p.65, 5c
89			C. da Cuminazzi	Castellana 2000, p.65, fig. 4b
91	Strata 1-1a		Monte Grande/Baffo Superiore	Castellana 1998, p.153,
92	Strata 1-1a		Monte Grande/Baffo Superiore	Castellana 1998, p.152,
100		Grave 1	C. da Ragusetta	De Miro 1961, fig. 17b
101		Grave 1	C. da Ragusetta	De Miro 1961, fig. 17a
102		Grave 1	C. da Ragusetta	De Miro 1961, fig. 17c
103		Grave 1	C. da Ragusetta	De Miro 1961, fig. 17c
104		Grave 2	C. da Ragusetta	De Miro 1961, fig. 17g
105		Grave 1	C. da Ragusetta	De Miro 1961, fig. 17d
106		Grave 2	C. da Ragusetta	De Miro 1961,
107		Grave 2	C. da Ragusetta	De Miro 1961, fig. 17i
108		Grave 2	C. da Ragusetta	De Miro 1961, fig. 17f
110		Hut 2	La Muculufa	McConnell 1995, p.148, fi.g 22.4
111		Hut 2	La Muculufa	McConnell 1995, p.147, fig. 22.2
112		Hut 3	La Muculufa	McConnell 1995, p.147, fig. 21.1
113	Strata 2-2a		Monte Grande/Baffo Superiore	Castellana 1998, p.141, fig. 75.11c
114			La Muculufa	Ianni 2009, p.245, fig. 1
115	Strate 2.22		Monte Grande/Baffo	Castellana 1998, p.139,
115	Strata 2-2a		Superiore	fig. 72.1c
117			La Muculufa	Ross Holloway et al. 1990, p.33, fig. 43b
118			La Muculufa	Ross Holloway et al. 1990, p.33, fig. 43d

Cat.N.	trench	Related feature	Location	Bibliography
119	F 200		La Muculufa	Mconnell 1995, p.161,
120			La Muculufa	Ianní 2009, p.257, fig. 7
121			La Muculufa	McConnell 1995, p.201, C2
122			La Muculufa	Ianni 2009, p.261, fig. 12
123	F 134	Floor Hut 3 (upper)	La Muculufa	McConnell 1995, fig. 137
124			Monte Grande/Baffo	Castellana 1998, p.139,
			Superiore	fig. 72.4c
125			La Muculuta	Ianni 2009, p.245, fig. 1
126			La Muculufa	Ross Holloway et al. 1990, fig. 38
127	Saggio Lavore		Manfria	Orlandini 1962, p.49.4
128	Test pit 9		Manfria	Orlandini 1962, p.47.1
129	Test pit 9		Manfria	Orlandini 1962, p.47.1
131			Monte Grande/Baffo Superiore	Castellana 1996a, p.505, fig. 2
132			Manfria	Orlandini 1962, p.13
133			Mantria	Orlandini 1962, 10.3
135	Stratum 2-2a	Enclosure	Monte Grande/ Barro	Castellana 1998, p.139,
			Monte Grande/Baffo	Castellana 1998 p 141
136	Stratum 2-2a	Enclosure	Superiore	fig. 75.14c
137			La Muculufa	Ianni 2009, p.245, fig. 1
138	F 80		La Muculufa	McConnell 1995, p.155, fig. 29.81
139	F 80		La Muculufa	McConnell 1995, p.155, fig. 29.82
140			La Muculufa	Ianni 2009, p.245, fig. 1
141			La Muculufa	Ianni 2009, p.245, fig. 1
142			La Muculufa	Ross Holloway et al. 1990, fig.
143			La Muculufa	Ross Holloway et al. 1990, fig. 53
145			La Muculufa	Ianni 2009, p.245, fig. 1
146			La Muculufa	Ianni 2009, p.245, fig. 1
147			La Muculufa	Ianni 2009, p.260, fig. 10
148			La Muculuta	lanni 2009, p.245, fig. 1
149			La Muculufa	Ianni 2009, p.259, fig. 8
150			La Muculufa	Ianni 2009, p.259, fig. 8
152		Hut 3	Manfria	Orlandini 1962, 13, 3
152		That 5	La Muculufa	Ianni 2009 p.250 fig. 3
154			La Muculufa	Ianni 2009, p.261, fig. 12
155			La Muculufa	Ianni 2009, p.261, fig. 12
156			La Muculufa	Ross Holloway et al. 1990, p.33, fig 44b
157			La Muculufa	Ross Holloway et al. 1990, p.33, fig. 43a
158			La Muculufa	Ross Holloway et al. 1990, p.32, fig. 40
159			La Muculufa	Ianni 2009, p.245, fig. 1
160			Gela Molino a vento	Gennusa 2015, p.96, 37.2
161	I Lotti	Burial 21	Manfria	Orlandini 1962
162	Test pit 10		Manfria	Orlandini 1962, 44.3
163	I Lotti	Burial 21	Manfria	Gennusa 2015, p.96, fig. 37.6

Cat.N.	trench	Related feature	Location	Bibliography
164			La Muculufa	Ianni 2009, p.259, fig. 8
165			La Muculufa	Ross Holloway et al. 1990, p.34, fig. 49
166	Test pit 16		Manfria	Orlandini 1962, fig. 24
167	•	Hut 8	Manfria	Orlandini 1962, fig. 24
168		Hut 9	Manfria	Orlandini 1962, fig. 24
169			La Muculufa	Ross Holloway et al. 1990, p.32, fig. 39
170			La Muculufa	Ross Holloway et al. 1990, p.32, fig 41c
171	Test pit 7		Manfria	Orlandini 1962, fig.46
172		Hut 5	Manfria	Orlandini 1962
173		Hut 9	Manfria	Orlandini 1962
174			Manfria	Gennusa 2015, p.103, 43.6
175	Test pit 8		Manfria	Orlandini 1962
176		Hut 3	Manfria	Orlandini 1962
177		Hut 2	La Muculufa	McConnell 1995, p.253, fig. 16.16
178	Test pit 16		Manfria	Orlandini 1962
179		Hut 1	La Muculufa	McConnell 1995, p.142, fig. 16.1
180		Hut 4	La Muculufa	McConnell 1995, p.154, fig. 28.75
184		Hut 9	Manfria	Orlandini 1962, p.28.4
186		Hut 5	Manfria	Orlandini 1962, 18.3
187		Hut 9	Manfria	Orlandini 1962, 28.3
188	Strata 1-1a		Monte Grande/Baffo Superiore	Castellana 1998, p.173, fig. 84.95c
189	Test pit 6		Manfria	Orlandini 1962, 42.3
190		Hut 8	Manfria	Orlandini 1962, fig. 24
191			La Muculufa	Ianni 2009, p.250, fig. 3
196	F 134	Collapsed wall of Hut 3 (upper)	La Muculufa	Ianni 2009, p.245, fig. 1
197			La Muculufa	Ianni 2009, p.245, fig. 1
198		Hut 3	La Muculufa	McConnell 1995, p.165, fig. 39.164
199		Hut 2	La Muculufa	McConnell 1995, p.157, fig. 31.118
244			Cantigaglione	Gennusa 2015, p.79, fig. 25.19
245			Cantigaglione	Gennusa 2015, p.99, fig. 40.9
247	Trench D		Casalicchio_Agnone	Gnesotto 1982; Gennusa 2015, p.81, fig. 26.4
248	Trench D		Casalicchio_Agnone	Gnesotto 1982, fig. 8
249		Hut 3	Manfria	Orlandini 1962, fig. 15.2
251	Test pit 9		Manfria	Gennusa 2015, p.82, fig. 27.13
252	Test pit 16		Manfria	Orlandini 1962, fig. 45.5
253		Hearth C	Manfria	Orlandini 1962
254	Test pit 8		Manfria	Orlandini 1962
257			La Muculufa	Ianni 2009, p.257, fig. 7
258			La Muculufa	Ross Holloway et al. 1990, p.32, fig. 42
259		Hut 2	La Muculufa	McConnell 1995, p.153, fig. 27.69
260		Hut 2	La Muculufa	McConnell 1995, p.153, fig. 27.68

Cat.N.	trench	Related feature	Location	Bibliography
261		Hut 2	La Muculufa	McConnell 1995, p.153, fig. 27.70
262		Hut 2	La Muculufa	McConnell 1995, p.154, fig. 28.72
263		Hut 2	La Muculufa	McConnell 1995, p.154, fig. 28.71
267			La Muculufa	Ianni 2009, p.245, fig. 1
268	F 75		La Muculufa	McConnell 1995, p.156, fig. 30.90
269	F 74		La Muculufa	McConnell 1995, p.156, fig. 30.93
272		Hut 2	La Muculufa	McConnell 1995, p.157, fig. 31.94
343		Tomb	Passarello	Mauceri 1880, fig. AB.5
368	F 171		La Muculufa	McConnell 1995, p.161, fig. 35.138
465			Favara-contrada Muntagnedda	Castellana 1997, p.157, Favara 5554
466			Favara-contrada	Castellana 1997, p.161,
			Muntagnedda	Favara 5555
467			Favara-contrada Muntagnedda	Castellana 1997, p.157, Favara 5552
468		Tomb a	Torre donzelle	Mannino 1994, p.167, tig. 21.b
469		Tomb a	Torre donzelle	Mannino 1994, p.166, fig. 20.c
470		Tomb a	Torre donzelle	Mannino 1994, p.167, fig. 21.a
471			Naro	Tusa and Pacci 1990, p.171 fig. 81
472		Tomb	Contrada Pergola	Mannino 1971, fig. 3.10
474		Hut 5	Manfria	Orlandini 1962, fig. 18. 24
475		Tomb 93	Castiglione	Gennusa 2015, p.53, 4.5
476			Partanna	Tusa and Pacci 1990, p.132 fig. 26
478			Naro	Tusa and Pacci 1990, p.172 fig. 82
479			Naro	Tusa and Pacci 1990, p.178 fig. 88
481	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.110, AGS/3444
482	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.118, AGS/3449
483	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.138, AGS/2140
484	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.158, AGS/2151
485	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.128, AGS/2150
486		Tomb 1	Ciavolaro	Castellana 1996b, p.226, AGS/5433
487	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.146, AGS/2137
488	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.164, AGS/5502
489	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.160, AGS/2141

Cat.N.	trench	Related feature	Location	Bibliography
490	Strato 3		Ciavolaro stipe	Castellana 1996b, p.182, AGS/5492
491	Strato 3		Ciavolaro stipe	Castellana 1996b, p.204, Ags/3441
492	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.132, AGS/5493
493	Strato 3		Ciavolaro stipe	Castellana 1996b, p.204, AGS/3442
494	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.158, AGS/5466
495	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.116, AGS/2152
496	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.132, AGS/3447
497	Ambiente b		Grotta Ticchiara	Castellana 1997, p.121, fig. 48
498	Survey		Partanna	Tusa and Pacci 1990, p.137, fig. 31
499	Survey		Partanna	Tusa and Pacci 1990, p.131, fig. 24
500	Survey		Partanna	Tusa and Pacci 1990, p.134, fig. 28
501	Survey		Naro	Tusa and Pacci 1990, p.173 fig. 83
502	Survey		Partanna	Tusa and Pacci 1990, p.129, fig. 22
503	Survey		Naro	Tusa and Pacci 1990, p.174 fig.84
504	Survey		Naro	Tusa and Pacci 1990, p.177 fig. 87
505			Contrada Pergola	Mannino 1971, fig. 3.8
506	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.106, AGS/2131
507	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.138, AGS/5450
508		Tomb 3	Valsavoia	Orsi 1902a, 2.5
509	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.130, AGS/3446
510	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.136, AGS/2129
511	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.130, AGS/2153
512	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.92, AGS/5490
513		Tomb 2	Ciavolaro	Castellana 1996b, p226, AGS/5425
514		Tomb 1	Ciavolaro	Castellana 1996b, p226, AGS/5426
515		Tomb 93	Castiglione	Rovetto 2006, fig. 2 a-b
516			Poggio Biddine	Gennusa 2015, p57, 8.1
517			Partanna	Tusa and Pacci 1990, p.179 fig. 89
518			Naro	Tusa and Pacci 1990, p.136 fig. 30
519			Naro	Pacci 1987, fig. 23
520			Partanna	Tusa and Pacci 1990, p.135 fig. 29
521			Naro	Tusa and Pacci 1990, p.180 fig. 90

Cat.N.	trench	Related feature	Location	Bibliography
522			Contrada Paolina	Procelli 1982, fig. 27.4
523		Tomb a	Torre Bigini	Mingazzini 1939, fig. 1.3
524			Dantanna	Tusa and Pacci 1990,
524			Fartanna	p.140, fig. 36
525			Partanna	Tusa and Pacci 1990,
525			1 artanna	p.139 fig. 33
526		Hut 8	Castelluccio Acropoli	Gennusa 2015, p.59, 9.1
527	Ambiente b		Grotta Ticchiara	Castellana 1997, p.124,
				fig. 56
528	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.130, AGS/5487
529	Grotte Miniere 1-2- 4		Colle Tabuto	Orsi 1898, fig. 20.3
530	Ambiente b		Grotta Ticchiara	Castellana 1997, p.118, fig.47
531			Naro	Tusa and Pacci 1990, p.170, fig. 80
532	Ambiente b		Grotta Ticchiara	Castellana 1997, p.120, fig. 49
533			Piano dell'Angelo	Amoroso 1979, fig. 6.3
534	Ambienti a-c	Burial 7	Grotta Ticchiara	Castellana 1997, p.90, fig. 13
535	Ambienti a-c	Burial 14	Grotta Ticchiara	Castellana 1997, p.104, fig. 32
536		Tomb 1	Ciavolaro	Castellana 1996b, p.226,
538	Strato 3 inf		Ciavolaro	Castellana 1996b, p.208, AGS/5499
539		Tomb 1	Ciavolaro	Castellana 1996b, p.224, AGS/5435
540	Ambienti a-c	Burial 8	Grotta Ticchiara	Castellana 1997, p.90, fig. 14
541	Ambienti a-c	Burial 10	Grotta Ticchiara	Castellana 1997, p.94, fig. 20
542	Ambienti a-c	Burial 9	Grotta Ticchiara	Castellana 1997, p.92, fig. 16
543			Naro	Tusa and Pacci 1990, p.175 fig. 89
544	Ambiente b		Grotta Ticchiara	Castellana 1997, p.118, fig. 45
545	Ambienti a-c	Burial 14	Grotta Ticchiara	Castellana 1997, p.105, fig. 33
546		Damp	Castelluccio villaggio	Orsi 1893a, fig. 6.12
547		Tomb 10	Cava della Secchiera	Orsi 1893b, fig. 2
548	Ambiente b		Grotta Ticchiara	Castellana 1997, p.116, fig. 42
549	Ambiente b		Grotta Ticchiara	Castellana 1997, p.116, fig. 43
550	Strato 3		Ciavolaro stipe	Castellana 1996b, p.199, AGS/3450
551	Strato 3		Ciavolaro stipe	Castellana 1996b, p.196, AGS/3458
552			Naro	Tusa and Pacci 1990, p.181, fig. 91
554		Hut 8	Castelluccio Acropoli	Gennusa 2015, p.63, 12.6
555	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.112, AGS/2149
556	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.112, AGS/5467

Cat.N.	trench	Related feature	Location	Bibliography
557	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.120, AGS/5476
558	Strato 3 inf		Ciavolaro stipe	Castellana 1996b, p.134, AGS/5501
559	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.152, AGS/5505
560	Strato 3		Ciavolaro stipe	Castellana 1996b, p.160, Ags/3457
561	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p. 204, AGS/5458
562			Naro	Tusa and Pacci 1990, p.185, fig. 94
563			Naro	Tusa and Pacci 1990, p.186, fig. 95
564	Strato 3a inf		Ciavolaro stipe	Castellana 1997, p.106, fig. 35
565	Ambienti a-c	Burial 14	Grotta Ticchiara	Castellana 1997, p.122, fig. 51
566	Ambiente b		Grotta Ticchiara	Tusa and Pacci 1990, p.185, fig. 94
567	Strato 3a inf		Ciavolaro stipe	Tusa and Pacci 1990, p.186, fig. 95
568			Montesara	Orsi 1895, fig. 4.3
569		Tomb1	Ciavolaro	Castellana 1996b, p.220, AGS/5445
570	Ambiente b		Grotta Ticchiara	Castellana 1997, p.128, fig. 57
571	Ambiente b		Grotta Ticchiara	Castellana 1997, p.128, fig. 59
572			Naro	Tusa and Pacci 1990, p.189 fig. 98
573	Ambiente b		Grotta Ticchiara	Castellana 1997, p.124, fig. 54
574			Favara-contrada Muntagnedda	Castellana 1997, p.160, Favara 5537
575	Ambienti a-c	Burial 18	Grotta Ticchiara	Castellana 1997, p.110, fig. 40
576	Ambiente b		Grotta Ticchiara	Castellana 1997, p.122, fig. 53
577	Ambiente b		Grotta Ticchiara	Castellana 1997, p.128, fig. 60
578	Ambiente b		Grotta Ticchiara	Castellana 1997, p.128, fig. 61
579	Ambiente b		Grotta Ticchiara	Castellana 1997, p.126, fig. 58
580			Naro	Tusa and Pacci 1990, p.188 fig. 97
581			Naro	Tusa and Pacci 1990, p.187 fig. 96
582	Ambienti a-c	Burial 6	Grotta Ticchiara	Castellana 1997, p.88, fig. 12
583	Ambiente b		Grotta Ticchiara	Castellana 1997, p.124, fig. 55
584	Strato 3		Ciavolaro stipe	Castellana 1996b, p.166, AGS/3445
585	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.108, AGS/5486
586	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.138,

Cat.N.	trench	Related feature	Location	Bibliography
587	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.94, AGS/2142
588	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.106, AGS/2136
589	starto 3a inf		Ciavolaro stipe	Castellana 1996b, p.134, AGS/2135
590	Strato 3		Ciavolaro stipe	Castellana 1996b, p.180, AGS/5497
592	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.124,
593	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.94, AGS/2132
594	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.124, AGS/2145
595	Ambienti a-c	Burial 9	Grotta Ticchiara	Castellana 1997, p.92, fig. 17
596			Contrada Paolina (Esterno Tomba 2)	Procelli 1981, fig. 30.4
597			Naro	Tusa and Pacci 1990, p.190, fig. 99
598			Passarello	Mauceri 1880, fig. AB.1-2
599	Grotta Miniera 5		Colle Tabuto	Orsi 1898, fig. 21.5
600	Grotta Miniera 5		Colle Tabuto	Gennusa 2015, p.71. fig. 19.2
601			Piano dell'Angelo	Amoroso 1979, fig. 7.1
603			Piano dell'Angelo	Amoroso 1979, fig. 6.7
606		Tomb 10	Cava della Secchiera	Orsi 1893b, fig. 2
607	Ambienti a-c	Burial 3	Grotta Ticchiara	Castellana 1997, p.82, fig. 51
608	Ambienti a-c	Burial 4	Grotta Ticchiara	Castellana 1997, p.82, fig. 6
609	Ambiente b		Grotta Ticchiara	Castellana 1997, p.120, fig. 50
610	Ambienti a-c	Burial 5	Grotta Ticchiara	Castellana 1997, p.84, fig. 8
611			Partanna	Tusa and Pacci 1990, p.138, fig. 32
612		Tomba?	Contrada Pergola	Mannino 1971, fig. 3.9
613			Partanna	Tusa and Pacci 1990, p.140, fig. 35
614			Partanna	Tusa and Pacci 1990, p.132, fig. 25
615			Partanna	Tusa and Pacci 1990, p 139 fig. 34
616			Naro	Tusa and Pacci 1990, p. 176, fig. 86
617			Partanna	Tusa and Pacci 1990, p.133, fig. 27
618		Tomb 1	Ciavolaro	Castellana 1996b, p.230, AGS/1
619		Tomb 1	Ciavolaro	Castellana 1996b, p.224, AGS/5434
620		Tomb 1	Ciavolaro	Castellana 1996b, p.224, AGS/5431
621		Tomb 1	Ciavolaro	Castellana 1996b, p.222, AGS/5432
622	Strato 3		Ciavolaro stipe	Castellana 1996b, p.166, AGS/3454

Cat.N.	trench	Related feature	Location	Bibliography
623	Strato 3		Ciavolaro stipe	Castellana 1996b, p.164, AGS/5446
624			Grotta Lazzaro	Di Stefano 1979, fig. 21
626		Tomb 1	Ciavolaro	Castellana 1996b, p.224, AGS/5430
627	Ambiente b		Grotta Ticchiara	Castellana 1997, p.122, fig. 52
628			Naro	Tusa and Pacci 1990, p.184, fig. 93
629	Strato 3		Ciavolaro stipe	Castellana 1996b, p.204, AGS/3445
630	Strato 3a inf		Ciavolaro stipe	Castellana 1996b, p.162, AGS/4763
649			Partanna	Tusa and Pacci 1990, p.120, fig. 8
650			Partanna	Tusa and Pacci 1990, p.123, fig. 14
651	Ambiente B		Grotta Ticchiara	Castellana 1997, p.130, fig. 63
652	F 200	Grey soil with bits of limestone, perhaps a floor	La Muculufa	McConnell 1995, 165, fig. 39.139
653		Esterno Tomb 2	Contrada Paolina	Procelli 1981, fig. 27.7
655			Naro	Tusa and Pacci 1990, p.148, fig. 47
656	Ambienti a-c	Burial 9	Grotta Ticchiara	Castellana 1997, p.92, fig. 18
657	Grotta Miniera 5		Colle Tabuto	Orsi 1898, fig. 21.2
659	Strato 3		Ciavolaro stipe	Castellana 1996b, p.176, AGS/41
660			Torre Bigini	Mingazzini 1939, fig. 2.8
661		Tomb 1	Ciavolaro	Castellana 1996b, p.220, AGS/5443
662	Ambienti a-c	Burial 10	Grotta Ticchiara	Castellana 1997, p.96, fig. 22
663	Ambiente b		Grotta Ticchiara	Castellana 1997, p.132, fig. 66
664	Ambiente b		Grotta Ticchiara	Castellana 1997, p.130, fig. 64
665			Naro	Tusa and Pacci 1990, p.156, fig. 59
666			Partanna	Tusa and Pacci 1990, p.121, fig. 9
667			Partanna	Tusa and Pacci 1990, p.121, fig. 10
668	Ambienti a-c	Burial 14	Grotta Ticchiara	Castellana 1997, p.106, fig. 34
669		Tomb A	Torre Bigini	Mingazzini 1939, fig. 2.10
670	Ambiente b		Grotta Ticchiara	Castellana 1997, p.132, fig. 65
671			Naro	Tusa and Pacci 1990, p.159, fig. 66
672		Tomb 1S	Palagonia	Maniscalco 1993-1994, fig. 5.3
673	Ambienti a-c	Burial 5	Grotta Ticchiara	Castellana 1997, p.86, fig. 9
674		Tomb 12	Cava della Secchiera	Orsi 1893b, fig. 2

Cat.N.	trench	Related feature	Location	Bibliography
675		Tomb 17	Marianopoli-Valleoscura	Fiorentini 1985-86, fig. 3.2
677	F 70		La Muculufa	McConnell 1995, p.152, fig. 26.55
709		Hut 2	La Muculufa	McConnell 1995, p. 39
710		Hut 2	La Muculufa	McConnell 1995, p.39
716		Hut 2	La Muculufa	McConnell 1995, p.43
717		Hut 2	La Muculufa	McConnell 1995, p.43
719		Hut 2	La Muculufa	McConnell 1995, p.44
735	Ambiente b		Grotta Ticchiara	Castellana 1997, p.134, fig. 69
736			San Giuliano	Gennusa 2015, p.79, 25.6
737			Monte Calvario	Ianní 2004, fig. 95
738			Canicatti	Pacci 1987, p.12, fig. 5, 6
739			Canicatti	Pacci 1987, p.10, fig. 3, 4
740		Tomb 4	Cava Canabarbara	Orsi 1902b, fig. 6.17
7.44			Favara-contrada	Castellana 1997, p.157,
741			Muntagnedda	Favara 5532
742	Ambienti a-c	Burial 11	Grotta Ticchiara	Castellana 1997, p.97, fig. 24
743	Ambienti a-c	Burial 1	Grotta Ticchiara	Castellana 1997, p.79, fig. 1
744			Naro	Tusa and Pacci 1990, p.157, fig. 62
745			Favara-contrada Muntagnedda	Castellana 1997, p.163, Favara 5556
746	Ambienti a-c	Burial 4	Grotta Ticchiara	Castellana 1997, p.85, fig. 7
747			Naro	Tusa and Pacci 1990, p.155, fig. 58
748			Naro	Tusa and Pacci 1990, p.154, fig. 57
749	Ambienti a-c	Burial 2	Grotta Ticchiara	Castellana 1997, p.79, fig. 2
750			Canicatti	Pacci 1987, fig. 7-8
751			Gibil Gabib	Sedita Migliore 1981, fig. 11c
754			Sant'Anna	Sedita Migliore 1981, fig. 10
755			Naro	Tusa and Pacci 1990, p.153, fig. 55
756			Monte del Gesso	Ianni 2004, p.150, fig. 121
757			Piano dell'Angelo 2	Seminerio 1996, fig. 15.2
758		Tomb 13	Castelluccio necropoli	Marazzi and Tusa 2001, p.122, Iv.84
759			Pizzo San Giuseppe	Ianni 2004, p.172, fig. 142
760	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.110, ASG/3393
761		Tomb 14	Marianopoli-Valleoscura	Fiorentini 1985-86, fig. 4.2
762	Strato 3		Ciavolaro stipe	Castellana 1996b, p.196, AGS/3426
764			San Giuliano	Gennusa 2015, p.85, 29.12
765	Ambienti a-c	Burial 18	Grotta Ticchiara	Castellana 1997, p.111, fig. 39

Cat.N.	trench	Related feature	Location	Bibliography
766	Ambienti a-c	Burial 12	Grotta Ticchiara	Castellana 1997, p.99, fig. 26
767			Naro	Tusa and Pacci 1990, p.156, fig. 60
768	Ambiente b		Grotta Ticchiara	Castellana 1997, p.131, fig. 62
769			Partanna	Tusa and Pacci 1990, p.122, fig. 11
770			Naro	Tusa and Pacci 1990, p.160, fig. 67
771			Naro	Tusa and Pacci 1990, p.149, fig. 48
772	Ambienti a-c	Burial 15	Grotta Ticchiara	Castellana 1997, p.109, fig. 36
773			Naro	Tusa and Pacci 1990, p.151, fig. 52
774		Tomb 17	Marianopoli-Valleoscura	Fiorentini 1985-86, fig. 3.5
778	Trincea P		Grotta della Chiusazza	Tine 1965, fig. 31.1
779		Hut 2	Branco Grande	Orsi 1910, fig. 22.7
780	Trincea P		Grotta della Chiusazza	Tine 1965, fig. 31.7
781			La Montagna	Ianni 2004, p.52, fig. 43
782	Trincea O		Grotta della Chiusazza	Tine 1965, fig. 31.9
783	Ambienti a-c	Burial 10	Grotta Ticchiara	Castellana 1997, p.95, fig. 21
784	Ambienti a-c	Burial 8	Grotta Ticchiara	Castellana 1997, p.91, fig. 15
786	Ambiente b		Grotta Ticchiara	Castellana 1997, p.133, fig. 67
787			Favara-contrada Muntagnedda	Castellana 1997, p.165, Favara 5534
788	Ambiente b		Grotta Ticchiara	
789	Ambiente b		Grotta Ticchiara	Castellana 1997, p.135, fig. 70
790			Rocca Messana	Ianni 2004, p.197, fig. 170
791	Ambienti a-c	Burial 6	Grotta Ticchiara	Castellana 1997, p.89, fig. 11
792			San Lio	Lagona 1971, fig. V.R3
793			San Lio	Lagona 1971, fig. V.R5
794		Tomb 7	Valsavoia	Gennusa 2015, p.96, fig. 37.17
795		Tomb 19	Melilli	Lagona 1971, fig. 6.R11
796		Tomb 1S	Palagonia	Maniscalco 1993-94, fig. 5.2
797	Ambiente b		Grotta Ticchiara	Castellana 1997, p.135, fig. 68
798			Favara-contrada Muntagnedda	Castellana 1997, p.159, Favara 5535
800			Naro	Tusa and Pacci 1990, p.153, fig. 56
801		Tomb	Contrada Pergola	Mannino 1971, fig. 3.5
803			Partanna	Tusa and Pacci 1990, p.119, fig. 6
804		Tomb	Contrada Pergola	Mannino 1971, fig. 3.4
805			Naro	Tusa and Pacci, 1990, p.149, fig. 49
806			Naro	Tusa and Pacci 1990, p.148, fig. 46

Cat.N.	trench	Related feature	Location	Bibliography
907			Namo	Tusa and Pacci 1990,
007			INATO	p.50, fig. 150
808			Naro	Tusa and Pacci 1990,
000			INALO	p.50, fig. 150
810		Esterno Tomb 2	Contrada Paolina	Procelli 1981, fig. 31.10
811		Tomb 6	Valsavoia	Orsi 1902a, fig. 2.26
812	Strato 3		Ciavolaro stipe	Castellana 1996b, p.177,
	011110 0		Simt Simt Supe	AGS/3391
813			Partanna	Tusa and Pacci 1990,
014			C I'	p.122, fig. 12
014 015		Tomb 7	Valaevaia	Lagona 19/1, fig. V.K10
015			vaisavoia	Tuss and Passi 1900
817			Partanna	p 118 for 4
				Tusa and Pacci 1990
818			Partanna	p.120, fig. 7
0.04			D	Tusa and Pacci 1990,
821			Partanna	p.115, fig. 1
000			Namo	Tusa and Pacci 1990
022			INATO	p.147, fig. 47
823			Castelluccio necropoli	Orsi 1892, fig. 2.7
824			Torre Cusa	Nicolis and Mottes 1998,
			10110 0000	p.230, fig. 5
825			Naro	Tusa and Pacci 1990,
				p.152, fig. 54
827			Partanna	Tusa and Pacci 1990, p_{116} for 2
				Tusa and Pacci 1990
828			Partanna	n 117 fig 3
829		Damp	Castelluccio villaggio	Orsi 1893a fig. 6.8
831			Piano dell'Angelo	Amoroso 1979, fig. 7.4
834		Tomb 1	Monte Racello	, 8
026			N	Tusa and Pacci 1990,
830			Naro	p.151, fig. 53
838		Tomb b	Marcita	Gennusa 2015, p.93, fig.
050		101110 0	Warena	35.5; Tusa 1997b, p.27
842			Grotta Ticchiara	Castellana 1997, p.144,
0.45				fig. 80
845			Grotta della Chiusazza	Tine 1965, fig. 31.2
846			Naro	Tusa and Pacci 1990, p_{158} fig. 64
847		Tomb	Contrada Pergola	Mappino 1971 fig. 3.3
848		TOILD	Piano dell'Angelo 2	Seminerio 1996 fig 15.4
849			San Lio	Lagona 1971, fig. V.R11
0.70				Castellana 1996b. p.170.
850	Strato 3		Ciavolaro stipe	AGS/3401
051	Strate 2 :- 6		Cianale	Castellana 1996b, p.206,
851	Strato 3 inf		Ciavolaro stipe	AGS/3403
852		Tomb 1	Ciavalaro	Castellana 1996b, p.232,
032			Ciavolaro	AGS/3
853		Esterno Tomb 94	Castiglione	Rovetto 2006, fig. 9
854		Damp	Castelluccio villaggio	Orsi 1893a, fig. 6.15
855			Monteaperto	Orsi 1897, fig. 1.1A
856			Monserrato	Orsi 1897, fig. 1.10
859		Esterno Tomb 98	Castiglione	Gennusa 2015, p.96, fig.
860			Castelluccio necronoli	Orsi 1892 fig 2.3
861			San Lio	Lagona 1971. fig. V.R2

Cat.N.	trench	Related feature	Location	Bibliography
862		Tomb 1S	Palagonia	Maniscalco 1993-94, fig. 5.1
864		Tomb 1	Monte Racello	Orsi 1898, fig. 22.4
865		Tomb 1	Monte Racello	Orsi 1898, fig. 22.2
866	Trincea R		Grotta della Chiusazza	Tine 1965, fig. 30.4
867		Tomb 2	Castelluccio necropoli	Orsi 1891b, fig. 5.27
868		Tomb 14	Marianopoli-Valleoscura	Fiorentini 1985-86, fig. 4.1
889			Naro	Tusa and Pacci 1990, p.157, fig. 61
890		Tomb 1	Ciavolaro	Castellana 1996b, p.220, AGS/5444
892			Favara-contrada Muntagnedda	Castellana 1997, p.162, Favara 5531
893			Monte San Basilio	Russo 2011, fig. 2
896	Ambiente b		Grotta Ticchiara	Castellana 1997, p.142, fig. 77
897	Ambiente b		Grotta Ticchiara	Castellana 1997, p.142, fig. 78
898			Favara-contrada Muntagnedda	Castellana 1997, p.158, Favara 5536
899			Grotta Lazzaro	Di Stefano 1979, fig. 20.
900	Grotta Miniera 5		Colle Tabuto	Gennusa 2015, p.101, 42.2
903		Esterno Tomb 98	Castiglione	Gennusa 2015, p.101, 42.5
904		Tomb 94	Castiglione	Pelagatti 1973, fig. 5.74
905		Tomb 5	Monte Racello	Orsi 1898, fig. 22.17.
906			Piano dell'Angelo 2	Seminerio 1996, fig. 15.1
907		Tomb 1	Contrada Paolina	Procelli 1981, fig. 27.5.
908		Esterno Tomb 98	Castiglione	Gennusa 2015, p.101, fig. 42.11
909			Melilli	Orsi 1891b, fig. 5.23
911		Tomb 17	Melilli	Orsi 1891b, fig. 6.17.
912			San Lio	Lagona 1971, fig. VI.R8.
914			Naro	Tusa and Pacci 1990, p. 167, fig. 77.
915			Piano dell'Angelo 2	Seminerio 1996, fig. 14.3
916		Tomb 1S	Palagonia	Maniscalco 1993-1994, fig. 74.4
917	Grotte Miniere		Colle Tabuto	Tusa 1990, fig. 2
919	Grotte Miniere		Colle Tabuto	Tusa 1990, fig. 4
920			Partanna	Tusa and Pacci 1990, p. 168, fig. 78.
921			Piano dell'angelo 2	Seminerio 1996, fig. 15.3
922		Tomb 94	Castiglione	Gennusa 2015, p.104, fig. 44.7
923			Piano dell'Angelo 2	Seminerio 1996, fig. 14.2
924			Contrada Paolina	Procelli 1981, p.26, fig. 27.3.
925 928	Trincea R	Esterno Tomb 98	Castiglione Grotta della Chiusazza	Rovetto 2006, fig. 16 a, b. Tiné 1965, fig. 31.4
929	Grotta Miniera 5		Colle Tabuto	Orsi 1898, fig. 21.15
932		Tomb 17	Marianopoli-Valleoscura	Di Stefano 1979, fig. 22.
934	Ambienti a-c	Burial 12	Grotta Ticchiara	Tusa and Pacci 1990, p.126, fig. 17.

