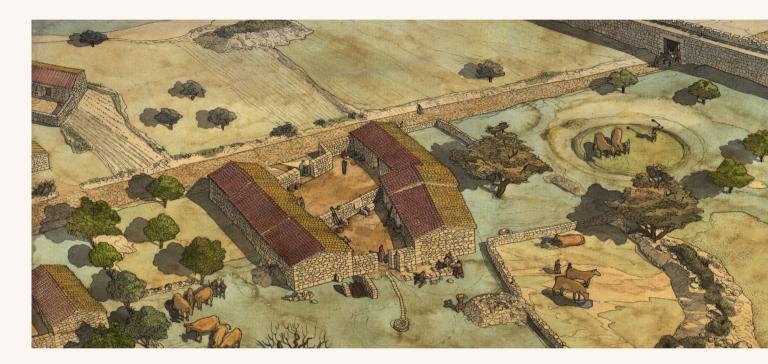
Archaeology and Economy in the Ancient World



12

Messapia: Economy and Exchanges in the Land between Ionian and Adriatic Sea

Panel 3.9

Francesco D'Andria Grazia Semeraro (Eds.)



Proceedings of the

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Proceedings of the 19th International Congress of Classical Archaeology

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Edited by

Martin Bentz and Michael Heinzelmann

Volume 12



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PREFACE

On behalf of the 'Associazione Internazionale di Archeologia Classica (AIAC)' the 19th International Congress for Classical Archaeology took place in Cologne and Bonn from 22 to 26 May 2018. It was jointly organized by the two Archaeological Institutes of the Universities of Cologne and Bonn, and the primary theme of the congress was 'Archaeology and Economy in the Ancient World'. In fact, economic aspects permeate all areas of public and private life in ancient societies, whether in urban development, religion, art, housing, or in death.

Research on ancient economies has long played a significant role in ancient history. Increasingly in the last decades, awareness has grown in archaeology that the material culture of ancient societies offers excellent opportunities for studying the structure, performance, and dynamics of ancient economic systems and economic processes. Therefore, the main objective of this congress was to understand economy as a central element of classical societies and to analyze its interaction with ecological, political, social, religious, and cultural factors. The theme of the congress was addressed to all disciplines that deal with the Greco-Roman civilization and their neighbouring cultures from the Aegean Bronze Age to the end of Late Antiquity.

The participation of more than 1.200 scholars from more than 40 countries demonstrates the great response to the topic of the congress. Altogether, more than 900 papers in 128 panels were presented, as were more than 110 posters. The publication of the congress is in two stages: larger panels are initially presented as independent volumes, such as this publication. Finally, at the end of the editing process, all contributions will be published in a joint conference volume.

We would like to take this opportunity to thank all participants and helpers of the congress who made it such a great success. Its realization would not have been possible without the generous support of many institutions, whom we would like to thank once again: the Universities of Bonn and Cologne, the Archaeological Society of Cologne, the Archaeology Foundation of Cologne, the Gerda Henkel Foundation, the Fritz Thyssen Foundation, the Sal. Oppenheim Foundation, the German Research Foundation (DFG), the German Academic Exchange Service (DAAD), the Romano-Germanic Museum Cologne and the LVR-LandesMuseum Bonn. Finally, our thanks go to all colleagues and panel organizers who were involved in the editing and printing process.

Bonn/Cologne, in August 2019

Martin Bentz & Michael Heinzelmann

Messapia: Economy and Exchange in the Land between Ionian and Adriatic Seas

Francesco D'Andria - Grazia Semeraro

Introduction

Ever since the Bronze Age, the geographical position of Messapia (fig. 1), between the Ionian and Adriatic seas, has enabled the development of relations characterised by continuity within the framework of mobility in the Mediterranean. In the light of the most recent investigations, the papers will adopt a multidisciplinary approach to the regional economy, production and exchange, in a period from the Iron Age to the Roman conquest in the mid 3rd century BC. The papers will focus on certain aspects of the economy in Messapia, with particular reference to bio-archaeological themes (including livestock rearing and the consumption of animal resources), textile production (to be analysed by applying archaeometric methods to residues of fabric) and imports of luxury products from Greek cities and the Greek colonies of

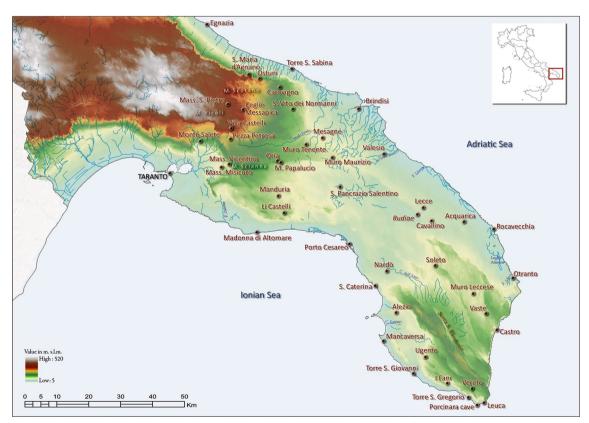


Fig. 1: Taranto and the main Messapian settlements, most of which mentioned in the following papers.

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southern Italy. The Iron Age, a period when the Salento was at the centre of traffic and migrations that led to the establishment of the Greek settlement of Taranto in the late 8th century BC, will be the focus of special attention. Of interest are the production techniques of the indigenous settlements and commercial exchange, which is seen from an early period, particularly on the shores of the Strait of Otranto. The presence in grave goods of imported prestige items will be investigated with reference to the forms of self-representation adopted by the Messapian aristocracy in both funerary rituals and manifestations of power within the settlements. The variety of religious manifestations in the Messapian world constitutes a particular case study linked to cultural exchanges, which, thanks to the recent discoveries of places of worship, can now be investigated in detail. Important in this regard are the discoveries made in Castro, where the Athenaion - linked to the myth of Aeneas's first landing on the shores of Italy - was identified. In this site, the abundance of votive offerings, the richness of the structures of the cult and the ways in which the rituals were performed all enable us to investigate the investment of resources in the religious dimension, especially the consumption of collective energy in the manifestations of the cult. A further objective is to reconstruct the economic system underlying the cult in Messapian society, considering its relationships with the other peoples of the Mediterranean.

Note

¹ The papers of this session have been edited by Francesco Meo.

Image Credit

Fig. 1: by the authors.

Methods and Practices in Studies of the Economy of Messapia

Grazia Semeraro

As part of this presentation I would like to discuss certain aspects of the archaeological research that make it possible to reconstruct the economic and relational framework of the Salento peninsula during the pre-Roman period. I will focus on three points in particular:

- Processes of interaction and exchange
- Settlements, landscapes and communities
- Production and consumption of food

Processes of Interaction and Exchange

From the quantitative analyses to the most recent cognitive approaches, the research in this sector has led to a radical overhaul of the concepts traditionally used to describe relations and contacts with neighbouring cultural systems.

Quantitative research has been applied in this field since the 1980s,¹ following an approach that seeks to mediate between contrasting conceptual positions that spring from different traditions of studies.

From the use of statistical methods, widely promoted by the Anglo-Saxon school of processual archaeology, the focus on the stratigraphic study of archaeological contexts (which has taken new forms in some sectors of Italian archaeology) and the sensitivity towards the disciplines of history and anthropology of the ancient world – closely associated with Mediterranean archaeology – a new model of analysis and interpretation of the data emerged.²

In the 1980s and 90s, this model was used to study the materials imported from Greece that were being discovered by the growing number of excavations in the area of Messapia in that period. From research based on data from the excavations in Otranto and the Iapygian settlements of the southern Salento,³ which yielded large quantities of Greek materials dated to the most ancient phases of the Greek occupation, to studies of imported materials of the Archaic and Classical periods,⁴ the basic tool used in the interpretive processes that made it possible to highlight dynamics of economic and social interest was spatial distribution analysis. For example, to explain the occurrences of Greek materials in the Iapygian settlement of Otranto in the 8th century the port-of-trade model, based on Karl Polany's reflections on the economic dynamics of the ancient world, was used.⁵ Considered within the broader context of commerce between the two shores of the Adriatic, the case of Otranto is helping to reshape our idea of the relations between cross-border communities (including those of the Illyrian and northern Greek

coasts), highlighting the role of local networks and redistribution centres. While these approaches enable a better understanding of the functioning of Archaic commerce, they also help redefine the dynamics of contact with the Greek world in the most ancient phases, and prompt us to reconsider the meaning of concepts such as 'pre-colonisation', for too long used as a key to interpret the Greek evidence in phases and contexts preceding the 'Classical' beginning of Greek colonisation.⁶ For this reason, the research in the Archaic Salento led to a broader reflection on the Mediterranean as a whole, helping to substantially revise our reading of relations and exchanges.⁷

The research on Greek imports in the Archaic period has given rise to interpretative approaches that have made it possible to revise our view of the economic dynamics of Messapian societies. From the methodological point of view, since the 1990s studies have sought to go beyond the essentially reductionist quantitative approaches by emphasising contextual data. Careful consideration of the function of objects in the individual contexts, understood not only in a stratigraphic and depositional sense, but as reflecting specific historical and social situations, has made it possible to read in the presence of Greek vessels linked to the sphere of wine evidence of the key role played in the Archaic societies by commensal practices centred on the use of alcoholic beverages. In order to decipher the various implications of this, it is not sufficient to refer to the research – important as it may be – into the role of the symposium in the Greek world, which was close in chronological, geographical and cultural terms.

Stimulating points for reflection emerged from research in the field of social anthropology, centred on the social role of practices linked to the preparation and consumption of food,9 which highlight the explicitly economic function of such practices in the context of pre-monetary societies. Models such as the working-feast¹⁰ illustrate the potential of this research, making it possible to associate the material characteristics of the objects with multiple semantic values. The distribution of food and alcoholic beverages can thus be read as part of an economic mechanism able to mobilise labour, but it also appears to be a key element of the dynamics that made it possible to acquire and consolidate power.

The evidence yielded by the Archaic settlements, so rich in Greek material linked to the use of wine, has thus become a tool that makes it possible to read the structures of economic and social organisation of Messapian communities from the inside, highlighting the fundamental role played by commensal practices centred on the consumption of alcoholic beverages and reconstructing its ceremonial setting. We shall return to this aspect, but in the meantime I would like to stress that thanks to these methodological approaches the value of these objects as indices of 'Hellenisation' has been thoroughly revised as part of an interpretative process that makes it possible to go beyond the hermeneutic limits of this concept. The relationship with the Greek world has thus been repositioned within the endogenous dynamics underlying the formation and development of Messapian communities and the acquisition and management of power by Messapian elites throughout the Archaic period.¹¹

The tools of analysis of settlement archaeology have played an important role in the reconstruction of these dynamics.

Settlements, Landscapes and Communities

The global approach to the study of the region has made it possible to reconstruct the development of the settlement system over time.

Numerous projects¹² have sought to reconstruct the cultural landscapes, with specific attention to the relations between human beings and the environment and the establishment and socio-political organisation of the local communities.

Systematic exploration of the region, information technology and palaeoenvironmental analyses, together with the focus on the human factor (agency) and cognitive approaches, are the key elements of this methodological framework.

I would like to make fare reference here to the 'Murge Tableland' project, conducted jointly by the University of the Salento, the Free University of Amsterdam and the University of Rome 'La Sapienza', and specifically to its contribution to deciphering the complex dynamics in progress from the Iron Age onwards.¹³

A renewed knowledge framework has made it possible to highlight the extensive growth settlements in the second half of the 8th century BC,¹⁴ with the stable occupation of marginal areas that had previously been frequented only sporadically. This process has been interpreted as 'internal colonisation',¹⁵ responsible for the high rate of growth of the settlements and mobility within the region. The systematic analysis of the cultural landscapes makes it possible to describe this framework in detail, highlighting a range of situations, determined by complex dynamics that were not shared by all local situations. Sites such as as L'Amastuola and Castelluccio¹⁶ arose in the second half of the 8th century BC, a short distance from late Bronze Age settlements that had been abandoned at the beginning of the Iron Age. It may hypothesised that they were the result of movement of human groups in search of more suitable territory. In contrast, the 8th-century BC settlement of Castello di Alceste¹⁷ arose in an area that had been frequented in the Bronze Age only sporadically (perhaps seasonally), a short distance from long-standing settlements such as Oria.¹⁸ It is probable in this case that the new settlement was founded by a group that branched off from the mother community.

Movements of populations and the mobility of communities within the same ethnos animate the picture of the Iron Age. The palaeo-environmental research reveals the important role played by the new agricultural practices. I refer here to the research in L'Amastuola and Castelluccio because it has highlighted the crops commonly grown in the Iron Age, including legumes. ¹⁹ This not only reflects strategies for food production, but also indicates an awareness of the properties of legumes as natural fertilisers, enabling more exploitation of arable land. Taken as a whole, these data point to a framework characterised by more stable communities, occupying systematically



Fig. 1: The Iron age settlement of Castello di Alceste (S.Vito dei Normanni – BR): graphical reconstruction.

area that had previously perhaps been used only sporadically, on a seasonal basis (in accordance with a pattern more typical of communities that were economically more dependent on grazing).

