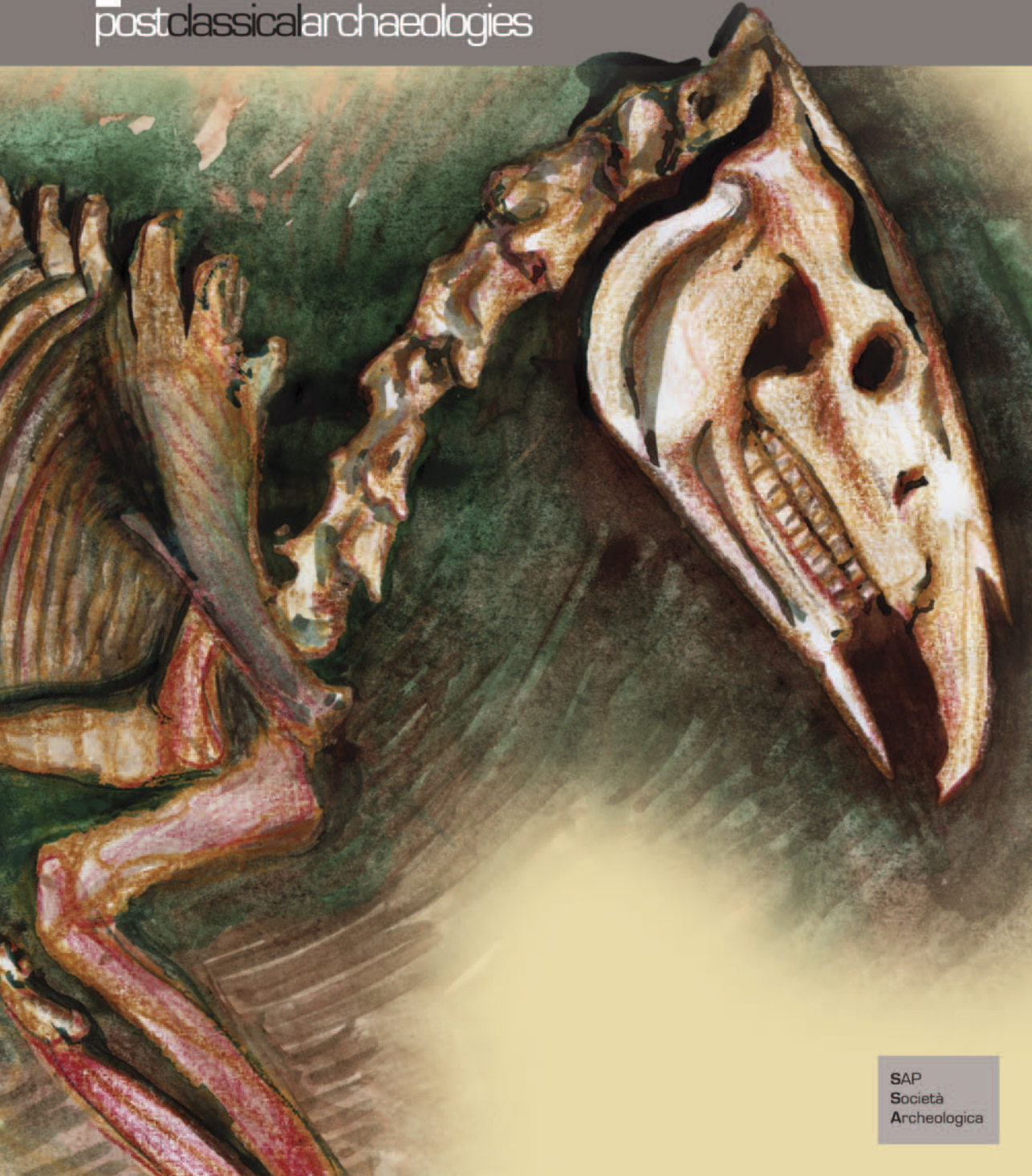


Volume 13
2023

pca

european journal of
postclassical archaeologies



SAP
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volume 13/2023

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Cover image: Artistic representation of the animal burial found in Santa Maria delle Lacrime a Treviglio (BG), by Binoli Navodya Nimnadi Kankanige Don.

"Post-Classical Archaeologies" is indexed in Scopus and classified as Q3 by the Scimago Journal Rank (2022). It was approved on 2015-05-13 according to ERIH PLUS criteria for inclusion and indexed in Carhus+2018. Classified A by ANVUR (Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca).

DESIGN:

Paolo Vedovetto

PUBLISHER:

SAP Società Archeologica s.r.l.

Strada Fienili 39/a, 46020 Quingentole, Mantua, Italy

www.saplibri.it

Authorised by Mantua court no. 4/2011 of April 8, 2011

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Tracing interconnected lifeways in the rural Aegean (7th-9th centuries AD): the case of the utilitarian artefacts of the Apalirou Environs Survey Project (Naxos – Greece)

1. Introduction: the historic landscape at Naxos between the 7th and 9th century AD

Kastro Apalirou is a fortified hilltop settlement, situated in the southern region of Naxos, the largest island in the archipelago of the Cyclades. This fortified citadel represents an important new element in the strategic geography and the wider settlement pattern that emerged on the island by the end of the 7th century AD. Recognized as a monumental example of an Early Medieval fortified centre, Kastro Apalirou is broadly characteristic of a class of settlements found in Greece and Anatolia that reflects a substantial level of state investment in technology and resources at a time of profound societal and geopolitical transformation of the Byzantine empire. From the 7th century, Naxos, the Cyclades and the rest of the Aegean became a strategic, maritime environment that was instrumental in the control of the connection between the imperial capital at Constantinople and the Western Mediterranean, especially southern Greece and the Italian Peninsula (Haldon 2012, 2016) (fig. 1). Within this context, Kastro Apalirou appears to have been a new military and administrative centre constructed as part of the Byzantine strategic policy of consolidating imperial authority over the Constantinopolitan territories at a time when the empire faced pressure from the Arab navy in the Aegean during the 7th and 8th centuries (Magdalino 2018, p. 20).

