

Halos: preliminary report of the 2011-2013 field survey campaigns

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Abstract

This article presents the goals and preliminary results of the 2011, 2012 and 2013 field survey campaigns in the area of ancient Halos, by the University of Amsterdam and the 13th Ephorate of Prehistoric and Classical Antiquities, in cooperation with Reinder Reinders of Groningen University. The 2011-2013 campaigns are a follow-up of survey work done from 1990-2002, and intended to evaluate, validate and supplement the earlier results in preparation for a final publication of the Halos surveys. The new work included revisiting all previously discovered sites, a series of methodological tests and intensive full coverage of one larger area, contrasting with the more extensive methods in the original project. While the initial overall results of the 2011-2013 campaigns seem to confirm the general validity of the methods and results of the earlier work, they also offer some new information on general find distribution, the chronology and extension of sites and the settlement pattern of the area. In particular, a series of small fortified hilltop sites is now better understood. Besides this, useful insights into the possibilities and effects of various (aspects of) survey methods have been obtained. A final noteworthy result is that the archaeological record seems quite stable: disappearance or destruction of sites or dramatic changes in find patterns seem rare.

Keywords

Halos – field survey – Thessaly – settlement pattern – polis.

Introduction: the 2011-2013 field survey campaigns and their background

The territory of the ancient polis of Halos, near the town of Almyros in present-day Magnesia, Central Greece, has been the focus of archaeological and epigraphical research since the 19th century. It was also one of the first areas in Greece where Dutch archaeologists conducted fieldwork (studying inscriptions in 1904 and excavating in 1906). Since 1976, the University of Groningen has continued this work on behalf of the Netherlands Institute in Athens in cooperation with the

13th Ephorate of Prehistoric and Classical Antiquities¹ and, from 2011, the University of Amsterdam.²

After mapping and excavation at the Hellenistic city of Halos from 1976 onwards, in four seasons between 1990 and 1996, most of the area directly north and northwest of it was surveyed under the direction of H.R. Reinders, Z. Malakasioti and V. Rondiri (Figure 1). The Voulokaliva area, with its concentration of Early Iron Age burial mounds, was the first focus of this project, and indeed yielded impressive finds (since partly excavated), but other areas and periods were also covered. Eventually, the survey aimed at a coverage by field walking of those parts of the plains surrounding the present-day villages of Sourpi and Almyros which may yield archaeological material related to ancient Halos. In order to achieve this, in 2000 and 2002 the areas to the south and southeast of Hellenistic Halos were walked by the Groningen teams. In addition to previous revisits of sites encountered in earlier campaigns, the 2006 season was devoted to a restudy of the most important Medieval sites (i.e. those with the most finds and the largest extensions) and an extensive exploration of the large Medieval and Early Modern harbour city of Almyros that preceded the present-day town further inland.

The results of the 1990-2006 surveys have been presented in a series of preliminary reports and articles highlighting specific results, and more extensively in a small book.³ A final publication is in preparation, in the context of which some new fieldwork in the old survey areas was done. This article offers a first brief report on these field survey campaigns of 2011, 2012 and 2013, which aimed to clear up some problems that had surfaced when the earlier results were reviewed.⁴ As the latest survey campaigns are part of a restudy, aiming at the final publication of the results of previous survey work mainly done between 1990 and 2006, a short summary of this earlier work is also presented.

The strategy and working methods of the 1990-2006 surveys

The aim of the 1990-2006 surveys to map the territory of ancient Halos does not mean that its whole area was fully covered by field walking. With the exception of the old beach ridge on which the Archaic-Classical site of Halos was situated,

¹ Since the winter of 2014 the Ephorate of Antiquities of Magnesia.

² More about the field work in the Halos area, and its history, can be found in the article by Stissi et al. elsewhere in this volume.

³ For preliminary reports on survey work in Halos and its surroundings, see mainly Efstathiou, Malakasioti & Reinders 1991; Haagsma et al. 1993; Reinders et al. 1997, 2000, 2007, 2008; Reinders 2004 (with some further references), 2005; Reinders & Aalders 2006; Stissi 2011, 151-153; id. 2012, 395-397. A more complete overview of publications on the Halos area can be found on <http://thessalika-erga.nl/publications/by-year/> (accessed October 2015).

⁴ A special word of thanks is due to the almost 40 participants in those three years of field work. A full list of names can be found at <http://thessalika-erga.nl/participants/> (accessed October 2015).

the areas directly west and east of the Hellenistic city (respectively barren hills and a coastal marsh mostly filled in with post-medieval sediments) were not covered by survey. As aerial photographs, probings and bordering parts of the tracts that were surveyed seem to confirm, these areas are unlikely to produce substantial archaeological remains on surface. Also the rather inaccessible, more mountainous area further west, the fringes of the Othrys mountain range, was not walked, apart from a few tests, a series of known fortified sites (see below) and some fields with known mostly early modern remains.

Most importantly, a combination of limited budgets (and therefore team sizes) and archaeological strategy resulted in a survey method that did not aim at even the partial coverage of every field in target areas, which is usual in more recent intensive surveys in Greece. Instead it focused on narrower strips of land, in relation to the topography and morphology of the surveyed areas. In practice the land that has been covered mostly consists of the upper parts of the gentle hills and 'finger ridges' just above the actual plains, up to the level where arable land ends and (now) impenetrable bushes, once pasturing lands, begin. The relatively flat higher parts of the slightly undulating plains, just below these hills, were almost fully walked over. Most of the lowest lying plains and the majority of the small valleys in between the finger ridges, which appear to be covered by rather recent sediments and very rarely show any archaeological remains on surface, were thus left out. That this strategy is perhaps problematic is shown by the results from the lowest, central part of the Sourpi plain. Although this flat and badly drained area was flooded seasonally till the early 20th century, and less regularly up to today, some strips of terrain which were covered during the surveys in 2000 and 2002 and later tests do show a limited number of ancient pottery scatters.