Among the methods used for reconstructing the economic aspects of the Iron Age settlements, worthy of mention the efforts of experimental archaeology, which have made it possible to calculate the time required for the construction of Iron Age houses and have shown that the investment in terms of social energy is not consistent with the idea of fragile and ephemeral buildings.²⁰ They are structures suited to nuclear families (calculation of the spaces based on ethnographic comparisons), clustered in groups, surrounded by low walls. To examine their distribution and understand how they worked, the tools of cognitive archaeology were deployed, borrowing concepts and interpretative approaches from anthropological research, such as those that use the 'biographical' model as a key to studying the material characteristics of the objects and the development of settlements.²¹

Thus, in the groups of Iron Age huts it is now possible to see the growth of nuclear families, with the construction of neighbouring houses built for members of new families



Fig. 2: Castello di Alceste (S.Vito dei Normanni – BR): Experimental archaeology in the Diffuse Museum. Reconstruction of an Iron Age hut.

formed from the original nucleus (figs. 1. 2). And it is fitting that the Archaic houses, with different forms and materials, in accordance with a new architectural culture, were built over the clusters of Iron Age huts, as if reflecting the growth and transformation of the families that since the 8th century BC had occuped that space.²² Overlapping of this type is documented in Castello di Alceste and L'Amastuola, but also in the large Archaic settlement of Cavallino.

Production and Consumption of Food and Beverages

The research is now making it possible to describe with concrete data the production and use of alcoholic beverages, highlighting the economic and social significance. The consumption of fermented beverages can now be associated with local ceramics with geometric decoration, thanks to analyses of the organic residues and functional research.²³ The ceremonial character of these objects is increasingly evident, as shown by the discoveries in Roca and Vaste,²⁴ but also the large hut in Pelli property (Cavallino), where Iapygian ceramics are associated with numerous vessels imported from Greece. Perhaps in contexts such as these, it is already possible to see the emergence of commensal practices of a ceremonial kind, which would become more explicit in the Archaic period thanks to a series of indicators, as can be seen in the large Archaic building in the settlement of Castello di Alceste (fig. 3).

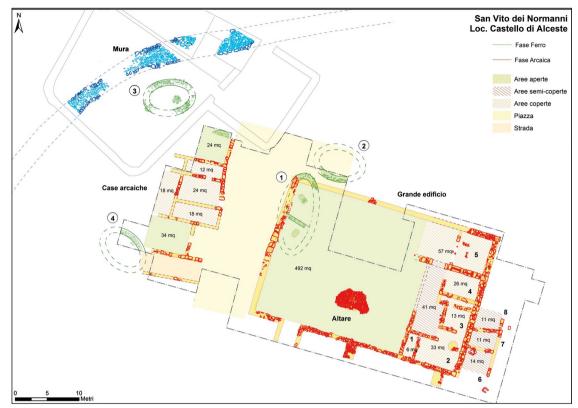


Fig. 3: Castello di Alceste (S.Vito dei Normanni – BR): Plan of the excavation area on the hilltop showing the Archaic 'large building' built over the clusters of the Iron Age huts.

Built in the 6th century on one of the Iron Age clusters is what we have called the 'large building', which differs in size and building technique from the other dwellings discovered in the vicinity. While these houses are 100-200 m² on average, the large building has an area of 700 m², mostly occupied by the large courtyard (fig. 4). The latter contains an enigmatic structure made of stones, which, on the basis of a series of indicators, has been interpreted as an altar (fig. 3).25 This is a Archaic type which, in the absence of comparisons with conserved structures, can be compared with iconographic sources on Attic ceramics. A number of clues already discussed in the presentation of the data suggest that it was linked to the cult of the ancestors. The residential part includes spaces with specific functions that are currently being studied, starting with the distribution of the artefacts (fig. 5): the banqueting hall (room 4) is a large room with a prevalence of ceramic containers (for conserving foodstuffs but also for displaying accumulated wealth), while in the area on the north side, clear traces of cult activities were recognised (votive deposits with sheep and goats' horns associated with imported ceramics). The currently available evidence suggests a link to the ceremonial and cult sphere (fig. 6). The entire complex can be interpreted in relation to the exercise of power: we can see here a direct and powerful reflection of

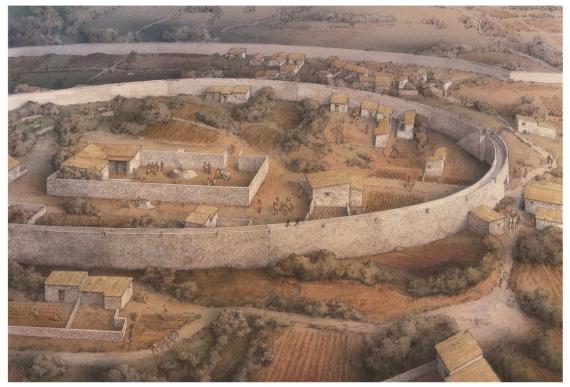


Fig. 4: The Archaic settlement of Castello di Alceste (S.Vito dei Normanni – BR): graphical reconstruction.

the presence, by now consolidated, of a group that holds power and exerts under the aegis of the ancestors.

Throughout this complex there is a strong presence of Greek ceramics: these are mostly small vessels for drinking, but also large Attic volute and calyx-kraters, vessels which in southern Italy, appear only in highly important contexts, proving the importance of the activities that took place in this building. Another feature is the imported Greek cooking ceramics, which are numerous in this context. These objects are rarely discovered in Archaic indigenous contexts. They mark what I consider to be a highly important phenomenon, i.e. the presence of innovations, acquired from outside, in the ways of preparing and consuming food. Analyses of the residues show traces of cooked meat, together with plant compounds, as well as the remains of cattle butchered for consumption, according to archaeo-zoologists. ²⁷

All this is seen in a context with a pronounced ceremonial and ritual dimension. I believe that Greek cooking vessels and ceramics for wine were used in collective ceremonies that were also performed in the large open-air courtyard. In these activities we can recognise the mechanism employed by the elites to acquire and consolidate power, by offering prestige foods and beverages such as wine. As social anthropology teaches us, there is also an economic aspect in collective commensal practices, clearly

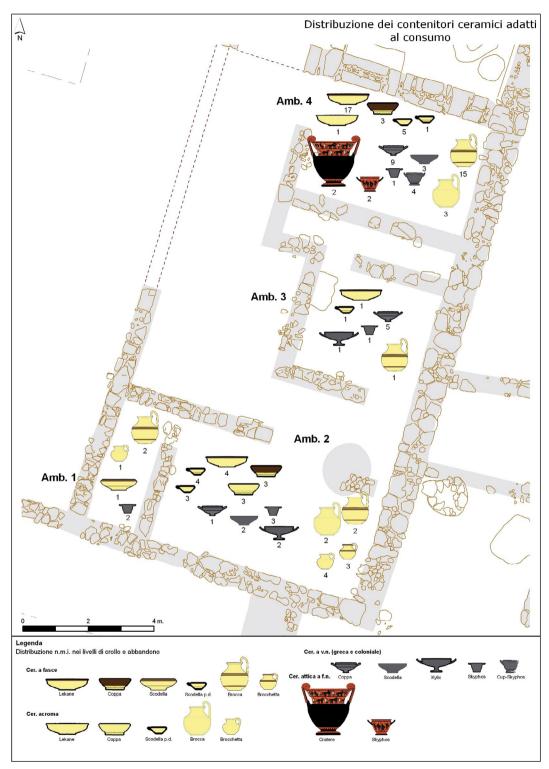


Fig. 5: Castello di Alceste (S.Vito dei Normanni – BR): The eastern rooms of the 'large building'. Spatial distribution of the pottery.

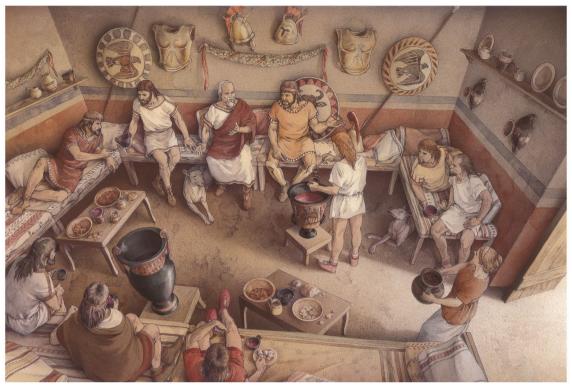


Fig. 6: The banqueting hall.

illustrated by the travail-fête, a system by which labour can be mobilised and activated in societies that do not use cash, offering a banquet in lieu of wages.²⁸ Those who are economically in a position to provide food and drink are also able to mobilise the labour force (for example for tilling the fields or large-scale construction), thereby increasing their economic prestige. This brings us back to the crucial role played by the production of wine and other alcoholic beverages in Archaic societies. The recent discoveries in the area behind the building enrich the picture set out above.²⁹ Behind the building we discovered equipment that appears to be linked precisely to the production of wine. This is composed of a number of installations, in which recesses for pithoi and traces of a wooden container next to a stone platform that can be interpreted as the base of a counterweight press, a very ancient form documented on black-figure Attic vessels, can be recognised.³⁰ The materials from the levels of occupation include commercial amphorae, jugs and pithoi, all linked to the use of wine. To these clues may be added the traces of plant remains recognised in the sediments associated with the structures. 31 It seems therefore that there are all the signs for recognising this as one of the rare Archaic workshops for the production of wine.³²

Aside from the objective importance for the study of viticulture in southern Italy, I believe that it is extremely important to have discovered this production context in association with such a large settlement. In addition, an oil press and spaces used for

grinding cereals were recognised nearby: an entire system centred on the production of food.

The large building represents an important piece of the puzzle for reconstructing the development of Messapian communities and the emergence of their elites. It is precisely in this period that the presence of elites is manifested on the funerary level, with tombs rich in precious pottery and bronze, as seen in Cavallino and Ugento³³ and figured kraters that probably symbolise the decisive role played by commensal practices in the social life of the Messapian elites.

Notes

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<sup>1</sup>Semeraro1990.
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² See Semeraro 1997, chapter 2.

³D'Andria 1995.

⁴Semeraro 1997; Mannino 2006.

⁵ See discussion in D'Andria 1995.

⁶ See the reflections on the issue of 'pre-colonisation' by D. Ridgway 2000.

⁷ See for example Malkin 1998; D'Andria 2012.

⁸ Semeraro 1990: 1997.

⁹Goody 1982.

¹⁰ Dietler 1990; Dietler - Herbich 2001.

¹¹See discussion in Semeraro 1997, chapter 2.

¹² See for references D'Andria 1997.

¹³ See the presentation of the project in Burgers – Recchia 2009; Semeraro 2012a.

¹⁴D'Andria 1991.

¹⁵Burgers 1998; see further discussion in Semeraro 2014; 2016.

¹⁶Burgers - Crieelard 2007; 2011; Semeraro 2009a.

¹⁷ Semeraro 2009b; 2014.

¹⁸ See Semeraro 2009a; for the long-lasting site of Oria: Yntema 1993;

¹⁹ For l'Amastuola: Lentijes 2011; for Castelluccio: Semeraro 2014; 2016.

²⁰ Semeraro 2015

²¹ Semeraro 2015: 2016.

²² Semeraro 2016.

²³ Semeraro 2016; 2017. About organic residues analyses in the archaeological context of the Salento region see Lettieri – Notarstefano 2010; Notarstefano et al. 2011; Notarstefano 2012.

²⁴Roca: Pagliara - Guglielmino 2005; Corretti et al. 2010; Vaste: D'Andria 2012.

²⁵ Semeraro 2009b: De Grossi Mazzorin et al. 2015.

²⁶ Semeraro 2000; Notarstefano 2012.

²⁷ De Grossi Mazzorin et al. 2015.

²⁸ Dietler 1990.

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²⁹ Semeraro 2012b; in press.

³⁰ See skyphos in Boston, Museum of Fine Arts, 99.525: Brun 2004, 91; Foxall 2011, 36 fig. 1.

³¹ F. Notarstefano, personal communication.

³² Brun 2011; Foxall 2011.

³³ See Mannino in this volume.

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Textile Manufacture in Messapia

Hedvig Landenius Enegren - Francesco Meo

One of the main domestic occupations in any society in Antiquity was that of textile production, from the working of the raw material through the different stages resulting in the end-product itself, the textile. In recent years textile research has gained momentum and has, in some instances, been used to define the economic role textile production had in society.¹

Current research uses two approaches in the study of ancient textile production. On the one hand, the analysis of the textile tools, in particular loom weights, makes it possible to calculate the warp density and the thread tension provided by a specific set of loom weights.

On the other hand, the study of mineralised, carbonised or calcified textile remains found exclusively in funerary contexts makes it possible to understand directly textile production connected in a specific site. The joint effort of these two approaches allows us to trace the evolution of techniques and technology connected to the influence of the *poleis*.²

The springboard for this research has been, without a doubt, the experimental archaeology conducted in Denmark at the *Centre for Textile Research* (CTR), University of Copenhagen and the *Centre for Historical-Archaeological Research and Communication* (CHARC) at Lejre. This has made it possible to gather essential information on the techniques used in spinning and in ancient textile production. Thanks to the study of the parameters of textile tools, for example, it is possible based on the width and the weight of spindle whorls and loom weights found in archaeological contexts, to calculate within a range the quality and the typology of worked textiles.

In calculating the type of textile that can be produced with a specific loom weight, first of all, it is necessary to estimate how many threads that can be attached to it. This depends on the weight of the thread since the sum of the tension applied to the threads, calculated in grams, must correspond to the weight of the loom weight, to which they are attached. Thus, it is not the diameter of the thread itself that determines the required tension but the applied tension which indicates how many threads that can be attached to the loom weight, even though, in general, the wider the diameter of the thread, the more tension it will require.³ If, for example, we have a loom weight that weighs 200g, we can attach 10 threads requiring a 20 g tension or 20 threads requiring a tension of 10 g. The width of the loom weight determines the number of threads that can be attached to it and in consequence the necessary applied tension. However, it is the relationship between loom weight and the width of a loom weight that determines the textile that is to be produced, as the weight of a loom weight determines the number of threads that can be attached to it and the width establishes the number of threads per cm.