Cat.N.	trench	Related feature	Location	Bibliography
935			Partanna	Tusa and Pacci 1990, p.127, fig. 19.
936			Naro	Tusa and Pacci 1990, p 163 fig 71
937	Ambienti a-c	Burial 12	Grotta Ticchiara	Castellana 1997, p.100, fig. 27,
939	Ambienti a-c	Burial 12	Grotta Ticchiara	Castellana 1997, p.100, fig. 28
940			Partanna	Tusa and Pacci 1990, p.124, fig. 15.
941			Partanna	Tusa and Pacci 1990, p.126, fig. 18.
942			Partanna	Tusa and Pacci 1990, p.125, fig. 16.
943	Ambiente b		Grotta Ticchiara	Tusa and Pacci 1990, p.126, fig. 17.
945		Tomb	Contrada Pergola	Mannino 1971, fig. 3.2
946	Ambiente c		Grotta Ticchiara	Castellana 1997, p.140, fig. 75
947	Ambiente b		Grotta Ticchiara	Castellana 1997, p.139, fig. 74
948	Ambienti a-c	Burial 12	Grotta Ticchiara	Tusa and Pacci 1990, p.126, fig. 17.
949			Naro	Tusa and Pacci 1990, p.162, fig. 70.
950	Ambienti a-c	Burial 13	Grotta Ticchiara	Castellana 1997, p.104, fig. 31
951	Ambienti a-c	Burial 2	Grotta Ticchiara	Castellana 1997, p.80, fig. 3
952			Monteaperto	Orsi 1897, fig. 1.14
953	Ambiente b		Grotta Ticchiara	Castellana 1997, p.146, fig. 83
954	Ambienti a-c	Burial 17	Grotta Ticchiara	Castellana 1997, p.108, fig. 38
955	Ambiente b		Grotta Ticchiara	Castellana 1997, p.147, fig. 84
956	Ambiente b		Grotta Ticchiara	Tusa and Pacci 1990, p.127, fig. 19.
957	Grotta Miniera 5		Colle Tabuto	Gennusa 2015, p.112, fig. 51.3
959	Ambiente b		Grotta Ticchiara	Castellana 1997, p.140, fig. 76
960	Ambiente b		Grotta Ticchiara	Tusa and Pacci 1990, 126, fig. 17
962	Strato 3 inf		Ciavolaro stipe	Castellana 1996b, p.210, AGS/3451
963	Strato 3		Ciavolaro stipe	Tusa and Pacci 1990, p.127, fig. 19.
964	Ambienti a-c	Burial 10	Grotta Ticchiara	Castellana 1997, p.96, fig. 23
965			Naro	Tusa and Pacci 1990, p.163, fig. 72
966		Esterno Tomb 2	Contrada Paolina	Procelli 1981, fig. 35
967			San Lio	Lagona 1971, fig. V.R4
968		Tomb 4	Cava Canabarbara	Orsi 1902b, fig. 6.13
969			Passanatello di	Berbabó Brea 1973, fig.
070			Francotorte Son Lic	4.0/
970			Sall LIO	Lagona 1971, 11g. VI.K9

Cat.N.	trench	Related feature	Location	Bibliography
971		Tomb 1	Cava della Secchiera	Gennusa 2015, p.114, fig. 53.8
973			La Muculufa	Ianni 2009, fig. 1
974		Tomb 7	Valsavoia	Orsi 1902a, fig. 2.17
977		Esterno Tomb 98	Castiglione	Rovetto 2006, fig. 10
978		Esterno Tomb 93	Castiglione	Gennusa 2015, p.115, fig. 54.5
979		Esterno Tomb 2	Contrada Paolina	Procelli 1981, fig. 30.1
980		Tomb 2	Contrada Paolina	Procelli 1981, fig. 30.3
981		Tomb 9	Castelluccio necropoli	Orsi 1892, fig. 3.8
984		Tomb 2	Contrada Paolina	Procelli 1981, fig. 30.2
985		Tomb 34	Melilli	Orsi 1891b, fig. 5.18
986			San Lio	Lagona 1971, fig. VI.R7
989		Tomb via Balilla	Santa Croce di Camerina	Scorfani 1972, fig. 2a.d
991		Tomb 94	Castiglione	Pelagatti 1973, fig. 5.73
992		Tomb 5	Monte Racello	Orsi 1898, fig. 22.9
993		Tomb 22	Castelluccio necropoli	Orsi 1892, fig. 5.13
994		Tomb 9	Castelluccio necropoli	Gennusa 2015, p.116, fig. 55.14
995			Piano dell'Angelo	Amoroso 1979, fig. 7.2
996		Tomb 94	Castiglione	Pelagatti 1973, fig. 5.72
997		Tomb 1	Monte Racello	Gennusa 2015, p.117, fig. 56.1
998		Tomb 1	Monte Sallia	Gennusa 2015, p.117, fig. 56.2
999	Grotte Miniere 1-2- 4		Colle Tabuto	Orsi 1898, fig. 20.8
1000			Piano dell'Angelo 2	Seminerio 1996, fig 15.6
1001	Grotte Miniere		Colle Tabuto	Pennavaria 1897, fig. 21.13
1003	Grotte Miniere		Colle Tabuto	Tusa 1990, fig. 1
1004	Grotte Miniere		Colle Tabuto	Tusa 1990, fig. 3
1005		Tomb 14	Marianopoli-Valleoscura	Fiorentini 1985, p.34, fig. 4.3
1006			Gibil Gabib	Sedita Migliore 1981, fig. 11a
1007			Canicatti	Pacci 1987, fig, 9-10
1008	Grotta Miniera 5		Colle Tabuto	Orsi 1898, fig. 21.6
1012	Grotte Miniere 1-2- 4		Colle Tabuto	Orsi 1898, fig. 20.9
1013		Tomb A	Torre Donzelle	Mannino 1994, p.167, fig. 21.e
1014			Feudo Nobile	Adamesteanu and Orlandini 1962, fig. 55
1015		Hut 8	Castelluccio Acropoli	Gennusa 2015, p.121, fig. 59.8
1016	Trincea R		Grotta della Chiusazza	Tine 1965, fig. 14.5
1017	Trincea R		Grotta della Chiusazza	Tine 1965, fig. 14.1
1018	Trincea R		Grotta della Chiusazza	Tine 1965, fig. 14.4
1019	Trincea R		Grotta della Chiusazza	Tine 1965, fig. 14.4
1020			Piano dell'Angelo	Amoroso 1979, fig. 6.6
1021			Piano dell'Angelo	Amoroso 1979, fig. 6.5
1023			Partanna	Tusa and Pacci 1990, p.144, fig. 41

Cat.N.	trench	Related feature	Location	Bibliography
1026			Gattolo	Ingoglia and Tusa 2006, fig. 4.41
1027	Ambienti a-c	Burial 9	Grotta Ticchiara	Castellana 1997, p.95, fig. 19
1028			Montesara	Orsi 1895, fig. 4.2
1029			Partanna	Tusa and Pacci 1990, p.143, fig. 40
1030			Ciavolaro (Tomba 1)	Castellana 1996b, p.228, AGS/5423
1031			Naro	Tusa and Pacci 1990, p.198, fig. 109
1032		Tomb 1	Ciavolaro	Castellana 199b, p.222, AGS/5438
1033		Tomb 1	Ciavolaro	Castellana 1996b, p.230, AGS/5429
1034	Ambienti a-c	Burial 2	Grotta Ticchiara	Castellana 1997, p.81, fig. 4
1035	Ambiente b		Grotta Ticchiara	Castellana 1997, p.149, fig. 86
1036	Ambiente b		Grotta Ticchiara	Castellana 1997, p.149, fig. 87
1037			Naro	Tusa and Pacci 1990, p.108, fig. 197
1038			La Muculufa	Ianni 2009, p.245, fig.1
1041			Torre Cusa	p.230, fig. 6
1044			Naro	Tusa and Pacci 1990, p.196, fig. 107
1046			Sant'Angelo muxaro	Tusa and Pacci 1990, fig. 21
1047	Ambiente b		Grotta Ticchiara	Castellana 1997, p.151, fig. 88
1050	Ambiente b		Grotta Ticchiara	Castellana 1997, p.151, fig. 89
1051	Ambienti a-c	Burial 11	Grotta Ticchiara	Castellana 1997, p.98, fig. 25
1052		Tomb A	Torre Donzelle	Mannino 1994
1053		Tomb A	Torre Donzelle	Mannino 1994, p.165, fig. 19.d
1054			I orre Cusa	Nicolis and Mottes 1998
1055		Tomb A	Torre Donzelle	Mannino 1994, p.165, fig. 19.c
1056		Tomb A	Torre Donzelle	19.b
1057			Marcita	Tusa 1997b, fig. 23
1058	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.118, AGS/5457
1059	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.102, AGS/5507
1061	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.102, AGS/2134
1062	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.110, AGS/5509
1063	Strato 3a		Ciavolaro stipe	Castellana 1996b, p.92, AGS/5449
1065		Tomb 1	Ciavolaro	Castellana 1996b, p.232, AGS/43
1066	Trincea R		Grotta della Chiusazza	Tine 1965, fig. 31.6

Cat.N.	trench	Related feature	Location	Bibliography
1067			Ciavolaro (stipe, Strato	Castellana 1996b, p.136,
1007			3a inf.)	AGS/5485
10/0	Starte 2 inf		Circulture etime	Castellana 1996b, p.92,
1008	Strato sa ini.		Ciavolaro supe	AGS/40
1070	Strate 2		Circulture stine	Castellana 1996b, p.180,
1070	Strato 2		Ciavolaro supe	AGS/5479
1070	S 2 . C			Castellana 1996b, p.116,
1072	Strato 3a inf.		Ciavolaro stipe	AGS/5488
1072	St. 1. 2			Castellana 1996b, p.148,
10/3	Strato sa		Ciavolaro stipe	AGS/5496
1050			NT	Tusa and Pacci 1990,
1079			Naro	p.193, fig. 103
				Tusa and Pacci 1990.
1080			Naro	p.192, fig. 102
1081			Marcita (Tomba b)	Tusa 1997b, fig. 33
				Tusa and Pacci 1990
1082			Naro	194 fig. 104
			Favara-contrada	Castellana 1997 p.161
1084			Muntagnedda	Favara 5554
1086			Marcita (Tomba b)	Tusa 1997b fig. 31
1087			Marcita (Tomba b)	Tusa 1997b fig. 31
1007				Tusa and Pacci 1990
1089			Partanna	p_141 fig 37
				Castellana 1997 p 118
1090	Ambiente b		Grotta Ticchiara	fig 46
1002		Tomb A	Torra Bigini	Mingazzini 1030 fig 1.1
1072	Crrotto	TOHID II		Winigazzini 1939, fig. 1.1
1108	Miniere		Colle Tabuto	Orsi 1898, fig. 21.9
1100	winnere		Diano doll'Angolo	Sominaria 1006 Fig. 16.4
1109			Piano dell'Angelo	Seminerio 1990, fig. 10.4
1110			Diano dell'Angelo	Ora: 1909 fra 20.15
1111			Platio dell'Aligelo	Ofsi 1696, fig. 20.15
1115			Poggio Monaco	Maniscalco et al. $19/5-76$,
				p. 151, fig. 55
1116			Poggio Monaco	Maniscalco et al.
				19/5//6, p136, fig. 33
1117			Poggio Monaco	Maniscalco et al.
				19/5//6, p. 136, fig. 33
1125			Contrada Castellazzo	Ianni 2004, p. 32, fig. 14
1222			Case Bastione (Hut 1)	
1231			Case Bastione (Hut 1)	
134bis			La Muculufa	Ianni 2009, p.245, fig.1
135bis			La Muculufa	Ianni 2009, p.245, fig.1
182bis		Hut 9	Manfria	Orlandini 1962, p.29.1
544bio	Ambienteb		Grotta Ticchiara	Castellana 1997, p.116,
544018			Giotta Tittinara	fig. 44
569bis			Monteaperto	Orsi 1897, fig. 1.4
569tris		Tomb A	Torre Bigini	Mingazzini 1939, fig. 1.5

Table I.4: List of pottery finds sorted by Type code. This table list all pottery finds by the classificatory code which has been defined in chapter 6 but also used in the Appendix 2. The Table enables the reader to seek relevant information regarding provenance and bibliographic sources when reading descriptions of pottery types in Section 6.4.1 and the Appendix 2.

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
	169	Bowl	La Muculufa	Transfer and processing	Serving, eating and cooking	Ross Holloway et al. 1990, p.32, fig. 39
	719	Bowl	La Muculufa			McConnell 1995, p.44
	749	Bowl	Grotta Ticchiara	Transfer and processing	Serving, eating and cooking	Castellana 1997, p.79, fig. 2
	790	Bowl	Rocca Messana	Transfer and processing	Serving, eating and cooking	Ianni 2004, p.197, fig. 170
	164	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.259, fig. 8
	165	Сир	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.34, fig. 49
	199	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, p.157, fig. 31.118
	649	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p. 20 fig. 8
	748	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.154, fig. 57
	773	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.151, fig. 52
	791	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.89, fig. 11
	797	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.135, fig. 68
	170	Hourglass pot	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.32, fig 41c
	171	Hourglass pot	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 46
	91	Jar	Monte Grande/Baffo Superiore	Storage	Long-term storage	Castellana 1998
	92	Jar	Monte Grande/Baffo Superiore	Storage	Long-term storage	Castellana 1998
	178	Jar	Manfria	Transfer	Serving, eating, transport and short- term storage	Orlandini 1962

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
	248	Jar	Casalicchio_Agnone	Transfer and storage	Transport and short- term storage	Gnesotto 1982, fig. 8
	267	Jar	La Muculufa	Transfer and storage	Transport and short- term storage	Ianni 2009, p.245, fig. 1
	842	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.144, fig. 80
	890	Jar	Ciavolaro	Transfer and storage	Serving, eating, transport and short- term storage	Castellana 1996b, p.220, AGS/5444
	900	Jar	Colle Tabuto	Transfer	Serving, eating, transport and short- term storage	Gennusa 2015, p.101, fig. 42.2
	932	Jar	Marianopoli- Valleoscura	Transfer	Serving, eating, transport and short- term storage	Di Stefano 1979, fig. 22.
	960	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.126, fig. 17
	973	Jar	La Muculufa			Ianni 2009, fig. 1
	1037	Jar	Naro	Transfer and storage	Serving, eating, transport and short- term storage	Tusa and Pacci 1990, p.108, fig. 197
	1051	Jar	Grotta Ticchiara			Castellana 1997, p.98, fig. 25
	1116	Jar	Poggio Monaco			Maniscalco et al. 1975/76, p. 136, fig. 33
	1117	Jar	Poggio Monaco			Maniscalco et al. 1975/76, p. 136, fig. 33
	513	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.226, AGS/5425
	514	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.226, AGS/5426

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
	534	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.90, fig. 13
	535	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.104, fig. 32
	536	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b
	554	Pedestalled_bowl	Castelluccio Acropoli	Serving and eating		Gennusa 2015, p.63, fig. 12.6
	565	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.122, fig. 51
	567	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Tusa and Pacci 1990, p.186, fig. 95
	577	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.128, fig. 60
	583	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.124, fig. 55
	584	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.166, AGS/3445
	603	Pedestalled_bowl	Piano dell'Angelo	Serving and eating		Amoroso 1979, fig. 6.7
	606	Pedestalled_bowl	Cava della Secchiera	Serving and eating		Orsi 1893b, fig. 2
	628	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 184 fig. 93
	677	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.152, fig. 26.55
	709	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p. 39
	710	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.39
	716	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.43
	717	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.43
	1092	Pedestalled_bowl	Torre Bigini	Serving and eating		Mingazzini 1939, fig. 1.1
	544bis	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.116, fig. 44
	569bis	Pedestalled_bowl	Monteaperto	Serving and eating		Orsi 1897, fig. 1.4
	569tris	Pedestalled_bowl	Torre Bigini	Serving and eating		Mingazzini 1939, fig. 1.5
1	120	Beaker	La Muculufa	Transfer	Serving and eating	Ianní 2009, p.257, fig. 7
1	154	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.261, fig. 12
1	155	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.261, fig. 12

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
1	257	Beaker	La Muculufa	Transfer	Serving	Ianni 2009, p 257 fig 7
1	740	Beaker	Cava Canabarbara	Transfer	Serving and eating	Orsi 1902b, fig. 6.17
1	1115	Beaker	Poggio Monaco	Transfer	Serving and eating	Maniscalco et al. 1975-76, p. 131, fig. 33
2	135	Beaker	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1998, p.139, fig. 72.6c
2	137	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
2	141	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p245, fig. 1
2	145	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
2	149	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.259, fig. 8
2	159	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
2	134bis	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig.1
2	135bis	Beaker	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig.1
3	1108	Bowl	Colle Tabuto			Orsi 1898, fig. 21.9
3	1109	Bowl	Piano dell'Angelo	Transfer and processing	Serving, eating and cooking	Seminerio 1996, fig. 16.4
3	1110	Bowl	Piano dell'Angelo	Transfer and processing	Serving, eating and cooking	Seminerio 1996, fig. 16.5
3	1111	Bowl	Piano dell'Angelo	Transfer and processing	Serving, eating and cooking	Orsi 1898, fig. 20.15
4	139	Bowl	La Muculufa	Transfer and processing	Serving, eating and cooking	McConnell 1995, p.155, fig. 29.82
4	251	Bowl	Manfria	Transfer and processing	Serving, eating and cooking	Gennusa 2015, p.82, fig. 27.13
4	764	Bowl	San Giuliano	Transfer and processing	Serving, eating and cooking	Gennusa 2015, p.85, fig. 29.12
5	168	Bowl	Manfria	Transfer and processing	Serving, eating and cooking	Orlandini 1962, fig. 24
5	173	Bowl	Manfria	Transfer and processing	Serving, eating and cooking	Orlandini 1962
5	845	Bowl	Grotta della Chiusazza	Transfer and processing	Serving, eating and cooking	Tine 1965, fig. 31.2
5	846	Bowl	Naro	Transfer and processing	Serving, eating and cooking	Tusa and Pacci 1990, p.158, fig. 64

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
5	892	Bowl	Favara-contrada Muntagnedda			Castellana 1997, p.162, Favara 5531
5	893	Bowl	Monte San Basilio	Transfer and processing	Serving, eating and cooking	Russo 2011, fig. 2
5	925	Bowl	Castiglione	Transfer and processing	Serving, eating and cooking	Rovetto 2006, fig. 16 a, b.
5	928	Bowl	Grotta della Chiusazza	Transfer and processing	Serving, eating and cooking	Tiné 1965, fig. 31.4
5	929	Bowl	Colle Tabuto	Transfer and processing	Serving, eating and cooking	Orsi 1898, fig. 21.15
5	1125	Bowl	Contrada Castellazzo			Ianni 2004, p.32, fig. 14
5	848	Cup	Piano dell'Angelo 2	Transfer	Serving and eating	Seminerio 1996, fig. 15.4
5	915	Jar	Piano dell'Angelo 2	Transfer	Serving, eating, transport and short- term storage	Seminerio 1996, fig. 14.3
5	921	Jar	Piano dell'angelo 2	Transfer	Serving, eating, transport and short- term storage	Seminerio 1996, fig. 15.3
5	922	Jar	Castiglione	Transfer	Serving, eating, transport and short- term storage	Gennusa 2015, p.104, fig. 44.7
5	923	Jar	Piano dell'Angelo 2	Transfer	Serving, eating, transport and short- term storage	Seminerio 1996, fig. 14.2
5	924	Jar	Contrada Paolina	Transfer	Serving, eating, transport and short- term storage	Procelli 1981, p.26, fig. 27.3.
6	756	Bowl	Monte del Gesso	Transfer and processing	Serving, eating and cooking	Ianni 2004, p.150, fig. 121
6	759	Bowl	Pizzo San Giuseppe	Transfer and processing	Serving, eating and cooking	Ianni 2004, p.172, fig. 142
7	1065	Bowl	Ciavolaro	Processing and storage	Cooking and long- term storage	Castellana 1996b, p.232, AGS/43

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
7	1067	Bowl	Ciavolaro (stipe, Strato 3a inf.)	Processing and storage	Cooking and long- term storage	Castellana 1996b, p.136, AGS/5485
7	1070	Bowl	Ciavolaro stipe	Processing and storage	Cooking and long- term storage	Castellana 1996b, p.180, AGS/5479
7	1072	Bowl	Ciavolaro stipe	Processing and storage	Cooking and long- term storage	Castellana 1996b, p.116, AGS/5488
7	1073	Bowl	Ciavolaro stipe	Processing and storage	Cooking and long- term storage	Castellana 1996b, p.148, AGS/5496
8	105	Cup	C. da Ragusetta	Transfer	Serving and eating	De Miro 1961, fig. 17d
8	113	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1998, p.141, fig. 75.11c
8	114	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
8	115	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1998, p.139, fig. 72.1c
8	117	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.33, fig. 43b
8	118	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.33, fig. 43d
8	119	Cup	La Muculufa	Transfer	Serving and eating	Mconnell 1995, p.161, fig. 35.140
8	121	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, p.201, fig. C2
8	122	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.261, fig. 12
8	123	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, fig. 137
8	125	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
8	153	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.250, fig. 3
8	156	Сир	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.33, fig 44b
8	157	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.33, fig. 43a
8	736	Cup	San Giuliano	Transfer	Serving and eating	Gennusa 2015, p.79, fig. 25.6

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
8	739	Cup	Canicatti	Transfer	Serving and eating	Pacci 1987, p.10, fig. 3, 4
9	106	Cup	C. da Ragusetta	Transfer	Serving and eating	De Miro 1961
9	166	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 24
9	167	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 24
9	245	Cup	Cantigaglione	Transfer	Serving and eating	Gennusa 2015, p.99, fig. 40.9
9	798	Cup	Favara-contrada Muntagnedda	Transfer	Serving and eating	Castellana 1997, p.159, Favara 5535
9	800	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.153, fig. 56
9	889	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.157, fig. 61
9	1231	Cup	Case Bastione (Hut 1)	Transfer	Serving and eating	
10A	78	Cup	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.65, fig. 5a
10A	79	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1996a, p.505, fig. 2
10A	81	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1996a, p.505, fig. 2
10A	82	Cup	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.65, fig. 5a
10A	83	Cup	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.63, fig. 3a
10A	84	Cup	C.da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.65, fig. 4c
10A	85	Cup	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.65, fig. 5b
10A	86	Cup	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.63, fig. 3b
10A	89	Cup	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.65, fig. 4b
10A	102	Cup	C. da Ragusetta	Transfer	Serving and eating	De Miro 1961, fig. 17c
10A	103	Cup	C. da Ragusetta	Transfer	Serving and eating	De Miro 1961, fig. 17c
10A	104	Cup	C. da Ragusetta	Transfer	Serving and eating	De Miro 1961, fig. 17g
10A	127	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 49.4
10A	128	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 47.1

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
10A	129	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 47.1
10A	131	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1996a, p.505, fig. 2
10A	132	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 13
10A	133	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 10.3
10A	136	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1998, p.141, fig. 75.14c
10A	138	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, p.155, fig. 29.81
10A	160	Cup	Gela Molino a vento	Transfer	Serving and eating	Gennusa 2015, p.96, fig. 37.2
10A	161	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962
10A	162	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 44.3
10A	174	Cup	Manfria	Transfer	Serving and eating	Gennusa 2015, p.103, fig. 43.6
10A	175	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962
10A	176	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962
10A	244	Cup	Cantigaglione	Transfer	Serving and eating	Gennusa 2015, p.79, fig. 25.19
10A	247	Сир	Casalicchio_Agnone	Transfer	Serving and eating	Gnesotto 1982; Gennusa 2015, p.81, fig. 26.4
10A	249	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, 15.2
10A	252	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 45.5
10A	253	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962
10A	254	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962
10A	258	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.32, fig. 42
10A	343	Cup	Passarello	Transfer	Serving and eating	Mauceri 1880, fig. AB.5
10A	368	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, p.161, fig. 35.138
10A	738	Cup	Canicatti	Transfer	Serving and eating	Pacci 1987, p.12, fig. 5, 6
10A	750	Cup	Canicatti	Transfer	Serving and eating	Pacci 1987, fig. 7-8
10A	751	Cup	Gibil Gabib	Transfer	Serving and eating	Sedita Migliore
10A	754	Cup	Sant'Anna	Transfer	Serving and eating	Sedita Migliore 1981, fig. 10

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
10A	758	Сир	Castelluccio necropoli	Transfer	Serving and eating	Marazzi and Tusa 2001, p.122, fig. Iv.84
10A	847	Cup	Contrada Pergola	Transfer	Serving and eating	Mannino 1971, fig. 3.3
10B	675	Cup	Marianopoli- Valleoscura	Transfer	Serving and eating	Fiorentini 1985-86, fig. 3.2
10B	760	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.110, ASG/3393
10B	761	Cup	Marianopoli- Valleoscura	Transfer	Serving and eating	Fiorentini 1985-86, fig. 4.2
10B	762	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.196, AGS/3426
11A	655	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.148, fig. 47
11A	659	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.176, AGS/41
11A	660	Cup	Torre Bigini	Transfer	Serving and eating	Mingazzini 1939, fig. 2.8
11A	661	Cup	Ciavolaro	Transfer	Serving and eating	Castellana 1996b, p.220, AGS/5443
11A	662	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.96, fig. 22
11A	663	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.132, fig. 66
11A	664	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.130, fig. 64
11A	665	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.156, fig. 59
11A	666	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.121, fig. 9
11A	667	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.121, fig. 10
11A	668	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.106, fig. 34
11B	801	Cup	Contrada Pergola	Transfer	Serving and eating	Mannino 1971, fig. 3.5
11B	803	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.119, fig. 6
11 B	804	Cup	Contrada Pergola	Transfer	Serving and eating	Mannino 1971, fig. 3.4

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
11B	805	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci, 1990, p.149, fig. 49
11B	806	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.148, fig. 46
11B	807	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.50, fig. 150
11B	808	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.50, fig. 150
12	829	Cup	Castelluccio villaggio	Transfer	Serving and eating	Orsi 1893a, fig. 6.8
12	831	Cup	Piano dell'Angelo	Transfer	Serving and eating	Amoroso 1979, fig. 7.4
13A	656	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.92, fig. 18
13A	657	Cup	Colle Tabuto	Transfer	Serving and eating	Orsi 1898, fig. 21.2
13A	812	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.177, AGS/3391
13A	813	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.122, fig. 12
13A	814	Cup	San Lio	Transfer	Serving and eating	Lagona 1971, fig. V.R10
13A	815	Cup	Valsavoia	Transfer	Serving and eating	Orsi 1902a, fig. 2.18
13A	817	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.118, fig. 4
13B	810	Cup	Contrada Paolina	Transfer	Serving and eating	Procelli 1981, fig. 31.10
13B	811	Cup	Valsavoia	Transfer	Serving and eating	Orsi 1902a, fig. 2.26
13B	818	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.120, fig. 7
13B	821	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.115, fig. 1
13B	822	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990 p.147, fig. 47
13B	823	Cup	Castelluccio necropoli	Transfer	Serving and eating	Orsi 1892, fig. 2.7
13B	824	Cup	Torre Cusa	Transfer	Serving and eating	Nicolis and Mottes 1998, p.230, fig. 5
13B	825	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.152, fig. 54
13B	827	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.116, fig. 2

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
13B	828	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.117, fig. 3
14	140	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
14	146	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
14	147	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.260, fig. 10
14	148	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
14	150	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.259, fig. 8
14	158	Сир	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, p.32, fig. 40
15	124	Cup	Monte Grande/Baffo Superiore	Transfer	Serving and eating	Castellana 1998, p.139, fig. 72.4c
15	745	Cup	Favara-contrada Muntagnedda	Transfer	Serving and eating	Castellana 1997, p.163, Favara 5556
15	746	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.85, fig. 7
15	747	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.155, fig. 58
16A	142	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990
16A	143	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, fig. 53
16A	669	Cup	Torre Bigini	Transfer	Serving and eating	Mingazzini 1939, fig. 2.10
16A	670	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.132, fig. 65
16A	671	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p. 159, fig. 66
16A	672	Cup	Palagonia	Transfer	Serving and eating	Maniscalco 1993-1994, fig. 5.3
16A	673	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.86, fig. 9
16A	735	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.134, fig. 69
16A	741	Cup	Favara-contrada Muntagnedda	Transfer	Serving and eating	Castellana 1997, p.157, Favara 5532
16A	742	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.97, fig. 24

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
16A	743	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.79, fig. 1
16A	744	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.157, fig. 62
16A	755	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.153, fig. 55
16A	765	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.111, fig. 39
16A	766	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.99, fig. 26
16A	767	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, 156, fig. 60
16A	768	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.131, fig. 62
16A	769	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p.122, fig. 11
16A	770	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.160, fig. 67
16A	771	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.149, fig. 48
16A	772	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.109, fig. 36
16A	774	Cup	Marianopoli- Valleoscura	Transfer	Serving and eating	Fiorentini 1985-86, fig. 3.5
16A	778	Cup	Grotta della Chiusazza	Transfer	Serving and eating	Tine 1965, fig. 31.1
16A	779	Cup	Branco Grande	Transfer	Serving and eating	Orsi 1910, fig. 22.7
16A	780	Cup	Grotta della Chiusazza	Transfer	Serving and eating	Tine 1965, fig. 31.7
16A	782	Cup	Grotta della Chiusazza	Transfer	Serving and eating	Tine 1965, fig. 31.9
16A	783	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.95, fig. 21
16A	786	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.133, fig. 67
16A	787	Cup	Favara-contrada Muntagnedda	Transfer	Serving and eating	Castellana 1997, p.165, Favara 5534
16A	788	Cup	Grotta Ticchiara	Transfer	Serving and eating	
16A	789	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.135, fig. 70

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
16B	126	Cup	La Muculufa	Transfer	Serving and eating	Ross Holloway et al. 1990, fig. 38
16B	151	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, 260, fig. 10
16B	674	Cup	Cava della Secchiera	Transfer	Serving and eating	Orsi 1893b, fig. 2
16B	737	Cup	Monte Calvario	Transfer	Serving and eating	Ianní 2004, fig. 95
16B	781	Cup	La Montagna	Transfer	Serving and eating	Ianni 2004, p.52, fig. 43
16B	784	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.91, fig. 15
16B	864	Cup	Monte Racello	Transfer	Serving and eating	Orsi 1898, fig. 22.4
17	152	Cup	Manfria	Transfer	Serving and eating	Orlandini 1962, fig. 13.3
17	163	Cup	Manfria	Transfer	Serving and eating	Gennusa 2015, p.96, fig. 37.6
17	757	Cup	Piano dell'Angelo 2	Transfer	Serving and eating	Seminerio 1996, fig. 15.2
17	792	Cup	San Lio	Transfer	Serving and eating	Lagona 1971, fig. V.R3
17	793	Cup	San Lio	Transfer	Serving and eating	Lagona 1971, fig. V.R5
17	794	Cup	Valsavoia	Transfer	Serving and eating	Gennusa 2015, p.96, fig. 37.17
17	795	Cup	Melilli	Transfer	Serving and eating	Lagona 1971, fig. 6.R11
17	796	Cup	Palagonia	Transfer	Serving and eating	Maniscalco 1993-94, fig. 5.2
17	849	Cup	San Lio	Transfer	Serving and eating	Lagona 1971, fig. V.R11
17	850	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.170, AGS/3401
17	851	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.206, AGS/3403
17	852	Cup	Ciavolaro	Transfer	Serving and eating	Castellana 1996b, p.232, AGS/3
17	853	Cup	Castiglione	Transfer	Serving and eating	Rovetto 2006, fig. 9
17	854	Cup	Castelluccio villaggio	Transfer	Serving and eating	Orsi 1893a, fig. 6.15
17	855	Cup	Monteaperto	Transfer	Serving and eating	Orsi 1897, fig. 1.1A
17	856	Cup	Monserrato	Transfer	Serving and eating	Orsi 1897, fig. 1.10
17	859	Cup	Castiglione	Transfer	Serving and eating	Gennusa 2015, p.96, fig. 37.5
17	860	Cup	Castelluccio necropoli	Transfer	Serving and eating	Orsi 1892, fig. 2.3
17	861	Cup	San Lio	Transfer	Serving and eating	Lagona 1971, p. V.R2

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
17	862	Cup	Palagonia	Transfer	Serving and eating	Maniscalco 1993-94, fig. 5.1
17	865	Cup	Monte Racello	Transfer	Serving and eating	Orsi 1898, fig. 22.2
17	866	Cup	Grotta della Chiusazza	Transfer	Serving and eating	Tine 1965, fig. 30.4
17	867	Cup	Castelluccio necropoli	Transfer	Serving and eating	Orsi 1891b, fig. 5.27
17	868	Cup	Marianopoli- Valleoscura	Transfer	Serving and eating	Fiorentini 1985-86, fig. 4.1
17	952	cup	Monteaperto	Transfer	Serving and eating	Orsi 1897, fig. 1.14
17	962	Cup	Ciavolaro stipe	Transfer	Serving and eating	Castellana 1996b, p.210, AGS/3451
18	196	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
18	197	Cup	La Muculufa	Transfer	Serving and eating	Ianni 2009, p.245, fig. 1
18	198	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, p.165, fig. 39.164
18	650	Cup	Partanna	Transfer	Serving and eating	Tusa and Pacci 1990, p. 123, fig. 14
18	651	Cup	Grotta Ticchiara	Transfer	Serving and eating	Castellana 1997, p.130, fig. 63
18	652	Cup	La Muculufa	Transfer	Serving and eating	McConnell 1995, p.165, fig. 39.139
18	653	Cup	Contrada Paolina	Transfer	Serving and eating	Procelli 1981, fig. 27.7
18	834	Cup	Monte Racello	Transfer	Serving and eating	
18	836	Cup	Naro	Transfer	Serving and eating	Tusa and Pacci 1990, p.151, fig. 53
18	838	Сир	Marcita	Transfer	Serving and eating	Gennusa 2015, p.93, fig. 35.5; Tusa 1997b, fig. 27
19	977	Hourglass pot	Castiglione	Transfer	Serving and eating	Rovetto 2006, fig. 10
19	978	Hourglass pot	Castiglione	Transfer	Serving and eating	Gennusa 2015, p.115, fig. 54.5
19	979	Hourglass pot	Contrada Paolina	Transfer	Serving and eating	Procelli 1981, fig. 30.1
19	980	Hourglass pot	Contrada Paolina	Transfer	Serving and eating	Procelli 1981, fig. 30.3
19	981	Hourglass pot	Castelluccio necropoli	Transfer	Serving and eating	Orsi 1892, fig. 3.8
19	984	Hourglass pot	Contrada Paolina	Transfer	Serving and eating	Procelli 1981, fig. 30.2
19	985	Hourglass pot	Melilli	Transfer	Serving and eating	Orsi 1891b, fig. 5.18

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
19	986	Hourglass pot	San Lio	Transfer	Serving	Lagona 1971, for VLR7
19	989	Hourglass pot	Santa Croce di Camerina	Transfer	Serving and eating	Scorfani 1972, fig. 2a.d
19	991	Hourglass pot	Castiglione	Transfer	Serving and eating	Pelagatti 1973, fig. 5.73
19	992	Hourglass pot	Monte Racello	Transfer	Serving and eating	Orsi 1898, fig. 22.9
19	993	Hourglass pot	Castelluccio necropoli	Transfer	Serving and eating	Orsi 1892, fig. 5.13
19	994	Hourglass pot	Castelluccio necropoli	Transfer	Serving and eating	Gennusa 2015, p.116, fig. 55.14
19	995	Hourglass pot	Piano dell'Angelo	Transfer	Serving and eating	Amoroso 1979, fig. 7.2
19	996	Hourglass pot	Castiglione	Transfer	Serving and eating	Pelagatti 1973, fig. 5.72
19	997	Hourglass pot	Monte Racello	Transfer	Serving and eating	Gennusa 2015, p.117, fig. 56.1
19	998	Hourglass pot	Monte Sallia	Transfer	and eating	Gennusa 2015, p.117, fig. 56.2
20	899	Bowl	Grotta Lazzaro	Transfer and processing	Serving, eating and cooking	Di Stefano 1979, fig. 20.
20	172	Hourglass pot	Manfria	Transfer	Serving and eating	Orlandini 1962
20	903	Hourglass pot	Castiglione	Transfer	Serving and eating	Gennusa 2015, p.101, fig. 42.5
20	904	Hourglass pot	Castiglione	Transfer	Serving and eating	Pelagatti 1973, fig. 5.74
20	905	Hourglass pot	Monte Racello	Transfer	Serving and eating	Orsi 1898, fig. 22.17.
20	906	Hourglass pot	Piano dell'Angelo 2	Transfer	Serving and eating	Seminerio 1996, fig. 15.1
20	907	Hourglass pot	Contrada Paolina	Transfer	Serving and eating	Procelli 1981, fig. 27.5.
20	908	Hourglass pot	Castiglione	Transfer	Serving and eating	Gennusa 2015, p.101, fig. 42.11
20	909	Hourglass pot	Melilli	Transfer	Serving and eating	Orsi 1891b, fig. 5.23
20	911	Hourglass pot	Melilli	Transfer	Serving and eating	Orsi 1891b, fig. 6.17.
20	912	Hourglass pot	San Lio	Transfer	Serving and eating	Lagona 1971, fig. VI.R8.
20	916	Hourglass pot	Palagonia	Transfer	Serving and eating	Maniscalco 1993-1994, fig. 74.4
21	1020	Jar	Piano dell'Angelo	Storage	Long-term storage	Amoroso 1979, fig. 6.6
21	1021	Jar	Piano dell'Angelo	Storage	Long-term storage	Amoroso 1979, fig. 6.5
21	1023	Jar	Partanna	Storage	Long-term storage	Tusa and Pacci 1990, p.144, fig. 41
21	1029	Jar	Partanna	Storage	Long-term storage	Tusa and Pacci 1990, p.143, fig. 40