Archaeological research over the last decade has substantially increased the corpus of evidence dating to these centuries, proving that the label 'Byzantine Dark Ages' is a misleading for the period (Panayiotis, Jacobs 2023). The new dataset of material culture dated to these centuries provides an essential counter-

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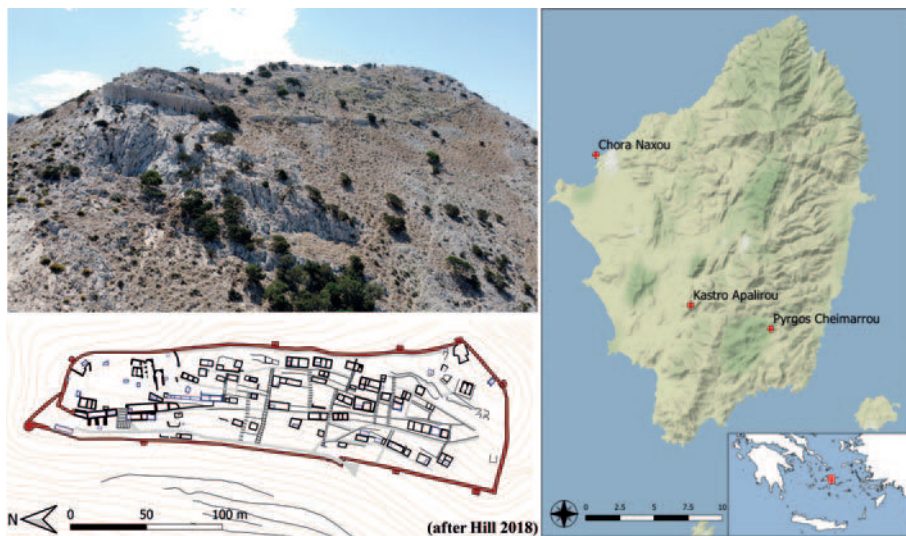


Fig. 1. The island of Naxos with indication of the places mentioned in the text (Map: H. Indgjerd, photo: R. Carlton).

weight to the insufficient textual sources available for these centuries. This new data from the archaeological record demonstrates a degree of socio-economic complexity that has often been oversimplified and underestimated in previous assessments of this period. New publications are now clearly documenting the typological variety and diverse provenances of material culture dated between the late 7th-9th centuries AD in the Aegean region and beyond. Nevertheless, this research has just started shedding light on the lifeways of this time. The character of daily activities, socio-economic patterns and manufacturing traditions remain less well understood and present necessary questions for further research. Furthermore, quantitative data are fundamental for any critically informed evaluation of ceramic distribution patterns and related interaction networks, but they are rarely published. The archaeological record of the Early Medieval period is only now starting to become visible, but future research and publications should aim towards the development and elaboration of quantified datasets. Such an approach will enable systematic estimation of the varied nature and degree of network distribution in the Aegean region. Finally, as numerous scholars have pointed out, methodological baggage has been inherited from previous decades which have exacerbated problems faced by those processing and dating ceramic datasets related to the so-called 'Byzantine Dark Ages' (Jackson 2020; Vionis 2020; Armstrong, Sanders 2023). A poor understanding of ceramic types, their chronology, provenance and distribution are problematic issues that have hampered the broader understanding

of the transformation of the socio-economic and topographical networks of the local communities in this region and beyond during the course of the 7th and 8th centuries AD. Studies such as those of Kastro Apalirou and its environs can add further piece of evidence to the broader knowledge of this timeframe and enable us to engage with some of these ongoing debates.

New archaeological developments in the study of material culture in the Aegean have started to document a network of seaways in this region whose nodal points were strongholds, warehouses and workshops located both on newly established hilltop settlements and at coastal sites where there seems to have been no break in occupation after the 6th century AD (Poulou 2019, 2023; Poulou, Leontsini 2022; Athanasoulis 2022, 2023; Athanasoulis *et al.* 2021; Vionis 2020). Archaeological research on Naxos has brought to light evidence of workshops and vernacular architecture dated between the 8th and 9th century AD located within the current urban area of Chora, the Late Roman capital of Naxos, situated on the north-western coast of the island (Lambrinoudakis 1982, pp. 254-255 1993, pp. 162-163, 2018, pp. 6-9; Roussos 2017, pp. 188-189). It has been hypothesised, for example, that Kato Kastro, the fortification situated on the hilltop of Chora, might originally have been constructed in the Early Byzantine period, rather than after 1207 with the establishment of the Frankish authority in the Aegean, and specifically of the Venetian Marco II Sanudo on the island. This new hypothesis for a Byzantine fortification later reinforced and expanded by the Latins is based in part on the observation of the architectural stratigraphy of the *kastro's* masonry and plan (Vavatsioulas 2007, pp. 447-448). New investigations conducted by the Hellenic Ministry of Culture, Ephorate of Cyclades during current restoration activities at Kato Kastro is documenting a phase of construction and occupation of this fortification dated to the Early Byzantine period. This new dataset could substantiate the hypothesis of an administrative role of Chora on the island in the Early Byzantine period (Athanasoulis 2022, 2023). It follows that the relationship of Kastro Apalirou to the pre-existing capital and its coastal fortification should provide important new insights into the changing nature of settlement on the island (Crow forthcoming).

Insight into the Early Byzantine landscape of Naxos is enriched by the particularly high proportion of churches that date to the Early Medieval period; perhaps as many as 50 religious buildings out of a total of 148 known Byzantine churches on the island. Of these early examples, more than 20 preserve the distinctive geometric decoration, art historically labelled as 'aniconic', dated between the 8th and 9th centuries (Aslanidis 2014, 2018; Vionis 2013; Crow, Turner 2015, 2018; Konstantellou 2023, pp. 7-8, nos. 24 and 25). The fabric of these churches provides examples of material investment during this period and proxy evidence for continued habitation; indeed, in many instances these churches were associated with rural settlements and material culture – evidence of domes-

tic and artisanal activities of the period. On this basis, as stressed in the preliminary publication by Turner and Crow, churches appear to provide in the case of Naxos and the Apalirou environs an effective proxy for settlement (Turner, Crow 2010; Crow *et al.* 2011; Turner, Crow 2019). In this context, it is worth mentioning the example of a cult site used continually from the ancient to the Byzantine periods: the archaic temple of Demeter, located in Gyroulas, near the modern village of Sangri in the central-western region of the island. In this rural area of Naxos, the archaeological evidence provides another example of the well-known phenomenon of the Christianisation of a pagan cult site, which corresponded with the construction of a three-aisled basilica, during the late 5th-6th century, as suggested by the excavators. This locus of religious activity was part of a settled area, which continued to be inhabited in the Early Byzantine period (Semantone-Bournia 2001, pp. 27-32). Vionis highlights the historic significance of this example, since it appears that the associated rural settlement included not only domestic structures, but also a pottery workshop, and oil and wine production facilities in use well into the 8th century (Vionis 2017, p. 137, n. 48). Another valuable case of a continually inhabited site from classical to post-classical times is the tower of Heimarras, located between the modern village of Filoti and Panermos Bay in south-eastern Naxos. The systematic excavations of this 4th century BC tower complex have revealed later phases of occupation which appear to include a three-aisled basilica as well as domestic and artisanal complexes built during the 6th century AD and kept in use in the Early Medieval period (Vionis 2016, pp. 329-330).

