Introduction

For the Zakynthos Archaeology Project, the year 2014 was a study season in order to progress towards final publication. Various campaigns of study were conducted: in February, pottery was studied for a week. During a three week campaign in June-July several scholars visited the project and we organised the definitive storage of all the finds. In July, a campaign of study of lithic artefacts was conducted, which was continued during a weekly campaign in November. The analytical study of finds progressed significantly now that thin-sections are available. In general, the project is nearing its completion, which also became apparent by various interviews and broadcasts in local media on the island. Noteworthy in 2014 was the publication of a thematic volume on the Ionian Islands in the periodical *Pharos, Journal of the Netherlands Institute at Athens*, with a substantial article on the archaeology of Zakynthos.¹

Lithic artefacts

The study of lithic artefacts was continued by Professor G. Kourtessi-Philippakis and Dr S. Ligkovanis. In previous years the surface finds from research areas A and C were studied and several diagnostic items from these assemblages had been selected for drawing. In the summer of 2014, O. Metaxas was able to draw the selected lithic artefacts from area A.

The actual study of the artefacts concentrated in 2014 on the material of research area B, which included 18 find concentrations of lithic artefacts. The raw material of the Area B lithics (flint and chert, mainly in the form of big nodules), appears to come from the Vrachionas hills and it can readily be distinguished from the material from area A, which consists in small flint pebbles. The diagnostic material that can be assigned chronologically, suggests that the majority of the find concentrations in area B fall within the general framework of the Middle and Early Upper Palaeolithic, whereas (diagnostic) artefacts belonging to the later phases of the Upper Palaeolithic - e.g. Gravettian, Épigravettian- are absent. A small post-pleistocene lithic component is also present in some of the Area B sites/scatters.

![Figure 2. Middle Palaeolithic and Early Upper Palaeolithic artifacts from Mouzaki-Brouma](image)

The find concentration presenting proportionally the largest lithic density in Area B is Mouzaki-Brouma. If we assume that this large concentration of lithic artefacts reflects a true site in the sense that artifacts have not been transferred and finally accumulated there by post-depositional processes, we may infer that Mouzaki-Brouma has known a long period of intensive occupation during the Palaeolithic. Considering that Mouzaki-Brouma is situated in the plain below the hills and relatively far away from the abundant sources of lithics, it is possible that the occupation of the site was related to its attractive palaeo-environment. However, since all these finds are related with Holocene soils, at places mixed with Roman materials, further research into the depositional history of this area/scatter is necessary.

**Pottery from Lithakia- Kamaroti**

During the July campaign we continued the study of the finds from the excavations at Lithakia- Kamaroti. Particular attention was paid to the lower levels of the excavation, to see if any finds earlier than Late Helladic I-II could be identified in the foundation layers of the
building. Even though several sherd s of general prehistoric tradition were identified, these could not with any certainty be assigned to pre-Mycenaean periods. Since the lowest floor of the Mycenaean house included pottery from LH IIIA and LH IIIA-LH IIIB, the foundation of the house most likely should be dated in this chronological range. It is not clear whether the earlier pottery at the site (LH I-II) is evidence for earlier occupation.

The research of the prehistoric pottery at Kamaroti turned attention to the abundant hand-made burnished ware sherds (figure 3), which are highly fragmented and in bad state of preservation. This burnished pottery was found in all Mycenaean levels. Unfortunately, diagnostic shapes are missing, but M. Bettelli recognized a horizontal handle with grooves that has good parallels in the Italian Final Bronze Age (ca. 12th-10th centuries BC). The presence of various fragments of dolia with good parallels at LH IIIC Broglio di Trebisacce also hints at contact with Italy during the Late Bronze Age.

**Additional pottery studies**

Several pottery experts visited our Apothiki in Ayia Marina on Zakynthos. Professor C. Morgan (British School at Athens) looked at the pottery of several sites and we were able to compare the Zakynthos assemblages with those at Ithaca, a bit further to the north. In comparison to Ithaca, Zakynthos appears in most historical periods to have been oriented more towards the Peloponnese with regards to the typology and decoration of the pottery.

M. Gori (University of Amsterdam) looked at prehistoric material from both the survey and the excavation with a specific attention to the presence of pottery that had parallels in northern Greece and the Balkan. From Lithakia-Kamaroti, she identified a vertical handle decorated with vertical plastic cordon (figure 4), which typologically has parallels at Sovjan (level 7, ca. 2100-1900 BC), as well as a LBA kantharos handle, from the survey at the same site, with possible Macedonian affiliations (figure 5). In addition to Italian connections, Lithakia-Kamaroti appears to have had contacts more to the north as
The survey material from several other sites also showed, tentative, similarities to pottery in Albania and Montenegro, including a probable Late Neolithic pot from Vasilikos.