The present contribution focuses on a few Messapian sites where loom weights and remains of textiles have been found, placing them within a more general framework of



Fig. 1: Loom weights with impression of a fibula.

concurrent contexts in southern Italy. In particular, the loom weights studied adhere from domestic contexts of the sites of Cavallino, San Vito dei Normanni e Muro Leccese, whereas the studied textile remains were found at Oria, Vaste and Muro Leccese.

HLE, FM

A key site for understanding the evolution of the organisation of the Messapian territory is Cavallino, a site that has provided numerous loom weights from domestic contexts dated from the 6th to the beginning of the 5th century BC.⁴ The study included 175 loom weights, which were recorded and analysed both from a technical standpoint as well as a decorative. As regards the latter, some loom weights show decorative elements, the so-called *puntinato* decoration, which involves small dots impressed into the clay before firing, and crosses and circles also occur (fig. 1). Even if the reason for the decoration of loom weights remains an open question, if it is personalised or refers to symbols of a particular social status, or if it has to do with the positioning of the loom weights on the loom, it is interesting to note that some decorations are trans-cultural. For instance, the impressed fibula decoration attested to in Messapia at the site of Cavallino and Muro Leccese,⁵ also occurs at Selinous in Sicily.⁶ Some loom weights show inscriptions, an

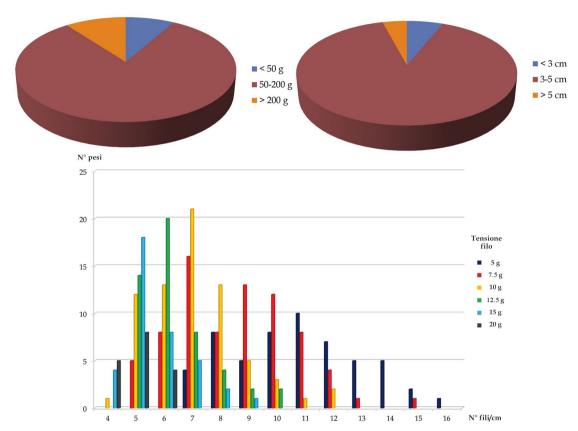


Fig. 2: Dimensions of the loom weights and histogram of fabrics based on the samples found at Cavallino.

example at Cavallino has the alphabetic sign 'A' incised on one face, another shows a possible dedicatory inscription.⁷

Of the loom weights at Cavallino 97 samples were intact and have a weight of between 50 and 200g and a width of 3–5cm.⁸ If the CTR method is applied to this documentation, it is possible to calculate, within a maximum range, the density and tension applied to warp threads. The Cavallino loom weights would have applied a tension of 5–20g, which implies a fine or very fine textile depending on the diverse requirements, which the textile was produced for. Concurrently, it seems that the warp was of a relatively low density between 4–5 and 15–16 threads per cm, depending on the tension applied (fig. 2).

Also San Vito dei Normanni, the 'Grande Edificio' excavated by Grazia Semeraro' yielded from the residential complex dated to the middle of the 6th to beginning of the 5th century BC, truncated pyramidal loom weights with one suspension hole. The loom weights were recovered in the superficial layers and 39 of these were analysed. With respect to Cavallino they show a more mixed picture weighing between 20–85g.¹⁰

In addition to the loom weights another type of object, cylindrical in shape and with an oblique perforation, was recovered at Cavallino, San Vito dei Normanni and Muro



Fig. 3: Drawing and replicas of spools of the type found at Cavallino and San Vito dei Normanni.

Leccese.¹¹ These spools, (rocchetti) were perhaps used as small loom weights, In order to investigate their function further, replicas, based on the dimensions of those found at San Vito dei Normanni and Cavallino, were made by the present author (fig. 3). These have a weight of 20–45 g and a width of 1.5–3 cm. There has been much discussion about their possible function, if these 'rocchetti' were used as small loom weights, in the manufacture of textile decorative elements, or for starting borders attached to the upper loom beam.¹² Experimental archaeology performed together with a colleague at CTR demonstrated that 'rocchetti' would have been suitable for the technique of warptwining since the oblique perforation creates an automatic stop for the thread thus facilitating the twining procedure.¹³ We do not know why these objects disappear at the end of the early Iron Age.

HLE

The systematic analysis of the textile tools and fragments of cloth found in Messapia has shed light on textile production from contexts dating from the Iron Age to the Hellenistic period and has made it possible to compare the data with the results from other sites pertaining to culturally diverse areas of south Italy.

The loom weights analysed thus far were recovered at Cavallino, San Vito dei Normanni and Muro Leccese, The methodologies developed by CTR,¹⁴ have been applied to all the analysed samples, and on textile tools from all the contexts of south Italy studied to date. Their application in those cases, in which a complete set was found in situ, has made it possible to determine the width of the fabric produced: a set of truncated pyramidal weights with a single suspension hole, from a late Archaic dwelling at Kaulonia suggested a weave 90 cm wide,¹⁵ and a set of truncated pyramidal weights with two perforations from the square building of the Heraion near the river Sele, suggested a weave set up for a finished cloth of about 1 meter in width.¹⁶ A set of

discoid weights with two suspension holes found in a $3^{\rm rd}$ century BC farm at San Biagio alla Venella was probably used to weave a 80 cm wide fabric. ¹⁷

In Messapia, although similar contexts do not occur with which to define the width of any fabric, it is still possible to determine the general ranges related to textile production, as is the case for Cavallino, 18 or to identify one or more sets of loom weights used inside the dwellings.

In this regard, the material from San Vito dei Normanni is extremely interesting because here the presence of two different groups, which may be linked to diverse chronologies, or, more likely, to the weaving of fabrics of different qualities, seems to emerge. The presence of more than one set of weights in domestic contexts was also found at Kaulonia, where three groups of loom weights were identified for different productions,¹⁹ as well as in the so-called *Casa dei Pithoi* at Serra di Vaglio²⁰ and in the Anaktoron at Torre di Satriano,²¹ where two isolated sets were found.

Returning to San Vito dei Normanni, despite the limited number of intact samples, it has been possible to isolate two sets. One of which is of extremely limited dimensions and weight, with a width of 3–4 cm and a weight of 46–87 g (fig. 4a), while the other shows significantly higher values (fig. 4b). Due to these data, the smaller set, with regard to a loom set-up, could have worked in a warp by providing a tension of only 5–7.5 g, while the second one would have given a tension of 10–15 g. In both cases, however, the density of the warp is relatively low as in the case at Cavallino, between 5 and 10 threads/cm in the first set, and between 7 and 11 threads/cm in the second set (fig. 4a. 4b).

These results are comparable with those obtained from a study undertaken in the last three years of the textile tool material from the late Archaic context of Muro Leccese. The loom weights have a width of 6–6.5 cm and a weight of 230–260 g. The thread tension applicable to this group of weights is between 10 and 15 g, with a density that is once again low, between 5 and 9 threads/cm, depending on the tension considered (fig. 5a).

Even the most numerous weights found in the Hellenistic contexts of Muro Leccese provide interesting information, especially in comparison with those of the Archaic settlement of Cavallino. The general ranges identified correspond to 150–350 g for the weight and to 4–6.5 cm for the thickness (fig. 5b). Thus, their sizes are generally larger and heavier than those of Cavallino and a tension of between 10 and 20 g would have been applied to the yarn stretched with these weights, as such being comparatively higher. Despite this, even in the Hellenistic contexts of Muro Leccese the loom weights point to a low warp density, with a number of threads/cm between 4 and 15 depending on the tension.

To better understand why there is this homogeneity in the low density of the warps and what could be produced with the loom weights of the various contexts, a highly significant discovery are pieces of mineralised textile found in some 4th century BC burials of Vaste and Muro Leccese as well as an imprint of cloth from a 9th century BC context from Oria.

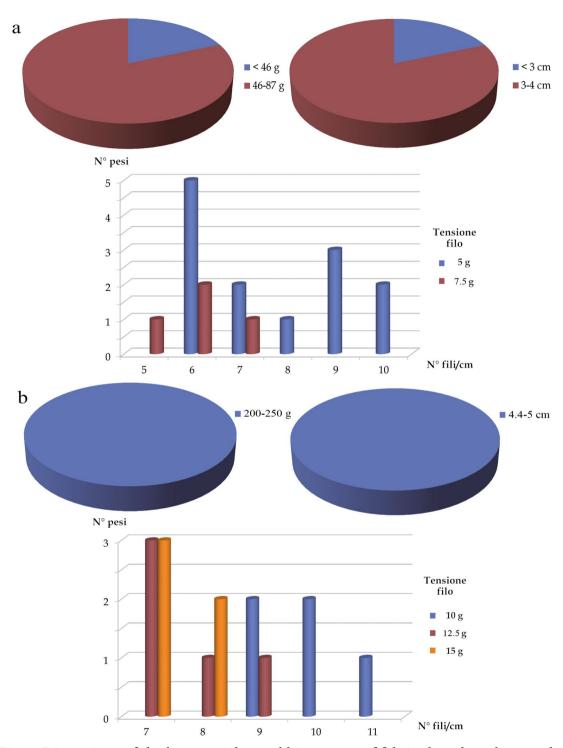


Fig. 4: Dimensions of the loom weights and histograms of fabrics based on the samples found at Vaste.

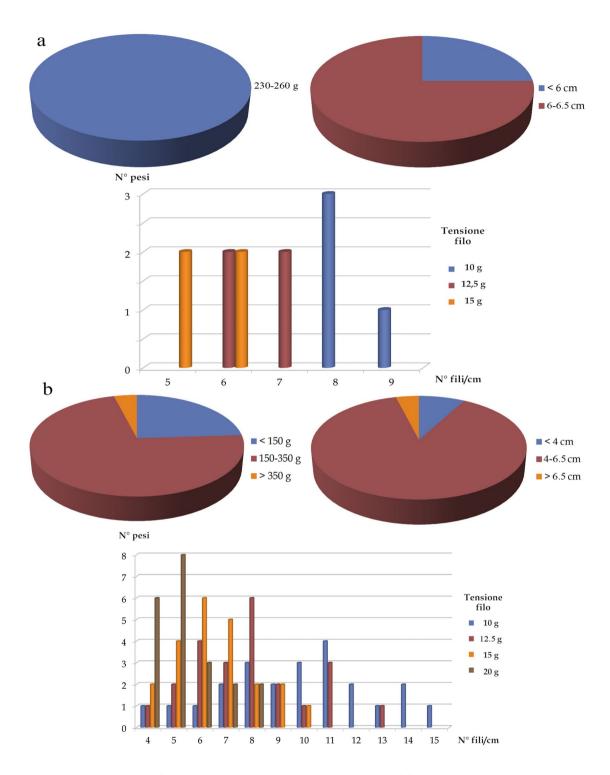


Fig. 5: Dimensions of the loom weights and histograms of fabrics based on the samples found at Muro Leccese.

These textiles produced during the Iron Age are balanced or unbalanced tabbies and twills. A tabby is a woven cloth where the threads of the warp intersect perpendicularly and alternately, with those of the weft. It is balanced when the warp and the weft have the same density that is the same number of threads per cm. Twills are instead more complex cloths and do not have the same diffusion as the tabbies. To date, twills have in fact never been found in Greece, while they are well attested to in Italy, as well as in Austria, Switzerland and Spain.²³

The imprint of Oria is a negative, involuntarily affixed to the outer part of a locally produced undecorated crater (fig. 6). This find, as yet unpublished, is very important both in terms of the dating, but also because, thus far, it is the only evidence of an imprint of cloth, found on pottery in Italy. The impression shows a tabby folded in several places.

The negative of the fabric was analysed with a polarized light-microscope, which gives an accurate measurement of the warp and weft densities, as well as measuring the average diameter of the yarn used (fig. 6). The number of threads/cm of both the warp and weft is 12–14, while the thread diameter is of 0.4–0.5 mm. Although the depth of the impression is, in some parts, visible, it has not been possible to determine the thread twist.

As a general point of view, it can be highlighted that the fabric of Oria was of a fairly fine quality with a relatively low warp density, virtually corresponding to the results obtained from the study of the loom weights discussed above.

The textiles found at Vaste and at Muro Leccese belong to the Hellenistic period. Fragments of mineralised cloth were found on iron fibulae in Fondo Melliche at Vaste, in tomb 555 and in two deposits, 562A and 585 (fig. 7). These are very small fragments, the largest of which is just over 2 cm wide. They were all found in contexts dated to the second half of the 4th century BC. Despite their extremely small size, they provide indispensable information for a full understanding of the production techniques and the fabrics produced.