Another feature which distinguishes the 1990-2002 Halos field walking strategy from most recent intensive archaeological surveys in Greece is that offsite material was not given much attention. This is again related to a combination of specific local conditions and the limitations in available manpower: unlike many other Greek survey areas, most of the surroundings of ancient Halos seem to offer very little 'background noise'. Outside a few gullies and some areas downslope of large sites, which sometimes do show low concentrations of worn sherds, offsite material is extremely rare in a very large part of the surveyed area, and most sites, even small ones, clearly stand out in the void. As a consequence, off-site material, though noted in field reports, was not specifically counted, nor systematically collected and kept.

A preliminary summary of the results of the 1990-2006 survey seasons

During the 1990-2006 campaigns around 230 built structures or concentrations of finds were encountered, dating from the Neolithic period to the early 20th

century, and ranging from less than 10 m² to complete towns and villages (Figure 1).⁵ Apart from (mostly recent) places with standing remains, few of these sites were previously known. The extension of each find concentration was measured, and the sizes and locations of sites were hand-drawn on paper maps, although from 2000 onwards GPS coordinates were registered. Both the field walking results and the ceramic finds are now being studied for definitive publication, as part of a larger series of publications of all the archaeological finds of the Halos area, by Greek and Dutch scholars, combining the forces of the 13th Ephorate of Prehistoric and Classical Antiquities and the Universities of Groningen and Amsterdam.

Of the recorded 1990-2006 sites, a little more than 20% (48), have yielded no finds that are still kept in the project's storage; nearly half of these (21) are standing structures, almost all Ottoman or later in date, twelve were found during clearing of the surfaces needed for the widening of the Athens-Thessaloniki motorway and then excavated by the 13th Ephorate of Prehistoric and Classical Antiquities. About one third of the total number of sites has yielded at least some Medieval pottery, slightly more than a quarter of the sites show Ottoman and/or later material and/or structures, and more than three quarters at least some pre-Medieval finds. As will be further discussed below, multi-period sites are common. From over 180 sites yielding movable finds, around 10,000 pottery sherds and other ceramic items, hundreds of bones and shells, dozens of lithic tools and smaller numbers of metal and stone items were collected and kept.

Counting, collecting, processing and storing strategies varied per site, depending on the size of sites, find density and quality/preservation of material. Moreover, limitations in storage, working space and time available for processing and studying led to rather strict selections of material to be kept. On smaller sites usually all material was collected and counted in one operation, but in larger sites registration and especially collecting were normally more selective, and sometimes took several visits; some large sites were divided in grids and/or only partly walked over. Apart from a few small and exceptional groups of finds, only diagnostic material and a selection of non-diagnostic finds not represented otherwise was brought in for processing and further study. Site collections, particularly the larger ones, were usually reduced further during processing, by filtering out apparent duplicates and relatively less diagnostic items. In the (few) most extreme cases, only a handful of sherds were stored from original counts of thousands and collections of hundreds.

⁵ It should be noted that (depending on how one defines the exact borders of the (non-continuous) survey area) about a dozen of these sites are located outside the areas covered by regular field walking, though still potentially within the territory of ancient Halos. These were all previously known, and are usually rather large and prominent.

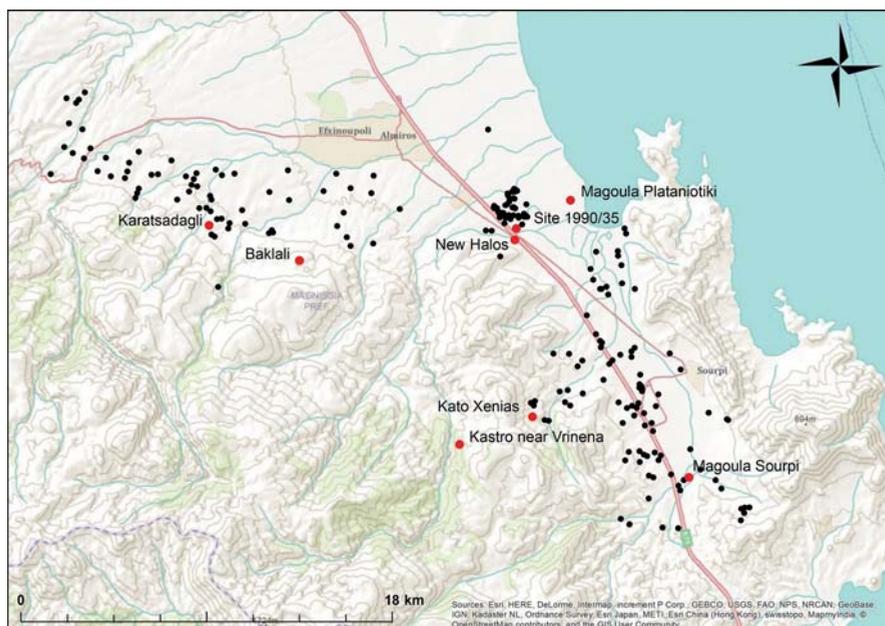


Figure 1. An overview of the surveyed area and recorded sites (J. Waagen)

Documentation of this selection and discarding process is at best very limited. On the other hand, many site collections were supplemented with finds collected during revisits in following seasons. Indeed, most sites were revisited at least once subsequent to their first discovery.