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
21	1031	Jar	Naro	Storage	Long-term storage	Tusa and Pacci 1990, p.198, fig. 109
22	1026	Jar	Gattolo	Storage	Long-term storage	Ingoglia and Tusa 2006, fig.4.41
22	1028	Jar	Montesara	Storage	Long-term storage	Orsi 1895, fig.4.2
22	1030	Jar	Ciavolaro (Tomba 1)	Storage	Long-term storage	Castellana 1996b, p.228, AGS/5423
23	1013	Jar	Torre Donzelle	Transfer and storage	Transport and short- term storage	Mannino 1994, p.167, fig. 21.e
23	1014	Jar	Feudo Nobile	Transfer and storage	Transport and short- term storage	Adamesteanu and Orlandini 1962, fig. 55
23	1015	Jar	Castelluccio Acropoli	Transfer and storage	Transport and short- term storage	Gennusa 2015, p.121, fig. 59.8
23	1027	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.95, fig. 19
24	999	Jar	Colle Tabuto	Storage	Long-term storage	Orsi 1898, fig. 20.8
24	1000	Jar	Piano dell'Angelo 2	Storage	Long-term storage	Seminerio 1996, fig. 15.6
24	1001	Jar	Colle Tabuto	Storage	Long-term storage	Pennavaria 1897, fig. 21.13
24	1003	Jar	Colle Tabuto	Storage	Long-term storage	Tusa 1990, fig. 1
24	1004	Jar	Colle Tabuto	Transfer and storage	Transport and short- term storage	Tusa 1990, fig. 3
25	896	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.142, fig. 77
25	898	Jar	Favara-contrada Muntagnedda	Transfer and storage	Transport and short- term storage	Castellana 1997, p.158, Favara 5536
25	914	Jar	Naro	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.167, fig. 77.
25	917	Jar	Colle Tabuto	Transfer and storage	Transport and short- term storage	Tusa 1990, fig. 2
25	919	Jar	Colle Tabuto	Transfer and storage	Transport and short-	Tusa 1990, fig. 4

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
					term storage	
25	920	Jar	Partanna	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p. 168, fig. 78.
26A	1008	Jar	Colle Tabuto			Orsi 1898, fig. 21.6
26A	1012	Jar	Colle Tabuto	Transfer and storage	Transport and short- term storage	Orsi 1898, fig. 20.9
26B	268	Jar	La Muculufa	Transfer and storage	Long-term storage	McConnell 1995, p.156, fig. 30.90
26B	269	Jar	La Muculufa			McConnell 1995, p.156, fig. 30.93
26B	272	Jar	La Muculufa	Transfer and storage	Long-term storage	McConnell 1995, p.157, fig. 31.94
26C	177	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.253, fig. 16.16
26C	179	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.142, fig. 16.1
26C	180	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.154, fig. 28.75
26C	259	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.153, fig. 27.69
26C	260	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.153, fig. 27.68
26C	261	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.153, fig. 27.70

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
26C	262	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.154, fig. 28.72
26C	263	Jar	La Muculufa	Transfer	Serving, eating, transport and short- term storage	McConnell 1995, p.154, fig. 28.71
27A	88	Jar	C. da Cuminazzi	Transfer	Serving and eating	Castellana 2000, p.65, fig. 5c
27A	11	Jar	Monte Grande/Baffo Superiore	Transfer	Serving, eating, transport and short- term storage	Castellana 1998, p.151, fig. 78.35c
27A	77	Jar	C. da Cuminazzi	Transfer	Serving, eating, transport and short- term storage	Castellana 2000, p.62 fig. 1
27A	87	Jar	C.da Cuminazzi	Transfer and storage	Transport and short- term storage	Castellana 2000, p.63, fig. 2
27A	100	Jar	C. da Ragusetta	Transfer	Serving, eating, transport and short- term storage	De Miro 1961, fig. 17b
27A	101	Jar	C. da Ragusetta	Transfer	Serving, eating, transport and short- term storage	De Miro 1961, fig. 17a
27A	107	Jar	C. da Ragusetta	Transfer	Serving, eating, transport and short- term storage	De Miro 1961, fig. 17i
27A	108	Jar	C. da Ragusetta	Transfer	Serving, eating, transport and short- term storage	De Miro 1961, fig. 17f
27A	966	Jar	Contrada Paolina	Transfer	Serving, eating, transport and short-	Procelli 1981, fig. 35
Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
--------------	--------	-------	-----------------------------	-------------------------	---	---
					term storage	
27A	1005	Jar	Marianopoli- Valleoscura	Transfer	Serving, eating, transport and short- term storage	Fiorentini 1985, p.34, fig. 4.3
27A	1006	Jar	Gibil Gabib	Transfer	Serving, eating, transport and short- term storage	Sedita Migliore 1981, fig. 11a
27A	1007	Jar	Canicatti	Transfer	Serving, eating, transport and short- term storage	Pacci 1987, fig. 9-10
27B	1044	Jar	Naro	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.196, fig. 107
27B	1046	Jar	Sant'Angelo muxaro	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, fig. 21
27B	1047	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.151, fig. 88
28A	1034	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.81, fig. 4
28A	1035	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.149, fig. 86
28A	1036	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.149, fig. 87
28A	1038	Jar	La Muculufa	Transfer and storage	Transport and short- term storage	Ianni 2009, 245, fig.1
28B	897	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.142, fig. 78
28B	934	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.126, fig. 17.
28B	935	Jar	Partanna	Transfer and storage	Transport and short-	Tusa and Pacci 1990, p. 127, fig. 19.

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
					term storage	
28B	936	Jar	Naro	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p. 163, fig. 71
28B	937	Jar	Grotta Ticchiara	Storage	Long-term storage	Castellana 1997, p.100, fig. 27,
28B	939	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.100, fig. 28
28B	940	Jar	Partanna	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p. 124, fig. 15.
28B	941	Jar	Partanna	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p. 126, fig. 18.
28B	942	Jar	Partanna	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p. 125, fig. 16.
28B	943	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.126, fig. 17.
28B	945	Jar	Contrada Pergola	Transfer and storage	Serving, eating, transport and short- term storage	Mannino 1971, fig. 3.2
28B	946	Jar	Grotta Ticchiara	Storage	Long-term storage	Castellana 1997, p.140, fig. 75
28B	947	Jar	Grotta Ticchiara	Storage	Long-term storage	Castellana 1997, p.139, fig. 74
28B	948	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.126, fig. 17.
28B	949	Jar	Naro	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p. 162, fig. 70.
28B	950	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.104, fig. 31
28B	951	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.80, fig. 3

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
28B	953	Jar	Grotta Ticchiara	Storage	Long-term storage	Castellana 1997, p.146, fig. 83
28B	954	Jar	Grotta Ticchiara	Storage	Long-term storage	Castellana 1997, p.108, fig. 38
28B	955	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.147, fig. 84
28B	956	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.127, fig. 19.
28B	957	Jar	Colle Tabuto	Storage	Long-term storage	Gennusa 2015, p.112, fig. 51.3
28B	959	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.140, fig. 76
28B	963	Jar	Ciavolaro stipe	Transfer and storage	Transport and short- term storage	Tusa and Pacci 1990, p.127, fig. 19.
28B	964	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.96, fig. 23
28B	965	Jar	Naro	Transfer and storage	Serving, eating, transport and short- term storage	Tusa and Pacci 1990, p.163, fig. 72
29D	1054	Bowl	Torre Cusa			Nicolis and Mottes 1998
29A	1032	Jar	Ciavolaro	Storage	Long-term storage	Castellana 199b, p.222, AGS/5438
29A	1033	Jar	Ciavolaro	Storage	Long-term storage	Castellana 1996b, p.230, AGS/5429
29A	1041	Jar	Torre Cusa	Transfer and storage	Transport and short- term storage	Nicolis and Mottes 1998, p.230, fig. 6
29A	1050	Jar	Grotta Ticchiara	Transfer and storage	Transport and short- term storage	Castellana 1997, p.151, fig. 89
29A	1066	Jar	Grotta della Chiusazza	Storage	Long-term storage	Tine 1965, fig. 31.6
29B	967	Jar	San Lio	Transfer and storage	Serving, eating, transport and short- term storage	Lagona 1971, fig. V.R4

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
29B	968	Jar	Cava Canabarbara	Transfer and storage	Serving, eating, transport and short- term storage	Orsi 1902b, fig. 6.13
29B	969	Jar	Passanatello di Francoforte	Transfer and storage	Transport and short- term storage	Berbabó Brea 1973, fig. 4.67
29B	970	Jar	San Lio	Transfer and storage	Transport and short- term storage	Lagona 1971, fig. VI.R9
29B	971	Jar	Cava della Secchiera	Transfer and storage	Transport and short- term storage	Gennusa 2015, p.114, fig. 53.8
29B	974	Jar	Valsavoia	Transfer and storage	Transport and short- term storage	Orsi 1902a, fig. 2.17
29C	1016	Jar	Grotta della Chiusazza			Tine 1965, fig. fig. 14.5
29C	1017	Jar	Grotta della Chiusazza			Tine 1965, fig. 14.1
29C	1018	Jar	Grotta della Chiusazza			Tine 1965, fig. 14.4
29C	1019	Jar	Grotta della Chiusazza			Tine 1965, fig. 14.4
29D	1052	Jar	Torre Donzelle	Transfer and storage	Transport and short- term storage	Mannino 1994
29D	1053	Jar	Torre Donzelle	Transfer and storage	Transport and short- term storage	Mannino 1994, p.165, fig. 19.d
29D	1055	Jar	Torre Donzelle	Transfer and storage	Transport and short- term storage	Mannino 1994, p.165, fig. 19.c
29D	1056	Jar	Torre Donzelle	Storage	Long-term storage	Mannino 1994, p.165, fig. 19.b
29D	1057	Jar	Marcita	Storage	Long-term storage	Tusa 1997b, fig. 23
29D	1058	Jar	Ciavolaro stipe	Storage	Long-term storage	Castellana 1996b, p.118, AGS/5457
29D	1059	Jar	Ciavolaro stipe	Storage	Long-term storage	Castellana 1996b, p.102, AGS/5507
29D	1061	Jar	Ciavolaro stipe	Storage	Long-term storage	Castellana 1996b, p.102, AGS/2134
29D	1062	Jar	Ciavolaro stipe	Storage	Long-term storage	Castellana 1996b, p.110, AGS/5509

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
29D	1063	Jar	Ciavolaro stipe	Storage	Long-term storage	Castellana 1996b, p.92, AGS/5449
29D	1068	Jar	Ciavolaro stipe	Storage	Long-term storage	Castellana 1996b, p.92, AGS/40
30	465	Pedestalled_bowl	Favara-contrada Muntagnedda	Serving and eating		Castellana 1997, p.157, Favara 5554
30	466	Pedestalled_bowl	Favara-contrada Muntagnedda	Serving and eating		Castellana 1997, p.161, Favara
30	467	Pedestalled_bowl	Favara-contrada Muntagnedda	Serving and eating		Castellana 1997, p.157, Favara 5552
30	1079	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.193, fig. 103
30	1080	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.192, fig. 102
30	1081	Pedestalled_bowl	Marcita (Tomba b)	Serving and eating		Tusa 1997b, fig. 33
30	1082	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.194, fig. 104
31	184	Pedestalled_bowl	Manfria	Serving and eating		Orlandini 1962, fig. 28.4
31	186	Pedestalled_bowl	Manfria	Serving and eating		Orlandini 1962. fig. 18.3
31	187	Pedestalled_bowl	Manfria	Serving and		Orlandini 1962 fig 28.3
31	471	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.171 fig. 81
31	472	Pedestalled_bowl	Contrada Pergola	Serving and eating		Mannino 1971, fig. 3.10
31	474	Pedestalled_bowl	Manfria	Serving and eating		Orlandini 1962, fig. 18. 24
31	475	Pedestalled_bowl	Castiglione	Serving and eating		Gennusa 2015, p.53, fig. 4.5
31	476	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 132 fig. 26
31	478	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.172 fig. 82
31	479	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.178 fig. 88
31	498	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p.137, fig. 31
31	499	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p.131, fig. 24

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
31	500	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p.134, fig. 28
31	501	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, 173 fig. 83
31	502	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p.129, fig. 22
31	503	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.174 fig.84
31	504	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 177 fig. 87
31	505	Pedestalled_bowl	Contrada Pergola	Serving and eating		Mannino 1971, fig. 3.8
31	521	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 180 fig. 90
31	611	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 138 fig. 32
31	612	Pedestalled_bowl	Contrada Pergola	Serving and eating		Mannino 1971, fig. 3.9
31	613	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 140 fig. 35
31	614	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 132 fig. 25
31	615	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 139 fig. 34
31	616	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 176 fig. 86
31	617	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 133 fig. 27
31	1086	Pedestalled_bowl	Marcita (Tomba b)	Serving and eating		Tusa 1997b, fig. 31
31	1087	Pedestalled_bowl	Marcita (Tomba b)	Serving and eating		Tusa 1997b, fig. 31
31	1089	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p.141, fig. 37
31	1090	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.118, fig. 46
31	182bis	Pedestalled_bowl	Manfria	Serving and eating		Orlandini 1962, fig. 29.1
32	468	Pedestalled_bowl	Torre donzelle	Serving and eating		Mannino 1994, p.167, fig. 21.b
32	469	Pedestalled_bowl	Torre donzelle	Serving and eating		Mannino 1994, p.166, fig. 20.c

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
32	470	Pedestalled_bowl	Torre donzelle	Serving and eating		Mannino 1994, p.167, fig. 21.a
32	1084	Pedestalled_bowl	Favara-contrada Muntagnedda	Serving and eating		Castellana 1997, p.161, Favara 5554
33	110	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.148, fig. 22.4
33	111	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.147, fig. 22.2
33	112	Pedestalled_bowl	La Muculufa	Serving and eating		McConnell 1995, p.147, fig. 21.1
34	189	Pedestalled_bowl	Manfria	Serving and eating		Orlandini 1962. fig. 42.3
34	190	Pedestalled_bowl	Manfria	Serving and		Orlandini
24	546		D ' D'11'	Serving and		Gennusa 2015,
- 34	516	Pedestalled_bowl	Poggio Biddine	eating		p.57, fig. 8.1
34	517	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 179 fig. 89
34	518	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 136 fig. 30
34	519	Pedestalled_bowl	Naro	Serving and eating		Pacci 1987, fig. 23
34	520	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 135 fig. 29
34	522	Pedestalled_bowl	Contrada Paolina	Serving and eating		Procelli 1982, fig. 27.4
34	523	Pedestalled_bowl	Torre Bigini	Serving and eating		Mingazzini 1939. fig. 1.3
34	524	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 140, fig. 36
34	525	Pedestalled_bowl	Partanna	Serving and eating		Tusa and Pacci 1990, p. 139, fig. 33
34	526	Pedestalled_bowl	Castelluccio Acropoli	Serving and eating		Gennusa 2015, p.59, fig. 9.1
34	527	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.124, fig. 56
34	552	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 181, fig. 91
34	572	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p. 189, fig. 98
34	595	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.92, fig. 17
34	1222	Pedestalled_bowl	Case Bastione (Hut 1)	Serving and eating		Giannitrapani et al. 2014

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
35	481	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.110, AGS/3444
35	482	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.118, AGS/3449
35	483	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.138, AGS/2140
35	484	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.158, AGS/2151
35	485	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.128, AGS/2150
35	486	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.226, AGS/5433
35	487	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.146, AGS/2137
35	488	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.164, AGS/5502
35	489	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.160, AGS/2141
35	490	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.182, AGS/5492
35	491	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.204, Ags/3441
35	492	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.132, AGS/5493
35	493	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.204, AGS/3442
35	494	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.158, AGS/5466
35	495	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.116, AGS/2152
35	496	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.132, AGS/3447
35	497	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.121, fig. 48
35	506	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.106, AGS/2131
35	511	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.130, AGS/2153

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
35	512	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.92, AGS/5490
35	528	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.130, AGS/5487
36	507	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.138, AGS/5450
36	508	Pedestalled_bowl	Valsavoia	Serving and eating		Orsi 1902a, fig. 2.5
36	509	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.130, AGS/3446
36	510	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.136, AGS/2129
36	515	Pedestalled_bowl	Castiglione	Serving and eating		Rovetto 2006, fig. 2 a-b
36	555	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.112, AGS/2149
36	556	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.112, AGS/5467
36	557	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.120, AGS/5476
36	558	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.134, AGS/5501
36	559	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.152, AGS/5505
36	560	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.160, Ags/3457
36	561	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.204, AGS/5458
36	629	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.204, AGS/3445
36	630	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.162, AGS/4763
37	585	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.108, AGS/5486
37	586	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.138,
37	587	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.94, AGS/2142
37	588	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.106, AGS/2136

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
37	589	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.134, AGS/2135
37	590	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.180, AGS/5497
37	592	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b
37	593	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.94, AGS/2132
37	594	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.124, AGS/2145
38	529	Pedestalled_bowl	Colle Tabuto	Serving and eating		Orsi 1898, fig. 20.3
38	530	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.118, fig.47
38	531	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.170 fig. 80
38	532	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.120, fig. 49
38	533	Pedestalled_bowl	Piano dell'Angelo	Serving and eating		Amoroso 1979, fig. 6.3
38	538	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b,p. 208, AGS/5499
38	539	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.224, AGS/5435
38	540	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.90, fig. 14
38	542	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.92, fig. 16
38	543	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.175 fig. 89
38	544	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.118, fig. 45
39	188	Pedestalled_bowl	Monte Grande/Baffo Superiore	Serving and eating		Castellana 1998, p.173, fig. 84.95c
39	562	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.185, fig. 94
39	563	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, 186, fig. 95
39	564	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1997, p.106, fig. 35

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
39	566	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Tusa and Pacci 1990, p.185, fig. 94
39	568	Pedestalled_bowl	Montesara	Serving and eating		Orsi 1895, fig. 4.3
39	569	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.220, AGS/5445
39	570	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.128, fig. 57
39	571	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.128, fig. 59
39	573	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.124, fig. 54
39	574	Pedestalled_bowl	Favara-contrada Muntagnedda	Serving and eating		Castellana 1997, p.160, Favara 5537
39	575	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.110, fig. 40
39	576	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.122, fig. 53
39	578	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.128, fig. 61
39	579	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.126, fig. 58
39	580	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.188 fig. 97
39	581	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.187 fig. 96
39	582	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.88, fig. 12
40	191	Pedestalled_bowl	La Muculufa	Serving and eating		Ianni 2009, p.250, fig. 3
40	541	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.94, fig. 20
40	545	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.105, fig. 33
40	546	Pedestalled_bowl	Castelluccio villaggio	Serving and eating		Orsi 1893a, fig. 6.12
40	548	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.116, fig. 42
40	549	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.116, fig. 43
41	547	Pedestalled_bowl	Cava della Secchiera	Serving and eating		Orsi 1893b, fig. 2

Type code	Cat.N.	Shape	Location	Functional category	Use types	Bibliography
41	596	Pedestalled_bowl	Contrada Paolina (Esterno Tomba 2)	Serving and		Procelli 1981, fig. 30.4
41	597	Pedestalled_bowl	Naro	Serving and eating		Tusa and Pacci 1990, p.190, fig. 99
41	598	Pedestalled_bowl	Passarello	Serving and eating		Mauceri 1880, fig. AB.1-2
41	599	Pedestalled_bowl	Colle Tabuto	Serving and eating		Orsi 1898, fig. 21.5
41	600	Pedestalled_bowl	Colle Tabuto	Serving and eating		Gennusa 2015, p.71, fig. 19.2
41	601	Pedestalled_bowl	Piano dell'Angelo	Serving and eating		Amoroso 1979, fig. 7.1
42	607	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.82, fig. 51
42	608	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.82, fig. 6
42	609	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.120, fig. 50
42	610	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.84, fig. 8
43	550	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.199, AGS/3450
43	551	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.196, AGS/3458
43	618	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.230, AGS/1
43	619	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.224, AGS/5434
43	620	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.224, AGS/5431
43	621	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.222, AGS/5432
43	622	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.166, AGS/3454
43	623	Pedestalled_bowl	Ciavolaro stipe	Serving and eating		Castellana 1996b, p.164, AGS/5446
43	624	Pedestalled_bowl	Grotta Lazzaro	Serving and eating		Di Stefano 1979, fig. 21
43	626	Pedestalled_bowl	Ciavolaro	Serving and eating		Castellana 1996b, p.224, AGS/5430
43	627	Pedestalled_bowl	Grotta Ticchiara	Serving and eating		Castellana 1997, p.122, fig. 52

Table I.5: List of pottery finds sorted by site provenance. This table of finds is sorted alphabetically by provenance locale and offers the reader an alternative tool to engage with the whole catalogue. It is particularly useful when reading description of sites in Section 5.5, which also includes an outline of the excavated pottery assemblages. Then the reader can refer to the Catalogue number, also reported in this Table, to move from the locale of the excavated assemblage to the other characteristic of the pottery finds which are listed in the Tables above.

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Branco Grande		Hut 2	Cup	Orsi 1910, fig. 22.7	779
C. da Cuminazzi			Cup	Castellana 2000, p.65, fig. 5a	82
C. da Cuminazzi			Cup	Castellana 2000, p.63, fig. 3a	83
C. da Cuminazzi			Cup	Castellana 2000, p.65, fig. 5b	85
C. da Cuminazzi			Cup	Castellana 2000, p.63, fig. 3b	86
C. da Cuminazzi			Cup	Castellana 2000, p.65, fig. 5c	88
C. da Cuminazzi			Cup	Castellana 2000, p.65, fig. 4b	89
C. da Cuminazzi			Jar	Castellana 2000, p.62 fig. 1	77
C. da Cuminazzi			Cup	Castellana 2000, p.65, fig. 5a	78
C. da Ragusetta		Grave 1	Jar	De Miro 1961, fig. 17b	100
C. da Ragusetta		Grave 1	Jar	De Miro 1961, fig. 17a	101
C. da Ragusetta		Grave 1	Cup	De Miro 1961, fig. 17c	102
C. da Ragusetta		Grave 2	Cup	De Miro 1961	106
C. da Ragusetta		Grave 2	Jar	De Miro 1961, fig. 17i	107
C. da Ragusetta		Grave 2	Jar	De Miro 1961, fig. 17f	108
C. da Ragusetta		Grave 1	Cup	De Miro 1961, fig. 17c	103
C. da Ragusetta		Grave 2	Cup	De Miro 1961, fig. 17g	104
C. da Ragusetta		Grave 1	Cup	De Miro 1961, fig. 17d	105
C.da Cuminazzi			Cup	Castellana 2000, p.65, fig. 4c	84
C.da Cuminazzi			Jar	Castellana 2000, p.63, fig. 2	87
Canicatti			Cup	Pacci 1987, p.12, fig. 5, 6	738
Canicatti			Cup	Pacci 1987, p.10, fig. 3, 4	739
Canicatti			Cup	Pacci 1987, fig. 7- 8	750
Canicatti			Jar	Pacci 1987, fig, 9- 10	1007
Cantigaglione			Cup	Gennusa 2015, p.79, fig. 25.19	244
Cantigaglione			Cup	Gennusa 2015, p.99, fig.40.9	245

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Casalicchio_Agnone	Trench D		Cup	Gnesotto 1982; Gennusa 2015, p.81, fig.26.4	247
Casalicchio_Agnone	Trench D		Jar	Gnesotto 1982, fig. 8	248
Case Bastione		Hut 1	Pedestalled_bowl		1222
Case Bastione		Hut 1	Cup		1231
Castelluccio Acropoli		Hut 8	Pedestalled_bowl	Gennusa 2015, p.59, fig. 9.1	526
Castelluccio Acropoli		Hut 8	Pedestalled_bowl	Gennusa 2015, p.63, fig. 12.6	554
Castelluccio Acropoli		Hut 8	Jar	Gennusa 2015, p.121, fig. 59.8	1015
Castelluccio necropoli		Tomb 13	Сир	Marazzi and Tusa 2001, p.122, fig.Iv.84	758
Castelluccio necropoli			Cup	Orsi 1892, fig. 2.7	823
Castelluccio necropoli			Cup	Orsi 1892, fig. 2.3	860
Castelluccio necropoli		Tomb 2	Cup	Orsi 1891b, fig. 5.27	867
Castelluccio necropoli		Tomb 9	Hourglass pot	Orsi 1892, Fig. 3.8	981
Castelluccio necropoli		Tomb 22	Hourglass pot	Orsi 1892, fig. 5.13	993
Castelluccio necropoli		Tomb 9	Hourglass pot	Gennusa 2015, p.116, fig. 55.14	994
Castelluccio villaggio		Damp	Pedestalled_bowl	Orsi 1893a, fig. 6.12	546
Castelluccio villaggio		Damp	Cup	Orsi 1893a, fig. 6.8	829
Castelluccio villaggio		Damp	Cup	Orsi 1893a, fig. 6.15	854
Castiglione		Esterno Tomb 94	Cup	Rovetto 2006, fig. 9	853
Castiglione		Esterno Tomb 98	Cup	Gennusa 2015, p.96, fig. 37.5	859
Castiglione		Esterno Tomb 98	Hourglass pot	Gennusa 2015, p.101, fig. 42.5	903
Castiglione		Tomb 94	Hourglass pot	Pelagatti 1973, fig. 5.74	904
Castiglione		Esterno Tomb 98	Hourglass pot	Gennusa 2015, p.101, fig. 42.11	908
Castiglione		Tomb 94	Jar	Gennusa 2015, p.104, fig. 44.7	922
Castiglione		Esterno Tomb 98	Bowl	Rovetto 2006, fig. 16 a, b.	925
Castiglione		Esterno Tomb 98	Hourglass pot	Rovetto 2006, fig. 10	977
Castiglione		Esterno Tomb 93	Hourglass pot	Gennusa 2015, p.115, fig. 54.5	978
Castiglione		Tomb 94	Hourglass pot	Pelagatti 1973, fig. 5.73	991
Castiglione		Tomb 94	Hourglass pot	Pelagatti 1973, fig. 5.72	996
Castiglione		Tomb 93	Pedestalled_bowl	Gennusa 2015, p.53, fig. 4.5	475

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Castiglione		Tomb 93	Pedestalled_bowl	Rovetto 2006, fig. 2 a-b	515
Cava Canabarbara		Tomb 4	beaker	Orsi 1902b, fig. 6.17	740
Cava Canabarbara		Tomb 4	Jar	Orsi 1902b, fig. 6.13	968
Cava della Secchiera		Tomb 10	Pedestalled_bowl	Orsi 1893b, fig. 2	547
Cava della Secchiera		Tomb 10	Pedestalled_bowl	Orsi 1893b, fig. 2	606
Cava della Secchiera		Tomb 12	Cup	Orsi 1893b, fig. 2	6/4
Cava della Secchiera		Tomb 1	Jar	p.114, fig. 53.8	971
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.226, AGS/5433	486
Ciavolaro		Tomb 2	Pedestalled_bowl	Castellana 1996b, p.226, AGS/5425	513
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.226, AGS/5426	514
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.226,	536
Ciavolaro	Strato 3 inf		Pedestalled_bowl	Castellana 1996b, p.208, AGS/5499	538
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.224, AGS/5435	539
Ciavolaro		Tomb1	Pedestalled_bowl	Castellana 1996b, p.220, AGS/5445	569
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.230, AGS/1	618
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.224, AGS/5434	619
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.224, AGS/5431	620
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.222, AGS/5432	621
Ciavolaro		Tomb 1	Pedestalled_bowl	Castellana 1996b, p.224, AGS/5430	626
Ciavolaro		Tomb 1	Cup	Castellana 1996b, p.220, AGS/5443	661
Ciavolaro		Tomb 1	Cup	Castellana 1996b, p.232, AGS/3	852
Ciavolaro		Tomb 1	Jar	Castellana 1996b, p.220, AGS/5444	890
Ciavolaro		Tomb 1	Jar	Castellana 199b, p.222, AGS/5438	1032
Ciavolaro		Tomb 1	Jar	Castellana 1996b, p.230, AGS/5429	1033
Ciavolaro		Tomb 1	Bowl	Castellana 1996b, p.232, AGS/43	1065
Ciavolaro	Tomb 1		Jar	Castellana 1996b, p.228, AGS/5423	1030
Ciavolaro stipe	Strato 3a inf		Bowl	Castellana 1996b, p.136, AGS/5485	1067
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.110, AGS/3444	481
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.118, AGS/3449	482
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.138, AGS/2140	483

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.158, AGS/2151	484
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.128, AGS/2150	485
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.146, AGS/2137	487
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.164, AGS/5502	488
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.160, AGS/2141	489
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.182, AGS/5492	490
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.204, AGS/3441	491
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.132, AGS/5493	492
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.204, AGS/3442	493
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.158, AGS/5466	494
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.116, AGS/2152	495
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.132, AGS/3447	496
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.106, AGS/2131	506
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.138, AGS/5450	507
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.130, AGS/3446	509
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.136, AGS/2129	510
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.130, AGS/2153	511
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.92, AGS/5490	512
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.130, AGS/5487	528
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.199, AGS/3450	550
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.196, AGS/3458	551
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.112, AGS/2149	555
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.112, AGS/5467	556
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.120, AGS/5476	557
Ciavolaro stipe	Strato 3 inf		Pedestalled_bowl	Castellana 1996b, p.134, AGS/5501	558
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.152, AGS/5505	559
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.160, AGS/3457	560
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.204, AGS/5458	561
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1997, p.106, fig. 35	564

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Tusa and Pacci 1990, p.186, fig. 95	567
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.166, AGS/3445	584
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.108, AGS/5486	585
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b	586
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.94, AGS/2142	587
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.106, AGS/2136	588
Ciavolaro stipe	starto 3a inf		Pedestalled_bowl	Castellana 1996b, p.134, AGS/2135	589
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.180, AGS/5497	590
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b	592
Ciavolaro stipe	Strato 3a		Pedestalled_bowl	Castellana 1996b, p.94, AGS/2132	593
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.124, AGS/2145	594
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.166, AGS/3454	622
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.164, AGS/5446	623
Ciavolaro stipe	Strato 3		Pedestalled_bowl	Castellana 1996b, p.204, AGS/3445	629
Ciavolaro stipe	Strato 3a inf		Pedestalled_bowl	Castellana 1996b, p.162, AGS/4763	630
Ciavolaro stipe	Strato 3		Cup	Castellana 1996b, p.176, AGS/41	659
Ciavolaro stipe	Strato 3a		Cup	Castellana 1996b, p.110, ASG/3393	760
Ciavolaro stipe	Strato 3		Cup	Castellana 1996b, p.196, AGS/3426	762
Ciavolaro stipe	Strato 3		Cup	Castellana 1996b, p.177, AGS/3391	812
Ciavolaro stipe	Strato 3		Cup	Castellana 1996b, p.170, AGS/3401	850
Ciavolaro stipe	Strato 3 inf		Cup	Castellana 1996b, p.206, AGS/3403	851
Ciavolaro stipe	Strato 3 inf		Cup	Castellana 1996b, p.210, AGS/3451	962
Ciavolaro stipe	Strato 3		Jar	Tusa and Pacci 1990, p.127, fig. 19.	963
Ciavolaro stipe	Strato 3a		Jar	Castellana 1996b, p.118, AGS/5457	1058
Ciavolaro stipe	Strato 3a		Jar	Castellana 1996b, p.102, AGS/5507	1059
Ciavolaro stipe	Strato 3a		Jar	Castellana 1996b, p.102, AGS/2134	1061
Ciavolaro stipe	Strato 3a		Jar	Castellana 1996b, p.110, AGS/5509	1062
Ciavolaro stipe	Strato 3a		Jar	Castellana 1996b, p.92, AGS/5449	1063

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Ciavolaro stipe	Strato 3a inf.		Jar	Castellana 1996b, p.92, AGS/40	1068
Ciavolaro stipe	Strato 2		Bowl	Castellana 1996b, p.180, AGS/5479	1070
Ciavolaro stipe	Strato 3a inf.		Bowl	Castellana 1996b, p.116, AGS/5488	1072
Ciavolaro stipe	Strato 3a		Bowl	Castellana 1996b, p.148, AGS/5496	1073
Colle Tabuto	Grotte Miniere 1- 2-4		Pedestalled_bowl	Orsi 1898, fig. 20.3	529
Colle Tabuto	Grotta Miniera 5		Pedestalled_bowl	Orsi 1898, fig. 21.5	599
Colle Tabuto	Grotta Miniera 5		Pedestalled_bowl	Gennusa 2015, p.71, fig. 19.2	600
Colle Tabuto	Grotta Miniera 5		Cup	Orsi 1898, fig. 21.2	657
Colle Tabuto	Grotta Miniera 5		Jar	Gennusa 2015, p.101, fig. 42.2	900
Colle Tabuto	Grotte Miniere		Jar	Tusa 1990, fig.2	917
Colle Tabuto	Grotte Miniere		Jar	Tusa 1990, fig. 4	919
Colle Tabuto	Grotta Miniera 5		Bowl	Orsi 1898, fig. 21.15	929
Colle Tabuto	Grotta Miniera 5		Jar	Gennusa 2015, p.112, fig.51.3	957
Colle Tabuto	Grotte Miniere 1- 2-4		Jar	Orsi 1898, fig. 20.8	999
Colle Tabuto	Grotte Miniere		Jar	Pennavaria 1897, fig. 21.13	1001
Colle Tabuto	Grotte Miniere		Jar	Tusa 1990, fig. 1	1003
Colle Tabuto	Grotte Miniere		Jar	Tusa 1990, fig. 3	1004
Colle Tabuto	Grotta Miniera 5		Jar	Orsi 1898, fig. 21.6	1008
Colle Tabuto	Grotte Miniere 1- 2-4		Jar	Orsi 1898, fig. 20.9	1012
Colle Tabuto	Grotte Miniere		Bowl	Orsi 1898, fig. 21.9	1108
Contrada Castellazzo			Bowl	Ianni 2004, p.32, fig. 14	1125
Contrada Paolina			Pedestalled_bowl	Procelli 1982, fig. 27.4	522
Contrada Paolina		Esterno Tomb 2	Cup	Procelli 1981, fig. 27.7	653
Contrada Paolina		Esterno Tomb 2	Cup	Procelli 1981, fig. 31.10	810
Contrada Paolina		Tomb 1	Hourglass pot	Procelli 1981, fig. 27.5.	907
Contrada Paolina		Esterno Tomb 2	Jar	Procelli 1981, fig. 35	966
Contrada Paolina		Esterno Tomb 2	Hourglass pot	Procelli 1981, fig. 30.1	979