Cloth found in archaeological contexts has usually been preserved through calcification, carbonisation or, more frequently, mineralization, which occurs when the fabric is in contact with metal objects, as is the case for the Messapian textiles. The corrosion of bronze, copper or, as in this case iron, involves the transfer of metal onto natural fibres, which decompose, but keep the morphology and the external dimensions almost unaltered.²⁵

Returning to Vaste, the three textile fragments are unbalanced, weft-faced tabbies. The weft-faced tabby has a low density in the warp and a decidedly higher number of threads/cm in the weft.²⁶ This type of cloth never appears, at least to date, in contexts prior to the foundation of the Greek *poleis*, while it is well attested in Greece, even in the Iron Age. The spread of these tabbies is common not only to Messapia, but also to other indigenous contexts: the examples of the Ripacandida textiles, dated from the mid-6th to the mid-4th century BC can be mentioned,²⁷ and also a calcified cloth found on two slabs of a tomb at Paestum together with mineralized cloth on several fibulae.²⁸

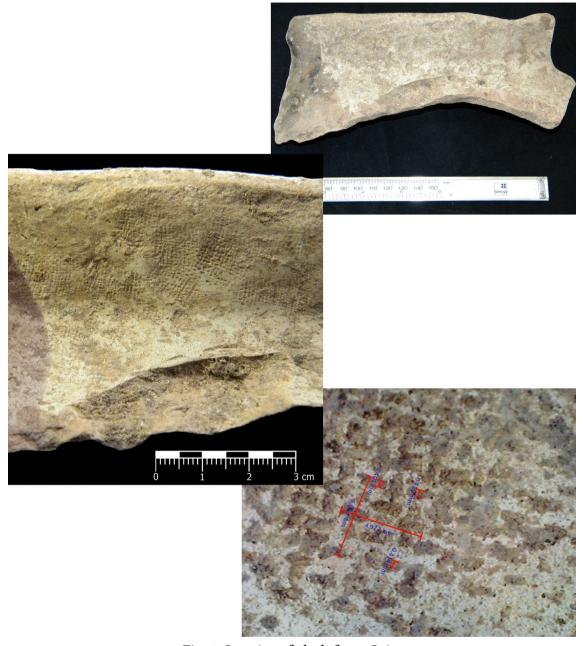


Fig. 6: Imprint of cloth from Oria.

Examination of the samples using a polarized light microscope established that the tabby found in tomb 555 at Vaste has 20–22 threads/cm in the warp and 36–38 threads/cm in the weft (fig. 7). No selvedges are preserved, so it is impossible to make a definitive identification of the direction of the warp and weft. However, since the warp usually has a lower density than the weft it is therefore possible to distinguish them. The subsequent step involved measuring the average diameter of the yarn, which measures 0.20 mm

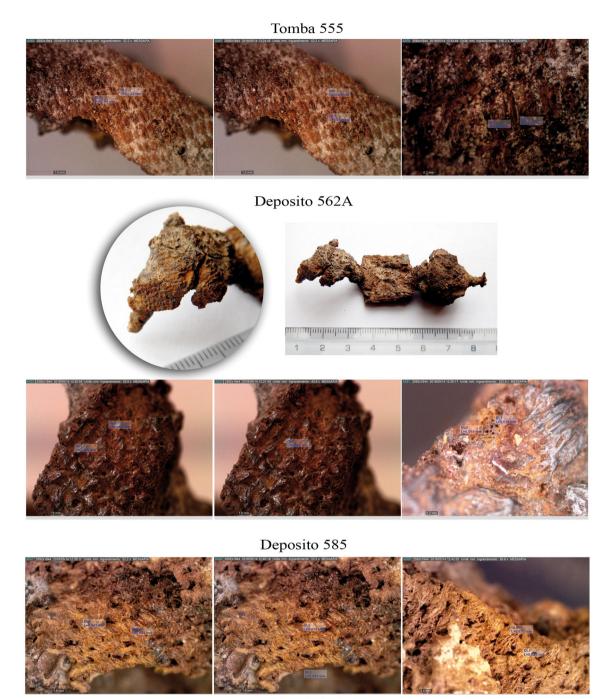


Fig. 7: Mineralised cloth from Vaste.

for the warp and 0.13-0.19 mm for weft, which are much more numerous. The yarn is Z-twisted both in the warp and in the weft, but twisting is more evident in the warp threads and is barely visible in the weft.

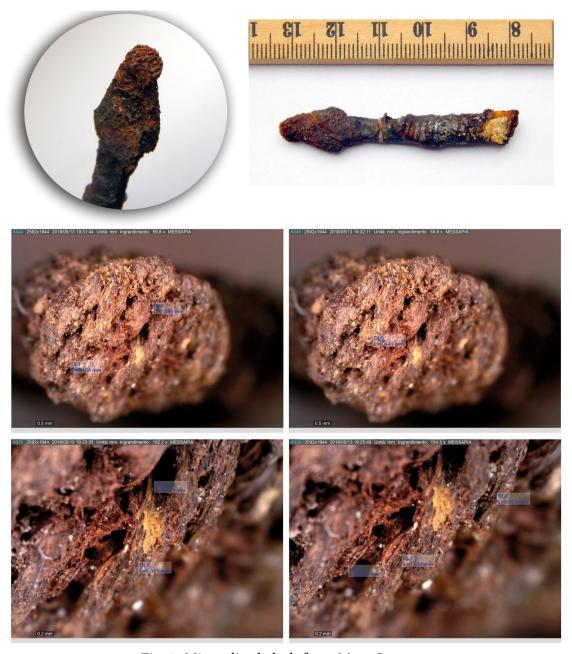


Fig. 8: Mineralised cloth from Muro Leccese.

Moreover, the other two preserved samples have similar characteristics but show a thicker yarn (fig. 7): the tabby of the 562A deposit has 13-14 threads/cm in the warp and 23-24 in the weft, with 0.50 mm thread in the warp and 0.40-0.45 mm in the weft; the fabric from the deposit 585, counts 18-20 threads/cm in the warp and 24-25 in the weft, with threads of 0.45-0.50 mm in the warp and 0.30-0.40 in the weft. In both cases it was not possible to determine the yarn twist.

However, the three pieces of textile fragments found at Vaste, probably a funerary shroud, are in wool of exceptional quality, whose fibres have, at first glance, a diameter of between 10 and 30 microns. The assessment of the fibre quality is based on the measurement of the diameter of 100 hairs per yarn and on statistical evaluations resulting in a distribution histogram. The only study so far conducted in south Italy using a Scanning Electron Microscope (SEM) is on a calcified textile from Paestum, in which the diameter of the fibres never exceeds, except in two cases, 40 microns. Comparing the results of Vaste with these, it is evident that the quality of the wool is excellent. This approach from an archaeozoological point of view can also be very useful, in shedding light on the selection of the breeds and the quality of their fleece. In any case, further investigations on the Messapian textiles will be done with a SEM.

Moreover, the textile found in 2017 in a funeral deposit at Muro Leccese is a weft-faced tabby (fig. 8). The mineralised fragment is found on an arrow point, which presents traces of the tendons on the tang, which were used to tie it to the shaft. In this case, therefore, it should not be a piece of the outfit. The textile of Muro Leccese has 11–12 threads/cm in the warp and 16–17 in the weft, with 0.45 mm thread in the warp and 0.45–0.50 mm in the weft. Also in this case it is possible to verify how the quality of the wool is excellent, with fibres of about 20 microns.

It emerges from these first studies that the Messapian fabrics are of a good quality, made with a relatively fine yarn and probably with wool of an excellent quality, as raw material. The low density of the warps, which corresponds with the data processed through the analysis of the loom weights, mainly suggests the production of weft-faced tabbies.

Therefore, it is possible, to begin to shed light on the techniques used in textile production, but still a lot remains to be done, since we have no information about decoration or colouring. The chance discovery in a semi-chamber tomb of the 4th century BC partially looted at Ordona,²⁹ of a textile finely decorated with geometric patterns in excellent condition, demonstrates how rich the decoration of some funerary costumes could be and how restricted our knowledge about productive aspects is.

This initial research makes it possible to compare, in terms of quality, the different productions. At the moment, the sample found at Taranto shows the best quality based on the analysis of both loom weights and the textile itself, stored at the Archaeological National Museum of Taranto, which allows us to confirm the quality of the cloth,³⁰ well attested to in the Archaec period thanks to a rich literary, epigraphic and numismatic tradition but which is still poorly investigated.

Notes

- ¹We thank the session organisers Professors D'Andria and Semeraro for their kind invitation to present our work at the conference.
- ² For a recent view see Gleba et al. 2018.
- ³ Experiments have shown that optimal results are obtained with a density of between 10 and 30 threads per loom weight. (Mårtensson et al. 2009; Andersson Strand 2012; 2013; 2014; Andersson Strand et al. 2015). However, research conducted in South Italy with re-calculations of the database show diverse values and inferior density; Meo c.d.s.
- ⁴Preliminary data are presented in Landenius Enegren 2015.
- $^{\scriptscriptstyle 5}$ One example is exhibited in the Municipal Museum of Muro Leccese.
- ⁶ Quercia Foxhall 2014, 95 fig. 6.
- ⁷ Pancrazzi 1979, 190 fig. 73,8; Santoro 1982, 166 f. For a discussion of inscribed loom weights see Agostiniani et al. 2015, 66–69 with further ref.
- ⁸Landenius Enegren 2015, 133.
- ⁹Semeraro 2009; 2014; Semeraro Monastero 2011.
- ¹⁰ Landenius Enegren 2015, 134 f. fig. 14.
- ¹¹ For Cavallino and San Vito: Landenius Enegren 2015, 131 fig. 7. 135 fig 16; for Muro Leccese: Meo 2011, 19
- ¹² Gleba 2008, 145 fig. 100, n. 1; Landenius Enegren 2015, 135.
- ¹³I thank Ulrika Mokkdad for her expert help in the experiment and Anna Waern-Sperber for productive discussions. For the technical aspects see Staermose-Nielsen 1999, 52 f. fig. 29A.
- ¹⁴See footnote 2.
- ¹⁵Luberto Meo 2017.
- ¹⁶ Ferrara Meo 2016; 2017.
- ¹⁷ Meo 2015, 315-319.
- ¹⁸ See above.
- ¹⁹Luberto Meo 2017.
- ²⁰ Preliminary data are given in 'A Focus on Textile Production in Lucania in the Hellenistic Period', published in the proceedings of this congress.
- ²¹ Quercia 2018.
- ²² Meo in press.
- ²³ Gleba 2017.
- ²⁴D'Andria 1990, 80. 107-109. 132.
- ²⁵Chen et al. 1998.
- $^{26}\mathrm{I}$ thank Giovanni Mastronuzzi and Valeria Melissano for their kind availability during the analyses of the textile fragments from Vaste, stored in the Municipal Museum.
- ²⁷ Gleba et al. 2018.
- ²⁸ Meo Gleba 2017.
- ²⁹ Catalli et al. 2018.
- ³⁰ Meo 2018. Taranto was also important for its shellfish purple-dye production; Meo 2017.

Image Credits

Fig. 1. 6: H. Landenius Enegren. – Fig. 2. 4–5. 7–8: F. Meo. – Fig. 3: H. Landenius Enegren; drawing: F. Malinconico.

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Economy of the Cult in Messapia

Francesco D'Andria

Various Types of Evidence

The study of the economic aspects of cult practices in Messapia must necessarily take account of the geographical context of the Salento peninsula, a middle ground between the Ionian and Adriatic seas and a space of interaction between different cultures, in which the Greek settlements on the eastern shore of the Strait of Otranto, along the coasts of Albania and on the island of Corfu, played a fundamental role. To the west of the Salento, the large Hellenic colonies on the Gulf of Taranto, such as Taras and Metapontum, also developed very close relations with the indigenous peoples of Puglia.

In the last few decades, extensive international collaboration, promoted by the University of the Salento, has enabled the research into the settlements of Messapia to make significant progress and has made it possible to reconstruct the landscapes and settlement dynamics of a period from the early Iron Age to the mid 3rd century BC, when this region was conquered by the Romans.¹

Within the systems of occupation and use of the territory, which gave rise to economic activities on various levels, manifestations of the sacred were structured in relation to the dynamics of agricultural production and mechanisms of exchange, the latter evident in coastal settlements in particular. The Messapian settlement system underwent radical transformation during the shift from the Archaic and Hellenistic periods, when a new cantonal organisation of the territory began to take shape, with the gradual emergence of a settlement hierarchy centred on the dominant towns. The latter were located inland but were linked to ports along the Ionian and Adriatic coasts, including Ugento, the port for which was Torre S. Giovanni, and Muro Leccese, with a port in Otranto.²

It should however be pointed out that in seeking to reconstruct the economic dimension of the cults in Messapian contexts, we do not have the same wealth of epigraphical documentation as is available for the sanctuaries of Greece. Indeed, in Athens and the *Heraia* of Samos and Argos for example, the inventories of the temple and the lists of expenses incurred for carrying out major building work show that the sanctuaries played a significant economic role, representing for the *polis* a fully-fledged financial fund. Indeed, the sacred properties (*hiera chremata*) were used in banking transactions, reflecting the close relationship between "the economy of the gods" and "the economy of humans".³

The Italiote *poleis* of Magna Graecia are characterised by the same shortage of epigraphical evidence concerning the economic dimension of the sacred, which is in no way comparable to the discoveries of Greece proper. Indeed, the famous bronze Tablets of Heraclea and the complex of bronze plates belonging to the sanctuary of Zeus in Locri Epizefiri represent exceptions. The former refer to ownership of land by the sanctuaries of Dionysus and Athena, while the latter record the granting of loans,

in accordance with procedures that were however completely different from those of Greek sanctuaries, such as Delos, which contained very harsh prescriptions regarding the repayment of sums to the treasury of the temple.⁴

Extremely scarce in this regard are epigraphical attestations in the Messapian language. On a slab from a tomb in Carovigno is the term *argorapandes*, translated as "monetary magistrate", while the decree of Brindisi and the figured relief in Salve contain the term *argorian* (silver-coin), considered to be a calque from the Greek *argyrion*.⁵

For this reason the economic dimension of the places of worship in Messapian contexts can only be investigated via other types of documentation, first and foremost archaeological, by means of traditional approaches, but also with the tools of ethnoanthropology, which highlight the mobilisation of social labour by means of communal rituals where individuals participate in ceremonial activities such as the travail-fête. The latter term is used by Michael Dietler to refer to the practice in African societies of holding feasts, in which the distribution and consumption of alcoholic beverages enables the mobilisation of a labour force, with which to perform work of collective interest.6 It is in this perspective that the ceremonial contexts discovered in the Salento should be considered. These include Muro Leccese, where ritual practices involving sacrifices and communal meals, designed to strengthen social bonds and relations with the dominant figures, took place.⁷ In the Archaic period, the residential complex of Castello d'Alceste in S. Vito dei Normans had a central communal space with an altar composed of a simple pile of stones.8 The consumption of wine during these commensal practices has been highlighted by Grazia Semeraro, particularly in her study of the distribution of commercial Greek amphorae inside the Archaic settlement of Cavallino. In addition, chemical analyses of residues found in matt-painted Iapygian ceramics indicate that they contained alcoholic beverages such as beer, obtained from the fermentation of cereals.10

A Typology of Places of Worship in Messapia

Our analysis of the economic aspects will therefore take account of the various types of places of worship, in which the surplus resulting from agricultural activities and commercial transactions was invested.¹¹ In these contexts the following factors will be assessed: the level of investment in the various building projects; the use of imported craft knowledge; the acquisition and accumulation of precious goods.