Refreshing old results: goals

When the study for the final publication of the Halos survey results and its finds started in 2008, it became clear that the varying collection, processing and storage strategies potentially posed problems for the interpretation of some sites, and the pottery finds in general. From some large sites very little material was preserved, which seemed to be quite different from what one would expect in such places in several cases: a large Hellenistic fortification yielding few sherds which were mainly from other periods, or a bag of ancient sherds from a modern ruin did not inspire much confidence as reliable samples. Furthermore, the wide chronological range of the small collections of finds from several sites looked suspicious – repeatedly encountering a combination of prehistoric, Classical-Hellenistic and Roman items, even in bags of 10 finds or so is not what one expects. Could these patterns be real, or are they simply a result of collection and processing strategies?

Revisiting sites for a fresh look at the finds, and to collect additional material where useful, appeared the simplest way to address the problems posed by the existing collections of finds. Moreover, revisits would solve some other issues brought up by working with twenty-year old survey results: firstly, the old documentation was almost completely pre-digital. Only a few field and site photographs were taken. The coverage of field walking, some of the observations made in the field, including the location and contours of sites were noted directly on the official 1:5000 maps during breaks in the walking, usually without topographical measurements. Although revisits had never revealed serious problems in locating sites, accurate digital mapping using GPS and aerial or satellite photographs seemed desirable in our present age, also to allow further spatial analyses. Likewise, several sketches and drawings of structures visible on surface and standing remains, again all on paper, needed verification and could use a digital overhaul through 3D recording and digital photography. Finally, considering the hindsight offered by twenty years of developing methodologies and practice of field survey in Greece, doubts were raised regarding some of the original assumptions guiding the field walking and collection strategy. Are offsite locations really negligible, and can we be sure that the areas thought to be empty, especially the low-lying gullies and valley bottoms, are indeed devoid of archaeological remains?

A revisit and verification programme was therefore decided upon, that would cover around 200 remaining sites (the 230 original ones minus 20 that have been excavated since and some that were already known to be inaccessible or to have disappeared) and some of the areas in between. The general aim was to provide the final pottery data (offering additional and improved information on chronology and, where possible, aspects of the ancient use of sites), to produce control samples for methodological testing and final check in order to prepare the publication of all results of the Halos areas surveys.

Although originally it was thought that the work could be done in two seasons (2011 and 2012), this turned out to be too optimistic. After two further seasons with the focus on excavation, the revisit program has now been concluded in the summer 2015. The results already obtained up to 2013, however, seemed relevant and substantial enough to provide this preliminary report.

The revisit and verification programme for the Halos survey has the following four parts:

1. *Systematic intensive field walking in the Kephalosi area (2011 season)*

Systematic intensive field walking, fully covering one area on the fringe of the 1990s survey area, which offers a typical sample of the landscapes around Halos, specifically including low-lying areas not covered by regular survey previously, and

an area where the presence of some light background scatter was suggested by 1990 field notes. The methods of walking, documentation and find processing (and the team leaders Nienke Pieters and Dave Susan) were taken over from the Zakynthos Archaeology Project, where they had been developed and refined over five field seasons.⁶ Besides offering a test case for the Halos area, this would also allow comparisons between the two projects, and would show whether the Zakynthos method was applicable in a different environment. Part of the Zakynthos method is also that all archaeologically relevant finds⁷ are kept and processed.

2. *Site revisiting in the areas covered in the 1990-2002 campaigns (2011, 2012, 2013)*⁸

This section of the programme aims at forming the core of a new site catalogue, integrating all old and new data. This will be based on the digital positioning, mapping and characterization (through a database system) of all sites still available which were previously recorded during the 1990-2002 campaigns. The existing paper documentation will be updated in a GIS environment using GPS equipment and satellite and aerial photos and experimenting with some new technological possibilities (integration of find and site database, mapping and photography in a mobile application, aerial photography with a quadcopter drone). In all sites finds were picked up, counted and photographed, but apart from a very limited number of exceptionally interesting items, material was only taken to the deposit from sites for which the existing find collection seemed problematic, and if the new finds appeared to offer additional information. In order to have a better picture of the extension and densities of more complex find concentrations, in some large sites finds were recorded and (where relevant) collected in sub-units, either covering the whole site or a sample. Comparing the present-day appearance of sites, including features like ground visibility, preservation and characteristics of finds and agricultural use, to their original state was a specific feature of the revisits, particularly in those areas which were first covered more than 20 years ago.

3. *Targeted detailed revisits of large sites (2011, 2012, 2013)*

In addition to the regular revisit programme, several larger sites were revisited in more detail with specific aims, though using the same equipment and methods.

⁶ For a description of this field walking method, see Van Wijngaarden et al. 2006, 31-33; id. 2007, 45-47.

⁷ Only natural stones, most very recent material and a small part of the undiagnostic finds (in large find groups) are discarded, after a first registration.

⁸ This work was continued and concluded in summer 2015; this last campaign offered no remarkable new insights on the general level presented here.