Location	trench	Related	Shape	Bibliography	Cat.N.
Contrada Paolina		Tomb 2	Hourglass pot	Procelli 1981, fig. 30.3	980
Contrada Paolina		Tomb 2	Hourglass pot	Procelli 1981, fig. 30.2	984
Contrada Paolina			Jar	Procelli 1981, p. 26, fig. 27.3.	924
Contrada Paolina		Esterno Tomb 2	Pedestalled_bowl	Procelli 1981, fig. 30.4	596
Contrada Pergola		Tomb	Pedestalled_bowl	Mannino 1971, fig. 3.10	472
Contrada Pergola			Pedestalled_bowl	Mannino 1971, fig. 3.8	505
Contrada Pergola		Tomba?	Pedestalled_bowl	Mannino 1971, fig. 3.9	612
Contrada Pergola		Tomb	Cup	Mannino 1971, fig. 3.5	801
Contrada Pergola		Tomb	Cup	Mannino 1971, fig. 3.4	804
Contrada Pergola		Tomb	Cup	Mannino 1971, fig. 3.3	847
Contrada Pergola		Tomb	Jar	Mannino 1971, fig. 3.2	945
Favara-contrada Muntagnedda			Pedestalled_bowl	Castellana 1997, p.157, Favara 5554	465
Favara-contrada Muntagnedda			Pedestalled_bowl	Castellana 1997, p.161, Favara	466
Favara-contrada Muntagnedda			Pedestalled_bowl	Castellana 1997, p.157, Favara 5552	467
Favara-contrada Muntagnedda			Pedestalled_bowl	Castellana 1997, p.160, Favara 5537	574
Favara-contrada Muntagnedda			Cup	Castellana 1997, p.157, Favara 5532	741
Favara-contrada Muntagnedda			Cup	Castellana 1997, p.163, Favara 5556	745
Favara-contrada Muntagnedda			Cup	Castellana 1997, p.165, Favara 5534	787
Favara-contrada Muntagnedda			Cup	Castellana 1997, p.159, Favara 5535	798
Favara-contrada Muntagnedda			Bowl	Castellana 1997, p.162, Favara 5531	892
Favara-contrada Muntagnedda			Jar	Castellana 1997, p.158, Favara 5536	898
Favara-contrada Muntagnedda			Pedestalled_bowl	Castellana 1997, p.161, Favara 5554	1084
Feudo Nobile			Jar	Adamesteanu and Orlandini 1962, fig. 55	1014

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Gattolo			Jar	Ingoglia and Tusa 2006, fig. 4.41	1026
Gela Molino a vento			Cup	Gennusa 2015, p.96, 37.2	160
Gibil Gabib			Cup	Sedita Migliore 1981, fig. 11c	751
Gibil Gabib			Jar	Sedita Migliore 1981, fig. 11a	1006
Grotta della Chiusazza	Trincea P		Cup	Tine 1965, fig. 31.1	778
Grotta della Chiusazza	Trincea P		Cup	Tine 1965, fig. 31.7	780
Grotta della Chiusazza	Trincea O		Cup	Tine 1965, fig. 31.9	782
Grotta della Chiusazza			Bowl	Tine 1965, fig. 31.2	845
Grotta della Chiusazza	Trincea R		Cup	Tine 1965, fig. 30.4	866
Grotta della Chiusazza	Trincea R		Bowl	Tiné 1965, fig. 31.4	928
Grotta della Chiusazza	Trincea R		Jar	Tine 1965, fig. 14.5	1016
Grotta della Chiusazza	Trincea R		Jar	Tine 1965, fig. 14.1	1017
Grotta della Chiusazza	Trincea R		Jar	Tine 1965, fig. 14.4	1018
Grotta della Chiusazza	Trincea R		Jar	Tine 1965, fig. 14.4	1019
Grotta della Chiusazza	Trincea R		Jar	Tine 1965, fig. 31.6	1066
Grotta Lazzaro			Pedestalled_bowl	Di Stefano 1979, fig. 21	624
Grotta Lazzaro			Bowl	Di Stefano 1979, fig. 20.	899
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.121, fig. 48	497
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.124 fig. 56	527
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.118, fig.47	530
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.120, fig. 49	532
Grotta Ticchiara	Ambienti a-c	Burial 7	Pedestalled_bowl	Castellana 1997, p.90, fig. 13	534
Grotta Ticchiara	Ambienti a-c	Burial 14	Pedestalled_bowl	Castellana 1997, p.104, fig. 32	535
Grotta Ticchiara	Ambienti a-c	Burial 8	Pedestalled_bowl	Castellana 1997, p.90, fig. 14	540
Grotta Ticchiara	Ambienti a-c	Burial 10	Pedestalled_bowl	Castellana 1997, p.94, fig. 20	541
Grotta Ticchiara	Ambienti a-c	Burial 9	Pedestalled_bowl	Castellana 1997, p.92, fig. 16	542
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.118, fig. 45	544
Grotta Ticchiara	Ambienti a-c	Burial 14	Pedestalled_bowl	Castellana 1997, p.105, fig. 33	545
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.116, fig. 42	548

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Grotta Ticchiara	Ambiente		Pedestalled_bowl	Castellana 1997, p 116 fig 43	549
Grotta Ticchiara	Ambienti a-c	Burial 14	Pedestalled_bowl	Castellana 1997, p.122, fig. 51	565
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Tusa and Pacci 1990, p.185, fig. 94	566
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.128, fig. 57	570
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.128, fig. 59	571
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.124, fig. 54	573
Grotta Ticchiara	Ambienti a-c	Burial 18	Pedestalled_bowl	Castellana 1997, p.110, fig. 40	575
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.122, fig. 53	576
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.128, fig. 60	577
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.128, fig. 61	578
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.126, fig. 58	579
Grotta Ticchiara	Ambienti a-c	Burial 6	Pedestalled_bowl	Castellana 1997, p.88, fig. 12	582
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.124, fig. 55	583
Grotta Ticchiara	Ambienti a-c	Burial 9	Pedestalled_bowl	Castellana 1997, p.92, fig. 17	595
Grotta Ticchiara	Ambienti a-c	Burial 3	Pedestalled_bowl	Castellana 1997, p.82, fig. 51	607
Grotta Ticchiara	Ambienti a-c	Burial 4	Pedestalled_bowl	Castellana 1997, p.82, fig. 6	608
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.120, fig. 50	609
Grotta Ticchiara	Ambienti a-c	Burial 5	Pedestalled_bowl	Castellana 1997, p.84, fig. 8	610
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.122, fig. 52	627
Grotta Ticchiara	Ambiente B		Cup	Castellana 1997, p.130, fig. 63	651
Grotta Ticchiara	Ambienti a-c	Burial 9	Cup	Castellana 1997, p.92, fig. 18	656
Grotta Ticchiara	Ambienti a-c	Burial 10	Cup	Castellana 1997, p.96, fig. 22	662
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.132, fig. 66	663
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.130, fig. 64	664
Grotta Ticchiara	Ambienti a-c	Burial 14	Cup	Castellana 1997, p.106, fig. 34	668
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.132, fig. 65	670
Grotta Ticchiara	Ambienti a-c	Burial 5	Cup	Castellana 1997, p.86, fig. 9	673
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.134, fig. 69	735

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Grotta Ticchiara	Ambienti a-c	Burial 11	Cup	Castellana 1997, p.97, fig. 24	742
Grotta Ticchiara	Ambienti a-c	Burial 1	Cup	Castellana 1997, p.79, fig. 1	743
Grotta Ticchiara	Ambienti a-c	Burial 4	Cup	Castellana 1997, p.85, fig. 7	746
Grotta Ticchiara	Ambienti a-c	Burial 2	Bowl	Castellana 1997, p.79, fig. 2	749
Grotta Ticchiara	Ambienti a-c	Burial 18	Cup	Castellana 1997, p.111, fig. 39	765
Grotta Ticchiara	Ambienti a-c	Burial 12	Cup	Castellana 1997, p.99, fig. 26	766
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.131, fig. 62	768
Grotta Ticchiara	Ambienti a-c	Burial 15	Cup	Castellana 1997, p.109, fig. 36	772
Grotta Ticchiara	Ambienti a-c	Burial 10	Cup	Castellana 1997, p.95, fig. 21	783
Grotta Ticchiara	Ambienti a-c	Burial 8	Cup	Castellana 1997, p.91, fig. 15	784
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.133, fig. 67	786
Grotta Ticchiara	Ambiente b		Cup		788
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.135, fig. 70	789
Grotta Ticchiara	Ambienti a-c	Burial 6	Cup	Castellana 1997, p.89, fig. 11	791
Grotta Ticchiara	Ambiente b		Cup	Castellana 1997, p.135, fig. 68	797
Grotta Ticchiara			Jar	Castellana 1997, p.144, fig. 80	842
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.142, fig. 77	896
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.142, fig. 78	897
Grotta Ticchiara	Ambienti a-c	Burial 12	Jar	Tusa and Pacci 1990, p.126, fig. 17.	934
Grotta Ticchiara	Ambienti a-c	Burial 12	Jar	Castellana 1997, p.100, fig. 27,	937
Grotta Ticchiara	Ambienti a-c	Burial 12	Jar	Castellana 1997, p.100, fig. 28	939
Grotta Ticchiara	Ambiente b		Jar	Tusa and Pacci 1990, p.126, fig. 17.	943
Grotta Ticchiara	Ambiente c		Jar	Castellana 1997, p.140, fig. 75	946
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.139, fig. 74	947
Grotta Ticchiara	Ambienti a-c	Burial 12	Jar	Tusa and Pacci 1990, p.126, fig. 17.	948
Grotta Ticchiara	Ambienti a-c	Burial 13	Jar	Castellana 1997, p.104, fig. 31	950
Grotta Ticchiara	Ambienti a-c	Burial 2	Jar	Castellana 1997, p.80, fig. 3	951

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.146, fig. 83	953
Grotta Ticchiara	Ambienti a-c	Burial 17	Jar	Castellana 1997, p.108, fig. 38	954
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.147, fig. 84	955
Grotta Ticchiara	Ambiente b		Jar	Tusa and Pacci 1990, p.127, fig. 19.	956
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.140, fig. 76	959
Grotta Ticchiara	Ambiente b		Jar	Tusa and Pacci 1990, p.126, fig. 17	960
Grotta Ticchiara	Ambienti a-c	Burial 10	Jar	Castellana 1997, p.96, fig. 23	964
Grotta Ticchiara	Ambienti a-c	Burial 9	Jar	Castellana 1997, p.95, fig. 19	1027
Grotta Ticchiara	Ambienti a-c	Burial 2	Jar	Castellana 1997, p.81, fig. 4	1034
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.149, fig. 86	1035
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.149, fig. 87	1036
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.151, fig. 88	1047
Grotta Ticchiara	Ambiente b		Jar	Castellana 1997, p.151, fig. 89	1050
Grotta Ticchiara	Ambienti a-c	Burial 11	Jar	Castellana 1997, p.98, fig. 25	1051
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.118, fig. 46	1090
Grotta Ticchiara	Ambiente b		Pedestalled_bowl	Castellana 1997, p.116, fig. 44	544bis
La Montagna			Cup	Ianni 2004, p.52, fig. 43	781
La Muculufa		Hut 2	Pedestalled_bowl	McConnell 1995, p.148, fi.g 22.4	110
La Muculufa		Hut 2	Pedestalled_bowl	McConnell 1995, p.147, fig. 22.2	111
La Muculufa		Hut 3	Pedestalled_bowl	McConnell 1995, p.147, fig. 21.1	112
La Muculufa	F 200		Cup	Mconnell 1995, p.161, fig. 35.140	119
La Muculufa	F 134	Floor Hut 3 (upper)	Cup	McConnell 1995, fig. 137	123
La Muculufa	F 80		Cup	McConnell 1995, p.155, fig. 29.81	138
La Muculufa	F 80		Bowl	McConnell 1995, p.155, fig. 29.82	139
La Muculufa		Hut 2	Jar	McConnell 1995, p.253, fig. 16.16	177
La Muculufa		Hut 1	Jar	McConnell 1995, p.142, fig. 16.1	179
La Muculufa		Hut 4	Jar	McConnell 1995, p.154, fig. 28.75	180

Location	trench	Related feature	Shape	Bibliography	Cat.N.
La Muculufa	F 134	collapsed wall of Hut 3 (upper)	Cup	Ianni 2009, p.245, fig. 1	196
La Muculufa		Hut 3	Cup	McConnell 1995, p.165, fig. 39.164	198
La Muculufa		Hut 2	Cup	McConnell 1995, p.157, fig. 31.118	199
La Muculufa		Hut 2	Jar	McConnell 1995, p.153, fig. 27.69	259
La Muculufa		Hut 2	Jar	McConnell 1995, p.153, fig. 27.68	260
La Muculufa		Hut 2	Jar	McConnell 1995, p.153, fig. 27.70	261
La Muculufa		Hut 2	Jar	McConnell 1995, p.154, fig. 28.72	262
La Muculufa		Hut 2	Jar	McConnell 1995, p.154, fig. 28.71	263
La Muculufa	F 75		Jar	McConnell 1995, p.156, fig. 30.90	268
La Muculufa	F 74		Jar	McConnell 1995, p.156, fig. 30.93	269
La Muculufa		Hut 2	Jar	McConnell 1995, p.157, fig. 31.94	272
La Muculufa	F 171		Cup	McConnell 1995, p.161, fig. 35.138	368
La Muculufa	F 200	grey soil with bits of limestone, perhaps a floor	Cup	McConnell 1995, p.165, fig. 39.13	652
La Muculufa	F 70		Pedestalled_bowl	McConnell 1995, p.152, fig. 26.55	677
La Muculufa		Hut 2	Pedestalled_bowl	McConnell 1995, fig. 39	709
La Muculufa		Hut 2	Pedestalled_bowl	McConnell 1995, fig. 39	710
La Muculufa		Hut 2	Pedestalled_bowl	McConnell 1995, fig. 43	716
La Muculufa		Hut 2	Pedestalled_bowl	McConnell 1995, fig. 43	717
La Muculufa		Hut 2	bowl	McConnell 1995, fig. 44	719
La Muculufa sanctuary			Cup	Ianni 2009, p.245, fig. 1	114
La Muculufa sanctuary			Сир	Ross Holloway et al. 1990, p.33, fig. 43b	117
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, p.33, fig. 43d	118
La Muculufa sanctuary			Beaker	Ianní 2009, p.257, fig. 7	120
La Muculufa sanctuary			Cup	McConnell 1995, p.201, C2	121
La Muculufa sanctuary			Cup	Ianni 2009, p.261, fig. 12	122
La Muculufa sanctuary			Cup	Ianni 2009, p.245, fig. 1	125

Location	trench	Related feature	Shape	Bibliography	Cat.N.
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, fig. 38	126
La Muculufa sanctuary			Beaker Ianni 2009, p.245, fig. 1		137
La Muculufa sanctuary			Cup	Ianni 2009, p.245, fig. 1	140
La Muculufa sanctuary			Beaker	Ianni 2009, p.245, fig. 1	141
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990	142
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, fig. 53	143
La Muculufa sanctuary			Beaker	Ianni 2009, p.245, fig. 1	145
La Muculufa sanctuary			Cup	Ianni 2009, p.245, fig. 1	146
La Muculufa sanctuary			Cup	Ianni 2009, p.260, fig. 10	147
La Muculufa sanctuary			Cup	Ianni 2009, p.245, fig. 1	148
La Muculufa sanctuary			Beaker	Ianni 2009, p.259, fig. 8	149
La Muculufa sanctuary			Cup	Ianni 2009, p.259, fig. 8	150
La Muculufa sanctuary			Cup	Ianni 2009, p.260, fig. 10	151
La Muculufa sanctuary			Cup	Ianni 2009, p.250, fig. 3	153
La Muculufa sanctuary			Beaker	Ianni 2009, p.261, fig. 12	154
La Muculufa sanctuary			Beaker	Ianni 2009, p.261, fig. 12	155
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, p.33, fig 44b	156
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, p.33, fig. 43a	157
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, p.32, fig. 40	158
La Muculufa sanctuary			Beaker	Ianni 2009, p.245, fig. 1	159
La Muculufa sanctuary			Cup	Ianni 2009, p.259, fig. 8	164
La Muculufa sanctuary			Cup	Ross Holloway et al. 1990, p.34, fig. 49	165
La Muculufa sanctuary			Bowl	Ross Holloway et al. 1990, p.32, fig. 39	169
La Muculufa sanctuary			Hourglass pot	Ross Holloway et al. 1990, p.32, fig 41c	170
La Muculufa sanctuary			Pedestalled_bowl	Ianni 2009, p.250, fig. 3	191
La Muculufa sanctuary			Cup	Ianni 2009, p.245, fig. 1	197

Location	trench	Related feature	Shape	Bibliography	Cat.N.
La Muculufa sanctuary			Beaker	Ianni 2009, p.257, fig. 7	257
La Muculufa sanctuary			Cup Ross Holloway et al. 1990, p.32, fig. 42		258
La Muculufa sanctuary			Jar	Ianni 2009, p.245, fig. 1	267
La Muculufa sanctuary			Beaker	Ianni 2009, p.245, fig.1	134bis
La Muculufa sanctuary			Beaker	Ianni 2009, p.245, fig 1	135bis
La Muculufa sanctuary			Jar	Ianni 2009, fig. 1	973
La Muculufa sanctuary			Jar	Ianni 2009, p.245,	1038
Manfria- I Lotti		Burial 21	Cup	Orlandini 1962	161
Manfria- I Lotti		Burial 21	Cup	Gennusa 2015, p.96, fig. 37.6	163
Manfria-Case Manfria	Saggio Lavore		Cup	Orlandini 1962, fig. 49.4	127
Manfria-Case Manfria	Test pit 9		Cup	Orlandini 1962, fig.47.1	128
Manfria-Case Manfria	Test pit 9		Cup Orlandini 1962 fig.47.1		129
Manfria-Case Manfria			Cup	Orlandini 1962, fig.13	132
Manfria-Case Manfria			Cup	Orlandini 1962, fig.10.3	133
Manfria-Case Manfria		Hut 3	Cup	Orlandini 1962, fig.13.3	152
Manfria-Case Manfria	Test pit 10		Cup	Orlandini 1962, fig. 44.3	162
Manfria-Case Manfria	Test pit 16		Cup	Orlandini 1962, fig.24	166
Manfria-Case Manfria		Hut 8	Cup	Orlandini 1962, fig. 24	167
Manfria-Case Manfria		Hut 9	Bowl	Orlandini 1962, fig.24	168
Manfria-Case Manfria	Test pit 7		Hourglass pot	Orlandini 1962, fig. 46	171
Manfria-Case Manfria		Hut 5	Hourglass pot	Orlandini 1962	172
Manfria-Case Manfria		Hut 9	Bowl	Orlandini 1962	173
Manfria-Case Manfria			Cup	Gennusa 2015, p.103, fig. 43.6	174
Manfria-Case Manfria	Test pit 8		Cup	Orlandini 1962	175
Manfria-Case Manfria		Hut 3	Cup	Orlandini 1962	176
Manfria-Case Manfria	Test pit 16		Jar	Orlandini 1962	178
Manfria-Case Manfria		Hut 9	Pedestalled_bowl	Orlandini 1962, fig. 28.4	184
Manfria-Case Manfria		Hut 5	Pedestalled_bowl	Orlandini 1962, fig. 18.3	186
Manfria-Case Manfria		Hut 9	Pedestalled_bowl	Orlandini 1962, fig. 28.3	187

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Manfria-Case Manfria	Test pit 6		Pedestalled_bowl	Orlandini 1962, fig. 42.3	189
Manfria-Case Manfria		Hut 8	Pedestalled_bowl Orlandini 1962, fig. 24		190
Manfria-Case Manfria		Hut 3	Cup	Orlandini 1962, fig. 15.2	249
Manfria-Case Manfria	Test pit 9		Bowl	Gennusa 2015, p.82, fig. 27.13	251
Manfria-Case Manfria	Test pit 16		Cup	Orlandini 1962, fig. 45.5	252
Manfria-Case Manfria		Hearth C	Cup	Orlandini 1962	253
Manfria-Case Manfria	Test pit 8		Cup	Orlandini 1962	254
Manfria-Case Manfria		Hut 5	Pedestalled_bowl	Orlandini 1962, fig. 18. 24	474
Manfria-Case Manfria		Hut 9	Pedestalled_bowl	Orlandini 1962, fig. 29.1	182bis
Marcita		Tomb b	Cup	Gennusa 2015, p.93, fig. 35.5; Tusa 1997b, fig. 27	838
Marcita			Jar	Tusa 1997b, fig. 23	1057
Marcita		Tomb b	Pedestalled_bowl	Tusa 1997b, fig. 33	1081
Marcita		Tomb b	Pedestalled_bowl Tusa 1997b, 31		1086
Marcita		Tomb b	Pedestalled_bowl	Tusa 1997b, fig. 31	1087
Marianopoli- Valleoscura		Tomb 17	Cup	Fiorentini 1985- p.86, fig. 3.2	675
Marianopoli- Valleoscura		Tomb 14	Cup	Fiorentini 1985- p.86, fig. 4.2	761
Marianopoli- Valleoscura		Tomb 17	Cup	Fiorentini 1985- p.86, fig. 3.5	774
Marianopoli- Valleoscura		Tomb 14	Cup	Fiorentini 1985- p.86, fig. 4.1	868
Marianopoli- Valleoscura		Tomb 17	Jar	Di Stefano 1979, fig. 22.	932
Marianopoli- Valleoscura		Tomb 14	Jar	Fiorentini 1985, p.34, fig. 4.3	1005
Melilli		Tomb 19	Cup	Lagona 1971, fig. 6.R11	795
Melilli			Hourglass pot	Orsi 1891b, fig. 5.23	909
Melilli		Tomb 17	Hourglass pot	Orsi 1891b, fig. 6.17.	911
Melilli		Tomb 34	Hourglass pot	Orsi 1891b, fig. 5.18	985
Monserrato			Cup	Orsi 1897, fig. 1.10	856
Monte Calvario			Cup	Ianní 2004, fig. 95	737
Monte del Gesso			Bowl	fig. 121	756
Monte Grande/Baffo Superiore			Jar	Castellana 1998, p.151, fig. 78.35c	11

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Monte Grande/Baffo Superiore	Strata 1-1a		Cup	Castellana 1996a, p.505, fig. 2	79
Monte Grande/Baffo Superiore			Cup	Castellana 1996a, p.505, fig. 2	81
Monte Grande/Baffo Superiore	Strata 1-1a		Jar	Castellana 1998	91
Monte Grande/Baffo Superiore	Strata 1-1a		Jar	Castellana 1998	92
Monte Grande/Baffo Superiore	Strata 2-2a		Cup	Castellana 1998, p.141, fig. 75.11c	113
Monte Grande/Baffo Superiore	Strata 2-2a		Cup	Castellana 1998, p.139, fig. 72.1c	115
Monte Grande/Baffo Superiore			Cup	Castellana 1998, p.139, fig. 72.4c	124
Monte Grande/Baffo Superiore			Cup	Castellana 1996a, p.505, fig. 2	131
Monte Grande/Baffo Superiore	Stratum 2- 2a	Enclosure	Beaker	Castellana 1998, p.139, fig. 72.6c	135
Monte Grande/Baffo Superiore	Stratum 2- 2a	Enclosure	Cup	Castellana 1998, p.141, fig. 75.14c	136
Monte Grande/Baffo Superiore	Strata 1-1a		Pedestalled_bowl	Castellana 1998, p.173, fig. 84.95c	188
Monte Racello		Tomb 1	Cup		834
Monte Racello		Tomb 1	Cup Orsi 1898, 22.4		864
Monte Racello		Tomb 1	Cup	Orsi 1898, fig. 22.2	865
Monte Racello		Tomb 5	Hourglass pot	Orsi 1898, fig. 22.17.	905
Monte Racello		Tomb 5	Hourglass pot	Orsi 1898, fig. 22.9	992
Monte Racello		Tomb 1	Hourglass pot	Gennusa 2015, p. 117, fig. 56.1	997
Monte Sallia		Tomb 1	Hourglass pot	Gennusa 2015, p. 117, fig. 56.2	998
Monte San Basilio			Bowl	Russo 2011, fig. 2	893
Monteaperto			Cup	Orsi 1897, fig. 1.1A	855
Monteaperto			cup	Orsi 1897, fig. 1.14	952
Monteaperto			Pedestalled_bowl	Orsi 1897, fig. 1.4	569bis
Montesara			Pedestalled_bowl	Orsi 1895, fig. 4.3	568
Nontesara			Jar	Tuse and Pacci	1028
Naro			Pedestalled_bowl	1990, p.171, fig. 81	471
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.172, fig. 82	478
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.178, fig. 88	479
Naro	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.173, fig. 83	501
Naro	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.174, fig.84	503

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Naro	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.177, fig. 87	504
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.136, fig. 30	518
Naro			Pedestalled_bowl	Pacci 1987, fig. 23	519
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.180 fig. 90	521
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.170 fig. 80	531
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.175 fig. 89	543
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.181 fig. 91	552
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.185, fig. 94	562
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.186, fig. 95	563
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.189 fig. 98	572
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.188 fig. 97	580
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.187 fig. 96	581
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.190, fig. 99	597
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.176 fig. 86	616
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.184 fig. 93	628
Naro			Cup	Tusa and Pacci 1990, p.148, fig. 47	655
Naro			Cup	Tusa and Pacci 1990, p.156, fig. 59	665
Naro			Cup	Tusa and Pacci 1990, p.159, fig. 66	671
Naro			Сир	Tusa and Pacci 1990, p.157, fig. 62	744
Naro			Cup	Tusa and Pacci 1990, p.155, fig. 58	747

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Naro			Cup	Tusa and Pacci 1990, p.154, fig. 57	748
Naro			Cup	Tusa and Pacci 1990, p.153, fig. 55	755
Naro			Cup	Tusa and Pacci 1990, p.156, fig. 60	767
Naro			Cup	Tusa and Pacci 1990, p.160, fig. 67	770
Naro			Cup	Tusa and Pacci 1990, p.149, fig. 48	771
Naro			Cup	Tusa and Pacci 1990, p.151, fig. 52	773
Naro			Cup	Tusa and Pacci 1990, p.153, fig. 56	800
Naro			Cup	Tusa and Pacci, 1990, p.149, fig. 49	805
Naro			Cup	Tusa and Pacci 1990, p.148, fig. 46	806
Naro			Cup	Tusa and Pacci 1990, p.50, fig. 150	807
Naro			Cup	Tusa and Pacci 1990, p.50, fig. 150	808
Naro			Cup	Tusa and Pacci 1990 p.147, fig. 47	822
Naro			Cup	Tusa and Pacci 1990, p.152, fig. 54	825
Naro			Cup	Tusa and Pacci 1990, p.151, fig. 53	836
Naro			Bowl	Tusa and Pacci 1990, p.158, fig. 64	846
Naro			Cup	Tusa and Pacci 1990, p.157, fig. 61	889
Naro			Jar	Tusa and Pacci 1990, p.167, fig. 77.	914
Naro			Jar	Tusa and Pacci 1990, p.163, fig. 71	936
Naro			Jar	Tusa and Pacci 1990, p.162, fig. 70.	949

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Naro			Jar Tusa and Pacci 1990, p.163, fig. 72		965
Naro			Jar	Tusa and Pacci 1990, p.198, fig. 109	1031
Naro			Jar	Tusa and Pacci 1990, p.108, fig. 197	1037
Naro			Jar	Tusa and Pacci 1990, p.196, fig. 107	1044
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.193, fig. 103	1079
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.192, fig. 102	1080
Naro			Pedestalled_bowl	Tusa and Pacci 1990, p.194, fig. 104	1082
Palagonia		Tomb 1S	Cup	Maniscalco 1993- 1994. fig. 75.3	672
Palagonia		Tomb 1S	Cup Maniscalco 199 94, fig. 75.2		796
Palagonia		Tomb 1S	Cup Maniscalco 199 94, fig.75.1		862
Palagonia		Tomb 1S	Hourglass pot	Maniscalco 1993- 1994, 74.4	916
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.132 fig. 26	476
Partanna	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.137, fig. 31	498
Partanna	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.131, fig. 24	499
Partanna	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.134, fig. 28	500
Partanna	Survey		Pedestalled_bowl	Tusa and Pacci 1990, p.129, fig. 22	502
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.179. fig. 89	517
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p. 135 fig. 29	520
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.140, fig. 36	524
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.139, fig. 33	525
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.138, fig. 32	611

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.140, fig. 35	613
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.132, fig. 25	614
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.139, fig. 34	615
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.133, fig. 27	617
Partanna			Cup	Tusa and Pacci 1990, p.120, fig. 8	649
Partanna			Cup	Tusa and Pacci 1990, p.123, fig. 14	650
Partanna			Cup	Tusa and Pacci 1990, p.121, fig. 9	666
Partanna			Cup	Tusa and Pacci 1990, p.121, fig. 10	667
Partanna			Cup	Tusa and Pacci 1990, p.122, fig. 11	769
Partanna			Cup	Tusa and Pacci 1990, p.119, fig. 6	803
Partanna			Cup	Tusa and Pacci 1990, p.122, fig. 12	813
Partanna			Cup	Tusa and Pacci 1990, p.118, fig. 4	817
Partanna			Cup	Tusa and Pacci 1990, p.120, fig. 7	818
Partanna			Cup	Tusa and Pacci 1990, p.115, fig. 1	821
Partanna			Cup	Tusa and Pacci 1990, p.116, fig. 2	827
Partanna			Cup	Tusa and Pacci 1990, p.117, fig. 3	828
Partanna			Jar	Tusa and Pacci 1990, p.168, fig. 78.	920
Partanna			Jar	Tusa and Pacci 1990, p.127, fig. 19.	935
Partanna			Jar	Tusa and Pacci 1990, p.124, fig. 15.	940
Partanna			Jar	Tusa and Pacci 1990, p.126, fig. 18.	941
Partanna			Jar	Tusa and Pacci 1990, p.125, fig. 16.	942
Partanna			Jar	Tusa and Pacci 1990, p.144, fig. 41	1023

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Partanna			Jar	Tusa and Pacci 1990, p.143, fig. 40	1029
Partanna			Pedestalled_bowl	Tusa and Pacci 1990, p.141, fig. 37	1089
Passanatello di Francoforte			Jar	Berbabó Brea 1973, fig. 4.67	969
Passarello		Tomb	Cup	Mauceri 1880, fig.AB.5	343
Passarello			Pedestalled_bowl	Mauceri 1880, fig. AB.1-2	598
Piano dell'Angelo			Pedestalled_bowl	Amoroso 1979, fig. 6.3	533
Piano dell'Angelo			Pedestalled_bowl	Amoroso 1979, fig. 7.1	601
Piano dell'Angelo			Pedestalled_bowl	Amoroso 1979, fig. 6.7	603
Piano dell'Angelo			Cup	Amoroso 1979, fig. 7.4	831
Piano dell'Angelo			Hourglass pot	Amoroso 1979, fig. 7.2	995
Piano dell'Angelo			Jar	Amoroso 1979, fig. 6.6	1020
Piano dell'Angelo			Jar	Amoroso 1979, fig. 6.5	1021
Piano dell'Angelo			Bowl	Seminerio 1996, fig. 16.4	1109
Piano dell'Angelo			Bowl	Seminerio 1996, fig. 16.5	1110
Piano dell'Angelo			Bowl	Orsi 1898, fig. 20.15	1111
Piano dell'Angelo			Cup	Seminerio 1996, fig. 15.2	757
Piano dell'Angelo			Cup	Seminerio 1996, fig. 15.4	848
Piano dell'Angelo			Hourglass pot	Seminerio 1996, fig. 15.1	906
Piano dell'Angelo			Jar	Seminerio 1996, fig. 14.3	915
Piano dell'angelo			Jar	Seminerio 1996, fig. 15.3	921
Piano dell'Angelo			Jar	Seminerio 1996, fig. 14.2	923
Piano dell'Angelo			Jar	Seminerio 1996, fig. 15.6	1000
Pizzo San Giuseppe			Bowl	Ianni 2004, p.172, fig. 142	759
Poggio Biddine			Pedestalled_bowl	Gennusa 2015, p.57, fig. 8.1	516
Poggio Monaco			Beaker	Maniscalco et al. 1975-76, p.33, fig. 131	1115
Poggio Monaco			Jar	Maniscalco et al. 1975/76, p.33, fig. 136	1116

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Poggio Monaco			Jar	Maniscalco et al. 1975/76, p.33, fig. 136	1117
Rocca Messana			Bowl	Ianni 2004, p.197, fig. 170	790
San Giuliano			Cup	Gennusa 2015, p.79, fig. 25.6	736
San Giuliano			Bowl	Gennusa 2015, p.85, fig. 29.12	764
San Lio			Cup	Lagona 1971, fig. V.R3	792
San Lio			Cup	Lagona 1971, fig. V.R5	793
San Lio			Cup	Lagona 1971, fig. V.R10	814
San Lio			Cup	Lagona 1971, fig. V.R11	849
San Lio			Cup	Lagona 1971, fig. V.R2	861
San Lio			Hourglass pot	Lagona 1971, fig. VI.R8.	912
San Lio			Jar	Lagona 1971, fig.V.R4	967
San Lio			Jar	Lagona 1971, fig. VI.R9	970
San Lio			Hourglass pot	Lagona 1971, fig. VI.R7	986
Santa Croce di Camerina		Tomb via Balilla	Hourglass pot	Scorfani 1972, fig. 2a.d	989
Sant'Angelo Muxaro			Jar	Tusa and Pacci 1990, fig. 21	1046
Sant'Anna			Cup	Sedita Migliore 1981, fig. 10	754
Torre Bigini		Tomb a	Pedestalled_bowl	Mingazzini 1939, fig.1.3	523
Torre Bigini			Cup	Mingazzini 1939, fig. 2.8	660
Torre Bigini		Tomb A	Cup	Mingazzini 1939, fig. 2.10	669
Torre Bigini		Tomb A	Pedestalled_bowl	Mingazzini 1939, fig. 1.1	1092
Torre Bigini		Tomb A	Pedestalled_bowl	Mingazzini 1939, fig. 1.5	569tris
Torre Cusa			Cup	Nicolis and Mottes 1998, p.230, fig. 5	824
Torre Cusa			Jar	Nicolis and Mottes 1998, p.230, fig. 6	1041
Torre Cusa			Bowl	Nicolis and Mottes 1998	1054
Torre donzelle		Tomb a	Pedestalled_bowl	Mannino 1994, 167, fig. 21.b	468
Torre donzelle		Tomb a	Pedestalled_bowl	Mannino 1994, p.166, fig. 20.c	469
Torre donzelle		Tomb a	Pedestalled_bowl	Mannino 1994, p.167, fig. 21.a	470

Location	trench	Related feature	Shape	Bibliography	Cat.N.
Torre Donzelle		Tomb A	Jar	Mannino 1994, p.167, fig. 21.e	1013
Torre Donzelle		Tomb A	Jar	Mannino 1994	1052
Torre Donzelle		Tomb A	Jar	Mannino 1994, p.165, fig. 19.d	1053
Torre Donzelle		Tomb A	Jar	Mannino 1994, p.165, fig. 19.c	1055
Torre Donzelle		Tomb A	Jar	Mannino 1994, p.165, fig. 19.b	1056
Valsavoia		Tomb 3	Pedestalled_bowl	Orsi 1902a, fig.2.5	508
Valsavoia		Tomb 7	Cup	Gennusa 2015, p.96, fig. 37.17	794
Valsavoia		Tomb 6	Cup	Orsi 1902a, fig.2.26	811
Valsavoia		Tomb 7	Cup	Orsi 1902a, fig. 2.18	815
Valsavoia		Tomb 7	Jar	Orsi 1902a, fig. 2.17	974

I.2 CATALOGUE OF SITES

This section of the Appendix 1 presents the complete list of sites that have been scrutinised in this work. This catalogue is sorted by the Site number. Information displayed regards i) location of the site, ii) geographic coordinates and iii) category of appartenance as defined in Chapter 5.