These multiple strains of evidence document a rural territory occupied by villages and sparse settlements related to churches that acted as focal points for community activities. Within this context, one of the aims of the systematic survey of the *Apalirou Environs Project* has been to investigate the diachronic transformation of the historic landscapes surrounding this *kastro* in order to contextualise the monument at Apalirou within its historical landscape (Athanasoulis *et al.* in preparation). A detailed survey of this fortified site has demonstrated that Kastro Apalirou was a strongly defended hill-top settlement, built during the 7th century, with an articulated topography characterised by at least two phases of occupation with a settlement framed by alleyways, churches, secular complexes, private and communal cisterns and evidence of artisanal production such as an olive press (Hill *et al.* 2017; Hill *et al.* 2018; Hill 2018; Ødegård 2018). Furthermore, the *Apalirou Environs Project* has also revealed important new evidence for occupation of the landscape dating to the 8th century AD. Not only did the fortified settlement itself continue to be occupied during this time, but the structural survey conducted on the slopes outside the *kastro* has recorded a previously unknown dispersed settlement, named Kato Choria or Paleoglisies (Crow, Veloudaki forthcoming). This important discovery allows a new appreciation of the com-

plexity of the occupation of the landscape outside the fortified settlement. This article provides preliminary information about this work in advance of the final publications deriving from the survey project, which are in preparation (Athanasoulis *et al.* forthcoming). Here we present some of the ceramics collected from the survey area. The pottery record from the *Apalirou Environs Survey Project*, therefore, provides further archaeological evidence to elaborate new insights into the everyday life of the society of Naxos during the Early Medieval period.

2. The dataset from the Apalirou Survey project

A programme of fieldwalking was carried out for four seasons from 2015 to 2018 during which 237 hectares were sampled systematically, including Kastro Apalirou, Kato Choria and the surrounding landscape. Fieldwalkers were placed every 10 m, each collecting, bagging and labelling all finds and ceramic material along a 1 m transect (fig 2.1). While tiles were counted with the use of clickers, but not collected, the fieldwalkers collected over 27,320 sherds weighing over 682.796 kg¹. Our assemblage consisted principally of body fragments of utilitarian ceramics, very often undecorated household wares in plain, coarse and cooking fabrics. The predominance of such wares in surface assemblages is a phenomenon widely documented in the extensive literature on survey ceramic datasets (Sanders 2004; Cirelli 2006). The lack of good reference material for the majority of the sherds in these assemblages, not to mention their coarse and abraded condition, makes them difficult to study in the absence of well-stratified local sequences and geological studies (Vroom 2018, p. 134).

The very large quantities of material recovered by the fieldwalkers on the Apalirou Environs Survey Project and the general lack of attention given to the plain, coarse and cooking wares dated to the early and later Byzantine periods in the wider region presented our team of ceramicists with the question of how to record and quantify previously unrecognised material on the surface in an area that had the potential to provide important evidence for the 7th-9th centuries AD.

A real challenge faced by all archaeologists studying the ceramics of this critical phase is the need to develop methodologies that build reliable datasets employable alongside other sources of data for the period. Numerous scholars have recently argued that critical methodologies combined with well-defined datasets are the key features on which future research on Byzantine socio-economic his-

¹ In the forthcoming publication of the AEP survey project the methodology applied to conduct this landscape study will be presented in detail, including the soil visibility index, the relationship between geomorphology, land use study and also the density of the finds collected (ATHANASOULIS *et al.* forthcoming).

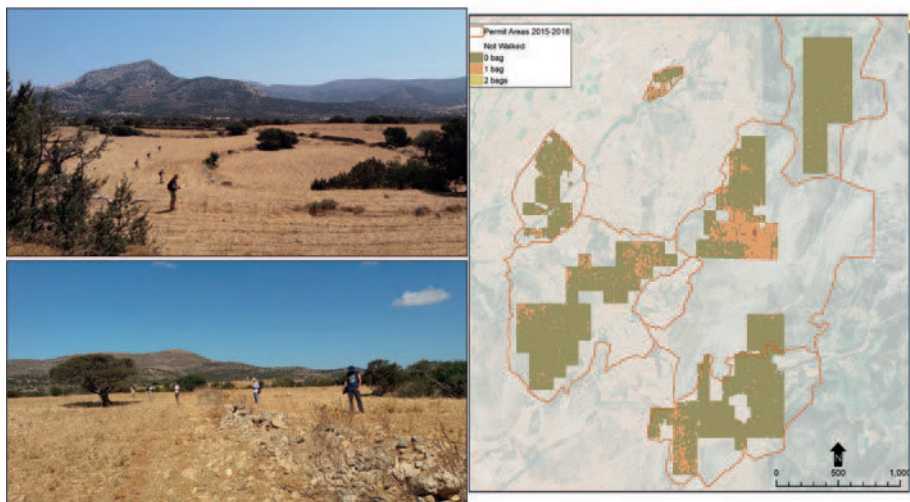


Fig. 2. Map of collected bags in the permit areas (Map: Alex Turner; photos: G. Foschi).

tory must be based, especially between the 7th and 9th centuries AD when traditional historical sources are lacking (Jackson 2020; Vionis 2020; Armstrong and Sanders 2023).

Over the last decade, new archaeological datasets from archaeological investigation at Naxos have been fundamental to redefining the character of the material culture dated between the late 7th and the early 9th century AD (Crow *et al.* 2011; Lambrinouidakis 2018; Lambrinouidakis, Ohnesorg 2020; Poulou 2018, 2023; Vionis 2013, 2018). Additionally, studies of the so-called 'globular amphorae' have been especially ground breaking in this respect (Arthur 2018; Diamanti 2016; Poulou-Papadimitriou 2011, 2014, 2018; Poulou-Papadimitriou, Nodarou 2014; Poulou 2018).