These include: site 1990/35 (2011), where the use of the site (also in connection to the nearby funerary landscape),⁹ and its extension in the Late Bronze Age and the Early Iron Age were unclear; Magoula Plataniotiki (2011 and 2012), the probable location of Classical Halos, to prepare for the test trenches which were dug in 2013 and 2014, and to have a better picture of the extension and chronology of the site; and (in 2012) four fortified hilltops, Kastraki/Nea Moni Kato Xenias (2000/48), Kastraki/Karatsadagli (1992/1), Agios Nikolaos/Baklali (1992/10), and the Kastro near Vrinena, which have extensive, partly well-documented architectural remains, but from which very little pottery was kept. In order to not only collect sherds, but also to map their distribution by chronology and/or functional category where possible, the open spaces in these heavily overgrown and partly inaccessible sites were surveyed in small grids, and relatively much pottery was brought in and processed.

4. *Methodological tests (2012, 2013, 2014)*¹⁰

In a few areas surrounding and in between sites, methodological tests were carried out by small teams directed by Jitte Waagen in order to get a better understanding of offsite material and its densities and so-called haloes around sites, and to test effects of various survey strategies and/or intensities of ground coverage. A main goal of these tests was to address remaining questions regarding quantitative evidence on which some earlier results have been based. The conclusions will be vital for overall comparability of survey results within the project, as well as in relation to projects in the rest of Greece. The questions under investigation may be narrowed down to the following:

- What is the quantitative foundation for determining areas to be ‘empty’?
- To what degree can offsite that does exist be explained as ‘background noise’ with little or no archaeological value?
- Is it possible to quantify the criteria for site-identification used during the Halos survey?
- What are the possible effects of the old Halos survey methodologies on the recovery rate of sites, and particularly low density sites?
- Can other influences of the working method and find characteristics on results be detected, for example effects of sample size or distance between walkers?

⁹ See the preliminary reports in Reinders 2004 and Malakasioti 2004.

¹⁰ This work was continued in summer 2015; the results of this campaign will be presented elsewhere.

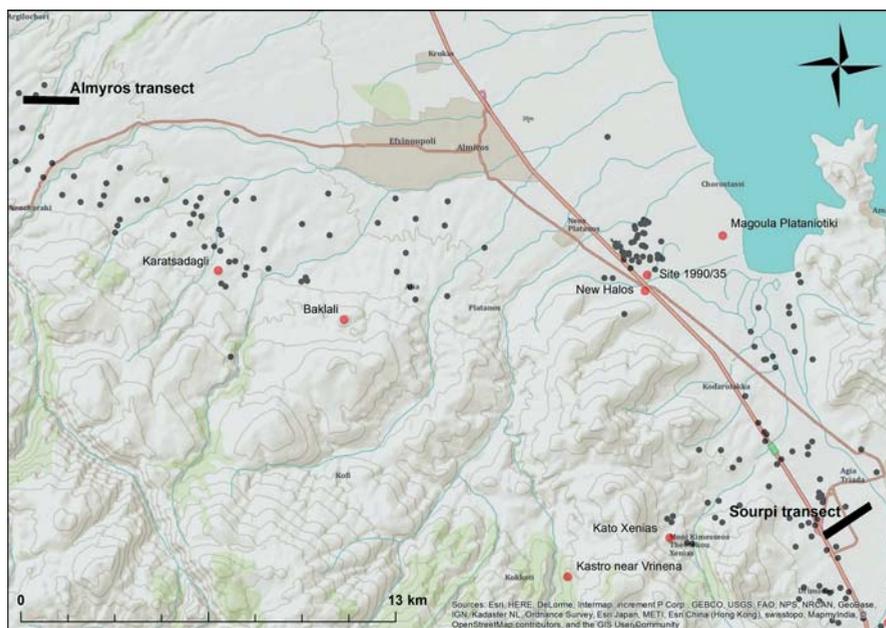


Figure 2. The sample areas where the methodological tests directed by J. Waagen were done (J. Waagen)

Three sample areas in different parts of the previously surveyed areas (one near Ayia Triada in the Sourpi plain, one in the Voulokaliva and one southwest of Almyros, see Figure 2) were selected for intensive and systematic walking with various coverage percentages, counting and collecting all finds. While generally based on the Zakynthos system also used in the 2011 survey, the working methodology was specifically aimed at measuring the effects of different intensities of walking and different find densities, and quantification of finds in areas with very low artefact densities. During the processing (which is still ongoing) all finds will be classified (by date, shape, fabric etc.) as far as possible, in order to provide a chronological and qualitative assessment as well. This should allow better definitions of 'empty' areas, but also of sites, which can then also be combined with the older data. The initial results, showing clear differences in background noise between the test samples, moreover indicate that some variation within the survey areas should be taken into account.

Since the material is still under study, some field work remains to be done, and these methodological tests offer rather abstract results which are part of the Jitte Waagen's ongoing PhD research, in the following they will be referred to only in passing.

Refreshing old results: tentative outcomes

Leaving aside the methodological tests for now, the preliminary results of the other three parts of the revisit programme can be summarized as follows:

Intensive fieldwalking

The systematic survey of the 2011 season covered most of a triangular area west of the Voulokaliva and north of the Kefalosi spring, between the new National Road and the Halos Akropolis (Figure 3), which with the exception of a single small strip walked in 1996, containing sites 1996/4 and 1996/5, was mostly leftover in between the campaigns in the Voulokaliva in 1990 and those in the southern part of the Almyros plain in 1992 and 1994. In total, almost 11,000 finds were brought in from 353 tracts (with a 40% surface coverage), and three new sites were found, in addition to 1996/4 (which was actually not visible anymore) and 1996/5.