Table I.6: Catalogue of Sites. This table includes all information regarding the geo localisation of the site. All Information regarding relevant site characteristics, including presence/absence of certain features, is described in Section 5.5 in which descriptions of sites has been arranged also by Site number.

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
1	Catania	Bronte	Grotta Maniace	37,8492	14,9148	Cave site
2	Catania	Bronte	Grotta Tartaraci	37,6399	14,7986	Cave site
3	Catania	Adrano	Grotta del Santo			Cave site
4	Catania	Adrano	Grotta del Vecchiuzzo			Cave site
5	Catania	Adrano	Grotta Maccarone	37,6638	14,8342	Cave site
6	Catania	Adrano	Grotta Marca	37,8492	14,9148	Cave site
7	Catania	Adrano	Grotta Petralia	37,8492	14,9148	Cave site
8	Catania	Adrano	Poggio dell'Aquila			Settlement
9	Catania	Adrano	Villaggio Garofalo			Settlement
10	Catania	Biancavilla	Origlio			Cave site
11	Catania	Paterno	Poggio Monaco	37,5328	14,8672	Scatter of pottery sherds
12	Catania	Catania	Argentieri			Cave site
13	Catania	Catania	Balze Soprane			Cave site
14	Catania	Catania	Delle Femmine			Cave site
15	Catania	Catania	Deposito Sapienza	37,6638	14,8342	Cave site
16	Catania	Catania	Filiciosa	37,5878	14,7294	Cave site
17	Catania	Catania	Grotta Basile			Cave site
18	Catania	Catania	Grotta Difesa Luna			Cave site
19	Catania	Catania	Grotta Leonardi			Cave site
20	Catania	Catania	Grotta Nuovaluccell o			Cave site
21	Catania	Catania	Grotta Pietralunga	37,8492	14,9148	Cave site
22	Catania	Catania	Grotta Quaceci			Cave site
23	Catania	Catania	Grotta Spitaleri San Leo			Cave site
24	Catania	Catania	Pozzillo	37,6596	15,1953	Cave site
25	Catania	Catania	Sciare Manganelli			Cave site
N.	Province	Municipality	Location	Latitude	Longitude	Site_type
----	----------	---------------	---	----------	-----------	------------------------------
26	Catania	Catania	Spartiviali			Cave site
27	Catania	Catania	Verzella			Cave site
28	Catania	Catania	Via Scutari			Cave site
29	Catania	Caltagirone	Piano dell'Angelo	37,0559	14,7289	Cemetery
30	Catania	Licodia Eubea	Casale- Vizzini	37,1575	14,7576	Scatter of pottery sherds
31	Catania	Mineo	Camuti			Settlement
32	Catania	Mineo	Camuti Cemetery			Cemetery
33	Catania	Mineo	Monte Catalfaro	37,2781	14,7195	Settlement
34	Catania	Mineo	Rocchicella	37,3320	14,6979	Settlement
35	Catania	Ramacca	Torricella di Ramacca			Settlement
36	Catania	Palagonia	Acqua Amara di Palagonia	37,3298	14,7653	Scatter of pottery sherds
37	Catania	Palagonia	Colle Fragala	37,3335	14,7743	Cemetery
38	Catania	Palagonia	Contrada Pietrazzi	37,3042	14,7495	Settlement
39	Catania	Palagonia	Coste di Santa Febbronia	37,3305	14,7722	Cemetery
40	Catania	Palagonia	Coste di Santa Febbronia	37,3305	14,7722	Settlement
41	Catania	Palagonia	Primo Lanzo	37,3207	14,7737	Cemetery
42	Catania	Militello	Dosso Tamburaro	37,3241	14,7852	Settlement
43	Catania	Militello	Fildidonna	37,3142	14,8103	Settlement
44	Catania	Militello	Poggio Croce	37,2726	14,7263	Cemetery
45	Catania	Scordia	Monte San Basile	37,3396	14,8554	Settlement
47	Siracusa	Francofonte	Passanatello di Francofonte			Cemetery
48	Siracusa	Francofonte	San Lio			Cemetery
49	Siracusa	Lentini	Valsavoia			Cemetery
50	Siracusa	Lentini	Valsavoia village			Settlement
51	Siracusa	Melilli	Cava della Secchiera			Cemetery
52	Siracusa	Melilli	Melilli-Cava Bernardina			Cemetery
53	Siracusa	Melilli	Timpa Dieri- Petraro di Melilli			Settlement
54	Siracusa	Augusta	Cava Cana Barbara	37,2619	15,0479	Cemetery
55	Siracusa	Noto	Case Granieri			Scatter of pottery sherds
56	Siracusa	Noto	Case Lantieri			Scatter of pottery sherds
57	Siracusa	Noto	Castelluccio necropoli- Cava della Signora	36,9520	14,9160	Cemetery

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
59	Siracusa	Noto	Castelluccio villaggio- Piano Sella	36,9497	14,9371	Settlement
60	Siracusa	Noto	Costa dei Grani	36,8155	14,9945	Scatter of pottery sherds
61	Siracusa	Noto	Cozzo Croce-Cava dei Servi			Cemetery
62	Siracusa	Noto	Cozzo delle Giummare			Scatter of pottery sherds
63	Siracusa	Noto	Sbriula			Scatter of pottery sherds
65	Siracusa	Pachino	Cugni di Calafarina	36,7198	15,1071	Settlement
66	siracusa	Rosolini	Cozzo Tondo-Cava del Prainito	37,0116	14,9119	Cemetery
67	Siracusa	Rosolini	Grotta Lazzaro	36,8474	14,9573	Cave site
69	siracusa	Rosolini	Mulino Grotte			Cemetery
70	Siracusa	Floridia	Grotta della Chiusazza	36,9939	15,1869	Cave site
71	Ragusa	Ispica	Baravitalla	36,8593	14,8303	Settlement
72	Ragusa	Ispica	Baravitalla- Cava Marchesa	36,8593	14,8303	Cemetery
73	Ragusa	Ispica	Cava Minciucci- Crocifia	36,8091	14,8643	Cemetery
74	Ragusa	Ispica	Finocchiara			Cemetery
75	Ragusa	Ispica	Grotticelle			Cemetery
76	Ragusa	Ispica	Scalepiane			Cemetery
77	Ragusa	Scicli	Sampieri- Bellamagna- Benarifi	36,7392	14,8086	Cemetery
78	Ragusa	Scicli	Sampieri- Valentino- Petraro	36,7359	14,7831	Cemetery
79	Ragusa	Scicli	Cava Gisana			Cemetery
80	Ragusa	Scicli	Cava Taddarita	36,8038	14,5963	Scatter of pottery sherds
81	Ragusa	Scicli	Cella			Cemetery
82	Ragusa	Scicli	Scicli	36,7913	14,7039	Scatter of pottery sherds
83	Ragusa	Modica	Caitina			Scatter of pottery sherds
84	Ragusa	Modica	Calicantone	36,8227	14,8578	Scatter of pottery sherds
85	Ragusa	Modica	Cava Lavinaro	36,8506	14,8375	Cemetery
86	Ragusa	Modica	Fiumara			Cemetery
88	Ragusa	Modica	Modica	36,8571	14,7589	Scatter of pottery sherds
89	Ragusa	Modica	Modica- Quartiriccio	36,8571	14,7589	Cemetery
90	Ragusa	Ragusa	Cozzo Ciaramiri			Scatter of pottery sherds

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
91	Ragusa	Ragusa	Piano Resti	36,8582	14,4508	Scatter of pottery sherds
92	Ragusa	Ragusa	Donna Scala	37,0398	14,7836	Scatter of pottery sherds
93	Ragusa	Ragusa	Grotta del Gigante			Cave site
94	Ragusa	Ragusa	Grotta San Filippo			Cave site
95	Ragusa	Ragusa	Ragusa	36,9234	14,7184	Scatter of pottery sherds
96	Ragusa	Ragusa	Sant'Antonio Grotta dell'Acqua	36,8600	14,7364	Scatter of pottery sherds
97	Ragusa	Giarratana	Ipogeo di Calaforno	37,0818	14,7046	Cave site
98	Ragusa	Monterosso Almo	Monte Casasia	37,1112	14,7056	Scatter of pottery sherds
99	Ragusa	Chiaramonte Gulfi	Aranci	37,0818	14,7046	Scatter of pottery sherds
100	Ragusa	Chiaramonte Gulfi	Paraspola	37,0818	14,7046	Scatter of pottery sherds
101	Ragusa	Comiso	Castiglione	36,9896	14,6156	Cemetery
102	Ragusa	Comiso	Castiglione village	36,9896	14,6156	Settlement
103	Ragusa	Comiso	Monte Racello	36,9222	14,6623	Cemetery
104	Ragusa	Comiso	Monte Sallia villaggio	36,9702	14,6560	Scatter of pottery sherds
105	Ragusa	Comiso	Monte Sallia- Cozzo delle Ciavole	36,9702	14,6560	Cemetery
106	Ragusa	Comiso	Monte Tabuto 1	36,9754	14,6544	Cave site
107	Ragusa	Comiso	Monte Tabuto 2	36,9754	14,6544	Cave site
108	Ragusa	Santa Croce di Camerica	Santa Croce di Camerina	36,8282	14,5239	Cemetery
109	Ragusa	Santa Croce di Camerina	Branco Piccolo	36,8505	14,4550	Scatter of pottery sherds
110	Ragusa	Santa Croce di Camerina	Camarina			Scatter of pottery sherds
111	Ragusa	Santa Croce di Camerina	Canalotti	36,8199	14,4631	Scatter of pottery sherds
112	Ragusa	Santa Croce di Camerina	Capitina- Nipitella	36,9009	14,4934	Scatter of pottery sherds
113	Ragusa	Santa Croce di Camerina	Contrada Forche			Settlement
114	Ragusa	Santa Croce di Camerina	Contrada Paolina	36,7220	15,1166	Cemetery
115	Ragusa	Santa Croce di Camerina	Maistro	36,7824	14,5763	Scatter of pottery sherds
116	Ragusa	Vittoria	Alcerito	36,9413	14,4201	Scatter of pottery sherds
117	Ragusa	Vittoria	Scoglitti- Macchia Tonda	36,8929	14,4306	Scatter of pottery sherds
118	Ragusa	Vittoria	Boscotondo			Scatter of pottery sherds

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
119	Ragusa	Vittoria	Branco Grande	36,8505	14,4550	Settlement
120	Ragusa	Vittoria	Carusone			Scatter of pottery sherds
121	Ragusa	Vittoria	Castellazzo	36,9531	14,5672	Scatter of pottery sherds
122	Ragusa	Acate	Biddini Sottano	37,0492	14,5227	Scatter of pottery sherds
123	Ragusa	Acate	Cozzo Cicirello			Scatter of pottery sherds
124	Ragusa	Acate	Torrevecchia			Scatter of pottery sherds
125	Ragusa	Acate	Poggio Biddine	37,0602	14,5318	Settlement
126	Ragusa	Acate	Punta Zafaglione	36,9189	14,4094	Scatter of pottery sherds
127	Ragusa	Acate	Cozzo Campisi	36,8582	14,4508	Scatter of pottery sherds
128	Caltanissett a	Gela	Gela Molino a Vento	37,0753	14,2361	Scatter of pottery sherds
129	Caltanissett a	Gela	Manfria-Case Manfria	37,1038	14,1329	Settlement
130	Caltanissett a	Gela	Manfria-I Lotti	37,1171	14,1545	Cemetery
131	Trapani	Partanna	Marcita	37,6898	12,7945	Cemetery
132	Caltanissett a	Butera	Fastucheria	37,1885	14,1843	Cemetery
133	Caltanissett a	Butera	Fattoria Ficuzza	37,1777	14,0227	Scatter of pottery sherds
134	Caltanissett a	Butera	La Muculufa sanctuary	37,2136	14,0093	Settlement
135	Caltanissett a	Butera	La Muculufa village	37,2136	14,0093	Settlement
136	Caltanissett a	Butera	Monte Dessueri	37,1859	14,2593	Scatter of pottery sherds
137	Caltanissett a	Butera	Poggio Diliella			Scatter of pottery sherds
138	Caltanissett a	Butera	Priorato	37,2091	14,1289	Scatter of pottery sherds
140	Caltanissett a	Butera	Saracinella			Scatter of pottery sherds
141	Caltanissett a	Butera	Suor Marchesa	37,1974	14,0386	Cemetery
142	Caltanissett	Mazzarino	Monte Bubbonia	37,2512	14,3387	Cemetery
143	Caltanissett	Butera	Milingiana	37,2038	14,0951	Cemetery
144	Caltanissett a	Butera	Monte Desusino	37,1500	14,0546	Settlement
145	Caltanissett a	Mazzarino	Contrada Garrasia	37,2071	14,2987	Settlement
146	Caltanissett a	Mazzarino	Contrada San Giuseppe di Gallitano	37,3419	14,0657	Scatter of pottery sherds
147	Caltanissett a	Mazzarino	Pizzo San Giuseppe	37,3534	14,0645	Scatter of pottery sherds
148	Enna	Aidone	Morgantina	37,4375	14,4890	Settlement
149	Enna	Villarosa	Case Bastione	37,6116	14,2259	Settlement

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
150	Caltanissett a	Caltanissetta	Contrada San Martino			Scatter of pottery sherds
151	Caltanissett a	Caltanissetta	Gibil Gabib	37,4503	14,0769	Cemetery
152	Caltanissett a	Caltanissetta	Mole del Draffu	37,3721	14,0066	Scatter of pottery sherds
153	Caltanissett a	Caltanissetta	Monte Pisciacane	37,4006	14,0187	Scatter of pottery sherds
154	Caltanissett a	Caltanissetta	Monte Sabucina	37,4980	14,1084	Scatter of pottery sherds
155	Caltanissett a	Caltanissetta	Monte San Giuliano	37,5011	14,0557	Scatter of pottery sherds
156	Caltanissett a	Caltanissetta	Roba Vecchia Galasse	37,3501	14,0191	Scatter of pottery sherds
157	Caltanissett a	Caltanissetta	Sant'Anna	37,5075	14,0438	Cemetery
158	Caltanissett a	Sommatino	Colle dell'Olivella	37,3242	14,0312	Settlement
159	Caltanissett a	Sommatino	Contrada Castellazzo	37,3660	14,0199	Scatter of pottery sherds
160	Caltanissett a	Sommatino	La Montagna	37,3168	14,0129	Settlement
161	Caltanissett a	Sommatino	Montagna Solfarella			Settlement
162	Caltanissett a	Sommatino	Monte Calvario	37,3669	13,9861	Scatter of pottery sherds
163	Caltanissett a	Sommatino	Monte del Gesso	37,3852	14,0584	Scatter of pottery sherds
164	Caltanissett a	Sommatino	Rocca Messana	37,3022	13,9989	Scatter of pottery sherds
165	Agrigento	Ravanusa	Contrada del Conte Bosco	37,2840	14,0024	Scatter of pottery sherds
166	Agrigento	Ravanusa	Monte Rosso	37,2494	13,9743	Settlement
167	Agrigento	Ravanusa	Monte Saraceno	37,2010	14,1508	Settlement
168	Agrigento	Campobello di Licata	Contrada Passarello	37,2034	13,9065	Cemetery
169	Agrigento	Campobello di Licata	Grotta di Pietrarossa			Cave site
170	Agrigento	Licata	Contrada Calí	37,1494	14,0005	Cemetery
171	Agrigento	Licata	Contrada Landro	37,1486	13,9367	Cemetery
172	Agrigento	Licata	Contrada Mintina	37,3018	14,0148	Cemetery
173	Agrigento	Licata	Contrada Palma			Cemetery
174	Agrigento	Licata	Fonte/Rio di San Pietro			Settlement
175	Agrigento	Licata	Monte Agrabona	37,1422	14,0264	Settlement
176	Agrigento	Licata	Monte Ararato del Muro	37,1605	13,9749	Cemetery
177	Agrigento	Licata	Monte Canalotto			Cemetery
179	Agrigento	Licata	Monte Canticaglione	37,1227	14,0037	Cemetery

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
180	Agrigento	Licata	Monte Giannotta	37,1078	13,8911	Cemetery
181	Agrigento	Licata	Monte Petrulla	37,1623	13,9426	Settlement
182	Agrigento	Licata	Monte Sole	37,1059	13,9075	Cemetery
183	Agrigento	Licata	Piano Gaffe- Madre Chiesa	37,1596	13,8485	Settlement
184	Agrigento	Licata	Pizzo Caduta	37,1021	13,8910	Settlement
185	Agrigento	Licata	Cantigaglione	37,1227	14,0037	Settlement
186	Agrigento	Licata	Casalicchio- Agnone	37,1410	13,9832	Settlement
187	Agrigento	Palma di Montechiaro	Zubbia			Cemetery
188	Agrigento	Palma di Montechiaro	Castello Chiaramonta no di Palma	37,1846	13,6952	Settlement
189	Agrigento	Palma di Montechiaro	Trappeto			Cemetery
190	Agrigento	Palma di Montechiaro	Piano di Citta- Mandranova	37,1767	13,8040	Cemetery
191	Agrigento	Palma di Montechiaro	Montagna del Bosco	37,1872	13,8165	Cemetery
192	Agrigento	Palma di Montechiaro	Masserizia Crescimanno			Scatter of pottery sherds
193	Agrigento	Palma di Montechiaro	La Ragusetta	37,2082	13,7915	Cemetery
195	Agrigento	Palma di Montechiaro	Cuminazzi slope	37,2021	13,7405	Cemetery
196	Agrigento	Palma di Montechiaro	Contrada Suttafari	37,2163	13,8194	Scatter of pottery sherds
197	Agrigento	Palma di Montechiaro	Contrada Suttafari	37,2163	13,8194	Cemetery
199	Agrigento	Palma di Montechiaro	Cassarino			Cemetery
20 0	Agrigento	Palma di Montechiaro	Monte Grande Vicinzina			Settlement
201	Agrigento	Palma di Montechiaro	Monte Grande San Francesco	37,1940	13,6855	Settlement
20 2	Agrigento	Palma di Montechiaro	Monte Grande	37,2010	13,6853	Settlement
20 3	Agrigento	Palma di Montechiaro	Castellazzo di Palma	37,1566	13,7960	Scatter of pottery sherds
20 4	Agrigento	Naro	Naro	37,2950	13,7910	Cemetery
20 5	Agrigento	Canicatti	Canicatti	37,3563	13,8478	Cemetery
20 6	Caltanissett a	Marianopoli	Marianopoli- Contrada Corvo	37,5879	13,9388	Settlement
20 7	Caltanissett a	Marianopoli	Marianopoli- Valleoscura	37,5894	13,9204	Cemetery
20 8	Agrigento	Favara	Grotta Ticchiara	37,2869	13,6780	Cave site
20 9	Agrigento	Racalmuto	Altopiano di Pietralonga	37,3614	13,7470	Cemetery

N.	Province	Municipality	Location	Latitude	Longitude	Site_type
210	Agrigento	Favara	Contrada Muntagnedda	37,3133	13,6412	Cemetery
211	Agrigento	Favara	Contrada Grazia	37,3133	13,9065	Cemetery
212	Agrigento	Aragona	Caldare			Settlement
213	Agrigento	Aragona	Caldare			Cemetery
214	Agrigento	Agrigento	Monteaperto	37,3273	13,5385	Cemetery
215	Agrigento	Agrigento	Monserrato	37,2981	13,5433	Cemetery
216	Agrigento	Sant'angelo Muxaro	Sant'Angelo Muxaro	37,4804	13,5457	Cemetery
217	Agrigento	Cattolica Eraclea	Monte Sara	37,4700	13,3567	Cemetery
218	Agrigento	Ribera	Ciavolaro	37,4815	13,2772	anthropic
219	Agrigento	Sciacca	Contrada San Bartolo	37,5669	13,0337	Cemetery
22 0	Trapani	Salaparuta	contrada Pergola	37,7428	12,9642	Cemetery
221	Trapani	Partanna	Partanna	37,7258	12,8900	Cemetery
22 2	Trapani	Partanna	Torre Bigini	37,7020	12,8485	Cemetery
22 3	Trapani	Partanna	Torre Donzelle	37,7210	12,9189	Cemetery
22 4	Trapani	Campobello di Mazara	Torre Cusa			Cemetery
22 5	Trapani	Mazara del vallo	Contrada Gattolo	37,6964	12,6969	Cemetery

APPENDIX 2. TYPOLOGY OF THE POTTERY REPERTOIRES

II.1 INTRODUCTION

The following body of text incorporates typological description of the examined pottery repertoires in accordance with the taxonomic levels identified in the morphometric study of variability undertaken in Chapter 6, Section 6.4. Definition of each typological levels, namely shape, form and sub-variety has been undertaken in Section 6.4.1 following specific criteria. In this section of the appendix full description is organised therefore per shape, form and formal variety from the simplest to the most complex profile, and enriched with illustrations of all the examined items redrawn by the author. Illustration captions cross-reference to specific tables and pages of the Catalogue of Pottery for the original sources and provenance.

II.2 SCHEMATISED STRUCTURE OF THE ILLUSTRATED MORPHO-TYPOLOGY

Shapes	Forms	Codes
Beakers	Smooth-waisted	1
	beaker	
	Marked-waisted beaker	2
Bowls	Globular	3, 4, 5
	Semi-spherical	6
	Rounded with stem	7
Cups	Bell -shaped	8
	Globular	9, 10A, 10B
	Conical	11A, 11B, 12, 13A, 13B
	Carinated	14, 15, 16A, 16B
	Bi-conical	17
	Semi-spherical	18
Hourglass pots		19, 20
Jars	Barrel	21, 22
	Oval	23
	Pear shaped	24, 25
	Globular	26A, 26B, 26C, 27A, 27B
	Bi-conical	28A, 28B, 29A, 29B, 29C,
		29D, 29E
Pedestalled bowls	Height of the foot $<$	30-37
	height of the bowl	
	Height of the foot \geq	38-43
	height of the bowl	

Table II.1: Schematised structure of the illustrated typology. The table shows the structure of the following illustrated typolog	gy.
---	-----

II.3 ILLUSTRATED TYPOLOGY



Figure II.1: Forms and varieties in Beakers. Type 1, with smooth carination; Type 2 with marked carination (scale 1:4 ca. For full reference to provenance and sources, see Table I.4, p. 50-51)



Figure II.2: Form and variations in beakers, Type 2 (continues, scale 1:4 ca).

Beakers

- 1. Handless waisted vessel with smooth carination (120, 154, 155, 257; 740; 1115), Figure II.1.
- 2. Handless waisted vessel with a marked carination point (134, 135; 137, 141, 145, 149, 159, 134bis and 135bis), Figure II.1 and Figure II.2.

Bowls

Globular

- **3.** Wide mouth globular bowl (1108-1111), Figure II.3.
- **4.** Globular bowl with expanded body and distinct neck (139, 251, 764), Figure II.3.
- Globular bowl with everted rim profile (168, 173, 845, 846, 848, 892, 893, 915, 921-925, 928, 929, 1125), Figure II.4 and Figure II.5.
- A. Semi-spherical

6. (756, 759), Figure II.5

- B. Rounded bowl with stem
 - **7.** (1065, 1067, 1070, 1072, 1073), Figure II.6.



Figure II.3: Form and variations in bowls. Type 3, wide mouth globular bowls; Type 4, with expanded body (scale 1:6 ca. For full reference to provenance and sources see Table I.4, p. 51)



Figure II.4: Form and variations in bowls. Type, 5: with everted rim profile (scale 1:4. For full reference to provenance and sources see Table I.4, p. 51-52)



Figure II.5: Form and variations in bowls. Type, 5: with everted rim profile; Type 6: semi-spherical (scale 1:4. For full reference to provenance and sources see Table I.4, p. 51-52)



Figure II.6: Form and variations in bowls. Type 7: rounded bowl with stem (scale 1:4. For full reference to provenance and sources see Table I.4, p. 52-53)



Figure II.7: Form and variations in cups: Type 8: bell-shaped form (scale 1:4. For full reference to provenance and sources see Table I.4, p. 53-54)

<u>Cups</u>

II.7

Bell-shaped 8. (105, 113-115, 117-119, 121-123,

125, 153, 156, 157, 736, 739), Figure

Globular

)

- **9.** Collared cup with hook handle (106, 166, 167, 245, 798, 800, 889, 1231), Figure II.8



Figure II.8: Form and variations in cups, globular forms: Type 9: collared cup with hook handle (scale 1:4. For full reference to provenance and sources see Table I.4, p. 54)



Figure II.9: Form and variations in cups, globular forms: Type 10A: Rounded wall cups with loop handle (scale 1:4. For full reference to provenance and sources see Table I.4, p. 54-56).

10. Cup with rounded walls. It has two sub-varieties.

A: with loop handle (78, 79, 81-86, 89, 102-104, 127-129, 131-133, 136, 138, 160-162, 174-176, 244, 247, 249, 252-254, 258, 343, 368, 738, 750, 751, 754, 758,

847), Figure II.9, Figure II.10 and Figure II.11. *B: with equine –ears termination handle* (675, 760-762), Figure II.12.



Figure II.10: Form and variations in cups, globular forms: Type 10A: Rounded wall cups with loop handle (scale 1:4. For full reference to provenance and sources see Table I.4, p. 54-56).



Figure II.11: Form and variations in cups, globular forms: Type 10A: Rounded wall cups with loop handle (scale 1:4. For full reference to provenance and sources see Table I.4, p. 54-56).



Figure II.12: Form and variations in cups, globular forms: Type 10A: Rounded wall cups with loop handle (scale 1:4. For full reference to provenance and sources see Table I.4, p. 56).

Conical

11. Conical cups with curved walls. It has two sub-varieties.

A: with loop handle (655, 659-668). Figure II.13

B with ring handle (801, 803-808), Figure II.13

12. Conical cups with inverted curved walls (829, 831), Figure II.14

13. Conical cups with straight-sided walls. It has two sub-varieties. *A: with loop handles* (656, 657, 812-815, 817), Figure II.15 and Figure II.16 *B with axe-shaped termination* (810, 811, 818, 821-825, 827, 828), Figure II.16



Figure II.13: Variations in conical forms, conical cups with curved walls: Type 11A: with loop handle, Type 11B: with ring handle (scale 1:4 ca. For full reference to provenance and sources see Table I.4, p. 56-57).



Figure II.14: Conical cups. Type 12: with inverted curved walls (scale 1:4. For full reference to provenance and sources see Table I.4, p. 57).



Figure II.15: Variations in conical forms, conical cups with straight-sided walls: Type 13A: with loop handle, Type 13B: with axe-shaped termination handles (scale 1:4. For full reference to provenance and sources see Table I.4, p. 57-58).



Figure II.16: Variations in conical forms, conical cups with straight-sided walls: Type 13B: with axe-shaped termination handles (scale 1:4. For full reference to provenance and sources see Table I.4, p. 57-58).

Carinated

- **14.** Cups with upper walls taller than the lower walls, everted profiles and marked carination (140, 146, 147, 148, 150, 158), Figure II.17
- **15.** Cups with lower walls taller than the upper walls, everted profiles and smooth carination (1124, 745-747), Figure II.17
- **16.** Cups with upper and lower walls equally developed. It has two subvarieties.

A: with slightly straight profiles (142, 143, 669-673, 735, 741-744, 755, 765-772,

774, 778-780, 782, 783, 786-789), Figure II.18 and Figure II.19.

B: with everted profiles (126, 151, 674, 737, 781, 784, 864), Figure II.20.

Bi-conical

17. (152, 163, 757, 792-796, 849-856, 859-862, 865-868, 952, 962), Figure II.21 and Figure II.22.

Semi-spherical

18. (196-198, 650-653, 834, 836, 838), Figure II.23.



Figure II.17: Variations in carinated forms: Type 14: with Upper walls taller than the lower; Type 15: with Lower walls taller than the upper (scale 1:4. For full reference to provenance and sources see Table I.4, p. 58).



Figure II.18: Variations in carinated forms: Type 16:A: with upper and lower walls equally developed in slightly straight profile development (scale 1:4. For full reference to provenance and sources see Table I.4, p. 58-59).



Figure II.19: Variations in carinated forms: Type 16A: with upper and lower walls equally developed in slightly straight profile development (scale 1:4. For full reference to provenance and sources see Table I.4, p. 58-59).



Type 16B Figure II.20: Variations in carinated forms: Type 16A: with upper and lower walls equally developed in everted profile development (scale 1:4. For full reference to provenance and sources see Table I.4, p. 60).







Figure II.23: Semi-spherical cups: Type 18 (scale 1:4. For full reference to provenance and sources see Table I.4, p. 61)

Hourglass pots

- **19.** Double-handled hourglass pots (977-981, 984-986, 989, 991-998), Figure II.24
- **20.** Hourglass pots with a single loop handle (172, 899, 903-909, 911, 912, 916), Figure II.25.





Figure II.25: Hourglass pots, Type 20 (scale 1:4. For full reference to provenance and sources see Table I.4, p. 62)

<u>Jars</u>

Barrel

21. Flat barrel jars (1020, 1021, 1023, 1029, 1031), Figure II.26.

22. Elongated barrel jars (1026, 1028, 1030), Figure II.27.



Figure II.26: Form and variety in jars. Flat barrel jars: Type 21 (1029, scale 1:9 ca; 1023, 1022, 1020, 1031, scale 1:6. For full reference to provenance and sources see Table I.4, p. 62-63)



Figure II.27: Form and variety in jars. Elongated barrel jars: Type 22 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 63)

Oval

23. (1013-1015, 1027), Figure II.28

Pear-shaped

- **24.** Double-handled pear-shaped jars (999-1001, 1003, 1004), Figure II.29.
- **25.** Single-handled pear-shaped jars (896, 898, 914, 917, 919, 920), Figure II.30..



Figure II.28: Form and variety in jars. Oval jars: Type 23 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 63).



Figure II.29: Form and variety in jars. Double-handled pear-shaped variety, Type 24 (scale 1:6 ca. For full reference to provenance and sources see Table I.4, p. 63).


Figure II.30: Form and variety in jars. Single-handled pear-shaped variety, Type 25 (scale 1:4. For full reference to provenance and sources see Table I.4, p. 63-64).

Globular

26. Globular jars with distinct neck. It includes three sub-varieties.

A: with cylindrical neck (1008, 1012), Figure. II.31.

B: with expanded body and shoulders, restricted by a small cylindrical neck (268, 269, 272), Figure II.32.

C: with a distinct neck and a loop handle (177, 179, 180, 259-263, 931), Figure II.33.

27. Globular jars with indistinct neck. It includes two sub-varieties.

A: double-handled (11, 77, 87, 88, 100, 101), Figure II.34.

B: with a pair of hook handle attached to the point of maximum expansion (1044, 1046, 1047), Figure II. 35.









Figure II.34: Form and variety in globular jars. Globular jars with indistinct neck, Type 27A (scale 1:4. For full reference to provenance and sources see Table I.4, p. 65-66).



Figure II.35: Form and variety in globular jars. Globular jars with indistinct neck, Type 27A (scale 1:4. For full reference to provenance and sources see Table I.4, p. 65-66).

Bi-conical

- **28.** Bi-conical jars with elongated body and upper walls raising to indistinct necks. It included two sub-varieties.
- *A:* double-handled jars with a smooth carination (1034-1036, 1038), Figure II.36.
- *B:* single-handled jars with a marked carination point (897, 934-937, 939-943, 945-951, 953-957, 959, 963-965), Figure II.37, Figure II.28 and Figure II.39.



Figure II.36: Forms and varieties in bi-conical jars. Biconical double-handled jars with elongate body and smooth carination, Type 28A (scale 1:4. For full reference to provenance and sources see Table I.4, p. 66)



 Type 28B

 Figure II.37: Forms and varieties in bi-conical jars. Biconical single-handled jars with elongate body and marked carination, Type 28B (scale 1:4. For full reference to provenance and sources see Table I.4, p. 66-68)



 Type 28B

 Figure II.38: Forms and varieties in bi-conical jars. Biconical single-handled jars with elongate body and marked carination, Type 28B (scale 1:4. For full reference to provenance and sources see Table I.4, p. 66-68)



Figure II.39: Forms and varieties in bi-conical jars. Biconical single-handled jars with elongate body and marked carination, Type 28B (scale 1:4. For full reference to provenance and sources see Table I.4, p. 66-68)

29. Bi-conical jars with expanded body. It includes four sub-varieties.

A: jars with a marked carination, indistinct neck and hook handle attached to the point of maximum expansion (1032, 1033, 1041, 1050, 1066), Figure II.40.

B: jars with a marked carination, indistinct neck, everted rim and two ribbon handles (967-971, 974), Figure II.41.

C: jars with a marked carination, restricted neck, everted rim and two ribbon handles (1016-1019), Figure II.41.

D: Jars with smooth carination point, indistinct neck and three handles (1052-1059, 1061-1063, 1068), Figure II.42..



Figure II.40 Forms and varieties in bi-conical jars with expanded body. Marked carinated jar with hook handles Type 29A (scale 1:6. For full reference to provenance and sources see Table I.4, p. 68)



Figure II.41: Forms and varieties in bi-conical jars with expanded body. Marked carinated jars with everted rims and ribbon handles (Type 29B), marked carinated jars (Type 29C) (scale 1:4. 1017 ca scale 1:4. For full reference to provenance and sources see Table I.4, p. 68-69)



Figure II.42: Forms and varieties in bi-conical jars with expanded body. Three handled smooth carinated jars (Type 29D). (scale 1:6. 1059 ca 1:6. For full reference to provenance and sources see Table I.4, p. 69-70)

<u>Pedestalled vessels</u> With stem lower than the height of the bowl

- **30.** Handless curved-walls bowl with ring-shaped stem, lower than the bowl (465-467, 1079-1082), Figure II.43.
- **31.** Handless everted-walls bowl with stem with marked inflection between the bowl and the stem (182, 184, 187, 472, 474-476, 478, 479, 498-505, 521, 611, 613-617, 1086, 1087, 1089, 1090), Figure II.44 and Figure II.45.



Type 30 Figure II.43: Pedestalled vessels with stem lower than the height of the bowl. Handless curved-walls pedestalled bowls with ringshaped stem, Type 30 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 70)





 Type 31

 Figure II.45: Pedestalled vessels with stem lower than the height of the bowl. Handless everted-walls bowl with stem with marked inflection Type 31 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 70-71)

- **32.** Handless everted-walls bowl with ring-shaped stem, lower than the bowl (468-470, 1084), Figure II.46.
- **33.** Double-handled everted-walls bowl, with stem lower than the bowl (110-112), Figure II.46.
- **34.** Single-handled everted-walls bowl, with stem lower than the bowl. Handle's lower attachment starts from the stem rising up to the bowl (189, 190, 517-520, 522-527, 552, 572, 595, 1222), Figure II. 47..



Figure II.46: Pedestalled vessels with stem lower than the height of the bowl.); handless everted-walls bowl with ring-shaped stem, Type 32; Single or double-handled everted-walls bowl, Type 33 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 71-72).



Type 34 Figure II.47: Pedestalled vessels with stem lower than the height of the bowl. Single-handled everted-walls bowl and handle's lower attachment from the stem rising up to the bowl, Type 34 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 72).

- **35.** Handless everted-walls bowl with out-flaring rim (a tesa). The stem is lower than the bowl (481-497, 506, 511, 512, 528), Figure II.48 and Figure II.49.
- **36.** Single-handled everted bowl with out-flaring rim (a tesa) and trumpet-

shaped stem. The stem is lower to the bowl. Handle's lower attachment starts from the stem rising up to the bowl (507-510, 515, 555, 557-561, 629, 630), Figure II.50.