When faced with individual sherds collected by our fieldwalkers on the Apalirou Environs Survey Project, however, we were very aware that much of the literature from other projects did not contain the resolution of evidence required to identify much of our ceramic material. Furthermore, the methodological approaches generally adopted for the study of survey ceramics often vary greatly from project to project, making it difficult to compare datasets and interpretations between projects. Thus, we wanted to be able to describe thoroughly and to quantify all the material collected by the Apalirou Environs Survey Project so that we could compare the ceramics not only within our assemblage and across the Apalirou environs landscape, but also with other Mediterranean regions. In setting out on our project, it was essential that our own methodology should be developed so that we could present our data and our interpretations as transpar-

ently as possible, both so that we could revise the identification of material if necessary as we learned, but also so that we could present our work in such a way that it could be revised in the future by our team or by other scholars. Given that only a small proportion of the material collected could be associated with established typologies we recognised the necessity of acknowledging the inherited problems in the study of material from this period and to create our own independent recording system that would facilitate the linking of pre-existing typologies to our own categories without imposing pre-existing assumptions on our material (Jackson 2020).

3. Methods of research for the Apalirou Survey Project Ceramics²

At the preliminary processing stage, the contents of each bag of pottery collected was recorded in the finds room, registering the number and weight of all feature sherds and body sherds from each 10 m transect. All feature sherds from each transect division (10 m x 10 m unit) were also photographed as a group in order to create a basic record of each. This first step allowed the team to calculate counts and weights for all the ceramics, and, therefore, to evaluate spatial concentrations of pottery in the landscape (fig. 2.2). At the same time, we looked for reference types, and whenever we observed new typological features or a variant type this was added to two type series built from the survey material, one based on shape and another on fabric. This has given us about 500 'Form-Reference Types' – some of which we subsequently understood to be parts of the same vessel type (e.g., handles and rims) and a series of 'Fabric-Reference Types'. We characterised each Form and Fabric Type sherd according to a set of criteria recorded in the database. This involved written descriptions and attributions to functional classes, as well as measurements, drawings and multiple photographs for all the Form Type sherds. Fabric Types were recorded using a similar proforma substantiated by photographs of fresh breaks using a Dino-Lite digital microscope. While this first stage produced a catalogue of forms and fabrics, in the second stage our concern was to quantify the rest of the assemblage according to the sherds in the catalogue. We went through all the bags again and recorded the weight, Estimated Vessel Equivalent (EVE) and diameter of all feature sherds, ensuring that at least one individual macroscopic photo and a fabric macro photo was taken for each feature sherd. At the same time, we

² This section is a summary of the project methodology created by Prof Mark Jackson, with the collaboration of Dr Rossana Valente, Dr Charikleia Diamanti, Dr Maria Duggan, Dr Vincenzo Castaldo and Dr Hallvard Indgjerd; all were instrumental in working together to build, refine and implement the methodology described here and the processing of the ceramics from which the material in this article derives (JACKSON *et al.* in preparation).

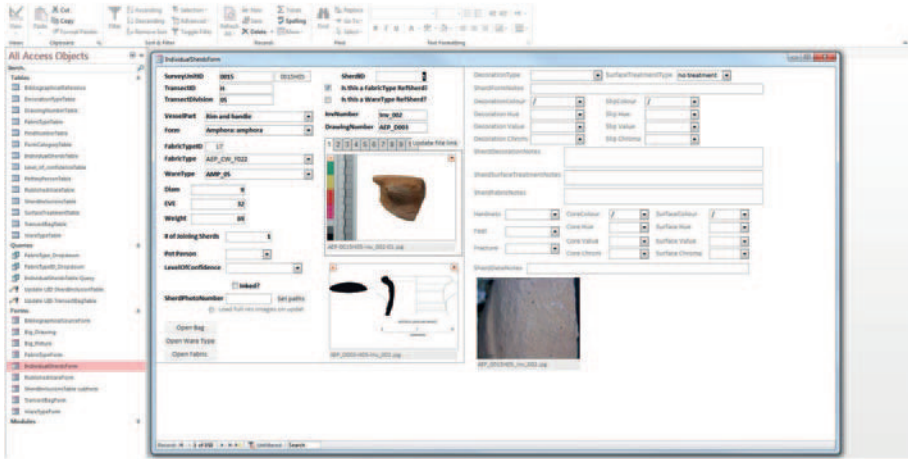


Fig. 3. 'The Apalirou Environs Project' database.

aimed to attribute every feature sherd to form and fabric groups in the database so that whether or not we have been able to identify it according to a published type, a description and quantitative information would be available. Usually, as a minimum, the sherd would be given a basic description, attributed to key categories and photographed with both standard photos and a fabric macro photo so that it could be compared to the visual match of the type sherd. Most importantly – with a click on the database – we could then see any other sherds attributed to the same fabric and form/ware groups and, for example, compare the individuals in the group or plot their locations in the landscape.

The material is typically abraded, but forms and fabrics are nevertheless possible to recognise as distinctive types within the assemblage. We can, therefore, identify each sherd against others and be confident of how many similar examples there are spread across the landscape. As a pilot study for the fabric characterization of the collected pottery, Hallvard Indgjerd and Charikleia Diamanti have sampled one hundred fragments of the fabric types series for petrographic analysis (Indgjerd, Diamanti forthcoming).

All the data (textual descriptions, photos, drawings, measurements, etc.) are stored on one relational database (Microsoft Access) (fig. 3). Since each sherd has a provenance to the nearest 10 m x 10 m square the database enables us querying and analysis of the relative quantities of the different wares across the landscape in ArcGIS alongside other data from the survey. One of the main aims of this database is to keep all the information together in one place so that we can test and explore all our data within the GIS; furthermore, we want to be able

to explore the data in a landscape context and to present our interpretations quantitatively with those presented by others. By providing clear descriptions including microscopic and macroscopic images of each sherd, we have endeavoured to be transparent with the bases of our interpretations. This recording of the evidence in the database also enables us to facilitate revision of our own interpretations as new information emerges. We want to use the database to further explore related datasets and make a dynamic environment for updating information as knowledge changes.

4. The ceramic evidence in the context of the Apalirou environs

The spatial analysis of the ceramic finds located in over 237 hectares of the Apalirou Environs Survey Project clearly demonstrates that the highest concentration of materials is located in the hectares related to the *kastro* itself in the Byzantine period. But the survey has also documented an increased concentration of ceramics on the lower slopes of the mountain outside the *kastro*, especially in the settlement named Kato Choria (fig. 4, no. 1)³.