As was expected, the northeastern part of the area seems to be continuation of the Voulokaliva burial area on the other side of the National Road. Most fields were covered by a thin but consistent scatter of worn Early Iron Age pottery,



Figure 3. The 2011 Intensive survey area (J. Waagen)

comparable to what was found (but not systematically recorded and collected) in the Voulokaliva. Some weak indications of possible (disturbed?) burial mounds in the form of stone piles and/or scatters offered no further evidence in finds or densities to confirm the presence of such funerary structures. The northwestern area, including the southern side of the bed of the Platanorema, yielded very little and generally recent material. This gave a good impression of the general background situation in much of the 1990-2002 survey area.

While two of the newly found sites were rather unremarkable small scatters, the area directly north of the Halos Akropolis, close to the Kefalosi spring and stream, produced a surprise. Although the area is partly disturbed by the recent exploitation of the spring and industrial activities, it is still full of material of different periods (prehistoric, Early Iron Age, Hellenistic, Roman, Medieval-Ottoman) showing some chronological spatial patterns (yet to be defined more clearly through further study of the pottery) and indications of surviving structures, including a Hellenistic (?) grave, a possibly Roman building, and an apparent Medieval-Ottoman village. Only parts of the latter were previously recorded, as the already mentioned sites 1996/4 and 1996/5. Clearly, the spring area has always attracted human activities, even though the Halos cemeteries sometimes came quite nearby.

The precise and intensive strategy (adopted from the Zakynthos Archaeological Project), counting densities also in offsite areas, and including full collection and only slightly selective processing, not only offered a much sharper picture of the field situation, but also allows a better understanding of general character of the offsite scatter in the wider Halos area. It indeed seems that the amounts of offsite material here are negligible. At the other extreme, coping with the very high find densities in the fields of the Kefalosi spring area was not easy. More than half the finds of this season came from the just 16 tracts which cover the core of the site. Even though similar peak densities were sometimes reached on Zakynthos,¹¹ they never extended over such a large area, covered with such a variety of materials. Under such circumstances, the survey method based on a rather dense coverage of the terrain and a full collection of material was clearly reaching its practical limits: processing 6500 mostly rather worn sherds is simply very time consuming, while many of the finds are highly repetitive, despite the longevity of the site and the variation of fabrics and pottery types. A separate, less intensive collection strategy for larger sites with high find densities would probably have been more efficient.

Further evaluation of the methodological implications of all this for interpreting the old finds will be part of the final publication work on the survey.

¹¹ Personal observation V. Stissi, who participated in the field work and directed much of the find processing. A final publication of the results of the surveys on Zakynthos is foreseen for 2017.

Regular site visits

The revisits of sites encountered in 1990-2002, which covered 16 sites in 2011, 85 sites (mostly in the Almyros plain) in 2012 and 13 in 2013 gave a consistent picture, of which the following are the most striking features:

Visibility and preservation

Although it turned out that a small number of sites have severely deteriorated, even in the last 5-10 years, most seem to be more or less stable: their location, extension and the general impression given by the finds appears to be generally the same as when they were first mapped in the 1990s and early 2000s. A very small number appear to have disappeared altogether, while a few others seem to have moved downslope and/or yield material which is more worn than previously. The effects on the visibility of sites by erosion and agricultural activities such as deep ploughing thus seem to be rather limited. However, sites with 19th-20th century standing buildings or ruins appear to deteriorate quickly, and are sometimes actively destroyed. Finally, there is also a small group of ancient sites which now yield more material than previously, including very large fresh fragments; some of these are also growing in size, because sherds have appeared on fields previously considered empty or almost empty. Clearly, destruction caused by digging and ploughing in previously undisturbed layers is ongoing in some places. While problematic with regards to preservation of archaeological contexts, this destruction does not (yet?) seem to affect the number of visible sites – paradoxically it appears to increase rather than decrease visibility.

Chronology

Generally, previously obtained dates were confirmed by site revisits and study of additionally collected finds. A few sites turned out to have had a longer life than previously thought, or a (slightly) different chronological focus. The most surprising outcome of the revisits, however, is that new collections from those sites which were considered problematic because they had yielded small amounts of chronologically very diverse material, confirmed the old results. A substantial number of sites still have finds from several, not always continuous, periods. The exact implication of this needs further study. One possibility is that the continuity of life on sites was very strong, another that people kept returning to the same places, perhaps because of some attractive features. In any case, it does seem clear that habitation patterns and factors determining locations of sites in the plains of Almyros and Sourpi were remarkably stable from the Bronze Age into the Middle Ages. This seems rather unusual for Greece, where other surveys usually seem to have

encountered fewer multi-period sites and less continuity in the long term settlement patterns.¹²

Larger fortified sites

A group of larger sites deserved a closer look. At the fortified hilltops of Kato Xenias (2000/48), the *kastra* above Baklali (Agios Nikolaos, 1992/10; Figure 4) and Karatsadagli (Kastraki(on), 1992/1; Figure 5), and Kastro Vrinenas (Figure 6), little material was kept initially, and spatial distribution was not considered. Since these heavily overgrown and partly remote sites are mostly inaccessible, only small parts could be surveyed. However it has been attempted to reach a substantial coverage of the area. Pottery collection has moreover been supplemented with digital and aerial photography of architectural remains, some of which had been mapped on paper previously.