Figure II.48: Pedestalled vessels with stem lower than the height of the bowl. handless everted-walls bowl with out-flaring rim (a tesa) Type 35 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 73-74).



Figure II.49: Pedestalled vessels with stem lower than the height of the bowl. handless everted-walls bowl with out-flaring rim (a tesa) Type 35 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 73-74).



Type 36 Figure II.50: Pedestalled vessels with stem lower than the height of the bowl. Single-handled everted bowl with out-flaring rim (a tesa), trumphet-shaped stem and handle's lower attachment from the stem rising up to the bowl, Type 36 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 74).

37. Three-handled everted bowl with out-flaring rim (a tesa). The stem is lower than the bowl. Handle's lower attachment starts from the stem rising up to the bowl (585-590, 592-594), Figure II.51.

With stem equal to the height of the bowl

- **38.** Handless everted-walls bowl with continuous profile (529-533, 538-540, 542-544), Figure II.52.
- **39.** Everted-walls bowl as high as the stem. It may have two handles (188, 562-564, 566, 568-571, 573-576, 579-582), Figure II.53.



Figure II.51: Pedestalled vessels with stem lower than the height of the bowl. Three-handled everted bowl with out-flaring rim (a tesa) and handle's lower attachment from the stem rising up to the bowl, Type 37 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 74-75)



 Type 38

 Figure II.52: Pedestalled vessels with stem equal to the height of the bowl. Handless everted bowl with continuous profile development, Type 38 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 75)



With stem higher than the height of the bowl

- **40.** Handless everted bowl with trumpetshaped stem. The stem is higher than the bowl (191, 193, 51, 545, 546, 548, 549), Figure II.54.
- **41.** Everted-walls bowl with out-flaring rim (a tesa). The stem is higher than the bowl. It may have three handles (547, 596-601), Figure II. 55.
- **42.** Everted-walls bowl with out-flaring rim (a tesa) and finestrated stem. The stem is higher than the bowl. It may have handles (607-610), Figure II.56.
- **43.** Everted bowl with out-flaring rim and handle with axe-shaped termination (550, 551, 618-624, 626, 627), Figure II.57.



Figure II.54: Pedestalled vessels with stem higher than the height of the bowl. Handless everted bowl with trumpet-shaped stem, Type 40 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 76)



Tyep 41 Figure II.55: Pedestalled vessels with stem higher than the height of the bowl. Everted wall bowls with out-flaring rim and sometimes three bandles Type 41 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 76-77)



Figure II.56: Pedestalled vessels with stem higher than the height of the bowl. Everted bowl with out-flaring rims and perforated stem, Type 42 (scale 1:6. For full reference to provenance and sources see Table I.4, p. 77)



Type 43 Figure II.57: Pedestalled vessels with stem higher than the height of the bowl. Everted bowl with out-flaring rim and handle with axe-shape termination, Type 43 (scale 1:6. For full reference to provenance and sources see Table I.4, p.77)

APPENDIX 3. ETHNOGRAPHIC CORPORA: SUPPLEMENTUM

Storage and transfer

Having considered the kind of appropriate analogy as discussed in Section 4.3, I examined as much ethnographic cases as possible in order to explore the relationship between size and shape in storage and transport vessels. As observable in the Table 4.1 and further shown below, water jars are the most represented shapes with enough measurements in the accounts I managed to read, while direct information about dry storage containers remains limited to three cases, as noted already by Hendrickson and McDonald [1983]. Also limited, appears the variety of forms in which water jars may be classified [cf. Rice 2005, 237]. As noted by Arnold [1978, 357-369], for instance, in analysing morphological developments in jarros, tinajas and tinajeras in the valley of Guatemala the basic shape is that of a necked jar.

Measurements in attributes of size, on the other hand, appeared to be much more informative of wider range of variations. As pointed out by Rice [2005, 225-226] size impinges on different performances when transport and storage vessels are examined, e.g. capacity, transportability, stability. As shown in Tabel 4.1, rim diameters and heights in liquid storage jars range from 6.5 to 48 cm and 17 to 83 cm respectively, suggesting a wide range of variations that may accommodate for different situations when containers are to be stored or transported. Unfortunately, there was not enough data to identify modal distributions in specific contexts, yet, Arnold [1978] contended for existence of at least three size classes, small, medium and large in distribution of tinajas, jarras and tinajeras, the former the largest of his sample and likely intended for storing purposes the most. Similarly, water transport jars appear to occupy slightly lower size ranges, although overlapping to an extent, having rim diameters and height spanning from 6.28 to 28 cm and from 17 to 57 cm respectively.

Long-term liquid storage

Collected morphometric information about storage jars concerns liquid storage and Arnold's ethnographic study of the communities of Guatemala valley still offer the most complete list of measurements, while other published tabulations of ranges show averaged measures [e.g. Arthur 2009, 38, table 1]. Yet, these available data provide elements to distinguish between long-term and temporary storage when overall height in particular is considered. Large storage jars, for instance, appear to be related with storing of fermented liquids, e.g. beer. Beer jars represent, for example, the largest storage jars in the Gamo collection [Arthur 2003; 2006; 2009]. Following Arthur's study of the community villages of Etello, Zuza and Guyla,

production of the local storing jars can be divided in two size-classes indeed as illustrated in Table 4.1, with the largest range typical of jars for storing beer. Crucially, Gamo shapes for long-term storage vessels are not so different from the Mesoamearican large-size tinajera, a part from the lack of handles. As illustrated by Arthur [2009, 34, fig. 2], large-sized beer jars are simply rounded handless containers.

Frustratingly, there are no other cases of large-sized storage vessels I could measure directly. Yet further information on size to link with long-term storage vessels may be discerned from cross-cultural comparisons with accounts on storage practices from other ethnographic and ethno-historic sources of evidence. 'Large size' jars are mentioned, for instance, in Swanton's [1942, 132] examination of Cherokee material culture and history as resembling 'water jars'. Besides, it is said [ibid., 157] that they can store bear oil for nearly a year while Harper [1958, 38] noted that large size jars contained hickory milk up to a capacity of 20 litres [see also Swanton 1946, 549]. Similarly, in her study of Kathmandu valley pottery-making traditions Birmingham [1975] pointed out that honey and cheese were usually stored in wide-mouth pots. As expected, jars associated with storing of staple liquids that can be conserved for weeks or months are typically large when compared with other jars used for temporary storage or transport.

Temporary storage and water transport vessels

As evident from Table 4.1, small-sized and medium-sized tinajas are used as water transport jars but largely overlap in size range with the jarras used for temporary storing of water. Once again, overlap with medium-size Gamo jars is evident as well as general morphological uniformity in terms of shape.

Serving and eating vessels

Again, jars feature in this type of use as shown in Table4.1 depending on the kind of service activities plus bowl-shaped vessels. Single-handled jars are used, for instance, among the Gamo in order to pour coffee. In this view, Gamo single-handled jars for pouring coffee can be compared with the modern day pitcher used to pour liquids, while small-size bowls to personal eating dishes. In this sense, proportions in terms of rim diameter and height are very distinguishable morphometric features when storage and transport jars are compared with this former kind of jar. Proportions in terms of overall size are comparable instead with those of drinking cups. Size ranges overlapping between drinking and pouring vessels is evident, for example, looking again at the Gamo collection in Table 4.1. Unfortunately, there are no so many measurements of cups in the examined repertoire, also because many

drinking pots, as documented in several ethno-historic accounts, often appear to be made out of other materials. Swanton [1946, 275] and Williams [1948, 61] reported, for instance, that water, and a black tea, was drunk in gourd cups among the Indians of the American southeast. Arthur argues the same for the Gamo people, explaining this occurrence with the fact that in the three examined villages the terrain is conducive for growing gourds [Arthur 2006, 77]. Yet, Thomson [1958, 61] observed how bowls used for drinking were characterised by very small size and a shape similar to that of gourd cups using for drinking purposes. As earlier stressed, measurements of rim diameter and height in cups are few and there is only one example in the examined collection from Arthur's dataset showing 7 cm in rim diameter and 6 in height.

Bowls show to have much greater variability in terms of function when size is considered. Measurements again are few, showing only the large Gamo bowl suited for storage and, as further shown below cooking. However, ethno-historic sources of evidence once again present an array of serving and eating practices related with this shape in a variety of size beyond personal use. For example, American Indians of the South east were known to use 'large' bowls to contain boiled beans and corns to eat during festivities [Speck 1909, 26]. Similarly, Butler [1934, 25] reported also of stews and soups to be served in bowls in consumed in communal activities. These were large bowls comparable with the Gamo bowl in terms of size, from which more than one Indian could have eaten food, using ladles or hands depending on the kind of contents [Hally 1986, 272].

Processing vessels

I could not manage to extrapolate some kind of relationship looking at the distinction in terms of size between different shapes and functions in cooking pots, as was impossible to evaluate properly the subtle difference in terms of size considering the available dataset. Unlike the previous use types, cooking vessels appear to be characterised indeed by a variety of proportions and forms that, depending on the cultural areas of provenance, appear to be more or less associated with specific functions. Miller [1985, 57] noted how Indian Dangwara cooking vessels, for example, for although varied in terms of these developments, may be only distinguished in roti-making flat-bottom dishes, and a variety of deeper unrestricted jars, normally used for preparing other meals [ibid., 59]. On the other hand, variations in rim diameter seem to be relevant in the Philippines Kalinga production of cooking vessels as reported by Kobayashi [1994, 135-136] who noted that two shapes different in mouth openness were used when cooking rice or meat. Similar conclusions

about the association between specific morphometric features and a type of cooking may be derived also from further ethnographic studies of south American household assemblages. Among the Wanka people of Peru, for instance, vegetables are roasted or fried in flat bottom jars called tostaderas [Hildebrand and Hagstrum 1999, 33]. Following Hildebrand and Hagstrum [1999], tostaderas are shallow and unrestricted in mouth when compared to ollas and chatas, used instead to cook stews [Lischka 1978, 229-230]. However, measurements are few and the nature of the evidence remains patchy and too much controversial. Yet, examined cases appear to confirm traditional expectations as expressed by Linton [1944] and Ericson et al. [1972] arguing that cooking vessel should not be too much open neither shallow, nor should it have narrow necks. Similar considerations are found also in older ethno-historical descriptions of Georgian Cherokee household [Swanton 1942; 1946, 551] reporting cooking pots as 'moderately open' vessels.

BIBLIOGRAPHY

List of Abbreviations

AICA = Annali dell'Istituto di Corrispondenza Archeologica

AJA= American Journal of Archaeology

Amer. Anth = American Anthropologist

AmerAnt = American Antiquity

Anthropol. Q. = Anthropological Quarterly

Arch. St. Sic = Archivio Storico Siciliano

ArchJ = Archaeological Journal

AttiIIPP 14 = Atti della XIV riunione scientifica dell'Istituto Italiano di Preistoria e Protostoria. Firenze: Istituto Italiano di Preistoria e Protostoria.

AttiIIPP34 = Preistoria e protostoria della Calabria. Atti della XXXVII Riunione scientifica, Scalea, Papasidero, Praia a Mare, Tortora, 29 settembre-4 ottobre 2002.

AttiIIPP 41= Dai ciclopi agli Ecisti. Società e territorio nella Sicilia preistorica e protostorica. Atti della XLI riunione scientifica dell'Istituto Italiano di Preistoria e Protostoria., San Cipirello (Palermo), 16-19 novembre 2006, Firenze: Istituto Italiano di Preistoria e Protostoria.

AttiIIPP 43 = L'Età del Rame in Italia. Atti della XLIII riunione scientifica dell'Istituto Italiano di Preistoria e Protostoria, Bologna, 26-29 novembre 2008, Firenze: Istituto Italiano di Preistoria e Protostoria.

AttiLic = Atti della seconda giornata di studi sull'archeologia licatese e della zona della bassa vlle dell'Himera, Licata-Palazzo Frangipane, 19 gennaio 1985, Palermo: STASS

AttiLido = Atti del Congresso di Lido di Camaiore, 26-29 marzo 1998. Volume I. Firenze 1999, Octavo.

AttiTarantoXXII = Magna Grecia e Mondo Miceneo. Atti Atti del XXII Convegno di studi sulla Magna Grecia, Taranto 7-11 Ottobre 1982.

AttiTarantoXXIV= Magna Grecia, Epiro e Macedonia. Atti del 24 Convegno di Studi sulla Magna Grecia, Taranto 5-10 ottobre 1984

AttiViareggio = L'antica età del Bronzo in Italia. Atti del Congresso nazionale di Viareggio, 9-12 gennaio 1995.

B.P.I.= Bollettino di Paletnologia Italiana

Boll. Soc. Geol. It.= Bollettino della Società Geologica Italiana

Cent. Eur. J. Geosci. = Central European Journal of Geosciences

Clim. Past. = Climate of the Past

Cron. Arch. = Cronache di Archeologia

CronCatania = Cronache di Archeologia e di Storia dell'Arte, Università di Catania

DialArch = Dialoghi di Archeologia

EJA = European Journal of Archaeology

EMPORIA = Aegeans in the Central and Eastern Mediterranean. Proceedings of the 10th International Aegean Conference, Athens, 14-18 April 2004, Athens: Italian School of Archaeology.

Geol. Rundsch. = Geologische Rundschau

HESPEROS = The Aegean seen from the west. Proceedings of the 16th International Aegean Conference, University of Ioannina, Department of History and Archaeology, 18-21 May 2016, Leuven-Liège: Peeters.

Iliria = Revistë Arkeologjike

IpoTesi = IpoTesi di preistoria

JAMT = Journal of Archaeological Method and Theory

JAS = Journal of Archaeological Science

JCP = Journal of Cleaner Production

JFA = Journal of Field Archaeology

JMA = Journal of Mediterranean Archaeology

J Quat. Sci. = Journal of Quaternary Science

JSA = Journal of Social Archaeology

Kokalos = Studi pubblicati dall'Istituto di storia antica dell'Università di Palermo

Nat. = Nature

N. Sc. = Notizie Scavi

NPP = Notiziario di Preistoria e Protostoria

Palaeog. Palaeocl. Palaeoeco. = <u>Palaeogeography</u>, <u>Palaeoclimatology</u>, <u>Palaeoecology</u>

PBSR = Papers of the British School at Rome

PPEAtti V = Preistoria e Protostoria in Etruria. Atti della V Giornata di Studi. Paesaggi d'Acqua.

PPEAtti VI = Preistoria e Protostoria in Etruria. Atti della VI Incontro di Studi. Miti, simboli, decorazioni.

PPS = Proceedings of the Prehistoric Society

Preistoria, Protostoria e Storia della Daunia 38 = Preistoria, Protostoria e Storia della Daunia. Atti del 38° Convegno Nazionale di studi, Sorano-Farnese, 12-14 maggio 2000.

Quad. Arch. = I Quaderni di Sicilia Archeologica

QuadMess = Quaderni di Archeologia dell'Università di Messina

Rass. Arch. = Rassegna di archeologia

Riv. Min. Sic = Rivista Mineraria Siciliana

RSP = Rivista di Scienze Preistoriche

ScAnt = Scienze dell'Antichità

Sic. Arch. =Sicilia archeologica

SOMA 11 = Proceedings of the 15th symposium on Mediterranean archaeology, held at the University of Catania, 3-5 march 2011.

WorldArch = World Archaeology

XIII UISPP = XXII Colloquium of XIII International Congress of Prehistoric and Protohistoric Sciences, Forli, Italia, 8-14 September 1996

References

- ABATE, B., CATALANO, R., D'ARGENIO, B., DI STEFANO, E., DI STEFANO, P., LO CICERO, G., MONTANARI, L., PECORARO, C., RENDA, P. (1982). Evoluzione delle zone
 - di cerniera tra piattaforme carbonatiche e bacini nel Mesozoico e nel Paleogene della Sicilia occidentale. In R. Catalano and B. D'Argenio (eds) 1982, 53-81.
- ADAMO, O., AGODI, S., ALBANESE, R. M., D'AGATA, A.L., MARTINELLI, M.C., NICOTRA,

S., PALIO, O., PROCELLI, E., SAPUPPO, L. (1999). L'Età del Bronzo e del Ferro in Sicilia. In D. Cocchi Genick (ed.) 1999, vol. I, 474-495.

- ADAMS, W.Y. AND ADAMS, E.W. (1991). *Archaeological typology and practical reality*. Cambridge: Cambridge University Press.
- AGATE, M., BASILONE, L., DI MAGGIO, C., CONTINO, A., PIERINI, S. AND CATALANO, R.
- (2017). 'Quaternary marine and continental unconformity-bounded stratigraphic units of the NW Sicily coastal belt', *Journal of maps*, 13(2), 425-437.
- ALBERGHINA, F. (2012). Considerazioni sulla definizione della facies di Malpasso-Sant'Ippolito. In E. Procelli (ed.) 2012, 663-670.
- ALBERGHINA, F. AND GULLÌ, D. (2011). L'età del rame finale in Sicilia: considerazioni per una facies unitaria Malpasso-Sant'Ippolito. In D. Cocchi Genick and A. Curci (eds) 2011, 129-134.
- ALBERTI, G. (2007). 'Minima Thapsiana. Riflessioni sulla cronologia dell'abitato di Thapsos', *RSP*, 57, 363-376.
- ALBERTI, G. (2013). 'A Bayesian 14C chronology of Early and Middle Bronze Age in Sicily. Towards an independent absolute dating', *JAS*, 40, 2502-2514.
- ANICHINI, F. ANDGUALANDI, M.L. (eds) (2017). *Mappa data book 2*. Roma: edizioni Nuova Cultura.
- APPADURAI, A. (ED.) (1986). The social life of things: commodities in cultural perspective. Cambridge: Cambridge University Press.

ARDESIA, V. (2013-14). 'La cultura di Rodi-Tindari-Vallelunga in Sicilia: origini, diffusione e cronologia alla luce dei recenti studi. Parte 1', *IpoTesi*, 6, 35-98.

- ARDESIA, V. AND CATTANI, M. (2012). Tipologia ceramica e caratteristiche culturali della facies RTV. In E., Procelli (ed.) 2012, 775-789.
- Ardesia, V., Cattani, M., Marazzi, M., Nicoletti, F., Secondo, M. and Tusa, S.
- (2006). 'Gli scavi nell'abitato dell'età del Bronzo di Mursia, Pantelleria (TP). Relazione preliminare delle campagne 2001-2005', *RSP*, 56, 1-75.
- ARDESIA, V., CATTANI, M., MARCUCCI, S., PANNOCCHIA, C. AND SECONDO, M. (2012). Le strutture produttive della capanna B6 di Mursia. In E. Procelli (ed.) 2012, 1185-1190.
- ARNOLD, D. (1978). Ethnography of pottery making in the Valley of Guatemala. In R.K. Wetherington (ed.) 1978, 327-401.
- ARNOLD, D. (1983). Design structure and community organisation in Quinua, Peru. In D.K. Washburn (ed.) 1983, 56-73.
- ARNOLD, D. (1991). Ethnoarchaeology and investigations of ceramic production and exchange: can we go beyond cautionary tales? In R.L. Bishop and F.W. Lange (eds) 1991, 321-345.
- ARTHUR, J.W. (2003). 'Brewing beer: status, wealth and ceramic use-alteration among the Gamo of Southwest Ethiopia', *WorldArch*, 34, 516-528.
- ARTHUR, J.W. (2006). *Living with Pottery. Ethnoarchaeology among the Gamo of Southwest Ethiopia.* Salt Lake city: The University Press.
- ARTHUR, J.W. (2009). 'Understanding household population through ceramic assemblage formation: ceramic ethnoarchaeology among the Gamo of Southwestern Ethiopia', *AmerAnt*, 74, 31-48.
- ASHLEY, S., BENDING, J. COOK, G., AND CORRADO, A. (2007). The resources of an upland community in the Fourth Millennium BC. In P. Fitzjohn (ed.) 2007, 59-80.
- ATTEMA, P. NIJOBER, A. AND ZIFFERERO, A. (EDS) (2005). Communities and settlements from the Neolithic to the Early Medieval Period. Proceedings of the 6th conference of Italian archaeology held at the University of Groningen (Groningen Institute of Archaeology, april 15-17, 2003), BAR International Series 1452 (II). Oxford: Archaeopress.
- BACCI SPIGO, G.M. AND MARTINELLI, M.C. (1996). Considerazioni sulla cultura di Rodì-Tindari-Vallelunga nel territorio di Messina. In D. Cocchi Genick (ed.) 1996, 175-183.
- BACCI SPIGO, G.M. AND MARTINELLI, M.C. (1998). 'L'insediamento dell'Età del Bronzo in via Farina isolato 158 a Messina. Lo scavo 1992', Origini, 22, 195-231.
- BALFET, H. (1965). Ethnographical observations in North Africa and archaeological interpretation. In F.R Matson (ed) 1965, 161-177.
- BANDIERA, O. (2003). 'Private States and the Enforcement of Property Rights: Theory and Evidence on the Origins of the Sicilian Mafia', *Journal of Law, Economics and Organization*, 19(1), 218-244.
- BANKOFF, A. AND WINTER, F. (1979). 'A house burning in Serbia. What do burnt remains tell an archaeologist?', *Archaeology*, 32, 8-14.

- BARKER, G. (1995). A Mediterranean Valley. Landscape and Annales History in the Biferno Valley. London and New York: Leicester University Press.
- BARTOLONI, G. AND MICHETTI, L.M. (EDS) (2013). Mura di legno, mura di terra, mura di pietra: fortificazioni nel Mediterraneao antico, Atti del convegno internazionale (Sapienza Università di Roma, 7-9 maggio 2012). Sapienza Università di Roma: Edizioni Quasar.
- BASILONE, L. (2018). Lithostratigraphy of Sicily. UNIPA Springer Series.
- BÁTORA, J. (2018). Creative Elaboration in Clay in the Early Bronze Age in the Carpathian Region. In J. Sofaer (ed.) 2018, 151-164.
- BELARDELLI, C., CASTAGNA, M.A., DAMIANI, I., DE GUIO, A., DI RENZONI, A., LEVI, S.,
- PERONI, R., SCHIAPPELLI, A., AND VANZETTI, A. (2005). L'impatto miceneo sulle coste dello Jonio e dell'Adriatico e l'alta congiuntura' del Bronzo recente italiano. In R. Laffineur and E. Greco (eds) 2005, 507-513.
- BENEDETTO, G. AND GIORDANO, G. (2008). Sicily. In I. Vogiatzakis, G. Pungetti and A.M. Mannion (eds) 2008, 117-143.
- BERGSVIK, K.A. AND SKEATES, R. (EDS) (2012). *Caves in context. The cultural significance of caves and rockshelters in Europe*. Oxford: Oxbow books.
- BERNABÒ BREA, L. (1954). La Sicilia prehistórica y sus relaciones con Oriente y la península Ibérica. Madrid: Escuela Española de Historia y Arqueología en Roma.
- BERNABÒ BREA, L. (1957). Sicily before the Greeks. London: Hudson and Thames.
- BERNABÒ BREA, L. (1958). La Sicilia prima dei Greci. Milano: il Saggiatore
- BERNABÒ BREA, L. (1965). 'Palikè. Giacimento paleolitico e abitato neolitico e eneo', *B.P.I.*, 74, 23-46.
- BERNABÒ BREA, L. (1966-67). 'Abitato neolitico ed insediamento maltese dell'Età del Bronzo nell'isola di Ognina (SR) e i suoi rapporti fra la Sicilia e Malta dal XVI al XIII sec. a.C.', *Kokalos*, 12, 40-69.
- BERNABÒ BREA, L. (1968-69). 'Considerazioni sull'Eneolitico e sulla prima età del Bronzo della Sicilia e delle Eolie', *Kokalos*, 14-15, pp.
- BERNABÒ BREA, L. (1973). Necropoli dell'età del Bronzo in Contrada Passanatello di Francofonte. In P. Pelagatti and G. Voza (eds) 1973.
- BERNABÒ BREA, L. (1976-77). 'Eolie, Sicilia e Malta nell'Etá del Bronzo', Kokalos, 22-23, 33-111.
- BERNABÒ BREA, L. (1985). *Gli Eoli e l'inizio dell'età del Bronzo nelle isole Eolie e nell'Italia Meridionale.* Napoli: Istituto universitario orientale, Dipartimento di studi del mondo classico e del Mediterraneo antico.
- BERNABÒ BREA, L. (1988). 'L'età del rame nell'Italia insulare: la Sicilia e le isole Eolie', Rass. Arch., 7, 469-506.
- BERNABÒ BREA, L. (1991-92). 'La Sicilia e le isole Eolie', Rass. Arch., 10, 105-121.
- BERNABÒ BREA, L. AND CAVALIER, M. (1960). Meligunis Lipàra I. La stazione preistorica della contrada Diana e la necropoli prototstorica di Lipari. Palermo: Flaccovio editore.
- BERNABÒ BREA, L. AND CAVALIER, M. (1968). *Meligunìs Lipàra III. Stazioni preistoriche delle isole Panarea, Salina e Stromboli.* Palermo: Flaccovio editore.
- BERNABÒ BREA, L. AND CAVALIER, M. (1980). *Meligunìs Lipàra IV: L'Acropoli Lipari nella Preistoria.* Palermo: Flaccovio editore.
- BERNABÒ BREA, L. AND CAVALIER, M. (1991). Melìgunis Lipàra VI. Filicudi, insediamenti dell'Età del Bronzo. Palermo: Flaccovio editore. in archeologia. Firenze.
- BIETTI SESTIERI, A.M. (1988). "The Mycenaean connections and its impact on the Central Mediterranean societies", *DialArch.*, 5, 23-51.
- BIETTI SESTIERI, A.M., LENTINI M.C. AND VOZA, G. (EDS) (1995). Sicilia orientale ed isole Eolie. Forlì.
- BINFORD, L.R. (1962). 'Archaeology as anthropology', AmerAnt, 28, 217-225.
- BINFORD, L.R. (1965). 'Archaeological systematics and the study of culture process', *AmerAnt*, 31, 203-210.
- BINFORD, L.R. (1971). Mortuary practices: their study and potential. In J.A. Brown (ed.), 1971, 6-29.
- BINFORD, L.R. (1972). *An archaeological perspective*. New York, San Francisco and London: Academic Press.
- BISCULUM, M., COLOMBAROLI, D., VESCOVI, E., VAN LEEUWEN, J.F.N., HENNE, P.D.,
- ROTHEN, J., PROCACCI, G., PASTA, S., LA MANTIA, T. AND TINNER, W. (2012). 'Holocene vegetation and fire dynamics in the supra-regional belt of the Nebrodi Mountains (Sicily, Italy)', *J. Quat. Sci.*, 27, 687-698.
- BIRMINGHAM, J. (1975). 'Traditional potters of the Kathmandu Valley: an ethnoarchaeological study', *Man*, 10(3), 370-386.
- BISHOP, R.L. AND LANGE, F.W. (EDS) (1991). *In the legacy of Anna O. Shepard*. Boulder: University Press of Colorado.
- BLAKE, E. (2008). 'The Mycenaeans in Italy: A Minimalist Position', PBSR, 76, 1-34.
- BLITZER, H. (1990). 'Koroneika: storage jar production and trade', Hesperia, 59, 675-711.
- BLOK, A. (1966). 'Land Reform in a West Sicilian Latifondo Village: The Persistence of a Feudal Structure', *Anthropol. Q.*, 39(1), 1-16.
- BOIVIN, N. (2008). Material cultures, material minds: the impact of things on human thought, society and evolution. Cambridge: Cambridge University Press.
- BOIVIN, N. (ED.) (2017). Human dispersal and species movement. From prehistory to the present. Cambridge: Cambridge University Press.
- BONANNO, C. AND VALBRUZZI, F. (EDS) (2012). *Mito e Archeologia degli Erei*. Palermo: Assessorato Regionale dei Beni Culturali e dell'Identità Siciliana.
- BOUDREAUX, E.A. (2010). 'A functional analysis of Mississipian ceramic vessels from Town Creek', *Southeastern Archaeology*, 8-30.
- BOURDIEU, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- BOVIO MARCONI, J. (1964-65). 'Il villaggio di Boccadifalco e la diffusione del Medio Bronzo nella Sicilia nord-occcidentale', *Kokalo*s, 10-11, 513-524.
- BRAUDEL, F. (1972). The Mediterranean and the Mediterranean world in the age of Philipp II. London: Fontana.
- BRAUDEL, F. AND WALLERSTEIN, I. (2009). 'History and the Social Sciences: The Longue Durée', *Review*, 32(2), 171-203.
- BRAUN, D.P. (1983). Pots as tools. In A.S. Keene and J.A. Moore (eds) 1983, 107-134.
- BRESC, H. (1986). Un monde Méditerranéen: économie et société en Sicilie, 1300-1450. Rome.

- BROODBANK, C. (2000). *An island archaeology of the early Cyclades*. Cambridge and New York: Cambridge University Press.
- BROODBANK, C. (2013). The making of the middle sea. A history of the Mediterranean from the beginning to the emergence of the Classical World. London: Thames and Hudson.
- BROWN, K. (1991). 'A passion for excavation: labour requirements and possible functions for the ditches of the "villaggi trincerati" of the Tavoliere, Apulia', *Journal of the Accordia Research centre*, 2, 7-30.
- BRÜCK, J. (2004a). Early Bronze Age burial practices in Scotland and beyond: difference and similarities. In I.A.G. Shepherd and G.J. Barclay (eds) 2004, 179-186.
- BRÜCK, J. (2004b). 'Material metaphors: the relational construction of identity in Early Bronze Age burials in Ireland and Britain', *JSA*, 4(3), 307-333.
- BUTLER, R.L. (1934). Journal of Paul Du Ru (February 1 to May 8, 1700) Missionary Priest to Louisiana. Chicago: The Caxton Club.
- CAFICI, C. (1925). 'Note di paletnologia Siciliana', B.P.I., 45-60.
- CAFICI, I. (1899). 'Di un sepolcro neolitico scoperto a San Cono presso Licodia Eubea (CT)', B.P.I., 25, 53-70.
- CAFICI, I. (1928). 'Sull'esistenza di industrie paleolitiche nella neolitica della Sicilia orientale', *Archivio Antropologia Etnologia*, 58, 341-364.
- CANTISANI, M. (2015). 'Le capanne B3 e B9 dell'abitato dell'età del Bronzo di Mursia (Pantelleria)', *IpoTesi*, 7, 49-70.
- CARANCINI, G.L, CARDARELLI, A., PACCIARELLI, M. AND PERONI, R. (1996). Italia. In R. Peroni (ed.) 1996, 75-86.

CARDARELLI, A. AND DI GENNARO, F. (1996). L'Italia. In R. Peroni (ed.) 1996, 259-266.

- CASSANO, S.M., CAZZELLA A. AND MOSCOLONI, M. (EDS) (1987). Coppa Nevigata e il suo territorio. Roma.
- CASTELLANA, G. (1982). Nuove ricognizioni nel territorio di Palma di Montechiaro (Agrigento), parte 1', *Sic. Arch.*, 49-50, 81-102.
- CASTELLANA, G. (1983). 'Nuove ricognizioni nel territorio di Palma di Montechiaro (Agrigento), parte 2', *Sic. Arch.*, 119-146.
- CASTELLANA, G. (1995). La necropolis protoeneolitica di Piano Vento nel territorio di Palma di Montechiaro. Agrigento: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- CASTELLANA, G. (1996a). Il santuario del Bronzo Antico di Monte Grande (Agrigento): problemi di contatti culturali e seriazione delle ceramiche castellucciane agrigentine. In D. Cocchi Genick (ed.) 1996, 501-508.
- CASTELLANA, G. (1996b). La stipe votiva del Ciavolaro nel quadro del Bronzo Antico Siciliano. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- CASTELLANA, G. (ED.) (1997). La Grotta Ticchiara ed il castellucciano agrigentino. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- CASTELLANA, G. (ED.) (1998). Il santuario Castellucciano di Monte Grande e l'approvvigionamento dello zolfo nel Mediterraneo dell'età del Bronzo, 12-223. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.

CASTELLANA, G. (ED.) (2000). La cultura del Medio Bronzo nell'Agrigentino ed i rapporti con il mondo Miceneo. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.

CASTELLANA, G. (2002). La Sicilia nel II millennio a.C. Palermo: Salvatore Sciascia Editore.

- CATALANO, R. AND D'ARGENIO, B. (EDS) (1982). *Guida alla Geologia della Sicilia* Occidentale, Guide geologiche regionali. Pitagora.
- CATALANO, R., DI STEFANO, P. AND KOZUR, H. (1991). 'Permian Circum-Pacific deepwater faunas from the western Tethis (Sicily, Italy). New evidences for the position of the "Permian Tethys", *Palaeog. Palaeocl. Palaeoeco.*, 87, 75–108.
- CATALANO, R., DI STEFANO, P., SULLI, A. AND VITALE, F.P. (1996). 'Paleogeography and structure of the Central Mediterranean: Sicily and its offshore area', *Tectonophysics*, 260, 291–323.
- CATTANI, M., DEBANDI, F., AND MAGRÌ, A. (2015). 'La produzione ceramica dell'abitato di Mursia. Proposta di una nuova classificazione tipologica dei materiali del settore B', *IpoTesi*, 7, 17-48.
- CATTANI, M., NICOLETTI, F. AND TUSA, S. (2012). Resoconto preliminare degli scavi dell'insediamento di Mursia. In E. Procelli (ed.) 2012, 637-651.
- CATTANI, M AND ARDESIA, V. (2012). Tipologia ceramica e caratteristiche culturali della facies RTV. In AttiIIPP 41, 775-789.
- CAVALIER, M. (1970). 'La stazione preistorica di Tindari', B.P.I., 21, 61-94.
- CAVALLARI, F.S. (1874). 'Corografia di un castello ciclopico e particolari dei sesi di Pantelleria', Bullettino della Commissione di Antichità e Belle Arti di Sicilia, 7, 28-32.
- CAZZELLA, A. (1999). L'Egeo e il Mediterraneo centrale fra il 3 e il 2 millennio: una riconsiderazione. In V. La Rosa, D. Palermo and L. Vagnetti (eds) 1999, 397-404.
- CAZZELLA, A. AND MANISCALCO, L. (2012). L'età del Rame in Sicilia. In AttiIIPP 41, 57-80.
- CAZZELLA, A. AND MOSCOLONI, M. (1987). Età del Bronzo. La ricerca archeologica. In S.M. Cassano, A. Cazzella and M. Moscoloni (eds) 1987, 108-190.
- CAZZELLA, A. AND RECCHIA, G. (2012a). 'Tas-Silġ: the Late Neolithic megalithic sanctuary and its re-use during the Bronze Age and Early Iron Age', *ScAnt.* 18, 15-38.
- CAZZELLA, A. AND RECCHIA, G. (2012b). Sicilia, Eolie, Malta e le reti di scambio tra gli ultimi secoli del III e gli inizi del I millennio a.C. In E. Procelli (ed.) 2012, 1001-1013.
- CAZZELLA, A. AND RECCHIA, G. (2013). Bronze Age fortified settlements in southern Italy and Sicily. In G. Bartoloni and L.M. Michetti (eds) 2013, 45-64.
- CAZZELLA, A. AND RECCHIA, G. (2015). The Early Bronze Age in the Maltese Islands. In D. Tanasi and N.C. Vella (eds) 2015, 140-158.
- CAZZELLA, A. AND RECCHIA, G. (2017). Permeable boundaries in the late 3rd millennium BC Central Mediterranean: contacts and mobility between Balkans, Greece, southern Italy and Malta. In A. Vlachopoulos, Y. Lolos, R. Laffineur and M. Fotidias (eds) 2017, 93-105.