Among the ceramic evidence, the Byzantine phase of occupation in the landscape is most conspicuously documented by the four major Byzantine glazed wares. Potentially dated to the Early Medieval period is the so-called Constantinopolitan White Ware. This ware is represented in the survey area by a total of only 11 fragments, 6 of which are body sherds from open shapes, averaging 3 cm in width and 4 g in weight; these sherds have plain yellow or green glazed surfaces and are characterised by their distinctive fabric, white (10 YR 8/1) to dark grey (5YR 4/1) in colour. These 6 fragments can date from the 8th to the 12th century AD, since no distinctive fabric characterisation or specific shape feature allows a more precise dating. The other White Ware feature sherds can be dated to the Middle Byzantine period (Valente *et al.* 2021). But the very limited number of glazed wares in the assemblage compared with the significant proportion of unglazed material collected emphasises the importance of understanding the function and chronologies of coarse-ware material for an assessment of Byzantine lifeways in the Apalirou environs. Thus, while the architectural survey of the settlement at Kato Choria has completely changed the understanding of the role of Kastro Apalirou by setting it into a wider inhabited landscape, it has been the examination of coarse wares that has provided the information to begin to study new ways in which the landscape functioned and people lived on Naxos during this period. Here we use the evidence from

³ The concentration of artefacts takes into consideration the visibility and morphology of the soil. For a detailed analysis of these parameters see ATHANASOULIS *et al.* forthcoming.

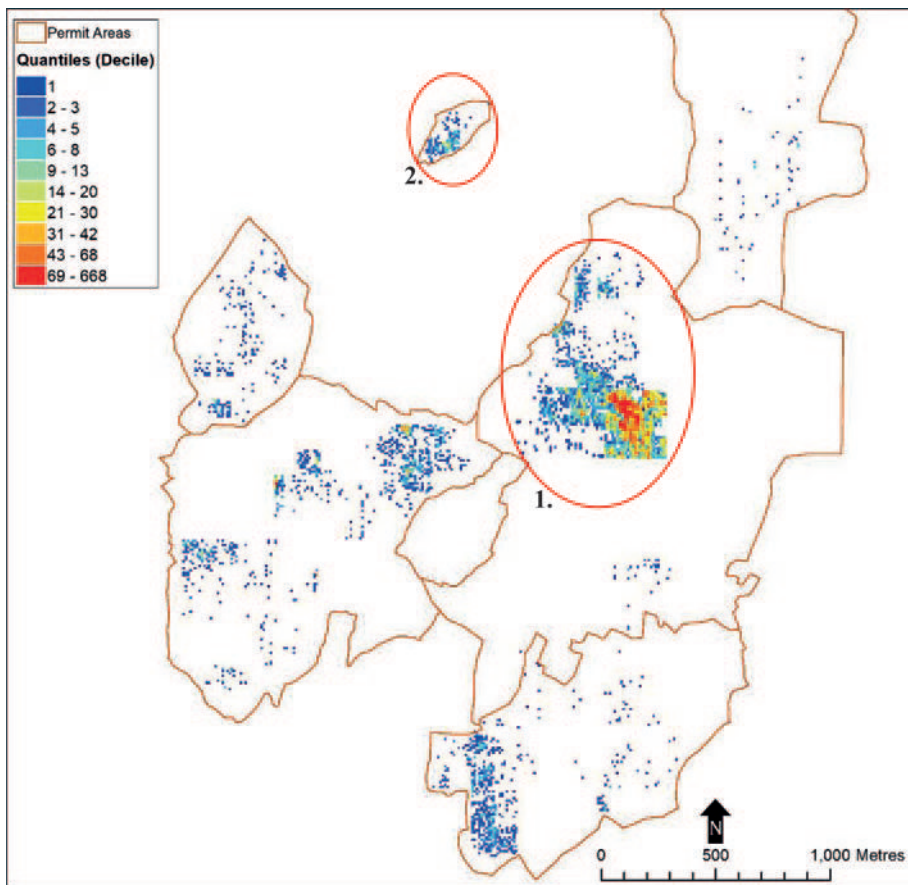


Fig. 4. Map of pottery concentrations in the permit areas (Author: A. Turner). Highlighted the pottery concentration at: 1. Kastro Apalirou and Kato Chora, 2. Adissarou plain.

cooking wares belonging to the 7th-9th centuries AD, by way of an example, to consider the co-existence of the settlement at Kato Choria alongside Kastro Apalirou and their connections beyond the island. Stewpots have been extremely informative in this respect, especially those labelled in our type series as Cook_1, Cook_6, Cook_9 and Cook_4.

According to our typology, Cook_1 is a cooking pot, closed in shape, with a vertical neck and in-turned rim (fig. 5, no. 1). The globular body opens out to a shoulder about 2 cm below the top of the rim, to which a flat vertical strap handle is attached. Petrographic analysis describes the fabric of this cooking pot as characterised by Quartz-Mica inclusions, which are compatible with the local geology of Naxos. We can therefore hypothesise a possible local manu-

facture of this utilitarian cooking vessel, but should point out that we are as yet unaware of any specific locations or contexts where this type of ware might have been produced on the island during this period. A late 7th to early 9th century chronology is proposed on the basis of Vionis's publication of the ceramics from the aforementioned site of the tower of Heimarrois, as well as by Lambrinouidakis's publication of the finds from Gyroulas and from a sedimentation chamber at the entrance to the tunnel of the aqueduct at Melanes leading to the Roman-period city of Naxos (Vionis 2013, p. 31; Lambrinouidakis 2018, p. 17). At this point in our research, this is the only potentially *locally made* cooking ware that we can associate with the 8th century occupation of this area, and it has been identified so far for a total number of 22 feature sherds from the survey material.

At least three other cooking ware forms identified in the survey area may be dated between the late 7th to early 9th centuries; these we relate to the 'Micaceous Brown Ware' as classified by Hayes (Hayes 1992, pp. 55-57). As Hayes has stressed, the definition of this ware is complicated due to the high number of sub-types, due especially to variation in the rim profile. The fabric macroscopically appears to be characterised by a gold micaceous paste, possibly with a predominance of biotite inclusions. The micaceousness of fabric varies, suggesting a highly variable clay recipe. These cooking vessels have a 'baggy shape', concave base, globular body, two handles and a sloping rim with a flat upper surface. Cook_6 shares the aforementioned typological features of a stew-pot but with a straight, flaring rim, and we have so far estimated a minimum number of 29 individual vessels of this type among the feature sherds from the Apalirou survey project (fig. 5, no. 2). This distinctive cooking pot is very similar to the finds published by Hayes from the Saraçhane excavations, as well as from Paphos in Cyprus (Hayes 1992, p. 199, 2003, p. 512). Cook_6 may also be compared with 8th century finds from the Crypta Balbi in Rome, following the study of Saguì and the other authors involved in the analysis of related material from the Crypta Balbi excavations (Saguì *et al.* 1997, p. 47). Similar finds have also been found in the context of the Emborio excavations at Chios (Boardman 1989, p. 115) and from the Byzantine basilica complex at Hephaestia on the island of Lemnos (Valente 2019, p. 508). Finally, very close parallels have been identified from stratified contexts excavated in Corinth, ASCSA excavations (Valente 2020, p. 594). In the case of Corinth, as also noted in Constantinople and in Cyprus by Hayes, within the same stratigraphic units there is a great variability in the details of the shape, which makes it impossible to define a clear typology of this ware, at least at this point in our research (Valente 2018).