Even though their placement and dimensions appear to have much in common, and their general appearance is similar, the sizes and layout of these sites and their defence systems are clearly adapted to the local situation and topography, and there is also quite some variation in their building techniques. The walls of the fortifications are built of large blocks, worked to different degrees, and combined into various types of constructions, from almost regular and isodomic to very irregular, even ‘Cyclopic’ looking (Figure 4). Typically, they are formed of two outer faces built of large blocks, filled with earth and rubble. Entrances and (relatively rare) towers are also of varying types, but never very elaborate.¹³

Besides the larger fortified hilltops, there are also some single towers or tower-like structures, which may either have stood on their own or have been part of a larger network in combination with the larger fortifications. Particularly the two towers at ‘Aeromyloi’ near the village of Neochoraki might be related to sites 1992/1 and 1992/10, since they are visually interconnected, and the limited amount and spread of finds does not suggest a use as farms. Together with some other fortifications further uphill and further to the west, they might have formed some kind of defense system keeping the connections through the Othrys in control, in addition to their direct surroundings.¹⁴ Yet, interestingly, most of the fortified hilltops do not only show remains of buildings and pottery scatters inside their walls, but also outside.

¹² See e.g. McDonald & Rapp 1972, especially 130-170; Renfrew & Wagstaff 1982; Van Andel & Runnels 1987, especially 155-176; Mee & Forbes 1997; Cavanagh et al. 2002; Forsen & Forsen 2003, especially 333-335.

¹³ For more details, see Efstathiou 2014; a more elaborate interpretation of the architecture will follow in the final publication of these sites.

¹⁴ See Wieberdink 1990. Efstathiou 2014 offers more extensive descriptions of these sites and several other similar ones in the Othrys, but outside our surveyed areas.



Figure 4. A part of the circuit wall of the Baklali/Agios Nikolaos fortification, site 1992/10 (D. Efstathiou)

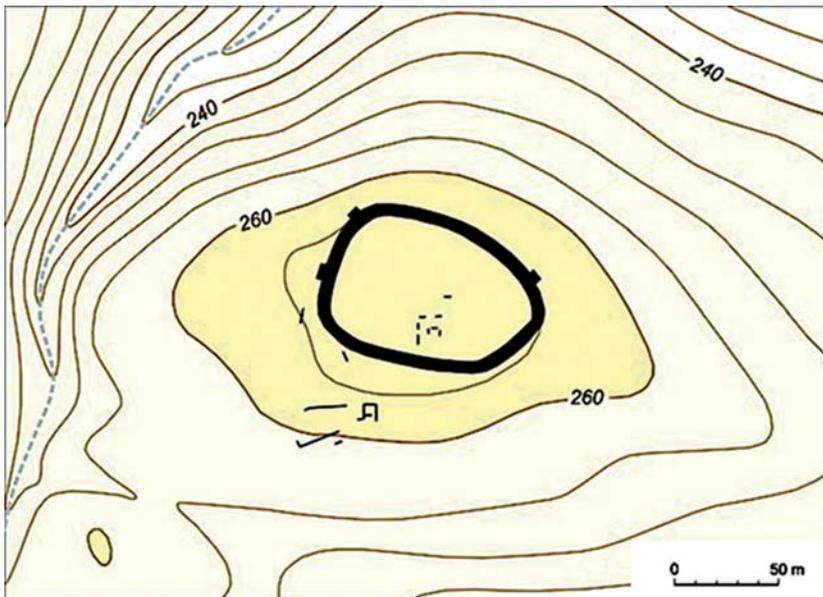


Figure 5. Plan of the Karatsadagli/Kastraki fortification, site 1992/1 (H.R. Reinders)