- CAZZELLA, A., CULTRARO, M. AND RECCHIA, G. (2011). Relazioni tra l'Italia centromeridionale, la Sicilia e l'area egeo-balcanica durante l'Eneolitico. In D. Cocchi Genickand A. Curci (eds) 2011, 157-164.
- CHERCHI, A. AND MONTADERT, L. (1982). 'The Oligo-Miocene Rift of Sardinia and early history of the western Mediterranean basin', *Nat.*, 298, 736-739.
- CHILDE, V.G. (1947). *The dawn of European civilisation*. London: Kegan Paul, Trench, Trubner & Co., LTD [4th edition].
- CILIA, D. (ED.) (2004). Malta before history. Malta.
- CIPOLLONI SAMPÒ M. (2005). Il Neolitico nell'Italia meridionale e in Sicilia. In A. Guidi and M. Piperno (eds) 2005, 334-365.
- CLARK, J.G.D. (1951). Folk culture and the study of European prehistory. In W.F. Grimes (ed.) 1951, 49-65.
- CLARK, J.G.D. (1953). Archaeological theories and interpretations: Old World. In A.L. Kroeber (ed.) 1953, 343-360.
- CLELAND, C. (ED.) (1977). Papers for the director. Essays in honour of James B. Griffin. Michigan anthropological Papers, 61. Ann Arbor: University of Michigan.
- COCCHI GENICK, D. (ED.) (1996). AttiViareggio (Viareggio, 9-12 gennaio 1995). Firenze: Octavo.

COCCHI GENICK, D. (ED.) (1999). Criteri di nomenclatura di terminologia inerente alla definizione delle forme vascolari del Neolitico/Eneolitico e del Bronzo/Ferro, vol. 2. Roma

- COCCHI GENICK, D. AND CURCI, A. (EDS) (2011). *AttiIIPP* 43 (Bologna, 26-29 novembre 2008). Firenze: Istituto Italiano di Preistoria e Protostoria.
- COCHRANE, A. AND JONES, A.M. (2012). Visualising the Neolithic: an introduction. In A. Cochrane and A.M. Jones (eds) 2012, 1-14.
- COCHRANE, A. AND A.M. JONES (EDS) (2012). Visualising the Neolithic: Abstraction, Figuration, Performance, Representation. Oxford: Oxbow Books.
- COMBES, J.L. AND COMBES A.L. (1967). Les potiers de Djerba. Tunis: Secretariat d'Etat aux Affaires Culturelles et au l'Information.
- COPAT, V., DANESI, M. AND RUGGINI, C. (2012). 'Late Neolithic and Bronze Age pottery from Tas-Silg: new research perspectives for the Maltese prehistoric sequence', *ScAnt*, 18, 39-63.
- CORDER, G.W. AND FOREMAN, D.I. (2009). Nonparametric statistics for non-statisticians: a stepby-step approach. Wiley.
- COX, W.E. (1949). The book of pottery and porcelain, vol. 1. New York: Crown Publishers.
- CRISPINO, A. (2016). 'Castelluccio', NPP, 1, 109-111.
- CRISPINO, A. (2018). 'Castelluccio', NPP, 5, 98-102.
- CRISPINO, A. AND CHILARDI, S. (2017). 'Castelluccio', NPP, 4, 100-102.
- CULTRARO, M. (1989). 'Il Castellucciano Etneo nel quadro dei rapporti tra Sicilia, penisola Italiana ed Egeo nei sec. XVI e XV a.C.', *Sileno*, 15, 259-283.
- CULTRARO, M. (1991-92). 'Distribuzione dei complessi delle culture di Castelluccio e di Thapsos nell'area etnea e ai margini della Piana di Catania', Rass. Arch., 10, 762-763.
- CULTRARO, M. (1996). La facies di Castelluccio. In D. Cocchi Genick (ed.), 1996, 163-174.

- CULTRARO, M. (1997). La civiltà di Castelluccio nella zona Etnea. In S. Tusa (ed.) 1997, 353-357.
- CULTRARO, M. (2004). Spazi geometrici e paesaggi simbolici: codici di rappresentazione e variabilità stilistica nella produzione ceramica della cultura di Castelluccio. In N. Negroni Catacchio (ed.) 2004, 103-118.
- CULTRARO, M. (2005). Dimore sacre e luoghi del tempo: appunti per uno studio della percezione dello spazio sacro nella Sicilia dell'antica età del Bronzo. In P. Attema, A. Nijboer and A. Zifferero (eds) 2005, 588-595.
- CUNLIFFE, B. (2017). On the ocean. Oxford: Oxford University Press.
- DALLA ROSA, G. (1871). Le abitazioni dell'età della pietra nell'isola di Pantelleria. Parma.
- DALLA ROSA, G. (1872). 'Una gita all'isola di Pantelleria', Archivio per l'Antropologia e l'Etnologia, 2, 138-150.
- DAS, V. AND POOLE, D. (2004). State and its margins. Comparative ethnographies. In V. Das and D. Poole (eds) 2004. 3-33.
- DAS, V. AND POOLE, D. (EDS) (2004). *Anthropology in the margins of the State*. Santa Fe: School of American Research Press.
- DEAL, M. (1998). Pottery ethnoarchaeology in the Central Maya Highlands. Salt Lake City: University of Utah Press.
- DELLA CASA, P. (1995). 'The Cetina group and the transition from the Copper to Bronze Age in Dalmatia', *Antiquity*, 69, 565-576.
- DELLA SETA, (1907). 'Appunti di topografia Omerica', Rend. Acc. Lincei, 16.
- DE MARRAIS, E., GOSDEN, C., AND RENFREW, C. (2004). Introduction. In E. DeMarrais, C. Gosden and C. Renfrew (eds) 2004, 1-7.
- DE MARRAIS, E., GOSDEN, C., AND RENFREW, C. (EDS) (2004). Rethinking materiality: the engagement of mind with the material world. Cambridge: McDonald Institute for Archaeological Research.
- DE MIRO, E. (1961). 'Ricerche preistoriche a nord dell'abitato di Palma di Montechiaro', *RSP*, 16, 15-56.
- DE MIRO, E. AND FIORENTINI, G. (1976-77). 'Relazione sull'attività della Soprintendenza alle Antichità di Agrigento (1972-1976)', *Kokalos*, 22-23, 423-430.
- DECIMA, A. AND WEZEL, F.C. (1971). 'Osservazioni sulle evaporiti siciliane della Sicilia centro meridionale', *Riv. Min. Sic.*, 132-139, 127-187.
- DE ROSALIA, A. (1990). Il De Rebus Siculi di Tommaso Fazello. Estratto. Palermo.
- DI GENNARO, M., MACERI, A., SCARPATO, L., SGAMATO, M., SPERA, V., TEDESCO, M.,

TUFANO, E. AND URSINI, D. (2012). Gestione informatizzata dei dati di scavo dell'insediamento di Mursia. In E. Procelli (ed.) 2012, 741-752.

- DIODORUS SICULUS (1989). *Diodorus of Sicily in Twelve Volumes*. Translated by C. H. Oldfather, Vol. 4-8. Cambridge, Mass: Harvard University Press.
- DI STEFANO, G. (1976-77). 'Saggi a Poggio Biddine sul Dirillo', Kokalos, 22, 647-650.
- DI STEFANO, G. (1979). 'La collezione preistorica della grotta Lazzaro nel museo civico di Modica', *Sich. Arch.*, 41, 91-110.
- DI STEFANO, G. (1996). Alcuni nuovi insediamenti "castellucciani" degli Iblei (Sicilia). In R. Peroni (ed.) 1996, 211-218.

DI STEFANO, G. (2002). 'Notizie preliminari sulla prima campagna di scavi nel sito preistorico di Baravitalla a Cava Ispica', *Sic. Arch.*, 100, 126-127.

DOBRES, M.A. AND ROBB, J. (EDS) (2000). Agency in Archaeology. London: Routledge.

- DOONAN, O. (2001). 'Domestic architecture and settlement planning in Early and Middle Bronze Age Sicily: thoughts on innovation and social process', *JMA*, 14, 159-188.
- DRENNAN, R.D. (1996). *Statistics for archaeologists. A common sense approach*. New York and London: Plenum Press.
- DU BOULAY, J. (1974). Portrait of a Greek mountain Village. Oxford.
- DUNNELL, R. (1971). Systematics in prehistory. New York: Free Press.
- EARLE, T.K. (1981). 'Comment on Rice', Current anthropology, 22, 230-231.
- EARLE, T.K. (2002). Bronze Age economics. The beginnings of political economics.
- ERICSON, J.E., READ, D.W. AND BURKE, C. (1972). 'Research design: the relationship between the primary functions and the physical properties of ceramic vessels and their implications for ceramic distributions on an archaeological sties', *Anthropology UCLA*, 3, 84-95.
- EVANS, J.D. (1959). Malta. London: Thames and Hudson.
- EVANS, J.D. (1971). The Prehistoric Antiquities of the Maltese Islands: A Survey. London: Athlone Press.
- FAIRBANKS, J. M. (1977). The Castelluccio culture: a reassessment of its origins and regional grouping. Thesis for the Ph.D. degree submitted to the University of London, Faculty of Arts (unpublished).
- FINETTI, R.I. (ED.) (2005). CROP PROJECT: deep seismic exploration of the Central Mediterranean and Italy. Boston: Elsevier.
- FIORENTINI, G. (1985-86). 'La necropoli indigena di età Greca di Valle Oscura (Marianopoli),' *QuadMess*, 1, 31-33.
- FIORENTINI, G., CALTABIANO, M. AND CALDERONE, A (EDS) (2003). Archeologia del Mediterraneo. Studi in onore di Ernesto De Miro. Roma.
- FITZJOHN, M. (ED.) (2007). Uplands of Ancient Sicily and Calabria. London: Accordia Research Institute.
- FLANNERY, K.V.(ED.) (1976). *The early Mesoamerican village*. New York and London: Academic Press.
- FLETCHER, M AND LOCK, G.R. (1991). *Digging numbers. Elementary statistics for archaeologists.* Oxford: Oxford University Committee for Archaeology, Institute of Archaeology.
- FONTANA, B.L., ROBINSON, W.J., CORMACK, C.W. AND LEAVITT, E.E. (1962). *Papago Indian pottery*. Seattle: University of Washington Press.
- FRAGNOLI, P., MANIN, A.L., GIANNITRAPANI, E. AND LEVI, S.T. (2013). Indagine archeometrica sulla tecnologia produttiva e la composizione della ceramica preistorica e protostorica di Tornambè (EN). In Atti del VII Congresso Nazionale di Archeometria, Modena (Italia), 22-24, Febbraio 2012. Bologna: Patron Editore.
- FRANCO, S. (1968). La civiltà preistorica Etnea dal IV al II Millennio Avanti Cristo. Adrano.
- FRASCA, M. (1976-77). 'Ramacca: campagne di scavo 1970-71 in contrada Torricella', *Kokalos*, 22-23, 619-621.

- FRIXA, A., BERTAMONI, M., CATRULLO, D., TRINCIANTI, E. AND MIUCCIO, G. (2000). 'Late Norian-Hettangian paleogeography in the area between wells Noto 1 and Polpo 1 (S-E Sicily)', *Mem Soc Geol Ital*, 55, 279-284.
- GABRILOPOULOS, N., MATHER, C. AND APENTIIK, C.R. (2002). 'Lineage organisation of the Tallensi compound: the social logic of domestic space in northern Ghana', *Africa: journal of the international African institute*, 72, 221-244.
- GALANAKI, I., TOMAS, H., GALANAKIS, Y. AND LAFFINEUR, R. (EDS) (2007). Between the Aegean and Baltic seas. Prehistory across borders (University of Zagreb, 11-14 April 2005). Liège: Université de Liège.
- GAMBLE, C. (1999). *The Paleolithic societies of Europe*. Cambridge: Cambridge University Press.
- GARWOOD, P., JENNING, F. SKEATES, R. AND TOMS, J. (EDS) (1991). Sacred and profane. Oxford: University Committee for Archaeology Monographs.
- GASTALDI, P. AND MAETZKE, G. (EDS) (1994). La presenza etrusca nella Campania meridionale (Atti delle giornate di studio, Salerno-Pontecagnano 1990). Firenze: L.S. Olschki.
- GENNUSA, R. (2015). L'evoluzione millenaria di uno stile. La civiltà del Bronzo Castellucciana. Firenze: All'Insegna del Giglio.
- GIANNITRAPANI., E. (2009). 'Nuove considerazioni sulla presenza in Sicilia del Bicchiere Campaniforme', *RSP*, 59, 219-242.
- GIANNITRAPANI, E. (2012a). Aspetti culturali e dinamiche del popolamento di età preistorica della provincia di Enna. In S. Lo Pinzino and F. Caffo (eds) 2012, 1-37.
- GIANNITRAPANI, E. (2012b) Dalla capanna alla casa. L'architettura domestica nella preistoria della Sicilia centrale. In C. Bonanno and F. Valbruzzi (eds) 2012, 69-75.
- GIANNITRAPANI, E. (2017). Paesaggi e dinamiche del popolamento di età preistorica nella Sicilia centrale. In F. Anichini and M.L. Gualandi (eds) 2017, 43-64.
- GIANNITRAPANI, E. AND IANNÌ F., CHILARDI, S. AND ANGUILANO, L. (2014). 'Case Bastione: a prehistoric settlement in the Erei Uplands (central Sicily)', *Origini*, 36, 181-211.
- GIANNITRAPANI, E. AND IANNI, F. (2011). La tarda età del Rame nella Sicilia centrale. In D. Cocchi Genick and A. Curci (eds) 2011, 271-278.
- GIANNITRAPANI, E. AND PLUCIENNIK, M. (1998). 'La seconda campagna di ricognizione (settembre 1997) del progetto 'Archeologia nella valle del Torcicoda', *Sic. Arch.*, 31, 59-69.
- GIARDINO, C. (1997). La metallotecnica nella Sicilia pre-protostorica. In S. Tusa (ed.) 1997, 405-414.
- GIDDENS, A. (1984). The Constitution of Society. Cambridge: Polity
- GNESOTTO, F. (1982). Il sito preistorico di Casalicchio Agnone in territorio di Licata (Agrigento). In *Studi in onore di Ferrante Rittatore Vonwiller*. 195-217. Como: Società archeologica comense.
- GORI, M. AND KRAPF, T. (2016). "The Bronze and Iron Age pottery from Sovjan", *Iliria*, 39, 91-135

GORI, M., RECCHIA, G. AND TOMAS, H. (2018). The Cetina phenomenon across the Adriatic during the 2nd half of the 3rd millennium BC: new data and research perspectives. In A. Gravina (ed.) 2018, 197-216.

GOSDEN, C. (1994). Social being and time. Oxford: Blackwell.

- GOSSELAIN, O.P. (1992). 'Technology and style: potters and pottery among Bafia of Cameroon', *Man*, 27, 559-586.
- GOSSELAIN, O.P. (1994). Skimming through potters' agendas: an ethnoarchaeological study of clay selection strategies in Cameroon. In S.T. Childs (ed.) 1994, 99-107.
- GOSSELAIN, O.P. (1998). Social and technical identity in a crystal bowl. In M.T. Stark (ed.) 1998, 78-106.

GOWER CHAPMAN, C. (1973). *Milocca*. London.

- GRAVES, M.W. (1985). Ceramic design variation within a Kalinga village: temporal and spatial processes. In B.A. Nelson (ed.) 1985, 9-34.
- GRAVINA, A. (ED.) (2018). *Preistoria, protostoria e Storia della Daunia,* 38 (San Severo, Italia, 18-19 Novembre 2017). Foggia: Archeoclub San Severo.
- GRAZIADIO, G. (2000). L'Egeo e l'Italia nel periodo delle tombe a fossa. In G. Castellana (ed.) 2000, 246-263.
- GRIMES, W.F. (ED.) (1951). Aspects of archaeology in Great Britain and beyond. London: Edwards.
- GROTTA, G., SCUDERI, A., TUSA, S. AND VINTALORO, A. (EDS) (1997). Atti. Primo congresso internazionale di preistoria e protostoria siciliane. Regione Siciliana
- GUAITOLI, M.T. (ED.) (1997). Scavi e ricerche del Dipartimento di archeologia. Mostra fotografica. Bologna-Imola.
- GUIDI, A. AND PIPERNO, M. (EDS) (2005). *Italia preistorica*. Roma-Bari: Editori Laterza (4th edition)
- GUIDO, M. (1963). Sardinia. London: Thames and Hudson.
- GULLÌ, D. (1993). 'Primi dati sull'insediamento preistorico di Eraclea Minoa', *QuadMess*, 8, 11-20.
- GULLÌ, D. (1997). La Grotta Palombara presso Raffadali e il culto delle acque di stillicidio in età eneolitica. In G. Grotta, A. Scuderi, S. Tusa and A. Vintaloro (eds) 1997, 377-395.
- GULLÌ, D. (2014). The meaning of cave in prehistory and protohistory of the Agrigento territory. In D. Gullì (ed.) 2014, 410-418.
- GULLÌ, D. (2018). Characteristics of the cult and funerary caves in the Agrigento territory. In E. Herring and E. O' Donoghue (eds) 2018, 410- 418.
- GULLÌ, D. (ED.) (2014). From cave to dolmen. Ritual and symbolic aspects in the prehistory between Sciacca, Sicily and the central Mediterranean. Oxford: Archaeopress Archaeology.
- GUZZONE, C. (1993-94). 'Abitato antico-bronzo in c.da Garrasia', *Kokalos*, 39-40, 845-850.
- HALLY, D.J. (1986). 'The identification of vessel function: a case study from Northwest Georgia', *AmerAnt*, 51, 267-295.
- HARDING, A.F. (2000). *European societies in the Bronze Age*. Cambridge: Cambridge University Press.
- HARPER, F. (1958). The travels of William Bartram. New Haven: Yale University Press.

- HAYDEN, B. AND CANNON, A. (1983). 'Where the garbage goes: Refuse disposal in the Maya Highlands', *Journal of Anthropological Archaeology*, 2 117-163.
- HAYDEN, B. AND CANNON, A. (1984). The structure of material systems.: Ethnoarchaeology in the Maya Highlands. Paper No.3. Society for American Archaeology. Washington.
- HENDRICKSON, F. AND MCDONALD, M.A. (1983). 'Ceramic form and function: an ethnographic search and an archaeological application', *Amer. Anth.*, 85, 630-643.
- HERON, C., CRAIG, O.E., LUQUIN, A., STEELE, V.J., THOMPSON, A. AND PILIČIAUSKAS, G.
- (2015). 'Cooking fish and drinking milk? Patterns in pottery use in the southeastern Baltic, 3300-2400 cal BC', *JAS*, 63, 33-43.
- HERRING, E. AND O' DONOGHUE E. (EDS) (2018). The Archaeology of Death. Proceedings of the seventh conference of Italian archaeology held at the National University of Ireland (Galway, april 16-18, 2016). Oxford: Archaeopress.
- HERRING, D. WHITEHOUSE, R. AND WILKINS, J. (EDS) (1991). The archaeology of power. Part 1, Papers of the fourth conferences of Italian archaeology held in London, January 1990. London: Accordia Research Center.
- HILDEBRAND, J.A. AND HAGSTRUM, M.B. (1999). 'New approaches to ceramic use and discard: cooking pottery from the Peruvian Andes in ethnoarchaeological perspective', *Latin American antiquity*, 10, 25-46.
- HILL, J.N. (1970). Broken K Pueblo: prehistoric social organisation in the American South-west. Anthropological Papers no. 18. Tucson: University of Arizona Press.
- HODDER, I. (1982). Symbols in action: an ethnoarchaeological study of material culture. Cambridge: Cambridge University Press.
- HODDER, I. (1986). Rethinking the past: current approaches to interpretation in archaeology. Cambridge: Cambridge University Press.
- HODDER, I. (ED.) (2001). Archaeological theory today. Polity Press.
- HODDER, I., ISAAC, G. AND HAMMOND, N. (EDS) (1981). Pattern of the past: studies in honour of David Clarke. Cambridge and New York: Cambridge University Press.
- HOLLOWAY, R.R. (1983). 'Primi saggi di scavo a La Muculufa (Butera)', Sic. Arch., 52-53, 33-44.
- HOLLOWAY, R.R. (1984-85). 'La Muculufa nell'età del Bronzo', Orizzonte Sicilia, 15-16, 31.
- HOLLOWAY, R.R. (1986). Scavi archeologici alla Muculufa e premesse per lo studio delle culture castellucciane. In AttiLic, 1986, 69-90. Palermo.
- HOLLOWAY, R.R., JOUKOWSKY, M.S. AND LUKESH, S.S. (1991). La Muculufa, the early Bronze Age sanctuary: the Early Bronze Age village. Excavations of the 1982 and 1983. Providence: Centre for Old World Archaeology and Art, Brown University.
- HORDEN, P. AND PURCELL N. (2000). The corrupting sea. A study of Mediterranean history. Carlton: Blackwell publishing.
- IANNÌ, F. (2004). Il castellucciano nella valle del fiume Salso. Caltanissetta.
- IANNÌ, F. (2009). 'La Muculufa santuario: considerazioni tecnologiche, morfologiche e stilistiche sulle classi vascolari e lo stile di Muculufa', *RSP*, 59, 243-264.
- IANNÌ, F. (2016). 'L'età del Rame nella Sicilia centro-meridionale: nuovi dati dalla valle del Salso', *RSP*, 66, 61-76.

INCARDONA, A., ZARCONE, G., AGATE, M., BONOMO, S., DI STEFANO, E., MASINI, F.,

- RUSSO, F. AND SINEO, L. (2010). 'A multidisciplinary approach to reveal the Sicily climate and environment over the last 20000 years', *Cent. Eur. J. Geosci.*, 2, 71-82.
- INGOLD, T. (1994). Companion encyclopedia of anthropology: humanity, culture and social life. Routledge.
- ISAAKIDOU, V. (2008). "The fauna and economic of Neolithic Knossos" Revised. In V. Isaakidou and P.D. Tomkins (eds) 2008, 90-114.
- ISAAKIDOU, V. AND TOMKINS, P.D. (EDS) (2008). Escaping the labyrinth: The Cretan Neolithic in context. Oxford and Oakville: Oxbow.
- JALUT, G., DEDOUBAT, J.J., FONTUGNE, M. AND OTTO, T. (2009). 'Holocene circum-Mediterranean vegetation changes: climate forcing and human impact', *Quaternary International*, 200, 4-18.
- JAMRICHOVÁ, E., HÉDL, R., KOLÁR, J., TÓTH, P. BOBEK, P., HAJNALOVÁ, M.,
- PROCHÁZKA, J., KADLEC, J. AND SZABÓ, P. (2017). 'Human impact on temperate woodlands during the middle Holocene in Central Europe', *Review of palaeobotany and palynology*, 245, 55-68.
- JARVIS, A., REUTER, H.I, NELSON, A. AND GUEVARA, E. (2008). 'An evaluation of void filling interpolation methods for SRTM data', *International Journal of Geographic Information Science*, 21:9, 983-1008.
- JONES, A.M. (2001). 'Drawn from memory: the archaeology of aesthetics and the aesthetics of archaeology in Earlier Bronze Age Britain and the present', *WorldArch*, 33, 334-356.
- JONES, A.M. (2012). Prehistoric Materialities: Becoming Material in Prehistoric Britain and Ireland. Cambridge: Cambridge University Press.
- JONES, R., BETTELLI, M., LEVI, S. AND VAGNETTI, L. (2015). *Italo-Mycenaean pottery: the archaeological and archaeometric dimensions*. Roma: CNR: istituto di studi sul Mediterraneao antico.
- JONES, S. (1997). The Archaeology of Ethnicity. Constructing identities in the past and present. London: Routledge.
- KEEN, A.S. AND MOORE, J.A (EDS) (1983). *Archaeological hammers and theories*. New York: Academic Press.
- KEMPTON, W. (1981). The folk classification of ceramics. London: Academic Press.
- KENT, S. (ED.) (1991). Domestic architecture and the use of space. An interdisciplinary cross-cultural study. Cambridge: Cambridge University Press.
- KING, R. (1973). Sicily. London.
- KNAPP, A.B. AND VAN DOMMELEN, P. (2008). 'Past practices: rethinking Individuals and Agents in Archaeology', *Cambridge Archaeological Journal*, 18(1), 15-34.
- KOBAYASHI, M. (1994). Use-alteration analysis of Kalinga pottery: interior carbon deposits of cooking pots. In W.A. Longacre and J.M. Skibo (eds) 1994, 127-169.
- KROEBER, A.L. (1916). 'Zuni potsherds', Anthropological papers of the American museum of Natural history, 18(1), 7-37.
- KROEBER, A.L. (ED.) (1953). Anthropology today: Chicago: University Chicago Press.
- LAMB, W. (1936). Excavations at Thermi in Lesbos. Cambridge: Cambridge University Press.
- LA ROSA, V. (1994). Le nuove indagini nella media valle del Platani. In S. Tusa (ed) 1994,

- LA ROSA, V. (2005). Réflexion sur le probleme del a premiere présence égéenne en Sicilie. In R. Laffineur and E. Greco, (eds) 2005, 571-583.
- LA ROSA, V. (ED.) (1997). Dalle capanne alle Robbe. La storia lunga di Milocca-Milena. Caltanissetta.
- LA ROSA, V. (ED.) (2004). *Le presenze micenee nel territorio siracusano*, (Atti del Primo simposio siracusano di preistoria siciliana, Siracusa, 15-16 dicembre 2003). Padova: Aldo Ausilio.
- LA ROSA, V. AND D'AGATA, A.L. (1988). 'Uno scarico dell'età del Bronzo sulla Serra del Palco di Milena', *QuadMess*, 3, 5-24.
- LA ROSA, V., PALERMO, D. AND VAGNETTI, L. (EDS) (1999). *Epi Ponton Plazomenoi:* Simposio italiano di Studi Egei dedicato a Luigi Bernabò Brea e Giovanni Pugliese Carratelli. Roma: Scuola Archeologica Italiana di Atene.
- LAFFINEUR, R. AND GRECO, E. (EDS) (2005). *Emporia* (Athens, 14-18 April 2004). Athens: Italian School of Archaeology.
- LAGONA, S. (1971). 'Le necropoli di Ossini San Lio', Cron. Arch., 10, 16-40.
- LATHRAP, D.W. (1983). Recent Shipibo-Conobo ceramics and their implications for archaeological interpretations. In D.K. Washburn (ed.) 1983, 25-39.
- LEIGHTON, R. (1999). Sicily before history. An Archaeological Survey from the Palaeolithic to the Iron Age. Cornell University Press.
- LEIGHTON, R. (2005). 'Later prehistoric settlement patterns in Sicily: old paradigms and new surveys', *EJA*, 8, 261-287.
- LEIGHTON, R. (2011). 'Pantalica (Sicily) from the Late Bronze Age to the Middle Ages: a new survey and interpretation of the rock-cut monuments', *AJA*, 115, 447-463.
- LEIGHTON, R. (2015). 'Rock-cut tombs and funerary landscapes of the Late Bronze and Iron Ages in Sicily: new fieldwork at Pantalica', *JFA*, 40, 190-203.
- LEIGHTON, R. (2016). 'Cassibile revisited: rock cut monuments and the configuration of Late Bronze Age and Iron Age sites in southeast Sicily', *Praehistorische Zeitschrift*, 91, 124-148.
- LEIGHTON, R AND DIXON, J.E. (1992). 'Jade and greenstone in the prehistory of Sicily and southern Italy', *OJA*, 11.2, 179-200.
- LEIGHTON, R. (ED.) (1996). *Early societies in Sicily. New developments in archaeological research*. London: Accordia Research Centre.
- LEMONNIER, P. (1993). Introduction. In P. Lemonnier (ed.) 1993, 1-35.
- LEMONNIER, P. (ED.) (1993). Technological choices: transformations in material cultures since the Neolithic. London: Routledge.
- LEROI GOURHAN, A. (1943). L'homme et la matière. Paris: Albin Michel.
- LESURE, R.G. (1995). 'Vessel form and function in an Early Formative ceramic assemblage from Coastal Mexico', *JFA*, 25, 19-36.
- LEVI, S., PROSDOCIMI, B., TIGANO, G. AND VANZETTI, A. (2009). Il villaggio protostorico di Viale dei Cipressi a Milazzo e la facies di Capo Graziano. In Tigano (ed.) 2009, 23-136.
- LINDHAL, A. AND PIKIRAYI, I. (2010). 'Ceramics and change: An overview of pottery production techniques in northern South Africa and eastern Zimbabwe during the first and second millennium AD', *Archaeological and Anthropological Sciences*, 2, 133-149.

- LINTON, R. (1944). 'North American cooking pots', AmerAnt, 9, 369-380.
- LISCHKA, J.J. (1978). A functional analysis of Middle Classic ceramics at Kaminaljuyu. In R.K. Wetherington (ed.) 1978, 223-279.
- LI VIGNI TUSA, V. P. (ED.) (2003). *Catalogo della mostra itinerante nel Mediterraneo*. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- LIVY (1940). The history of Rome. Translated by Frank Gardner Moor.
- LO GIUDICE, A. INGRAO, C. CLASADONTE, M. T., TRINCASE, C. AND MBOHWA, C. (EDS)
- (2017). 'Life cycle assessment for highlighting environmental hotspots in the Sicilian traditional ceramic sector: the case of ornamental ceramic plates', *Journal of Cleaner Production*, 142, 225-239.
- LO PINZINO, S. AND CAFFO, F. (EDS) (2012). *Studi, ricerche, restauri per la tutela del patrimonio culturale Ennese*. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- LONGACRE, W.A. AND SKIBO, J.M. (EDS) (1994). Kalinga ethnoarchaeology. Expanding archaeological method and theory. Washington and London: Smithsonian Institution Press.
- LONGACRE, W. (ED.) (1991). Ceramic Ethnoarchaeology. Tucson: University of Arizona Press.
- LUMBER, S. AND KINGERY, W.D. (EDS) (1993). *History from Things*. Washington: Smithsonian Institution Press
- LYMAN, R. L.; O'BRIEN, M.J. AND DUNNELL, R. C. (1997). *The Rise and fall of culture history*. New York: Plenum Press Press.
- MACK SMITH, D. (1963). Sicily: 800-1913. London.
- MALONE, C. (1985). Pots, prestige and ritual in Neolithic southern Italy. In C. Malone and S. Stoddart (eds) 1985, 118-151.
- MALONE, C. (1996). Cult and burial in the Neolithic and Early Bronze Age central Mediterranean: an assessment of the potential. In J.B. Wilkins (ed.) 1996, 31-54.
- MALONE, C. AND STODDART, S. (1998). The conditions of creativity for prehistoric Maltese art. In S. Mithen (ed.) 1998, 241-259.
- MALONE, C. AND STODDART, S. (2000). 'A house in the Sicilian hills', *Antiquity*, 74, 471-472.
- MALONE, C. AND STODDART, S. (2009). Conclusions. In C. Malone and S. Stoddart (eds) 2009, 361-384.
- MALONE, C. AND STODDART, S. (EDS) (1985). Papers in Italian archaeology IV: The Cambridge Conference, part ii: Prehistory. Oxford: British Archaeological Reports.
- MALONE, C. AND STODDART, S. (EDS) (2009). Mortuary customs in prehistoric Malta. Excavations at the Brochtorff Circle at Xanghra (1987-94). Cambridge: McDonald Institute for Archaeological Research.
- MALONE, C., GRIMA, R., MAGRO-CONTI, J., TRUMP, D., STODDART, S. AND HARDISTY, H.
- (2009). The domestic environment. In C. Malone and S. Stoddart (eds) 2009, 41-56.
- MALONE, C. STODDART, S. AND TRUMP, D. (1988). 'A house for the temple builders. Recent investigations on Gozo, Malta', *Antiquity*, 297-301.

- MALONE, C., STODDART, S. AND WHITEHOUSE, R. (1994). The Bronze Age of southern Italy, Sicily and Malta. In C. Mathers and S. Stoddart (eds) 1994, 167-194.
- MANDOLESI, A. (1999). La prima Tarquinia. L'insediamento protostorico sulla Civita e nel territorio circostante. Firenze: all'Insegna del Giglio.
- MANISCALCO, L. (1993-94). 'La necropoli delle Coste di S. Febbronia presso Palagonia', *Kokalos*, 39-40, 881-900.
- MANISCALCO, L. (1994). Le ceramiche dell'età del rame nel territorio di Milena. In S. Tusa (ed) 1994, 323-338.
- MANISCALCO, L. (1995). The Castelluccian ceramics. In B. McConnell (ed.) 1995, 37-66.
- MANISCALCO, L. (1996a) La necropoli del Bronzo Antico alle Coste di Santa Febbronia presso Palagonia (Catania). In D. Cocchi Genick (ed.) 1996, 509-519. Firenze: Octavio.
- MANISCALCO, L. (1996b) Early Bronze Age funerary ritual and architecture: monumental tombs at Santa Febbronia. In R. Leighton (ed.) 1996, 81-89.
- MANISCALCO, L. (1997). L'insediamento castellucciano delle Coste di Santa Febbronia. In S. Tusa (ed.) 1997, 359-365.
- MANISCALCO, L. (2007). 'Considerazioni sull'età del Rame nella media valle del Platani', *RSP*, 57, 167-184.
- MANISCALCO, L. (2012). Insediamenti dell'antica età del Bronzo fra la Valle del Margi e gli Iblei settentrionali. In E. Procelli (ed.) 2012, 741-750.
- MANISCALCO, L. (ED.) (2005). Museo Civico "Corrado Tamburino Merlini" di Mineo. Sezione Archeologica. Caltagirone.
- MANNINO, G. (1971). 'La tomba di contrada Pergola', Sic. Arch., 15, 52-56.
- MANNINO, G. (1994). Ricerche preistoriche nel territorio di Partanna. In S. Tusa (ed.) 1994, 125-176. Palermo: Società Siciliana per la Storia Patria.
- MAQUET, J. (1993). Objects as instruments, objects as signs. In S. Lumber and W.D. Kingery (eds) 1993.
- MARAN, J. (2007). Seaborne contacts in the 3rd millennium B.C. In I. Galanaki, H. Tomas, Y. Galanakis and R. Laffineur, (eds) 2007, 3-21.
- MARAZZI, M. (1998). I siti di Monte Grande e Vivara: due capisaldi delle più antiche frequentazioni egee in Occidente. In G. Castellana (ed.) 1998, 319-333.
- MARAZZI, M. (2003). Dalle Origini ai popoli del mare. In V. P. Li Vigni Tusa (ed.) 2003, 101-105.
- MARAZZI, M AND TUSA, S. (1976). 'Interrelazioni dei centri siciliani e peninsulari durante la penetrazione micenea', *Sic. Arch.*, 31, 49-90.
- MARAZZI, M. AND TUSA, S. (2005). Egei in occidente. Le più antiche vie marittime alla luce dei nuovi scavi sull'isola di Pantelleria. In R. Laffineur and E. Greco (eds) 2005, 599-609.
- MARCUCCI, S. (2008). 'La capanna B6 dell'abitato dell'Antica Età del Bronzo di Mursia (Pantelleria-TP) e le strutture produttive domestiche', *IpoTesi*, 1, 125-199.
- MARINO, D. AND PACCIARELLI, M. (1996). Calabria. In D. Chocchi Genick (ed.) 1996, 147-162.