Cook_9 also belongs to the 'Micaceous Brown Ware' class. The shape is characterised by an everted rim and in-sloping wall; a vertical handle with distinctive concave upper side is attached to the underside of the rim and looped

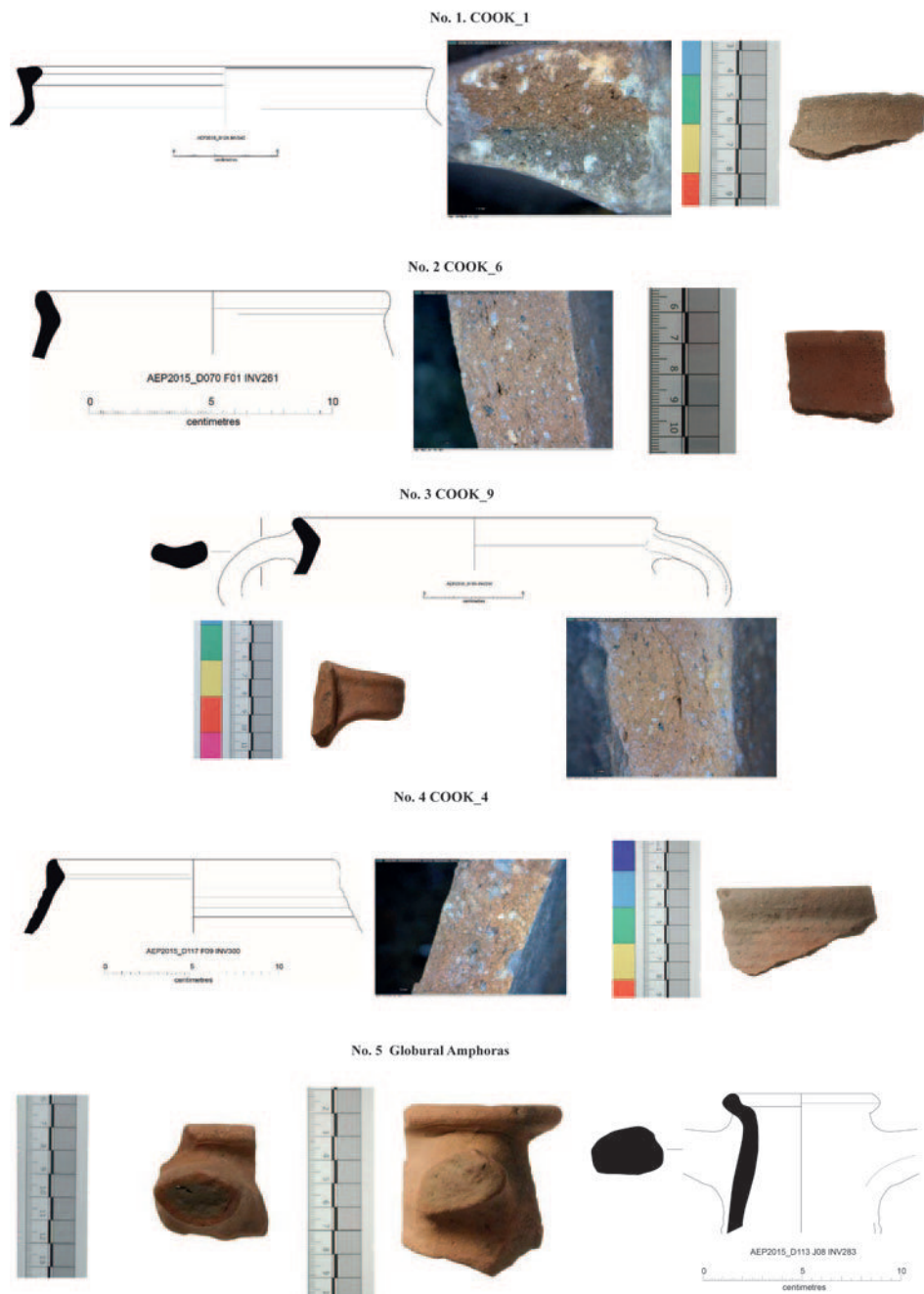


Fig. 5. No. 1 to no. 4 images of the cooking pot type sherds: Cook_1; Cook_6; Cook_9; Cook_4. No. 5 'Globular amphora' types. (Drawings: V. Castaldo, M. Jackson and V. Herring; photos: H. Indgjerd and R. Valente).

down (fig. 5, no. 3). This cooking pot also resembles types published from the Saraçhane excavations (Hayes 1992, deposit 35, no. 14) and displays similarities to the Bozburun shipwreck types (Hocker *et al.* 1998, pp. 14-15). Petrographic analysis of this material by Indgjerd and Diamanti informs us that the fabric is characterised by andesite inclusions. Cook_9, therefore, appears to be another example of an imported cooking ware, since the fabric recipe appears inconsistent with the local geology. According to the current state of our research, we estimate a minimum number of 38 vessels associated to this ware on the basis of identified feature sherds.

Finally, it is also worth mentioning Cook_4: a stewpot with sloping shoulder, curving sharply up to a vertical, tapered rim, inwardly thickened, and an inwardly-bevelled lip with slightly concave profile and a wide, shallow groove below the exterior of the rim. The outer surface is unevenly hand-smoothed, evidently to erase wheel-ridges (fig. 5, no. 4). Though not petrographically tested, we wonder if it may be related to the same Andesite fabric group as the previous cooking ware types. This type has been found to be one of the least frequent of the 'Micaceous Brown Ware' groups from the project, identified so far only in two specimens, but based on current knowledge, it compares well with finds from Corinth (Valente 2018, no. 25).

The identification of this series of forms and fabrics of cooking ware raises several issues for future research to address. Firstly, the study of utilitarian ceramics has enormous potential for informing aspects of historical periods, such as the Early Medieval period, that could otherwise be almost invisible. In addition, fabrics and typological features of material from surveys do afford analysis and have considerable potential for raising further questions about the chronology of sites, as well as the production, exchange and use of these utilitarian vessels.