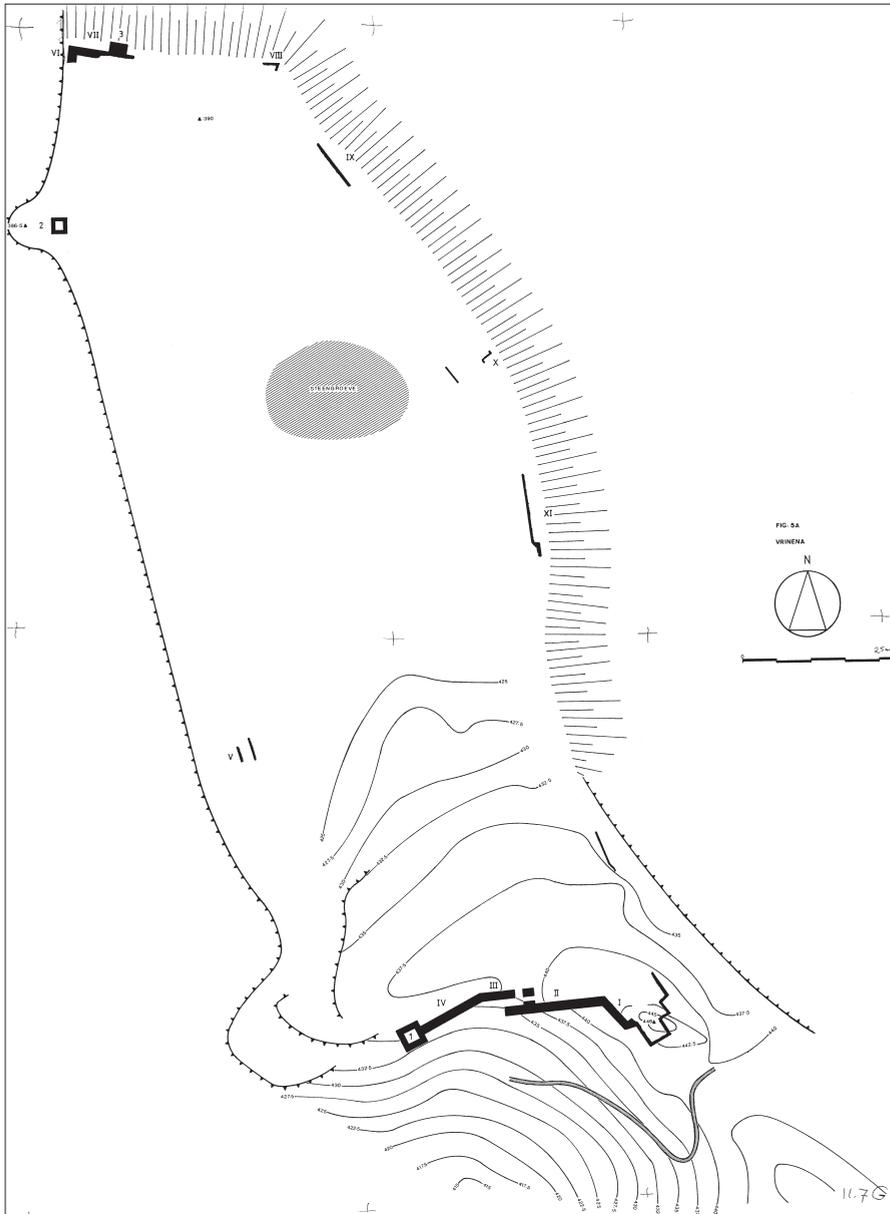


Figure 6. Plan of the Kastro Vrinenas (G. Wieberdink)

While nothing remarkably new was revealed, by further confirming the presence of these extramural remains, and showing the presence of large multi-period pottery assemblages including clearly domestic materials, the revisits do offer a more solid foundation for the previously shaky hypothesis that these fortified sites were small habitation centres in the Classical and Hellenistic periods, and possibly before that already.

With the tells of Magoula Sourpi (2000/9) and Magoula Plataniotiki and the upper area of the Hellenistic city they seem to form a network of hilltop hamlets, which together might have formed the polis of Halos. It is also conceivable that the population of the large newly founded Hellenistic city of Halos was taken from these sites. It must be noted, however, that the hilltop *kastra* continued to be inhabited after the demise of New Halos, some into the Roman period. Unfortunately, due to the low chronological resolution of the worn finds, the pottery does not clarify whether habitation was interrupted or not during the existence of the Hellenistic city. It is also unclear how habitation and fortification of the hill-tops are connected, although it is clear that most if not all these sites were already inhabited before their fortification walls were built, and also that all (with the exception of the relatively large site at Kastro Vrinenas) had buildings, some of them rather monumental, outside their walls (see Figure 5).

Magoula Sourpi, which yielded mainly Middle and Late Bronze Age pottery, occupies a prominent hilltop, with a significant amount of Classical-Hellenistic material on it. The site is well-defendable and its very steep and regularly shaped outer slopes might hide fortifications below the present ground surface. However, there are no visible remains of a defensive system. Nevertheless, as stated previously, it seems to belong with the fortified sites, just as the hilltop of Kato Xenias which has the same combination of pottery finds, and does show possible remains of a large Classical-Hellenistic wall, in addition to apparently older fortifications.

A section cut into the Kato Xenias hill by a modern road seems to show a stratigraphy of two main habitation phases (Figure 7). One belongs to the Middle Bronze Age and the earlier part of the Late Bronze Age, and was also encountered previously in rescue excavations by the 13th Ephorate of Prehistoric and Classical Antiquities, and another to the Classical-Hellenistic period. In parts of the profiles at least four distinctive sub-phases appear to be visible, two in the Bronze Age, and two later ones. Protruding bits of wall suggest dense construction with small rectangular, presumably domestic, spaces in both periods. One profile shows two children's graves below the lowest Bronze Age floors. These cist graves below houses fit the pattern of other Middle Bronze Age finds of the area.



Figure 7. A section cut into the site at Kato Xenias (2000/48) by the modern road, showing several building phases above a MBA child grave (2012 survey team)

Revisit of site 1990/35

In order to refine our picture of the still enigmatic site 1990/35, and explore the presence of different chronological phases over the site in view of assessing preservation and possibilities for excavation, a large part of the site (fields 1266 (partly),¹⁵ 1267, 1268 (partly) and 1269, see Figure 8) was resurveyed in 86 15 × 15 m grids that follow the pattern of olives recently planted in a section of the fields. All accessible areas in the surveyed fields were fully covered. Material was collected, photographed and classified in the field, while only a small selection of items offering information clearly additional to what has already been collected was taken in and processed. Due to the dense vegetation in field 1265, most of the eastern part of 1266 and most of 1268 (the exception being a bit on the south and west sides), these parts of the sites could not be covered.

¹⁵ The eastern part of the field as mapped in 1990 is now cultivated separately and was mostly too overgrown to survey during the 2011 campaign.



Figure 8. Map of site 1990/35 also showing the field numbers (J. Waagen)

Yet, more than 7000 finds were picked up, of which more than 4000, from all but 5 squares (with a maximum of 224 in a single square) belong to first habitation phase, which lasted from the Final Neolithic period to the beginning of the Middle Bronze Age. 165 sherds from 29 squares were dated to the Late Bronze Age, 381 from 63 squares to the Early Iron Age, a further 308 from 43 squares may belong with either of the latter periods. Later material is rather rare, but many of the more than 1000 tile fragments picked up all over the site seem medieval or early modern.