On the basis of the archaeological evidence available today, the following typology of places of worship may be proposed:

1) Sanctuaries linked to the agricultural sphere, structured in accordance with Greek customs: sanctuaries dedicated to Demeter, including those of Monte Papalucio near Oria and S. Maria di Agnano, near Ostuni.

- 2) Polyadic places of worship: this category includes the context on the acropolis of Ugento, where the bronze statue of Zeus, dated to the Archaic period, was discovered.
- 3) Ancestor cults, linked to individual family groups: the Iron Age place of worship in Roca; the ritual contexts of Fondo Melliche near Vaste (8th–3rd centuries BC).
- 4) Places of worship sited near coastal landing sites, linked to commercial exchanges with Greek sailors: particularly significant are those present on the Ionian, characterised by the cult of Artemis Bendis: Leuca, the Porcinara cave, Torre S. Giovanni near Ugento, ¹² Mancaversa and Madonna di Altomare. Discovered in the landing site near Ugento were *ostraka* with texts in Greek, consisting of lists of numbers (perhaps regarding commercial accounts and loans). Evidence of a small community of Greeks who had settled there comes from the excavation of some tombs, in which the composition of the grave goods is similar to the funerary rituals of Taranto (excavations 2014–2016, Laura Masiello and Paolo Schiavano).
 - 5) Cults in small caves, attested in the Murge hills, linked to grazing practices.

Given the abundance of material discovered in the excavations, for which published descriptions are available, the sanctuary of Demeter in Monte Papalucio near Oria provides significant clues for assessing the system of offerings, the investment of resources linked to cult activities and the ways in which the community's collective goods were accumulated and could be used as a financial reserve. 13 An example is the presence in the sanctuary of Demeter of silver coins from the mints of Magna Graecia¹⁴ (fig. 1) and thin figured plates of gilded silver. 15 These highly valuable items should not however be considered in terms of the ownership and accumulation in the sanctuary of objects of value which would thereby form a treasury; they should rather be seen in relation to the ritual sacrifice of these resources as offerings to the divinity (sacrificial consumption). Indeed, both the coins and the silver plates were discovered in ash-rich layers containing food offerings and the remains of sacrificed piglets that had been entirely combusted (i.e. as a holocaust). Like the imported ceramics, they were among the goods that were set aside for votive depositions, reserved for the divinity, thereby removing them from the dynamics of circulation and financial management to the benefit of the sanctuary.

The Athenaion of Castro

A highly distinctive case is that of the Athenaion of Castro where, unlike other contexts in Messapia, the arrangement and complexity of the cult site can be recognised as clearly belonging to the Greek world rather than the indigenous culture, in which the investment of the community's collective energies in the construction of sanctuaries was rather limited. Indeed, Messapian places of worship consist of open-air structures surrounded by a perimeter wall, small structures inside caves, and areas marked by



Fig. 1: Oria. Archaeological Museum of Oria and the Messapians. Silver coins from the sanctuary of Monte Papalucio (Archaic period).

cippi and *stelae*. ¹⁶ In contrast, the Athenaion of Castro can be interpreted with reference to the settlement's function as an emporium in a territory controlled by the indigenous inhabitants: given its strategic position, controlling the entrance to the Adriatic Sea, it became a meeting place for various peoples, Illyrian and Greek, from both the opposite shore of the Adriatic and the Hellenic colonies of the Gulf of Taranto. The site's topography, with the inlet dominated from above by the settlement's acropolis and the temple of Athena, also reflects the typical structure of an emporium. That it was a place of accumulation of wealth is explicitly confirmed by the testimony of Strabo (VI, 3,5), who writes: "entauta d'esti kai to tes Atenàs hieron plousion pote uparxan". The excavations, conducted in successive campaigns since 2000, have brought to light a haul of evidence consisting of both materials and structures that have taught us a great deal about the investment of resources in the sanctuary, which is seen in both the extraordinary architecture and the accumulation of wealth. The evidence also sheds light on the sacrificial consumption of collective resources in offerings and sacrifices, which unfolded in ways that are similar to the practices associated with Hellenic divinities. Indeed, in the words of Chankowski, the Greek divinities are "consommateurs de sacrifices" and "manieurs d'argent". 17

Economic Activities Recognisable in the Sanctuary of Castro

Architectural Structures and Works of Sculpture

Considerable resources were destined to the construction of buildings, in accordance with approaches that have parallels in the building complexes of the colonial Greek world, whose economic characteristics were delineated in an important paper by Roland Martin, presented at the Taranto Conference of 1972, dedicated precisely to the theme of Economy and Society.¹⁸ The monumentalisation of the acropolis of Castro can be seen in this light: considerable quantities of calcarenite blocks were used to create the system of terracing and defence, inside which the structures of the temple and the altar, also built of stone, were located. Indeed, the creation of the sanctuary appears to have been closely linked to these major fortification works. By way of example, for the walls of a Messapian settlement of 60 hectares, it has been calculated that 65,000 m3 of blocks, equivalent to 8000 truckloads, would be required.¹⁹ The creation of the sanctuary of Athena in Castro, with the *temenos*, the altar and the temple, should be seen in relation to the construction of the walls. The bronze plates of Locri also state that to finance the construction of the fortifications and to produce weapons for the defence of the *polis*, resources drawn from the treasury of the temple were used.²⁰

A further aspect of this ambitious building project in Castro is the cost of bringing in craftsmen from Magna Graecia, particularly from Taras, who are credited with building the only temple of the Greek type present in Messapia. The façade, about 6 m wide,



Fig. 2: Castro. The triglyph in the pediment, reconstructed in wood (second half of the 4^{th} century BC).

has a pediment with a central triglyph, a characteristic typical of the western Greek world, although to date it has been known only from scale models of temples and representations in figured terracottas and ceramics (fig. 2).21 A considerable financial commitment must also have been required for the creation of the cult statue of Athena, more than three metres high, consisting of two large blocks of pietra leccese building stone from the nearby quarries of Maglie-Cursi (fig. 3). The left arm that held the spear was attached to the shoulder by a lead-seated iron dowel, while the shield was created separately, perhaps in metal. A large commitment of resources was also needed for the series of sculpted slabs that formed a wall, interpreted either as forming a perimeter around the area of the altar or, more plausibly, as marking the top of the terrace of the sanctuary. About 1.50 m high and 1.85 m long, they bear reliefs with "peopled scrolls", typical of the art of Taras in the 4th century BC, which are also found in Apulian red-figured ceramics and the sculptural decoration produced in the workshops of the Laconian city. Despite their considerable stylistic quality, the rather hurried rendering of the statue and reliefs suggests that the Greek craftsmen were required by their clients to complete the work in a limited period of time.²²

But with what resources were all these works financed? The phenomenon can be more readily understood with reference to the site's function as an emporium and the intense interaction between the Messapian *principes* and the Greek community. It is plausible that tariffs were levied on the trade that took place in the port and paid to



Fig. 3: Castro. Virtual reconstruction of the cult statue of Athena Iliaca.



Fig. 4. Castro. Archaeological Museum. Rear of the statue of Athena with the letter *gamma* carved on the shoulder.

the sanctuary.²³ But Greek sanctuaries had other sources of income, as shown by the inscriptions on the bronze plates of Argos, dated to the second half of the 5^{th} century BC.²⁴ On the basis of this evidence, the *Athenaion* in Castro could thus have drawn on the following resources:

- a tithes, perhaps paid by Messapian settlements inland.
- b gifts from the kings of nearby regions (Epirus etc.).
- c interest on money lent.
- d sale of the hides of sacrificed animals.
- e sale of animals from sacred herds.

The resources obtained are believed to have been used for the organisation of feasts, cult furnishings and building work, but also for herdsmen's wages and the salaries of the personnel of the sanctuary itself, which was thus "a large-scale employer".

Accumulation and Management of the Sanctuary's Goods

An important feature of the cult statue of the goddess Athena was the Greek letter *gamma* (about 6 cm high) carved into the back of the left shoulder, to be considered a numeral corresponding to the number three (fig. 4). The same numbering system is found in other statues, such as the bronze "Hellenistic Prince" discovered in the wreck of Punta del Serrone near Brindisi. These marks have been interpreted as inventory numbers indicating a sanctuary's goods.²⁵ Thus it seems that this way of



Fig. 5: Castro. Archaeological Museum. Ivory ram's head (4th century BC).

registering items of property was also used in the sacred context of Castro. Typical of Greek contexts, it represents one of the ways, in which the hiera chremata were accumulated and managed. The wealth of data yielded by the excavations in this context of the Akra Iapyghia also makes it possible to distinguish goods attributable to sacrificial consumption and votive offerings (such as ceramics used for ritual libations, iron and bronze weapons, etc.) from items that were part of the sanctuary's accumulated wealth (such as furnishings with metal appliqués, vessels and statues made of marble from the Cyclades, fabrics and garments). This field is apparently referenced by the testimony of Lycophron (Alexandra, 852–855), datable to the 3rd century BC, which tells of how Menelaos, once he had arrived among the bellicose Iapygians, made an offering to the goddess Athena consisting of a bronze krater of Tamassos (Cyprus), a shield covered in leather and the sandals of his wife Helen. The group of keimelia discovered in the Athenaion included objects such as the gold ring holding a piece of vitreous paste in which was carved a representation of Aphrodite Urania on a swan, or the extraordinary ivory protome of a ram (fig. 5), perhaps the extremity of a metal patera which has a parallel in a silver specimen from the Tomb of the Prince of Vergina.²⁶ Indeed, in Magna Graecia contexts, ivory



Fig. 6: Castro. Archaeological Museum. Mould and bronze statuette of Athena Iliaca (4th century BC).

objects are extremely rare. They were probably produced in specialised workshops such as those that operated inside the palaces of Macedonia, where the finest specimens have been discovered. The presence in Castro of these small precious objects recalls the patterns of accumulation of goods documented in Hellenic sanctuaries, in which chryselephantine sculptures, gold utensils, silver and bronze artefacts and contemporary coinage constituted a reserve of wealth for the entire community. Of extraordinary importance in this context is the presence inside the sanctuary of finds reflecting the production in loco of metal artefacts.27 A limestone mould was used for casting bronze statuettes (13 cm high) that represent the goddess wearing the Phrygian cap (fig. 6); the inside of the mould corresponds perfectly to the small bronze figure of Athena Iliaca discovered in 2008. XFR analyses have made it possible to verify the absence of metal residues inside the mould: it must therefore be one half of a bi-valve mould used for making a wax positive of the statuette which could then be used to make a new mould of refractory clay, in turn used to make a solid bronze figure exactly like the specimen discovered in the excavation of the sanctuary.

Another significant discovery is that of fragments of moulds for making fluted *phialai*, probably of silver (fig. 7).²⁸ The production inside the sanctuary of these metal vessels practically conferred a monetary value on the *phialai*, which were kept in the sanctuary as a financial reserve, the *chremata* thereby constituting a treasury of wealth that could be released back into circulation in case of need (see the examples of Athens, Samos, Didyma and Argos).

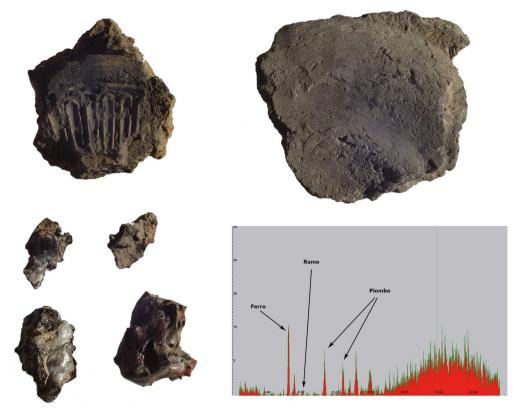


Fig. 7: Castro. Archaeological Museum. Fragments of casting moulds for metal phialai.

Sacrificial Consumption

The sanctuary also saw the sacrificial consumption of significant resources in the course of rituals in honour of the divinity. There may have been a direct link to local potters' workshops for the production of objects destined for the rite, especially the thousands of single-handled small bowls used for individual libations, but there was also considerable production of closed vessels and *trozzelle*.