These micaceous cooking wares suggest significant interregional connections on the island of Naxos during the Early Medieval period. But these are not the only archaeological evidence to support this hypothesis. A similar picture is also emerging from examples of globular amphora types collected in the environs of Kastro Apalirou, which will be presented in the forthcoming publication. These amphora types are of the kind now identified from all over the Mediterranean that date to the same period (fig. 5, no. 5). As noted by Vionis (2013), the ceramic datasets from around chapels with aniconic decoration on Naxos include examples of globular amphoras that share similarities with the Saraçhane type 36 amphorae, thus further testifying to the degree of connectivity between the seaways of the Eastern Mediterranean and Constantinople. Importantly, these finds are not exclusively associated with the fortified centre of Apalirou but are also found elsewhere in the survey area, including at Kato Choria where their discovery complements the picture presented by the cooking pots.

5. Conclusions

In conclusion, the identification and quantification of key cooking pot types indicates that Apalirou and its environs were occupied by vernacular complexes whose inhabitants could afford to use both locally made and imported cooking vessels. The presence of imported cooking pots also proves that this region of Naxos was well-connected into an interregional system of exchange in the period between the late 7th to the early 9th century AD. All four cooking wares presented here have been found in large concentrations in the *kastro* area and in the *extra moenia* settlement of Kato Choria, where archaeological excavations are planned to be conducted. The new survey evidence demonstrates that while the *kastro* likely held an important administrative role on the island in the Byzantine period, it did not stand in isolation but was in fact associated with a settlement located beyond its walls (Crow, Veloudaki forthcoming). On the contrary, these cooking wares are not recorded in the other areas surveyed by the AEP with the exception of two examples of Cook_9 found in the area of the Adissarou plain (fig. 4.2) where the Early Medieval church of Agios Ioannis – with among other characteristics its aniconic decoration program – is located (Acheimastou-Potamianou 1986; Turner, Crow 2019, pp. 226-227).

In the Apalirou area, then, we can highlight an important concentration of ceramic types assignable to a period that has in the past so often been considered almost aceramic in the Aegean as well as in the wider Mediterranean region. The link between specific kinds of pottery in the assemblage at Kastro Apalirou and Kato Choria at this time is very important for understanding the nature of ceramic assemblages in the period. Morphological and typological analysis of the most representative samples in our type series has allowed us to identify provisionally both local and imported productions. At the same time, the macroscopic analysis of fabrics highlights a high homogeneity of clay-pastes among storage and cooking vessels, which may be taken as evidence to suggest the possible existence of local manufacture in the Early Medieval period. Moreover, typological parallels can be drawn between the coarse ware finds from the *Apalirou Environs Survey Project* and examples documented in major Mediterranean centres, such as Rome (Crypta Balbi) and Constantinople (Saraçhane excavations), as well as on the Greek Mainland (Corinth), elsewhere in the Aegean area, such as on the island of Lemnos (Valente 2019), and beyond, including Cyprus where the same types of cooking vessels have been found in stratified deposits.

The widespread appearance of these vessels may in the first place be used to suggest date ranges but it also, more interestingly, denotes regional and interregional networks of connection in the Early Medieval period. Such typological consistency is evidence for connectivity and for exchange, which encompasses the exchange of these goods and proxy evidence for other materials. The scale

and reach of such utilitarian wares, in fact, shed light also on cultural or economic zones, defined by a complex network of settlements which demanded and consumed these products. If, as it has been suggested, the imperial authority guaranteed a framework in which people and goods could circulate, the state stimulated part of the production and demand in this period in the Aegean region. Private demand as well might have contributed to production, circulation and consumption of utilitarian vessels like these stewpots, within a *mixed* Byzantine economic system (Laiou, Morrison 2007; Cosentino 2022). The identification of imports as well as local production of the same type of utilitarian objects can further support this hypothesis. This type of cooking vessel, for instance, with its globular shape, was used for slow cooking, like the simmering of soups (Arthur *et al.* 2016). This cooking pot testifies to shared culinary practices and the engagement of communities in the exchange of specific utilitarian vessels. Moreover, they document a shared artisanal know-how since similar cooking pots in terms of shape, and therefore in usage, were locally produced but they were also imported, as documented by the aforementioned examples. These globular cooking pots belong to wares produced simultaneously in distant sites. As firstly pointed out by Paul Arthur (2007), Medieval cooking wares, in association with other archaeological data, can be indicative of economic areas. Due to these similarities, utilitarian unglazed wares may be studied as *instrumenta*, proxies for culinary habits, and patterns of social and cultural exchanges within the Byzantine Empire during a period when traditionally it was thought to have fragmented into local exchange networks (Haldon 2016, p. 289).

The cooking pot types and globular amphorae presented do not only come from the *kastro* area, but also come from Kato Choria below the fortified centre, which appears to be a new settlement established outside the walls of the *kastro* (figs. 6-7). This evidence is of great importance in understanding how the landscape in this area was populated and its possible connections to the coast. The ceramic evidence suggests that this inland region of Naxos was interconnected via maritime trade networks, as highlighted by the presence of cooking wares and amphorae in forms dated to the 8th century AD on the basis of published *comparanda* found beyond the island. This dataset supports the interpretation that this extra-mural settlement was occupied alongside Kastro Apalirou as part of a developing settlement system from the 7th century AD. This new discovery of inhabitation can be added to and contextualised alongside the aforementioned evidence of rural settlements which proliferated in these centuries. The material culture from the rural settlement at Kato Choria represents part of an increasingly convincing body of evidence that Naxos was home to significant and vibrant Early Medieval communities. The new, articulated fortification complexes at Kastro Apalirou and the *kastro* at Chora on the coast, the evidence for aniconic churches dated to the Early Medieval period, domestic complexes and rural