On a general level, the revisit confirmed the outcome of the previous surveys: the extension of the site remains the same, concentrations of medieval-early modern pottery in field 1266 and Late Bronze Age in 1268-1269 were still there, material from all periods previously encountered was found again, and no new periods appeared. A few new kinds of pottery have turned up, but the bulk seems to belong to the categories previously found. Yet, on a detailed level, the more refined resurvey offers a much clearer picture of the chronological developments of the site than was available previously. It turns out the non-Mycenaean prehistoric material consists of two distinguishable groups (based on relative quantities of the fabrics present), one covering fields 1266 and 1267, and one concentrating

in the surveyed part of 1268 and in 1269, but slightly extending into the southern part of 1266. Part of the difference may relate to the presence of Late Bronze Age coarse wares in 1268-1269 only, but also the earlier prehistoric material seems to be involved, perhaps suggesting a chronological or functional differentiation within the site in this period. New fieldwork and/or closer study of available material may clarify this.

A second revelation is that the Early Iron Age material can also be separated into two groups (Figure 9). The material in most of fields 1266-1267 is more worn and later in date (up to Archaic) than the finds in 1268-1269 (and the adjacent parts of 1266), where the Protogeometric material seems to be focused. In fact, the first group looks much like the Early Iron Age ‘background noise’ encountered in the 1996 and 2011 surveys in the Voulokaliya area, and probably belongs with this large funerary landscape. The core centring on 1268, on the other hand, with its clear Protogeometric finds, looks much more like a continuation of the Late Bronze Age site in the same fields – which does not necessarily mean it is related to habitation (as apparently the Late Bronze Age site), although that surely is a possibility. It does seem clear however, that there is a break in find patterns between the beginning and the end of the Early Iron Age.

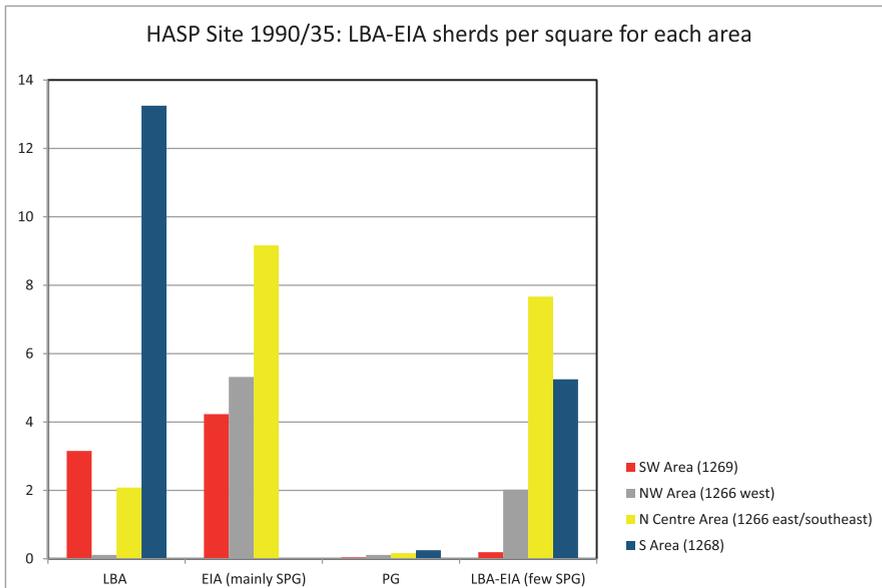


Figure 9. The Late Bronze Age to Early Iron Age finds of site 1990/35, subdivided by area and period (V.V. Stissi)

Conclusions

The 2011-2013 revisits of the surveyed areas around Halos have refined and largely confirmed the results of the earlier campaigns of 1990-2006. The Hellenistic city of Halos is part of a long-lasting sequence of intensive habitation of the area, which is characterized by a surprising level of continuity from prehistory into the early modern period. While individual sites may have been destroyed, abandoned and (re-)occupied continuously, also possibly as a consequence of the high frequency of earthquakes in the region, there almost always was a scatter of villages and small settlements in the area. Many sites were either often resettled or in use for very long periods. In this context, the short-lived Hellenistic city was the exception rather than the rule, both with regards to its lifespan and in its size, which was much larger than that of any other town in the area before modern Almyros. The smaller town at Magoula Plataniotiki had a longer life-span, with its quick cycle of reconstructions,¹⁶ which is much more typical – perhaps also in the apparent laconical attitude of its inhabitants to the frequent and sometimes rather drastic destructions.

From a methodological and practical point of view it is reassuring that the 2011 intensive survey and the 2011-2013 revisits of the sites discovered from 1990-2002, though revealing more variation on a detailed level, appear to confirm the general soundness of the intuitive choices made in the original surveys and in find processing. Using the intensive Zakynthos field walking method proved to be a feasible choice, and considerably improved the detail of information that could be retrieved from both sites and offsite fields. Likewise, the revisits offered a clearer understanding of many sites and the finds they yield. In the final publication, a further evaluation of the methodologies used and their implications will be offered.

The general picture provided by the earlier surveys has not changed: offsite material is rare in most of the surveyed area, and terrain previously considered offering a low probability of archaeological finds is indeed mostly empty. Furthermore, while it is clear that ploughing is damaging underground remains, it also seems that most ceramic scatters are surviving pretty well, and are remarkably stable in position, size and composition. However, some sites, particularly relatively recent ones with standing architecture and related features, are faring much less well. All are neglected, but walls and even complete structures are also often demolished or bulldozed away. This occasionally also seems to happen at much less visible ancient sites. Continuous monitoring seems useful, even necessary.

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¹⁶ See the article by V. Stissi et al. elsewhere in this journal.

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