Among the tributes paid to Athena were animal sacrifices that were partly reserved for the divinity and partly consumed on site, during collective banquets that served to strengthen the social bonds between the members of the Messapian communities, but also to confirm the alliance and interaction with their Greek counterparts. With its Doric frieze, the altar made of blocks, 3 m wide and presumably 8 m long, has the typical decoration and other features of a Greek altar. The discovery inside it of archaeo-zoological finds makes it possible to clarify aspects of the investment of resources and sacrificial consumption. Indeed, inside the altar, below the level of use, various faunal materials were deposed as part of a foundation sacrifice. They included bones belonging to numerous specimens of cattle, animals of greater value than the more frequently sacrificed sheep and goats. Arranged separately next to fragments of vessels, in a



Fig. 8: Castro. Athenaion, foundation deposit of the altar (second half of the 4th century BC).

primary position, were the bones: the skull and the lower part of the legs, which are thus recognised as the parts of the animal set aside for the divinity (fig. 8). In contrast, discovered among the mass of votive materials outside the altar were faunal finds pertaining to the other parts of the sacrificed animals, particularly ribs and vertebrae, clearly the remains of the consumption of ritual meals by the faithful.²⁹

Together with the rest of the archaeological evidence, the archaeo-zoological research makes it possible to highlight hitherto neglected aspects of the economy of Messapian society, not only concerning the familiar themes of livestock rearing and food, but also more complex questions linked to the religious sphere.

Notes

¹Ringrazio Corrado Notario per la redazione di testo e immagini, Vito Giannico, Amedeo Galati e Gianni Ruggiero per le foto dei materiali di Castro.

²D'Andria 1991, 393-478; Auriemma 2004.

- ³ Maucourant 2005; on the relationship between sanctuary and polis, see the recent and extremely useful summary by Rita Sassu (2014).
- ⁴Dignas 2002, 25.
- ⁵De Simone Marchesini 2002, 23.
- ⁶Dietler 1990.
- ⁷ Giardino Meo 2016, 77–82.
- ⁸ Semeraro Monastero 2011, fig. 1.
- ⁹Semeraro 1997, 351–353.
- ¹⁰ Semeraro 2016, 359–362; the results of the analyses are presented in the appendix by F. Notarstefano; see also Notarstefano 2012.
- ¹¹ For a general summary of Archaic places of worship in Southern Italy, see Mastronuzzi 2005, 156–162, with specific references to Messapia.
- ¹² For a general review of the issues concerning the cult of Artemis Bendis near coastal landing sites and an account of the excavations in Torre S. Giovanni (Ugento), conducted by the present author in 1975, see Vitolo 2015–2016.
- ¹³ Mastronuzzi 2013.
- ¹⁴ Siciliano 1990, 283-285.
- ¹⁵ Guzzo 1990, 274-281.
- ¹⁶ The presentation of the early excavation campaigns can be found in D'Andria 2009.
- 17 Chankovski 2005, 10.
- ¹⁸ Martin 1973, 185–206.
- ¹⁹ These defence works required an extraordinary mobilisation of human resources. Consider that in 399 BC, to build the fortifications of Syracuse, Dionysius brought in about 60,000 men from the nearby indigenous settlements, but also from the Italiote poleis and Greece proper (Diod. XIV,41, 1–3).
- ²⁰ Sassu 2014, 306-307.
- ²¹ Ismaelli 2012, 141–168.
- ²² A preliminary study can be found in D'Andria 2018, 55–65.
- ²³ Sassu 2014, 353; Athens took 2% of the value of the goods exchanged in Piraeus.
- ²⁴ Kritzas 2006.
- ²⁵ Daehner Lapatin 2015, 205: carved above the right collarbone are two Greek letters, kappa and ypsilon, which might indicate the number 25, referring to the inventory of the Sanctuary or some other collection of statues, perhaps from Greece.
- ²⁶ Andronicos 1984, 213 figs. 181. 182.
- ²⁷ See especially the metal workshops in Gravisca: Fiorini Torelli 2008, 75–106. Fusion moulds and traces of metalworking are also present in the sanctuary of Punta Stilo in Caulonia: Parra 2011, 26 f. A sacred deposit discovered in Argos, dated to the second half of the 5th century BC, contained bronze plates with inscriptions. Discovered in the same area was a kiln for melting metal: Kritzas 2006; Sassu 2014, 295 f.
- ²⁸ Giardino 2011, 151-160.
- 29 On the contribution of bio-archaeology to our knowledge of ancient rituals, see D'Andria et al. 2008.

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Figs. 1. 2. 4–8: Archive of Department of Cultural Heritage. Salento University – Lecce. – Fig. 3: Antonio Mangia.

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Consumption of Luxury Goods and Art among Messapian Aristocrats

Katia Mannino

In studies of the economic systems of the ancient world, Messapia represents an area of great interest thanks to the large amount of data produced by the archaeological research both in the field and - in accordance with a range of multidisciplinary approaches on the theoretical level. The aspect analysed in the present paper can be considered especially fortunate. Indeed, on the basis of innovative work by Francesco D'Andria and Grazia Semeraro in the 1990s, the "luxury goods" and "art" of Messapia have been the object of extensive research which has analysed the contexts of the evidence in search of the right key with which to interpret the finds.¹ In this article I will focus on the aspects of the phenomenon as documented by particularly significant artefacts and contexts dated from the Archaic period to the end of the 4th century BC. The evidence will be examined in such a way as to highlight the economic significance of artistic items and luxury goods among the Messapians and explore how this differentiated them from other non-Hellenic peoples in the ancient world. Interesting data on this theme begin to appear in both residential and cult areas in the late second quarter of the 6th century BC, a time when a hierarchical organisation of settlements was emerging in Messapia. Indeed, albeit with some discontinuities, the villages composed of clusters of huts began to be replaced by more complex forms of settlement.² Significant in this regard is the case of Cavallino, where, inside the fortifications, spaces with funerary, religious or craft functions alternated with areas crossed by irregular paved roads with side-walks flanked by dwellings with limestone foundations, stone walls and clay roofs.³ This period is rich in new developments: together with the advent of writing, some family groups acquired the power necessary to begin to invest resources and the population practised craft activities linked to building and the production of ceramics in addition to livestock rearing and agriculture. The role of these aristocratic groups was also consolidated by means of Greek wine, documented in the settlement by numerous imported amphorae. This was highlighted by Grazia Semeraro, for whom the use of Greek wine - drunk from Laconian kraters and Attic or colonial black-glaze bowls - was regulated by the aristocratic classes who were able to control exchanges and procure the exotic beverage.⁴ In this phase of transformation of the settlements, imported wine may have played a strategic role in the mobilisation and recruitment of manual labour. Significant in this respect is the presence, in a very few residential areas, of Attic black-figure kraters. Concerning the function of these vessels, information is provided by the discoveries made in the areas of Castello di Alceste near San Vito dei Normanni (BR), a modest hill with dwellings on the summit that are comparable to those of Cavallino.⁵ Prominent among these is the so-called 'large building', a complex of 700 m² composed of a number of covered rooms facing onto a courtyard with an

altar in the centre. The building's floor plan and dimensions, together with the type and quality of the objects discovered there, enabled Grazia Semeraro to identify the structure as the residence of a person – or a family – who held power in the settlement and conducted ceremonial and religious activities there. The a room that yielded ceramics for the consumption of wine at banquets were the fragments of two Attic black-figure vessels dated to the last two decades of the 6th century BC: a volute-krater with a frieze of horsemen and a calyx-krater with a representation of Athena and Herakles.8 The discovery is exceptional. Indeed, while in the residential contexts of southern Puglia imported ceramics for pouring wine are mostly black-glazed, in San Vito dei Normanni the Attic kraters constitute a prestigious medium for images that recall the world of warriors and Herakles, the hero of Archaic Greek aristocrats.9 In economic terms, these carefully selected vessels should be considered "luxury goods". Indeed, for the Messapian context, J. Geoffrey Kron's recent hypothesis is not plausible. Resuming the famous theory of Vickers and Gill, Kron ignores the differences between regional situations – with Etruscans, Messapians, Peucetians, Daunians and Campanians alike described as "prodigious consumers of Attic fine pottery" - and sees Attic ceramics as a type of ware with no particular value whose importance today is overestimated because, unlike the true "luxury goods", of which not a trace remains, they are well conserved in archaeological contexts. 10 Given that the value of craft products is not the same in the society that produces them (in this case Athens) as it is in those societies that in various ways come to acquire them, it should be pointed out that throughout the period during which they were imported, figured Attic vases never once constituted objects of everyday use among the Messapians. On the contrary, they represented items that were deliberately acquired for the purpose of highlighting differences of status. In San Vito dei Normanni, the choice of the figured kraters was determined by the aristocrats' need to display in the 'large building' suitable indicators of their social position, which they occupied by virtue of the wellbeing they had achieved. The prestige of figured pottery, which was imported and therefore exotic, derived above all from the images it bore. Indeed, for the aristocrats of Messapia (as also in Daunia but in the 4th century), possession of the knowledge required for interpreting the representations, in particular the Greek myths, represented a tool, with which to consolidate power, enabling them to emphasise their superiority with respect to those who had neither the purchasing power needed to acquire such objects, nor the ability to comprehend their meaning. Contemporary with the specimens of San Vito dei Normanni is an Attic black-figure volute krater with an image of warriors leaving home discovered in Muro Leccese, a site inland from Otranto (fig. 1). Here, researchers from the University of the Salento led by Liliana Giardino and Francesco Meo identified the scattered nuclei of a settlement - one of the most extensive in Messapia – that developed around the mid 6th century BC, with characteristics similar to those of Cavallino, with aristocratic residences comparable to the 'large building' of S. Vito dei Normanni.11 The Attic volute-krater was found in the Cunella district in a residential complex frequented – as was the funerary space, with



Fig. 1: Attic black-figure volute krater with an image of warriors leaving home from Muro Leccese, Masseria Cunella. Muro Leccese (Le), Museo Diffuso di Borgo Terra.

which it is associated – from the Archaic to the Hellenistic periods. ¹² The vessel was discovered in a secondary deposit in the area of the burials, having been placed there, suggests Giardino, to affirm the origin of the aristocratic group that held power in the settlement. ¹³ There are numerous similarities with San Vito dei Normanni and it may be hypothesised that the vessel was originally acquired in order to be placed in the residential complex; it was only in a later period, when the aristocrats' modes of self-representation had changed, that the krater was moved to the funerary area, where – perhaps positioned outside the burials – it would have maintained its symbolic value.

In Archaic Messapia the economic and social overtones of the consumption of luxury are also well documented in places of worship.¹⁴ Particularly interesting is the religious complex, frequented by various strata of the Messapian population, identified on Monte Papalucio, an area investigated by the University of the Salento in Oria, the most extensive settlement in northern Messapia.¹⁵ Inscriptions and ceramics link the cult to divinities identifiable with Demeter and Persephone. The dedication of seeds, fruits

and suckling pigs links the ritual practices to the cycles of nature and fertility. In the sanctuary, the luxury goods include gold items that demonstrate the participation in the cult of aristocrats, who paid the divinities for the wealth derived from the harvest and the multiplication of the livestock in silver coins¹⁶. As an example of luxury goods, an important role in the sanctuary's Archaic phase was played by Attic ceramics, especially containers of perfumes (*lekythoi*) and vessels for wine, prominent among which is the only known red-figure volute krater in Messapia.¹⁷ Frequent in the ceramic complex of Monte Papalucio are mythological representations: Dionysus and his thiasos, Amazons, and characters from the Iliad. 18 According to Francesco D'Andria, in Archaic Messapia, the starting point for the dissemination of the myth was precisely the sanctuary. 19 Here, the aristocrats who held power - the owners of prestigious dwellings such as those of San Vito dei Normanni and Muro Leccese - dedicated or used in the rites ceramics, which, by means of images, told stories of gods and heroes. Thus, the figured Attic vessels were also indicators of power in the sacred context, and their value - which was greater than the object itself - derived from the fact that the images constituted a source of information in rituals controlled by the aristocrats. The sanctuary was thereby transformed into a favoured channel for transmission of the "mythical knowledge" expressed by the Greek vessels. The acquisition of this knowledge in indigenous circles also had an important effect on the local production of artefacts: see for example, the trozzella of Copenhagen, a vessel illustrating the combat between Aeneas and Diomedes and the death of Capaneus below the walls of Thebes, struck by a lightning bolt of Zeus.²⁰ The presence of the figure of Zeus in the *trozzella* of Copenhagen is not a coincidence. A statue of the god hurling a thunderbolt – a masterpiece of Greek bronze-work, probably from Taranto, dated to 530 BC - was indeed venerated within a sacred area surrounded by a perimeter wall on the acropolis of Ugento, the dominant settlement of southern Messapia (fig. 2).21 The Zeus of Ugento, placed on a column surmounted by a doric capital with an abacus decorated by rosettes, is likely to have been commissioned by aristocratic groups who recognised in the simulacrum the figure of Katabaites, i.e. the divinity who, according to Clearchus, incinerated the inhabitants of Taranto after they committed sacrilege on the occasion of their conquest of the Iapygian city of Càrbina.²² The acquisition of a simulacrum in precious metal must have required a considerable commitment of economic resources on the part of the Messapians, but the aristocrats had a precise objective: maintaining the stability of power. Indeed, in the site where Zeus was venerated, the god guaranteed respect for the status quo and served as a reminder of the danger threatening those who broke the rules and committed hybris.