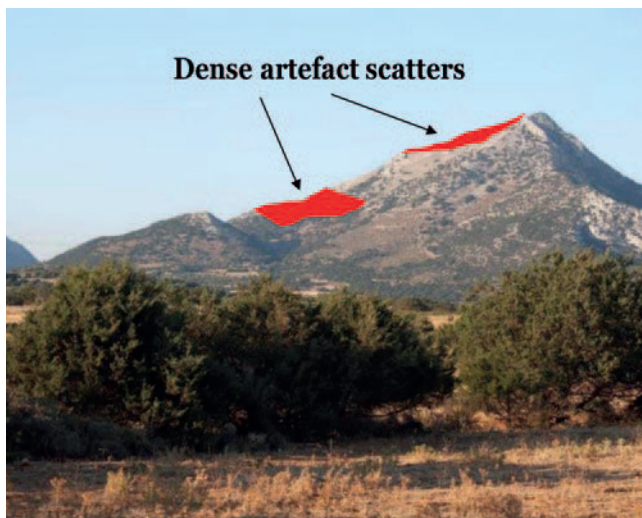
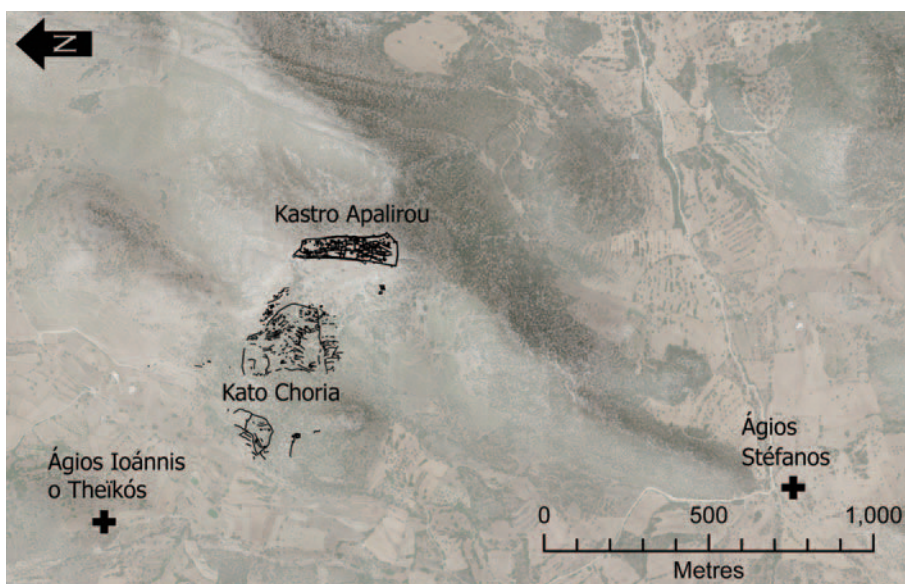


Fig. 6. Map showing dense Early Medieval artefact scatters on the top of the hill at Kastro Apalirou and the slopes at Kato Choria where most of the cooking pots: Cook_1; Cook_6; Cook_9; Cook_4 and 'globular amphorae' were collected in the AEP. (Photo: J. Crow. Map: A. Turner).



settlements together provide tangible evidence for insular settlement patterns which developed from the 7th century and continued into the 8th and 9th centuries AD.

In conclusion, Apalirou and its environs supports the picture of the Aegean region as a central place in the line of communication between Constantinople and southern Greece, and from there further to the Western as well as to the

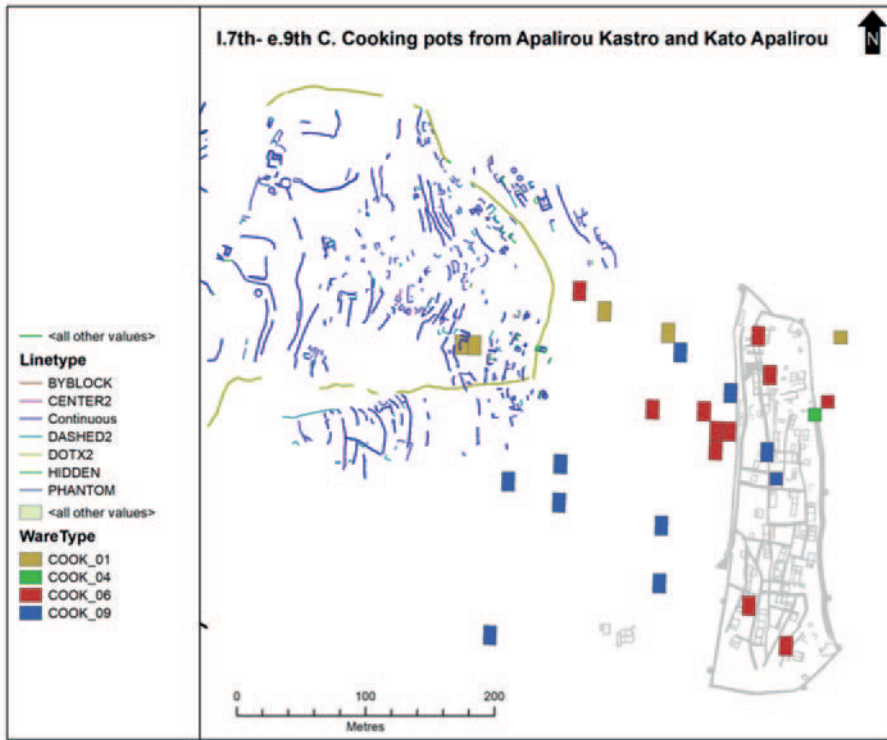


Fig. 7. Map of cooking wares concentrations in the permit areas.

Eastern Mediterranean. The sea and its islands thus acquired strategic and commercial importance in the late 7th and 8th centuries, as the ceramic evidence appears to document. Naxos with Kastro Apalirou acquired a key economic and political importance, possibly becoming a significant, but not exclusive, administrative centre from the 7th until the 12th century, when the history of this fortified centre changed again its destiny (Valente *et al.* 2021). The chronology hypothesised in this paper is based on comparative material from published excavations, but one of our future goals is to provide stratified dated evidence for these groups through the planned excavations in Kato Choria.

Abstract

We present insights into economic trends, manufacturing traditions and daily food practices across the Aegean region during the relatively poorly understood 7th-9th centuries AD. The data have been studied as part of the intensive systematic survey by the 'Apalirou Environs Project' (AEP), which investigates the historic landscape dominated by the Byzantine fortification of Kastro Apalirou, on the island of Naxos (Greece). The analysis and interpretation of ceramics, set in the context of an increasing body of evidence for the vibrant Early Medieval communities populating the island, demonstrates the significant role of Naxos in interregional maritime networks during this period.

Keywords: 'dark ages', survey, Naxos, Byzantine ceramics, Byzantine landscape.

Questo articolo presenta, sulla base della cultura materiale datata fra il tardo VII e inizi IX secolo, processi economici, tradizioni produttive e alimentari nel contesto dell'Egeo bizantino. I dati qui presentati provengono dallo studio sistematico del paesaggio storico dominato dalla fortificazione di kastro Apalirou (Naxos, Grecia), indagato dal progetto 'Apalirou Environs Project' (AEP). L'analisi e l'interpretazione della ceramica, contestualizzata nella crescente mole di dati archeologici afferenti a questo periodo, documentano la presenza di comunità dedite ad attività agricole, manifatturiere e coinvolte in reti commerciali interregionali.

Parole chiave: 'secoli bui', survey, Nasso, ceramica bizantina, paesaggio bizantino.

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