- MARTINELLI, M. C. AND SPIGO, U. (EDS) (2001). Studi di preistoria e protostoria in onore di Luigi Bernabò Brea (Quaderni del Museo archeologico regionale eoliano, Supplemento 1). Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- MATHERS, C. AND STODDART, S. (EDS) (1994). Development and decline in the Mediterranean Bronze Age. Sheffield: JR Collis Publications.
- MAUCERI, L. (1880). 'Notizie su talune tombe antichissime scoperte tra Licata e Racalmuto', *AICA*, 52, 5-27.
- MAUSS, M. (1935). 'Les techniques du corps', Journal de Psychologie, 32, 5-20.
- MCCONNELL, B. (1992). 'The Early Bronze Age village of La Muculufa and prehistoric hut architecture in Sicily', *AJA*, 96, 23-44.
- MCCONNELL, B. (1995). Stratigraphy and chronology. In B., McConnell (ed.) 1995, 9-18.
- MCCONNELL, B. (2003). Resti preistorici a Dosso Tamburaro (Militello in val di Catania) e l'età del Rame nella Sicilia. In G. Fiorentini, M. Caltabiano and A. Calderone (eds) 2003, 489-498.
- MCCONNELL, B. (ED.) (1995). La Muculufa II. Excavation and survey 1988-1991. The Castelluccian village and other areas. Collège Erasme, Louvain-la-Neuve: Art and Archaeology Publications.
- MCCONNELL, B. AND BEVAN, W.B. (1999). Spatial analysis of a Castelluccian settlement in Early Bronze Age Sicily. In R.H. Tykot, J. Morter and J.E. Robb (eds) 1999, 195-204.
- MCNUTT, C. (2005). 'Seriation: classic problems and multivariate applications', *Southeastern Archaeology*, 24, 209-222.
- MELLER, H. H., ARZ, H. W., JUNG, R. AND RISCH, R. (EDS) (2015). 2200 BC A climatic breakdown as a cause for the collapse of the old world? 7th Archaeological Conference of Central Germany (Halle october 23-26, 2014). Landesmuseum für Vorgeschichte Halle (Saale): Landesmat für Denkmalpflege und Archäeologie Sachsen Anhalt.
- MENTESANA, R. (2015). The use of space in the Early Bronze Age on the basis of artefact distribution: the village of Coste di Santa Febbronia. In P.M. Militello and H. Öniz (eds) 2015, 259-264.
- MESKELL, L. (2001). Archaeologies of identities. In I. Hodder (ed.) 2001, 187-213.
- MESKELL, L. (2005). Archaeologies of materialities. Oxford: Wiley-Blackwell.
- MESSINA, F. PALERMO, D. AND PROCELLI, E. (1971). 'Ramacca (Catania). Esplorazione di una città greco-sicula in c. da La Montagna e di un insediamento preistorico in c. da Torricella', *N. Sc.*, 25, 565-574.
- MESSINA, F., FRASCA, M., PALERMO, D. AND PROCELLI, E. (1975). 'Ramacca (Catania), saggi di scavo nel villaggio preistorico in contrada Torricella', N. Sc., 29, 557-585.
- MESSINA, I. (1956). La civiltà del II periodo siculo a Boccadifalco presso Palermo. Palermo.
- MICHELAKI, K. (2006). Household ceramic economies: production and consumption of household ceramics among the Maros Villagers of Bronze Age Hungary. BAR International series 1503. Oxford: Archaeopress.
- MICHELAKI, K, HANCOCK, R.V.G. AND BRAUN G.V. (2011). 'Using provenance data to assess archaeological landscapes: an example from Calabria, Italy', *JAS*, 30, 1-13.
- MILITELLO, P. (2005). Mycenaean palaces and western trade: a problematic relationship. In R. Laffineur and E. Greco (eds) 2005, 585-597.

- MILITELLO P.M. AND ÖNIZ, H. (EDS) (2015). SOMA 11. BAR International Series 2695(I). Oxford: Archaeopress.
- MILLER, D. (1985). Artefacts as categories. Cambridge: Cambridge University Press.

- MILLS, J.S. AND WHITE, R. (1977). 'Natural resins of art and archaeology: their sources, chemistry, and identification', *Studies in conservation*, 22, 12-31.
- MINGAZZINI, P. (1939). Due tombe sicule in territorio di Partanna presso Selinunte. In G.E. Rizzo and P. Mingazzini (eds) 1939, 47-91.
- MITHEN S. (ED.) (1998). Creativity in human evolution and prehistory. London: Routledge.
- MONTALBANO, G. (2012). 'La repressione del movimento contadino in Sicilia (1944-1950)', *Diacronie*, 12, 1-19.
- NAVA, M.L. (1985). Intervento. In AttiTaranto XXIV, Taranto, 312-315.

NEGRONI CATACCHIO, N. (2004). *PPEAtti VI* (Pitigliano 13-15 settembre 2002). Milano: Centro Studi di Preistoria e Archeologia.

- NELSON, B.A. (1991). Ceramic frequency and use life: a highland Mayan case in crosscultural perspective. In W. A. Longacre (ed.) 1991, 162–181.
- NELSON, B.A. (ED.) (1985). *Decoding prehistoric ceramics*. Carbondale: Southern Illinois University Press.
- NERONI CATACCHIO, N. (ED.) (2002). *PPEAtti V* (Sorano-Farnese, 12-14 maggio 2000). Milano: Centro Studi di Preistoria e Archeologia.
- NICOLETTI, F. (1996a). Le industrie litiche oloceniche: forme, materie prime e aspetti economici. In R. Leighton (ed.) 1996, 57-72.
- NICOLETTI, F. (1996b). Il campignano della Sicilia. In S. Tusa (ed.) 1997, 395-405.
- NICOLETTI, F. (1997). Carta archeologica di Pantelleria. Il saggio stratigrafico alla base della fortificazione del villaggio di Mursia. In M.T. Guaitoli (ed.) 1997, 97-98.
- NICOLETTI, F. (2001). 'Indagini sull'organizzazione del territorio nella facies di Castelluccio. Il caso dei Monti Algar', *Sic. Arch.*, 33, 105-127.
- NICOLETTI, F. AND PANVINI, R. (2015). Due insediamenti del Bronzo antico nella Valle del Platani (Caltanissetta): Corvo e Valle Oscura. In R. Panvini and M. Congiu (eds) 2015, 119-149.

NICOLIS, F. AND MOTTES, E. (EDS) (1998). Simbolo ed enigma. Il bicchiere campaniforme e l'Italia nella preistoria europea del III millennio a.C. Catalogo della Mostra. Trento: Provincia autonoma di Trento.

- NIGRO, F. AND RENDA, P. (1999). 'Evoluzione geologica ed assetto strutturale della Sicilia centro-settentrionale', *Boll. Soc. Geol. It.*, 118, 375-388.
- O'BRIEN, M.J. AND LYMAN, R.L. (2000). *Applying evolutionary archaeology: a systematic approach*. New York: Kluwer academy.
- OGNIBEN, L. (1960). 'Note illustrative dello schema geologico della Sicilia Nord-Orientale', *Riv Min Sic*, 64-65, 183 - 212, 2 tav. di sez. Geol 1:200.000.
- ORAZI, R. (1997). Carta archeologica di Pantelleria. Il rilevamento fotogrammetrico del muro di nord-est del sito di Mursia. In M.T. Guaitoli (ed.) 1997, 96.
- ORLANDINI, P. (1962). Il villaggio preistorico di Manfria presso Gela. Palermo.

MILLER, D. (1994). Artefacts and the meaning of things. In T. Ingold (ed.) 1994, 396-419.

- ORSI, P. (1889). 'Appunti per la paletnologia di Siracusa e suo territorio', *B.P.I.*, 15, 48-58.
- ORSI, P. (1892). 'La necropoli sicula di Castelluccio (Siracusa)', B.P.I., 18, 1-34; 67-84.
- ORSI, P. (1891a). 'La necropoli sicula del Plemmirio (Siracusa)', B.P.I., 17, 115-139.
- ORSI, P. (1891b). 'La necropoli sicula di Melilli (Siracusa)', B.P.I., 17, 53-76.
- ORSI, P. (1893a). 'Scarichi del villaggio siculo di Castelluccio (Sicilia)', B.P.I., 19, 30-51.
- ORSI, P. (1893b). 'Di due sepolcreti siculi nel territorio di Siracusa', Arch. St. Sic., 18, 30-51.
- ORSI, P. (1895). 'Vasi siculi dalla provincia di Girgenti', B.P.I., 21, 80-85.
- ORSI, P. (1897). 'Nuovi materiali siculi dal territorio di Girgenti', *B.P.I.*, 23, 1-15; 105-122.
- ORSI, P. (1898). 'Miniere di selce e sepolcreti eneolitici a Monte Tabuto e Monte Racello presso Comiso (Siracusa)', *B.P.I.*, 24, 165-191.
- ORSI, P. (1899). Pantelleria, risultati di una missione archeologica. Palermo (estratto dai "Monumenti Antichi dei Lincei", IX.).
- ORSI, P. (1902a). 'La necropoli di Valsavoia (Catania)', B.P.I., 28, 184-190.
- ORSI, P. (1902b). 'Sepolcreto di Cava di Cana Barbara (Siracusa)', B.P.I., 28, 184-190.
- ORSI, P. (1905). 'Cava d'Ispica. Reliquie sicule, cristiane e bizantine', N. Sc., 302, 431-437.
- ORSI, P. (1906). 'Nuovi documenti della civiltà micenea e premicenea', Ausonia, 1, 5-12.
- ORSI, P. (1910). 'Due villaggi del primo periodo siculo', B.P.I., 36, 158-193.
- ORSI, P. (1923). 'Villaggio, officina litica e necropoli sicula del I periodo a Monte Sallia presso Canicarao (Comiso, prov. di Siracusa)', *B.P.I*, 43, 4-26.
- ORSI, P. (1928). 'Miscellanea sicula', B.P.I., 48, 44-98.
- ORTON, C. (2012). Sampling in Archaeology. Cambridge: Cambridge University Press.
- OSBORNE, R. (2008) 'Introduction: for tradition as an analytical category', *World Arch*, 40(2), 281-94.
- PACCI, M. (1987). 'Nota su alcuni vasi protocastellucciani dalla Sicilia Occidentale conservati all'Ashmolean Museum di Oxford', *Quad. Arch.*, 1, 7-37.
- PACCIARELLI, M, SCARANO, T. AND CRISPINO, A. (2015). The transition between the Copper and Bronze Ages in southern Italy and Sicily. In H. H. Meller, H. W. Arz, R. Jung and R. Risch (eds) 2015, 253-281.
- PACCIARELLI, M. (1991-92). 'Considerazioni sulla struttura delle comunitá dell'Italia centro-meridionale', Rass. Arch., 10, 265-281.
- PACCIARELLI, M. (1994). Sviluppi verso l'urbanizzazione nell'Italia Tirrenica protostorica. In P. Gastaldi and G. Maetzke (eds) 1994, 227-253.
- PACCIARELLI, M. (2001). Dal villaggio alla cittá. La svolta protourbana del 1000 a.C. nell'Italia tirrenica. Firenze: All'Insegna del Giglio.
- PACCIARELLI, M. (2011). 'L'eneolitico della Calabria tirrenica: nuovi dati sull'articolazione cronoculturale', *Origini*, 33, 249-302.
- PACE, B. (1932). Arte e civiltà della Sicilia antica. Milano
- PAGLIARA, G. (2003). Il sito di Roca Vecchia nell'età del Bronzo. In F. Lenzi (ed.) 2003, 74-90.

- PALIO, O. (2007). L'area etnea e il Mediterraneo tra l'età del Rame e l'inizio del Bronzo Antico. In F. Privitera and V. La Rosa (eds) 2007, 81-90.
- PALIO, O. AND PRIVITERA, F. (2008). Il territorio di Catania: la Grotta Petralia. In F. Privitera and V. La Rosa (eds) 2008, 231-311.
- PALIO, O. AND TURCO, M. (2018). 'La Grotta 3 di località Marineo (Licodia Eubea, Catania). Scavi 2017', *CronCatania*, 37, 41-60.
- PANVINI, R. (2003). Butera dalla preistoria all'età medievale. Caltanissetta.

PANVINI, R. AND CONGIU, M. (EDS) (2015). Indigeni e Greci tra le valli dell'Himera e dell'Halikos. Atti del Convegno (Caltanissetta, Museo Archeologico Regionale, 15-17 giugno 2012). Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.

- PARKER PEARSON, M. AND RICHARDS, C. (1993). Architecture and order: spatial representation and archaeology. In M. Parker Pearson and C. Richards (eds) 1993, 38-72. Cambridge University Press.
- PARKER PEARSON, M. AND RICHARDS, C. (EDS) (1993). *Architecture and order*. Cambridge: Cambridge University Press.
- PARKINSON, W.A. AND GALATY, M. (EDS) (2010). Archaic state interaction: the Eastern Mediterranean in the Bronze Age. Santa Fè: School for Advanced Research.
- PEACOCK, D.P.S. (1982). Pottery in the Roman world: an ethnoarchaeological approach. London: Longmans.
- PELAGATTI, P. (1973). Villaggi castellucciani tra il Dirillo e l'Irminio. In P. Pelagatti and G. Voza (eds) 1973, 26-29.
- PELAGATTI, P. AND DEL CAMPO, N. (1971). 'Abitati siculi: Castiglione', Sic. Arch, 16, 31-34.
- PELAGATTI, P. AND VOZA, G. (EDS) (1973). Archeologia nella Sicilia sud-orientale. Napoli: Centre Jean Bèrard.
- PENNAVARIA, F. (1895). 'Grotte sepolcrali sicule a colle Tabuto nel territorio di Ragusa (provincia di Siracusa)', *B.P.I.*, 21, 160-166.
- PERONI, R. (1967). Archeologia della Puglia preistorica. De Luca Editore.
- PERONI, R. (1983). Presenze micenee e forme socio-economiche nell'Italia protostorica. In AttiTarantoXXII, 211-284. Taranto.
- PERONI, R. (1989). Protostoria dell'Italia continentale: la penisola italiana nelle età del bronzo e del *ferro*. Roma: Biblioteca di Storia Patria.
- PERONI, R. (1998). 'Classificazione tipologica, seriazione cronologica, distribuzione geografica', *Aquileia nostra*, 59, 10-28.
- PERONI, R. (2004). L'Italia alle soglie della storia. Roma: Laterza editore.
- PERONI, R. (ED.) (1996). The Bronze Age in Europe and the Mediterranean. XIII UISPP (Forli, Italia, 8/14 September 1996). Forli: A.B.A.C.O.
- PERONI, R. AND DI GENNARO, F. (1986). 'Aspetti regionali dello sviluppo dell'insediamento protostorico nell'Italia centro-meridionale alla luce dei dati archeologici e ambientali', *Dialoghi di Archeologia*,4-2, 193-200.
- PETERSON, N.E. (1995). The architecture of the Castelluccian structures. In B., McConnell (ed.) 1995, 24-31.

- PETRIE, F. (1899). 'Sequences in prehistoric remains', Journal of the Anthropological Institute of Great Britain and Ireland, 3, 295–301.
- PIKIRAYI, I. AND LINDAHL, A. (2013). 'Ceramics, ethnohistory and ethnography: locating meaning in Southern African Iron Age Ceramic Assemblages', *The African Archaeological Review*, 30(4), 455-473.
- PITT RIVERS, J.A. (ED.) (1963). Mediterranean countrymen: essays in the sociology of the Mediterranean. Paris and the Hague.
- POBLOME, J., MALFITANA, D AND LUND, J. (2006). A Concluding Dilemma: Sisyphos versus Daidalos'. In D. Malfitana, J. Poblome, and J. Lund (eds) 2006, 557-580.
- POBLOME, J., MALFITANA, D AND LUND, J. (EDS) (2006). Old Pottery in a New Century. Innovating perspectives on Roman pottery studies. Atti del convegno internazionale di studi Catania, 22-24 Aprile 2004, Catania. Monografie dell'Istituto per i Beni Archeologici e Monumentali, Consiglio Nazionale delle Ricerche 1.
- POTTINO, G. (1981). 'Monumenti funerari della prima e media età del Bronzo nella Sicilia centro-meridionale', *Sic. Arch.*, 46-47.
- PRIVITERA, F. AND LA ROSA, V. (EDS) (1997). *Ima Tartara. Preistoria e leggenda delle grotte etnee, Catalogo della mostra.* Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- PROCELLI, E. (1981). 'Il complesso tombale di Contrada Paolina ed il problema dei rapporti tra Sicilia e Malta nella prima età del Bronzo', *Bollettino di archeologia*, 66, 83-110.
- PROCELLI, E. (1996). Sicily between the second and third millennium BC: a brief survey. In R. Leighton (ed.) 1996, 89-101.
- PROCELLI, E. (1997). La civiltà agro-pastorale Siciliana matura: l'antica età del Bronzo. In S. Tusa (ed.) 1997, 343-351. Palermo.
- PROCELLI, E. (2001). Continuità e cesura tra Tardo Rame e Antico Bronzo in Sicilia: qualche riflessione. In U. Spigo and M. C. Martinelli (eds) 2001, 175-173.
- PROCELLI, E. (2004). Una facies a cavallo dello stretto, Rodì-Tindari-Vallelunga e i rapporti tra Sicilia e Calabria nell'età del Bronzo. In AttiIIPP 34, 381-392. Firenze: Istituto Italiano di Preistoria e Protostoria.
- PROCELLI, E. (ED.) (2012). *AttiIIPP* 41 (San Cipirello, 16-19 novembre 2006). Firenze: Istituto Italiano di Preistoria e Protostoria.

RACKHAM, O. (2008). Holocene history of Mediterranean island landscape. In I. Vogiatzakis, G. Pungetti and A.M. Mannion (eds) 2008, 36-61.

- RADINA, F. AND RECCHIA, G. (EDS) (2010). Ambra per Agamennone. Indigeni e Micene tra Adriatico, Ionio ed Egeo. Catalogo della mostra. Bari.
- RAPOPORT, A. (1991). Systems of activities and systems of settings. In S. Kent (ed.) 1991, 9-20. Cambridge: Cambridge University Press.
- RECCHIA, G. (2002). I siti costieri garganici e i loro rapporti transmarini tra Eneolitico ed età del Bronzo. In N. Negroni Catacchio (ed.) 2000, 331-342.
- REINA, R.E. AND HILL, R.M. (1978). *The traditional pottery of Guatemala*. Austin: University of Texas Press.
- RENFREW, C. (1972). The emergence of civilisation: the Cyclades in the 3rd millennium BC. London: Methuen.

- RENFREW, C. (1986). Varna and the emergence of wealth in prehistoric Europe. In A. Appadurai (ed.) 1986, 141-168.
- RENFREW, C. (ED.) (1977). *The explanation of culture change*. Pittsburgh: University of Pittsburgh Press.
- RICE. P. (2005). Pottery analysis: A sourcebook. Chicago: The University of Chicago Press.
- RIEGEL, A. (1996). The Modern Cult of Monuments: Its Essence and its Development. In N. Stanley Price, M. Kirby Talley Jr. and A. M. Vaccaro (eds) 1996.
- RICKMAN, G.E. (1980). The corn supply of ancient Rome. Oxford: Oxford University Press.
- RIZZO, G.E. AND MINGAZZINI, P. (EDS) (1939). *Studi di archeologi e arte editi dalla Società Paolo Orsi*, 1. Milano: Società Paolo Orsi.
- ROBB, J. (1999). Great persons and big men in the Italian Neolithic. In R. H. Tykot, J. Morter and J. Robb (eds) 1999, 111-121.
- ROBB, J. (2007). The Early Mediterranean village. Cambridge: Cambridge University Press.

ROUSE, I. (1972). Introduction in prehistory. New York: McGraw Hill.

- ROVETTO, F. (2006). Cenni su Castiglione in età preellenica. In *Camarina 2006 anni dopo la fondazione. Nuovi studi sulla città e sul territorio (Atti del Convegno Internazionale, Ragusa* 2002-2003), 395-408. Roma.
- RUSSO, I. (2001). 'Nuove acquisizioni sulla preistoria del versante est del monte San Basilio', *Sic. Arch.*, 34, 107-11.
- SACKETT, J. (1977). Style, function and artefact variability in Paleolithic assemblages. In C. Renfrew (ed.) 1977, 317-325.
- SADORI, L. AND NARCISI, B. (2008). 'Late Glacial to Holocene paleoenvironmental evolution at Lago di Pergusa (Sicily, southern Italy) as inferred by pollen, microcharcoal, and stable isotopes', *Quaternary international*, 181, 4-14.
- SADORI, L., ORTU E, PEYRON O., ZANCHETTA, G., VANNIÈRE, B., DESMET, M, AND
- MAGNY, M. (2013). 'The last 7 millennia of vegetation and climate change at Lago Pergusa (central Sicily, Italy), *Clim. Past.*, 9, 1969-1984.
- SCARANO, T. (2010). Le mura di fortificazione di Roca. In F. Radina and G. Recchia (eds) 2010, 240-242.
- SCARANO, T. (2012). 'Roca. Le fortificazioni della media età del Bronzo nel quadro delle testimonianze relative agli insediamenti fortificati della prima metà del II millennio a.C. nella Puglia meridionale', *Annali della Scuola Normale Superiore di Pisa.*, 4(2), 72-87, 191-194.
- SCARRE, C. (2004). Displaying the stones: the materiality of "megalithic" monuments. In E. DeMarrais, C. Gosden and C. Renfrew (eds) 2004, 141-152.
- SCARRE, C. AND HEALY, F. (EDS) (1993). Trade and exchange in prehistoric Europe: Proceeding of a conference held at the University of Bristol. Oxford: Oxbow books.
- SCHLEE, G. AND WATSON, E.E. (2009). Space and time: introduction to the geography and political history. In G. Schlee and E.E. Watson (eds) 2009, 15-31.
- SCHLEE, G. AND WATSON, E.E. (EDS) (2009). Changing identifications and alliances in northeast Africa. New York Oxford: Berghahn Books.
- SCHMINCKE, H.U, BEHNCKE, B. GRASSO, M. AND RAFFI, S. (1997). 'Evolution of the northwestern Hyblaean Mountains, Sicily: uplift, Pliocene/Pleistocene sea-level changes, paleoenvironment, and volcanism', *Geol Rundsch*, 86, 637-669.

- SCROFANI, G. (1972-73). 'Nuove testimonianze archeologiche dal territorio di S. Croce Camerina', *Sic. Arch.*, 18-20, 101-110.
- SEDITA MIGLIORE, M. (1981). Sabucina. Studio sulla zona archeologica di Caltanissetta. Caltanissetta.
- SEMINERIO, D. (1996). 'L'insediamento castelluccio di Contrada Angeli di Caltagirone', *Kokalos*, 42, 147-176.
- SENIOR M., DUNBAR P. AND BIRNIER III (1995). 'Accurately Estimating Vessel Volume from Profile Illustration', *AmerAnt*, 60, 319- 334.
- SHANKS, M. AND TILLEY, C. (1987). Social theory and archaeology. Cambridge: Polity Press.
- SHEPARD, A. (1976). Ceramics for the archaeologist. Washington.
- SHEPHERD, I.A.G. AND BARCLAY, G.J. (EDS) (2004). Scotland in Ancient Europe: The Neolithic and Early Bronze Age of Scotland in their European Context. Edinburgh: Society of Antiquaries of Scotland.
- SHERRATT, A.S. (1981). Plough and pastoralism: aspects of the secondary products revolution. In I. Hodder, G. Isaac and N. Hammond (eds) 1981, 261-305.
- SILLAR, B. AND JOFFRÉ, G.R. (2016). 'Using the present to interpret the past: the role of ethnographic studies in Andean Archaeology', *WorldArch.*, 48(5), 1-18.
- SILVA-SANCHEZ, N., CORTIZAS, A.M. AND LOPEZ-MERINO, L. (2014). 'Linking forest cover, soil erosion and mire hydrology to late-Holocene human activity and climate in NW Spain', *The Holocene*, 24 (6), 714-725.
- SKEATES, R. (1993). Neolithic exchange in central and southern Italy. In C. Scarre and F. Healy (eds) 1993, 109-114.
- SKEATES, R. (1995). Transformations in mortuary practices and meaning in the Neolithic and Copper Age of lowland east-central Italy. In W.H. Waldren, J.A. Enseynat and R.C. Kennard (eds) 1995, 211-237.
- SKEATES, R. (1998). The social life of Italian Neolithic painted pottery. In D. Bailey (ed.) 1998, 131-141.
- SKEATES, R. (2000). 'The social dynamics of the enclosure in the Neolithic of the Tavoliere, south-east Italy', *JMA*, 13, 155-188.
- SKEATES, R. (2005). Visual culture and archaeology. Art and social life in prehistoric southeast Italy. London: Duckworth.
- SKEATES, R. (2010). An archaeology of the senses. Prehistoric Malta. Oxford: Oxford University Press.
- SKEATES, R. (2012). Caves in need of context: prehistoric Sardinia. In K.A. Bergsvik and R. Skeates (eds) 2012, 153-166.
- SKIBO, J.M. (1994). The Kalinga cooking pot. An ethnoarchaeological and experimental study of technological change. In W.A. Longacre and J.M. Skibo (eds) 1994, 113-126.
- SKIBO, J.M. AND SCHIFFER, M.B. (2013). *People and things: a behavioural approach to material culture*. New York and London: Springer.
- SLUGA MESSINA, G. (1991). 'Architettura funeraria nel Mediterraneo centrale', JMA, 226-241.
- SOFAER, J. (2015). Clay in the Age of Bronze. Essays in the archaeology of prehistoric creativity. Cambridge: Cambridge University Press.

- SOFAER, J. (ED.) (2018). Considering Creativity: Creativity, Knowledge and Practice in Bronze Age Europe. London: Archaeopress.
- SØRENSEN, M. L. AND REBAY, K. (2008). Interpreting the body. Burial practices at the Middle Bronze Age cemetery at Pitten, Austria', *Archaeologia Austriaca*, 89, 153-176.
- SPECK, F.G. (1909). *Ethnology of the Yuchi Indians*. Philadelphia: University Museum, University of Pennsylvania.
- SPIGO, U. (1984-85). 'Ricerche e rinvenimenti a Brucoli (c.da Gisira), Valsavoia (Lentini), nel territorio di Caltagirone, Adrano e Francavilla di Sicilia', *Kokalos*, 30-31, 863-904.
- STAMPFLI, G.M. (2005) Plate Tectonics of the Apulia-Adria microcontinents. In R.I. Finetti (ed.) 2005, 747-766.
- STANLEY PRICE, N., KIRBY TALLEY JR. M. AND VACCARO, M. (EDS) (1996). *Historical and Philosophical Issues in the Conservation of Cultural Heritage.* Los Angeles: The Getty Conservation Institute.
- STARK, M.T. (ED.) (1998). *The archaeology of social boundaries*. Washington D.C. and London: Smithsonian Institution Press.
- STEWART, I.S., AND MORHANGE, C. (2009). Coastal geomorphology and sea-level change. In J.C Woodward (ed.) 2009, 385-414.
- STIRLING, L.M. (ED.) (2007). *Mortuary landscapes of North Africa*. Toronto Ontario: University Toronto Press.
- STONE, D. (2007). Monuments on the margins: interpreting the first millennium B.C.E. rock-cut tombs (haouanet) of North Africa. In L.M. Stirling (ed.) 2007, 43-74.
- SWANTON, J.R. (1942). Source material on the history and ethnology of the Caddo Indians. Washington: Smithsonian Institution.
- SWANTON, J.R. (1946). Indians of the Southeastern United States. Washington: Smithsonian Institution.
- TANASI, D. (2004). Per un riesame degli elementi di tipo miceneo nella cultura di Pantalica nord. In V. La Rosa (ed.) 2004, 337-383.
- TANASI, D. AND VELLA N.C. (EDS) (2015). The late prehistory of Malta: essays on Borg i-Nadur and other sites. Oxford: Archaeopress.
- TANI, M. (1994). Why should more pots break in larger households? Mechanisms underlying population estimates from ceramics. In W.A. Longacre and J.M. Skibo (eds) 1994, 51-71.
- THOMAS, H. (2010). The world beyond the northern margin: the Bronze Age Aegean and the east Adriatic coast. In W.A. Parkinson and M. Galaty (eds) 2010, 181-210.
- THOMAS, J. (1991). Reading the body: beaker funerary practices in Britain. In P. Garwood, F. Jenning, R. Skeates and J. Toms (eds) 1991, 33-42.
- THOMSON, S. M. (1999). A Central Sicilian Landscape: Settlement and Society in the Territory of Ancient Morgantina (5000 BC–AD 50). Thesis for the Ph.D. degree submitted to the University of Virginia (unpublished).
- THOMSON, R.H. (1958). Modern Yucatan pottery making. Salt Lake city.
- TIGANO, G. (1993-94). 'Archeologia a Milazzo: nuove acquisizioni', *Kokalos*, 39-40, 1059-1085.

- TIGANO, G. (1997-98). 'Milazzo. Scavi e ricerche tra il 1994 e il 1997', *Kokalos*, 43-44, 513-545.
- TIGANO, G. (ED.) (2009). Mylai II, Messina.
- TINÈ, S. (1960-61). Giacimenti dell'età del Rame in Sicilia e le "culture tipo Conca d'Oro", *B.P.I.*, 69-70, 113-151.
- TINÈ, S. (1960). 'Giacimenti dell'età del Rame in Sicilia e la cultura tipo Conca d'Oro', B.P.I., 69-70, 113-151.
- TINÈ, S. (1983). Passo di corvo e la civiltà neolitica del Tavoliere. Sagep editrice.
- TINÈ, V. (1965). 'Gli scavi nella Grotta Chiusazza', B.P.I., 16, 123-286.
- TINÈ, V. (1997). Il complesso dei vasi castellucciani dalla Grotta Ticchiara di Favara. Tipologia e decoro. In G. Castellana (ed.) 1997, 176-207.
- TRUMP, D. (1966). Skorba: excavations carried out on behalf of the National Museum of Malta 1961-1963. Reports of the Research Committee of the Society of Antiquaries of London, 22. Oxford.
- TRUMP, D. (2002). Malta: prehistory and temples. Malta.
- TRUMP, D. (2004). Dating Malta's prehistory. In D. Cilia (ed.) 2004, 230-242.
- TUSA, S. (1991). The Pietraperzia territory in the Copper and Bronze Ages. In D. Herring, R. Whitehouse and J. Wilkins (eds) 1991, 27-43.
- TUSA, S. (1997). Il megalitismo e la Sicilia. In S. Tusa (ed.) 1997, 333-341.
- TUSA, S. (1998a) Prospettiva mediterranea e integrità culturale del bicchiere campaniforme siciliano. In F. Nicolis and E. Mottes (eds) 1998, 204-219.
- TUSA, S. (1998b) Il bicchiere campaniforme in alcuni siti della Sicilia occidentale. In F. Nicolis and E. Mottes (eds) 1998, 220-223.
- TUSA, S. (1999). La Sicilia nella preistoria. Palermo: Sellerio Nuovo Prisma.
- TUSA, S. (ED.) (1994). La preistoria del basso Belice e della Sicilia meridionale nel quadro della preistoria siciliana e Mediterranea. Palermo: Società Siciliana per la Storia Patria, Istituto di Archeologia.
- TUSA, S. (ED.) (1997). *Prima Sicilia. Alle origini della società siciliana*. Palermo: Regione Sicilia, Assessorato Beni Culturali ed Ambientali e della Pubblica Istruzione.
- TUSA, S AND PACCI, M. (1990). La collezione dei vasi preistorici di Partanna e Naro. Palermo: Sellerio editore.
- TYKOT, R.H (1996). 'Obsidian procurement and distribution in the central and western Mediterranean', *JMA*, 9(1), 39-82.
- TYKOT, R.H., MORTER, J. AND ROBB, J.E. (EDS) (1999). Social dynamics of the Prehistoric Central Mediterranean. London: Accordia Research Institute.
- VACIRCA, I. (2005). Camuti. In L. Maniscalco (ed.) 2005, 56-62.
- VALBRUZZI, F. AND GIANNITRAPANI, E. (2017). Il progetto di ricerca e valorizzazione dell'area archeologica di Cozzo Amatrice (Enna). Metodi, esiti e prospettive nell'ambito delle ricerche sul paesaggio antico degli Erei. In F. Anichini and M.L Gualandi (eds) 2017, 82-99.
- VANDER LINDEN, M. (2007). Le phénomène campaniforme dans l'Europe de 3ème millénaire avant notre ère. Synthèse et nouvelles perspectives. BAR International series 1470. Oxford: Archeopres.

- VARIEN, M. AND MILLS, B. (1997). 'Accumulations research: problems and prospects for estimating site occupation span', *JAMT*, 4(2), 141–91.
- VENEZIANO, R. (2012). La presunta facies di Rodì-Tindari-Vallelunga ad un cinquantennio dalla sua formulazione. In E. Procelli (ed.) 2012, 791-801.
- VITA FINZI, C. (1969). The Mediterranean valleys. Cambridge: at the University Press.
- VLACHOPOULOS, A., LOLOS, Y., LAFFINEUR, R. AND FOTIDIAS, M. (EDS) (2017). HESPEROS (University of Ioannina, Department of History and Archaeology, 18-21 May 2016). Leuven-Liège: Peeters.
- VOGIATZAKIS, I., PUNGETTI, G. AND MANNION, A.M. (EDS) (2008). *Mediterranean island landscapes*. *Natural and Cultural approaches*. Dordrecht: Springer Netherlands.
- VON ANDRIAN, F. (1878). 'Prähistorische Studien aus Sizilien', Zeitschrift für Ethnologie, 10, 1-92.
- VOZA, G. (1968-69). 'Villaggio fortificato dell'età del Bronzo in contrada Petraro di Melilli', *Kokalos*, 14-15, 357-359.
- VOZA, G. (1972). *Thapsos, primi risultati delle più recenti ricerche*. In AttiIIPP 14, 175-205. Firenze: Istituto Italiano di Preistoria e Protostoria.
- VOZA, G. (1995). Castelluccio (Siracusa). In A.M. Bietti Sestieri, M.C. Lentini and G. Voza (eds) 1995, 331-332.
- WALDREN, D.H., CHAPMAN, R., LEWTHWAITE J., AND KENNARD, R. C. (EDS) (1994). The Dejà conference of prehistory: early settlement in the western Mediterranean islands and the peripheral areas. BAR. Oxford: Archaeopress.
- WALDREN, W.H., ENSEYNAT, J.A. AND KENNARD, R.C. (EDS) (1995). *Ritual, rites and religion in prehistory: Third Dejà conference of prehistory*, vol 1.
- WETHERINGTON, R.K. (ED.) (1978). *The ceramics of Kaminaljuyu*. Philadelphia: The Pennsylvania State University Press.
- WHITE, L. (1959). 'The concept of culture', Amer. Anth., 61, 227-251.
- WHITEHOUSE, R. D. (1972). 'The rock-cut tombs of the central Mediterranean', *Antiquity*, 46, 275-281.
- WHITEHOUSE, R. D. (1984). Social organisation in the Neolithic of southeast Italy. In. D.H. Waldren, R. Chapman, J. Lewthwaite and R. C. Kennard (eds) 1994, 1109-1137.
- WHITEHOUSE, R. D. (1990). Caves and cult in Neolithic southern Italy. In Accordia Research Paper 1, 19-37.
- WHITEHOUSE, R. D. (1992). Underground religion. Cult and culture in prehistoric Italy. Specialist studies on Italy 1. University of London: Accordia Research Centre. AmerAnt., 48, 253-276.
- WILKENS, B. (1997). Resti faunistici provenienti da alcuni siti dell'area di Milena. In V. La Rosa (ed.) 1997, 127-133.
- WILKINS, J. B. (ED.) (1996). *Approaches to the study of ritual. Italy and the ancient Mediterranean*. London: Accordia Research Centre.
- WOBST, H.M. (2000). Agency in (Spite of) Material Culture. In M. A. Dobres and J. Robb (eds) 2000, 40-50.
- WOODWARD, J.C. (ED.) (2009). *The physical geography of the Mediterranean*. Oxford and New York: Oxford University Press.

YELLIN DROR, A., GRASSO, M. BEN-AVRAHAM Z. AND TIBOR, G. (1997). "The subsidence history of the northern Hyblaean plateau margin, southeastern Sicily', *Tectonophysics*, 282, 277-289.