Among the archaeological evidence in Ugento we find an important indication of the changes in the modes of self-representation of the Messapian aristocracy at the beginning of the 5^{th} century BC. This was on the eve of traumatic events – linked to the deterioration of Messapia's relations with Taranto – that would destabilise the Messapian system and result in the violent disappearance of settlements such as Cavallino and San Vito dei Normanni. We refer here to the tomb in Via Salentina, a burial built of large

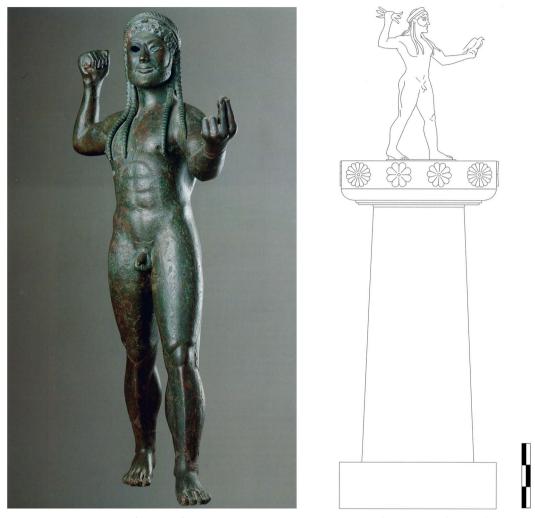


Fig. 2: Bronze statue of Zeus from Ugento. Taranto, National Archaeological Museum. In the reconstruction, the statue of Zeus is on a column surmounted by a Doric capital with an abacus decorated by rosettes.

blocks decorated with painted sashes and objects – an aryballos, a *trozzella*, a cock, a dove – used for the deposition of a male adult accompanied by a service of bronze vessels for wine and a pair of strigils, a clear reference to the world of the *palaestra* and the *paideia*.²⁴ Around 490 BC then, we see luxury being introduced into the grave goods and this new development, which is also seen in other rare burials of the same period, reveals the need on the part of certain powerful groups to differentiate themselves from other aristocratic elements. The affirmation of superiority is seen in the display of a number of indicators: the construction of carefully built tombs that required the use of specialised manual labour and a considerable economic investment; the ostentation of imported prestige metal objects with a high intrinsic value that recall, on the ideological level, Greek culture; and the introduction of figured Attic pottery – see for



Fig. 3: Attic red-figure bell-krater from Egnazia, attributed to the Menelaos Painter. Main side: Menelaos pursuing Helen. Paris, Musée du Louvre.

example Tomb 1 in Via Regina Margherita at Cavallino - which had previously been documented exclusively in residential and sacred contexts. 25 The grave goods, small in number and carefully selected, omitting weapons, have complementary functions: the metal tableware was used for drawing, pouring and filtering wine, while for mixing and drinking the wine, figured ceramics were used.²⁶ The latter included especially kraters, which, as the main marker of the tombs of male adults from this time onwards, played a key role on the symbolic level by means of their images.²⁷ At the beginning of the 5th century BC, burials with figured vessels were still extremely rare, given that such images were initially restricted to a very narrow elite. In subsequent decades, the importation of pottery from Attica (fig. 3) and, from the third quarter of the 5th century BC onwards, from the Italiote colonies (fig. 4), grew considerably.²⁸ However, figured vessels remained the preserve of the aristocrats, for whom they represented – together with writing – a symbol of their status²⁹. The images on the vessels served to strengthen or complete the meaning of the grave goods, both male and female, and were now used as elements of a common language that enabled members of the aristocratic groups to effectively represent themselves by transmitting partly via the selection of specific ceramic forms – precise messages.³⁰ These messages concerned in some cases the training and social life of male adults and in other cases wine and relative practices of collective consumption; the representations with figures and episodes from Greek mythology may have had the ambitious aim of assimilating the deceased to the



Fig. 4: Proto-Lucanian bell-krater from Manduria, attributed to the Amykos Painter. Main side: a maenad between two silens. Castro (Le), Archaeological Museum 'A. Lazzari'.

heroes of the sagas.³¹ The luxury items among the grave goods in this phase thus served to emphasise the status and prerogatives of the male adults, who only exceptionally reveal their rank by deposing a spur in the burial, as in the case of the aristocrat buried with an Attic krater and a rare Etruscan *podaniptèr* in the 'tomb of the horseman' in the Melliche necropolis in Vaste (fig. 5).³² Arranged around this burial, the only one not reused for subsequent depositions, are other tombs, all covered by a tumulus that has yielded figured Attic and Italiote fragments of *semata* and the containers that the aristocrats used – together with *skyphoi* with perforated bottoms – in funerary rites.³³ These rites, celebrated to affirm group identity and strengthen their possession of the territory, were practised around the tomb of a personage – the 'horseman' – who, as the fulcrum of the family, was probably venerated as an ancestor-hero.³⁴



Fig. 5: Vaste, Melliche necropolis. The 'tomb of the horseman'. Grave goods: Attic red-figure bell-krater by the Painter of the Louvre Centauromachy, Etruscan bronze podaniptèr, bronze spur. Vaste (Le), Archaeological Museum.

Discovered in Vaste was the most prestigious artistic craft item of all the finds from Messapia in the Classical period: a bronze krater – today in Boston – with volute handles decorated with plant whorls and protomes of swans (fig. 6a), probably produced in Magna Graecia in the late 5th century BC.³⁵ In the same class as the Boston krater are about ten vessels distributed across an area that includes Macedonia, Dodona, Sicily and Magna Graecia. In Messapia this krater represents a unique case, clearly a status symbol, as suggested by the discovery in an aristocratic tomb in Mesagne – in association with a bronze cista and a proto-Lucanian krater – of a perfect reproduction in silvered clay (fig. 6b).³⁶ The imitation – probably attributable, like the original, to a workshop in Taranto – is a demonstration of the 'symbolic value' that luxury goods had among the



Fig. 6: A) bronze volute-krater from Vaste. Boston, Museum of Fine Arts; b) volute-krater in silvered clay from Mesagne. Mesagne, 'U. Granafei' Museum.

Messapians. The key to its interpretation is provided by a 4th-century Attic relief squat *lekythos* discovered in Monte Papalucio that shows an athlete holding a *halter* standing next to a tripod (fig. 7).³⁷ The *lekythos* is a further sign of the participation of emergent groups in the rites of the sanctuary. It proclaims the significance, in the training of the aristocrats, of athletics and the *paideia*, whose importance is proportional to the value of the prize awarded to the winner of the *agones*, as seen in the representation: a valuable metal volute krater on a support.³⁸

At the end of the 5th century, in some 'emergent' Messapian grave goods, a new element is introduced in the form of an item of clothing associated with the warrior figure: the bronze belt. The rarity of specimens until the mid 4th century BC indicates that in this phase, the belt accompanied the deceased as a 'valuable item', and thus served as an indicator of rank rather than of role.³⁹ In the grave goods of the 4th century, figured vessels were still of central importance. Now however it was products from the Italiote workshops that dominated the market.⁴⁰ Attic vessels transported by ships heading to Spina still reached, albeit sporadically, settlements on the Adriatic coast of Messapia.⁴¹



Fig. 7: Attic relief squat *lekythos* from Oria, sanctuary of Monte Papalucio. An athlete holding a *halter* standing next to a tripod and a metal volute-krater on a support in front of him. Lecce, Dip. of Beni Culturali, University of Salento.

This is the case with Rocavecchia, where, however, the most conspicuous evidence from this phase is composed of figured ceramics produced in Taranto, as attested by the discoveries made by Cosimo Pagliara (University of Salento) in the Zona Castello in 2003 and 2008 in an area to south of Grotta Poesia.⁴² In addition to Attic and Italiote ceramics, among the 4th-century grave goods discovered in southern Puglia are also products from the workshops of the Peloponnese and western Greece, as shown by the Agrinion Group vases discovered in Vaste and the Elean red-figure kraters discovered in Rudiae, demonstrating that Messapia, unlike other parts of Puglia, was active in a number of commercial networks.⁴³

In conclusion, I would like to point out that the economic investment by Messapian aristocracies in funerary spaces is even more evident in the underground chambers built at the end of the 4th century. The aristocrats continued to exalt their status with modes of self-representation that now find a model in the ideals of the Macedonian world, seen in Rudiae and in Egnazia in the form of inscriptions and pictorial representations of hanging weapons, and in Lecce – in the Palmieri chamber – in a frieze sculpted with foot soldiers and horsemen in combat.⁴⁴ By combining luxury items and art in a single

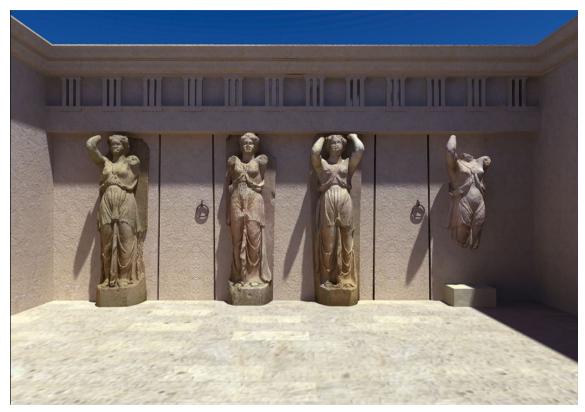


Fig. 8: Vaste (Le), the Hypogeum of the Caryatids: the façade of the monument.

monument, the Messapians used their final resting places to exalt their status: in the Hypogeum of the Caryatids in Vaste, the journey to the Next World is represented in the *dromos* by friezes with felines pulling carts driven by erotes; on the façade of the tomb, the doors granting access to the funerary chambers are protected by funerary Genii called on to watch over the sepulchre of mortal beings who aspire to become, like the protagonists of Greek myths, true heroes (fig. 8).⁴⁵

Notes

¹D'Andria 1988; 1991; Semeraro 1997.

²D'Andria 1991.

³D'Andria 2005.

⁴Semeraro 1997, 347–357.

⁵ Semeraro 2009, 495–496; Semeraro – Monastero 2011.

⁶ Semeraro 2009, 496.

⁷Semeraro 2009, 497 f.

⁸ Semeraro 2009, 497-502.

- ⁹Semeraro 2009, 497 f.; Mannino 2014, 202.
- 10 Vickers, Gill 1994; Kron 2016, 366.
- ¹¹ Giardino Meo 2008; 2011; 2016.
- 12 Giardino 2014: 2016.
- ¹³ Giardino 2014, 219 f.
- ¹⁴ Mastronuzzi 2005, 156-166.
- ¹⁵ D'Andria 1990, 237–306; Mastronuzzi 2013.
- ¹⁶ D'Andria 1990, 274–285; Mastronuzzi 2013, 208–213.
- ¹⁷ D'Andria 1990, 254–256; Semeraro 1997, 176–200; Mastronuzzi 2013, 251 f.; Mannino 2014, 204.
- ¹⁸ Semeraro 2006, 169.
- ¹⁹ D'Andria 1988; 1999; Semeraro 2006.
- ²⁰ D'Andria 2002; Semeraro 2006, 171 f.; Lombardo 2013.
- ²¹ Rolley 1996, 385; D'Andria Dell'Aglio 2002.
- ²²Lombardo 2002.
- ²³ D'Andria 1988, 667; 1991, 437; Semeraro 2009, 496.
- ²⁴D'Andria 1988, 666; Giannotta 2012.
- ²⁵ Semeraro 1997, 358-360; 2005, 64 f.
- ²⁶ Mannino 2006, 256.
- ²⁷ Semeraro 1996, 359; Mannino 2006, 256 f.
- ²⁸ Mannino 2006, 255–267; 2016.
- ²⁹ Mannino 2006, 255–267; on writing and literacy in Messapia, see Lomas 2011.
- ³⁰ Mannino 2006, 260.
- ³¹ Mannino 2006, 257.
- ³² D'Andria 1990, 86–90; Mannino 2006, 260.
- ³³ Mannino 2006, 265 f.; Mannino 2009.
- ³⁴ Mannino 2009.
- ³⁵ Boston, Museum of Fine Arts, inv. 99483: Rolley 1991, 199–201; Tarditi 1996, 57 f. no. 107; Rolley 2002, 55; Barr-Sharrar 2008, 49 no. 5; Mannino 2014, 205 f.
- ³⁶ Mannino 2014. 206–208.
- ³⁷ Mannino Roubis 2000, 71 f.; Mannino 2006, 113 f. no. 111; 2014, 205.
- ³⁸ Mannino 2014, 205.
- ³⁹ Mannino 2004, 701-705.
- 40 Giannotta 2014.
- ⁴¹ Mannino 2006, 223-226.
- ⁴²The vessels come from burials that have been subject to anthropological excavation, the results of which are in print: Viva et al., in press. The grave goods are currently being studied by M.T. Giannotta. The study of the Italiote pottery was entrusted to the present author by Professor Cosimo Pagliara who conducted research into Roca with much energy and passion and by my colleague Riccardo Guglielmino.
- ⁴³ Mannino Roubis 2000, 74; Mannino 2006, 225 f.
- ⁴⁴D'Andria 1988, 710 f.; Lamboley 1996, 366-373; Mannino 2004, 713-716.
- ⁴⁵ Mannino 2015; D'Andria 2020, 122-114.

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The Use of Animals in Ritual Offerings in Messapian Area: Some Examples from Recent Discoveries

Jacopo De Grossi Mazzorin - Claudia Minniti

Introduction

The last years of archaeological research have witnessed a major role of the study on ancient ritual practices in all their aspects, as recently demonstrated by numerous conferences and publications focused on the topic.¹ Modern lines of the research hope for a complete study of ritual context (topography, organization, composition, relationship with other contexts, correlation with written sources) and of all cultural materials.²

One of the most significant moments of ritual practices was the sacrifice of animals. Although it was implemented with different traits in the multiple series of rituals that had to characterize the life of ancient communities (public festivals, natural disasters, propitiatory rituals, particular rituals according to the destined divinity, rites of edification, passing ceremonies, etc.), it had to constitute the heart of every religious and social act, expressing the link between humans and deity and a mutual solidarity among community members.³

The research carried out over the last twenty years in the southern area of Apulia has contributed to the knowledge of the ritual contexts that widespread in the territory corresponding to Messapia. Through an integrated interdisciplinary approach, they have highlighted the existence of a complex system of sanctuaries and cultic places, in which characters closely related to those known for Greece and indigenous distinctive traits seem to be mixed.