M. Bettelli (Istituto di Studi sul Mediterraneo Antico, Rome) inspected the survey assemblages from various sites with regards to the presence of Italian imports. Even though hand-made burnished wares are present in relevant quantities at various sites, clear typological parallels to Italian prehistoric wares, such as are present at Teichos Dyimaion for example, are lacking at Zakynthos. Instead, the hand-made pottery at Zakynthos is similar to that at occurring at the Ionian islands and the southern Adriatic region. Considering the indications for northern, Adriatic connections, it is tentatively presumed that Zakynthos was mostly embedded in Adriatic networks during the Late Bronze Age.

P. Bes (Leuven University) inspected the Roman pottery from Zakynthos. Even though there is petrographical evidence for local pottery production on Zakynthos during the Roman period, the Roman pottery that can be macroscopically identified all appears to come from elsewhere. In particular, imports from Tunisia and/or Tripolitania are relatively common, among which are amphorae, tablewares of African Red Slip Ware (ARSW) and an oil lamp fragment. Among these amphorae and tablewares, products from different places of production are recognised: amphorae from workshops at Leptiminus, Nabeul and Sullecthum, whilst the ARSW include products from central and northern Tunisia (Sidi Marzouk Tounsi, Carthage area?).

Analytical study of the survey ceramics

Pottery selected for thin section analysis as part of PhD research by Nienke Pieters was studied at the Fitch Laboratory at the British School in Athens. The PhD research is concerned with interaction between local communities based on the study of diachronic and spatial patterns of pottery distribution, production and consumption. An important part of this study is the macroscopic and microscopic study of pottery fragments to get a grip on
local pottery production, the distribution of these products and certain preferences held by pottery and consumers in technologies, shapes and decorative patterns.

The microscopic analysis of 166 pottery thin sections and about 100 geological local samples (for comparative purposes) resulted in some interesting findings. For example, in the Early-Late Bronze the communities on Zakynthos used not only locally made pottery (identified in a perfect match with a geological sample (figures 6 & 7), but also pottery from outside the island, for example Aegina or Kythera (figure 8), Crete (figure 9), and other off-island unidentified regions. The imported pottery is identified on the basis of the presence of rock minerals foreign to Zakynthian geology, like volcanic rock, mica and mudstone in combination with metamorphic rocks.

For later chronological periods, some interesting issues came up when studying thin sections. Certain types of ceramic object, tiles and pithoi- large storage jars-, were assumed to be locally made somewhere on the island: tiles because of their bulk production and use, and pithoi because of their size. Thin section analysis of both pottery classes did not put forward a match with local geological sources, however a specific match with an off island region was not found either. In addition, when discussing the pottery sessions with C. Morgan and P. Bes it turned out that the distribution pattern of tiles might extend to Patras and for the pithoi there is a positive match with a specific pithos on Ithaca. These results mean that even the ‘basic’ ceramic classes like building material and storage pots circulated in larger regional networks than we expected.

The microscopic analysis of the ceramic and geological samples is in its final stage. Preliminary results of the study have already been applied to the macroscopic fabric
classification and description. The next stage of the PhD research is writing up and integrating the results and compare them to data from other nearby regions, like Kefalonia, Ithaca, and the Peloponnese.

1. The Zakynthos Archaeology Project is directed by A. Sotiriou from the 35th Ephorate of Prehistoric and Classical Antiquities (35th EPKA) and Dr G.J. van Wijngaarden from the University of Amsterdam (UvA). V. Sarris of the 35th EPKA helped us in various ways. D. Nikolia (from the 20th Ephorate of Byzantine Antiquities) also helped us. The study of the Lithics is coordinated by Dr G. Kourtessi-Philippakis of the Kapodistrian University at Athens (KUoA). Dr S. Ligkovanlis conducted research on the Lithic artefacts of research area B. They were assisted by D. Charalambopoulou. O. Metaxas did drawings of lithic artefacts from research area A. Professor V. Stissi (UvA) continued his study of the Archaic-Hellenistic pottery from Zakynthos. Dr Ph. Bes conducted the studies on the Roman finds at Zakynthos. B. Bogaard, (UvA), J. van der Does and G. van Wijngaarden continued the study of the Mycenaean pottery from Kamaroti in research area C. The analytical study of the pottery from Zakynthos is part of the PhD study of Nienke Pieters, who is coached by Dr J. Hilditch (both UvA). J. Waagen (UvA) was responsible for the GIS and the related databases; he was helped by B. Bogaard. Various students participated in the 2014 campaign as an assignment for material practice in their studies: N. Mussert, B. Petrutoni and E. Schraven (all UvA). L. De Gelder (UvA) coordinated the definitive storage of the survey finds. The directors of ZAP14 are grateful to all participants for their expertise, energy and companionship.

The research at Zakynthos is carried out under the authority of the Netherlands Institute at Athens and we thank the staff of the NIA and, in particular, the directors Dr Ch. Tytgat and Dr W. Van der Put. The project would not have been possible without generous grants by the Dutch Organisation for Scientific Research (NWO), The University of Amsterdam, the UTOPA foundation, the Institute for Aegean Prehistory (INSTAP) and the Mediterranean Archaeological Trust (UK).