In a view of a better contributing to the understanding of ancient ritual practices, then, are here presented the most significant results of the study of animal remains from some places of worship brought to light in southern Apulia.

Oria - M. Papalucio

In ancient Greece the cult of Demeter was an official rite and was celebrated with a well-codified practice. To Demeter piglets were sacrificed into a pit or a cave (or a *megaron*?), to remember the myth of Persephone's abduction by Hades. The myth narrates that the swineherd Eubuleus was with his pigs at the place where Hades dragged Persephone to the underworld; a part of the pig herd was swallowed with the two deities. Numerous sanctuaries are devoted to Demeter, located in Greece and Magna Grecia.⁴ The archaeological excavations brought to light burnt piglet remains,

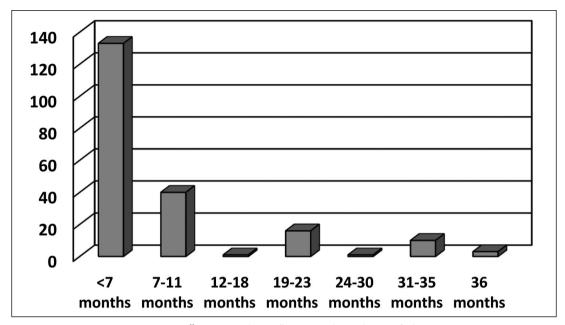


Fig. 1: Oria "M. Papalucio": mortality data of the pig.

together with pottery and clay figurines in the shape of pig, miniature vases and female figurines bearing a torch and a piglet.⁵

The cult of a female deity probably linked to fertility (who could remind Demeter) seems to be associated with the sanctuary of Oria – Monte Papalucio where Messapian as well as introduced Greek traditions are variably mixed.⁶ The site consists of a number of artificial terraces and a cave, where abundant votive objects, including miniature vases, clay figurines and jewellery as well as charred biscuits and other food offerings were found. There are two main phases of occupation, one spanning the 6th and 5th century BC (Archaic) and the other dating to the 4th and 3rd century BC (Hellenistic). The material is pertaining to votive deposits removed from the original positions for making the terraces that was used to make the terraces. In the Hellenistic period some rooms were built against a large wall located downstream of the terrace for celebrating ritual banquets.

Inscriptions, pottery decorated with the cross torch, figurines seated on a throne with *pomos* or veiled, female protomes and *kourotrophoi*, and male ithyphallic grotesque figurines suggest they were associated to the cult of a native form of Demeter, which was called *Mátar*.

The animal bones and teeth mainly belong to pigs (over 80%), while remains of caprines and cattle are less represented.⁷ The majority of pig remains belonged to very young animals killed in the first year of their lives (fig. 1). The remains of pigs killed between the first and the second year of age and after the second year are very few.



Fig. 2: Muro Leccese "loc. Cunella": the particular deposition of the sheep skeleton in pit 1.

Muro Leccese (Cunella)

Other ritual evidence is documented in the Messapian town of Muro Leccese, Cunella.⁸ Under a feature made by tuff, two small pits dated to the beginning of the 5th century BC could be found. The animal remains belonged to caprines.

In pit 1 a sheep was buried, roughly in the first quarter of the 5th century BC, along the perimeter of the small hole and according to a specified order. Fig. 2 shows the particular deposition of the skeleton; starting from the top and proceeding clockwise, fragments of skull, maxilla and mandibles can be noted, followed by a small group formed by a pair of vertebrae, another group consisting of scapulae and most of the anatomical elements of fore and hind limbs, excluding metatarsals, and finally a group of vertebrae, some of them still articulated, and a group formed by some ribs and pelvis. Together with the remains of this adult sheep, were buried those of a neonatal (or more likely a foetal) individual. They can be easily interpreted as the refuse of mutton that was firstly consumed by the participants in the ritual; then, the majority of bones were



Fig. 3: Muro Leccese "loc. Cunella": some anatomical parts of sheep still articulated in pit 2.

tidily arranged into the pit. In fact, only some vertebrae were still articulated, suggesting that they may have been buried with meat and ligaments that joined them to each other.

In pit 2, instead, three young individuals that were killed between two and twelve months of age were buried not neatly like in the previous pit but with some anatomical parts still articulated (fig. 3).

All rites can be interpreted as building rites or *piacula* for the abandonment of sacred features. They are all characterized by the sacrifice and a subsequent burial of caprines according to well-defined rules.

Vaste fondo Melliche

A religious complex made by an enclosure with square block walls, a cistern and several holes was discovered immediately north of Vaste, in the locality of Fondo Melliche, and dated to the 4^{th} – 3^{rd} century BC (fig. 4). All features are interpreted as belonging to a sanctuary devoted to the cult of fertility and chthonic deities. One of the holes was filled



Fig. 4: Vaste "Melliche": the religious with square block walls and several holes (4th-3rd century BC).

by ash, black ware pottery, miniature vases, and iron tools (sickles, knifes, a sword). Other votive material from the complex includes *louteria*, a small *lekàne*, an upturned bowl, and a clay disk.

Not so far away, another hole was filled by a huge quantity of animal remains. The animal remains mainly belonged to sheep; very few remains were of pigs and cattle. Description remains belonged to seventy-eight individuals. They were mainly killed as adults. Metapodial measurements suggest the presence of all sex groups. Of particular interest are the burning marks that characterize several bones and recur on the same part of bones, such as those on the occipital part of skull, on the lower part of mandible, on the proximal part of metacarpals and metatarsals (fig. 5). It is likely that the extremities of bones were exposed to fire after the disarticulation of skeletons during cooking.

Bothroi of Vaste

Another important sanctuary of Vaste was located in the centre of the Messapian town, in the area now corresponding with the modern Piazza Dante.¹¹ The building was formed by an enclosure divided into rooms separated by walls of square blocks and



Fig. 5: Vaste "Melliche": burning marks on the same proximal part of metatarsals.

with fireplaces on the floor. Close to the enclosure, three artificial caves (*bothroi*) that were dug in the bedrock (fig. 6) were identified. The occurrence of miniature vases, jugs, cups, *lekythoi*, *kantharoi*, oinochoi, remains of grapes, olives, cereal and legumes, and pomegranates suggest that the sanctuary was used for a cult connected to fertility and the passage between the world of living and the underworld.

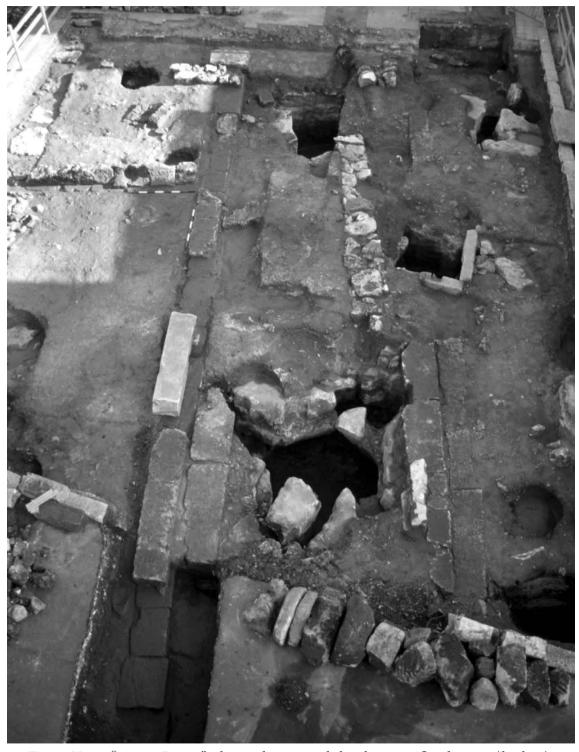


Fig. 6: Vaste "piazza Dante": the enclosure and the three artificial caves (bothroi).



Fig. 7: Castro "Athenaion": one of the two pits with animal bones and vessels used for libations.

The animal remains from the caves 1 and 2 were represented by caprines and pigs bones, mainly belonging to young individuals. ¹² Caprines were killed at the second year of age; pigs between the first and the second year. Body part frequencies suggest a prevalence of forelegs and hind legs. Numerous bones bared burning and cut marks. As they were associated with vases for eating, they may represent the remains of meals consumed during the rite. Botanical remains suggest that they were offered in autumn to a female deity. The presence of the remains from five dogs in cave 1 is also consistent with the hypothesis of a fertility cult.

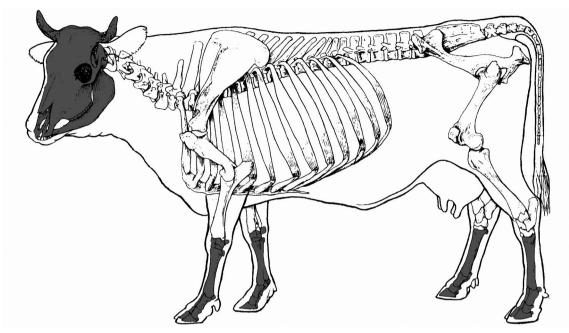


Fig. 8: Castro "Athenaion": anatomical parts of cattle represented in the pit (in grey).

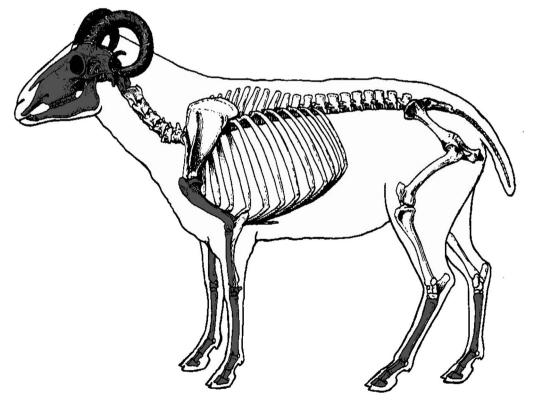


Fig. 9: Castro "Athenaion": anatomical parts of sheep represented in the pit (in grey).

	Cattle		Sheep	
Anatomical element	NISP	MNI	NISP	MNI
skull	6	3	46	12
maxilla and upper teeth	35	5	76	20
mandible and lower teeth	62	5	111	15
teeth unidentified	2	-	35	-
hyoid	2	2	2	2
axis	-	-	2	2
humerus	-	-	1	1
radius	-	-	1	1
carpal bones	7	2	2	1
metacarpal	18	6	9	-
metatarsal	5	2	5	5
metapodial	8	-	3	3
first phalanx	9	2	24	3
second phalanx	18	3	14	2
third phalanx	12	2	13	2
Total	184		344	

Tab. 1: Identification of anatomical elements from Castro.

The cave 3 is wider than the others and had a slab in local stone with a central hole (*omphalos*) stuck into the floor, probably used for libations. Inside the cave a Triton shell (*Charonia tritonis*), possibly used as a trumpet and a female limestone head were found. All these aspects suggest that cave 3 had a central role during the rites. Fireplaces and pottery for cooking testify that the food was cooked inside the rooms located near the caves. In addition, the presence of the Triton's trumpet suggest a link to a female deity and to a fertility cult, as other specimens have been found in the areas dedicated to the cult of Demeter. The animal remains from cave 3 are represented by caprines and pigs. Pigs particularly were killed very young before reaching the first year of age or around their birth.

Castro

On the promontory of Castro was recently identified a sanctuary devoted to Athena/Minerva (*Athenaion*). Recent excavations have brought to light the foundations of

an altar used for the ritual actions performed at the time of consecrating the structure in the second half of the 4th century BC. A considerable amount of the remains of sacrificed animals were kept in two pits, together with the vessels used for libations (fig. 7).¹⁴

Preliminary results from the study of animal remains suggest that cattle and sheep are the exclusively represented species. Another important characteristic of the sample is represented by the strong selection of anatomical parts, as skulls, jaws and the bones from the extremities of limbs (carpal, tarsal, metapodials and phalanges) were almost exclusively represented (tab. 1; fig. 8. 9). All the bones that would have been included in the most important cuts of meat, such as scapula, humerus, radius, ulna, pelvis, femur and tibia, are missing. Cattle remains almost all belonged to adults, to females and castrates, according to Nobis. Among sheep remains, mainly cranial elements and the bones of limb extremities were also identified. According to wear stages of mandibular teeth that ca. 27% of sheep were killed between 6 and 12 months of age, while the majority was sacrificed after four years of age.

Notes

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<sup>1</sup>Rizzo - La Rocca 2012; Camella - Mele 2006.
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Ever since the Bronze Age, the geographical position of Messapia, between the Ionian and Adriatic seas, has enabled the development of relations characterised by continuity within the framework of mobility in the Mediterranean. This volume focuses on certain aspects of the economy in Messapia, with particular reference to bio-archaeological themes (including livestock rearing and the consumption of animal resources), textile production (applying archaeometric methods to residues of fabric) and imports of luxury products from Greek cities and the Greek colonies of southern Italy. The presence in grave goods of imported prestige items has been investigated with reference to the forms of self-representation adopted by the Messapian aristocracy in both funerary rituals and manifestations of power within the settlements. The variety of religious manifestations in the Messapian world constitutes a particular case study linked to cultural exchanges, which, thanks to the recent discoveries of places of worship, can now be investigated in detail. Important in this regard are the discoveries made in Castro, where the Athenaion - linked to the myth of Aeneas's first landing on the shores of Italy – was identified.



