

TRIPHYLIA and IONIAN ISLANDS

Strategies in Space: The Early Mycenaean Site of Kakovatos in Triphylia

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Abstract: Kakovatos is mainly known for its three large and richly furnished tholos tombs that rival the wealthiest burials of their time on the Greek mainland. New research in Kakovatos revealed the remains of a building complex of the early Mycenaean period on the so-called acropolis. Excavations of the site by Wilhelm Dörpfeld in 1907–08 had remained more or less unpublished. The recent fieldwork offered the rare opportunity to explore an early Mycenaean habitation site together with the group of associated tombs. The integration of data from neighbouring sites allows us to study the development of Kakovatos in the regional context of Triphylia.

The stratigraphy of the excavated building complex provides valuable information about the history of the site in the early Mycenaean period, when places of regional prominence emerged in the Peloponnese. A rebuilding of an earlier architectural phase took place in LH IIB, and during an advanced stage of this phase, the architectural complex was destroyed. Just as the tombs stood out among the tombs of the region by their size, expenditure in terms of construction and wealth of grave offerings, the building complex on the acropolis hill was set apart spatially, clearly visible above the Triphylian Plain. We can recognise this as one of the strategies of early Mycenaean elites to elevate themselves symbolically, socially, economically, politically and spatially above the rest of the population.

Keywords: Kakovatos, early Mycenaean residential remains, ¹⁴C data, stratigraphy, storage, spinning bowls

Kakovatos: The Site

“(Social) space is a social product”.³ The ground-breaking works of the French sociologists Henri Lefebvre and Pierre Bourdieu had a fundamental impact on the perception of geography and its built environment as a social construct that is produced and reproduced in everyday practice by social agents. Every society thus produces its own space, because social structures and related practices are translated into physical space with its hierarchies of sites, places and relational positions, the space of the living and the dead. Social agents always occupy specific places in physical space, and in the words of P. Bourdieu, “their habitus shapes their habitat” and vice versa.⁴

Our paper is dedicated to the evaluation of the recent excavations at Kakovatos, where we can trace the emergence of an early Mycenaean site with (the very last remains of) residential buildings and associated burial places. With a review of our finds and the associated stratigraphy, we would like to look at the creation and demise of the building complex on the acropolis and the tombs at Kakovatos. The chronology of developments will allow us to examine the dynamic changes in the organisation of social space and the political landscape of the region.

On the western coast of the Peloponnese, south of the Alpheios River and north of the Neda, between the historical regions of Elis and Messenia lies the region of Triphylia, which only rarely gained any political significance in history. In 1907–08 the renowned Wilhelm Dörpfeld discovered and excavated the Mycenaean site of Kakovatos, which he identified with the Homeric Pylos

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³ Lefebvre 1991, 26, and passim.

⁴ Bourdieu 1999, 128; Bourdieu 1991. Cf. Smith 2003 on the relation between political landscape and the built environment in early complex societies; on the reflexive relationship between architecture and society, cf. Maran 2006.

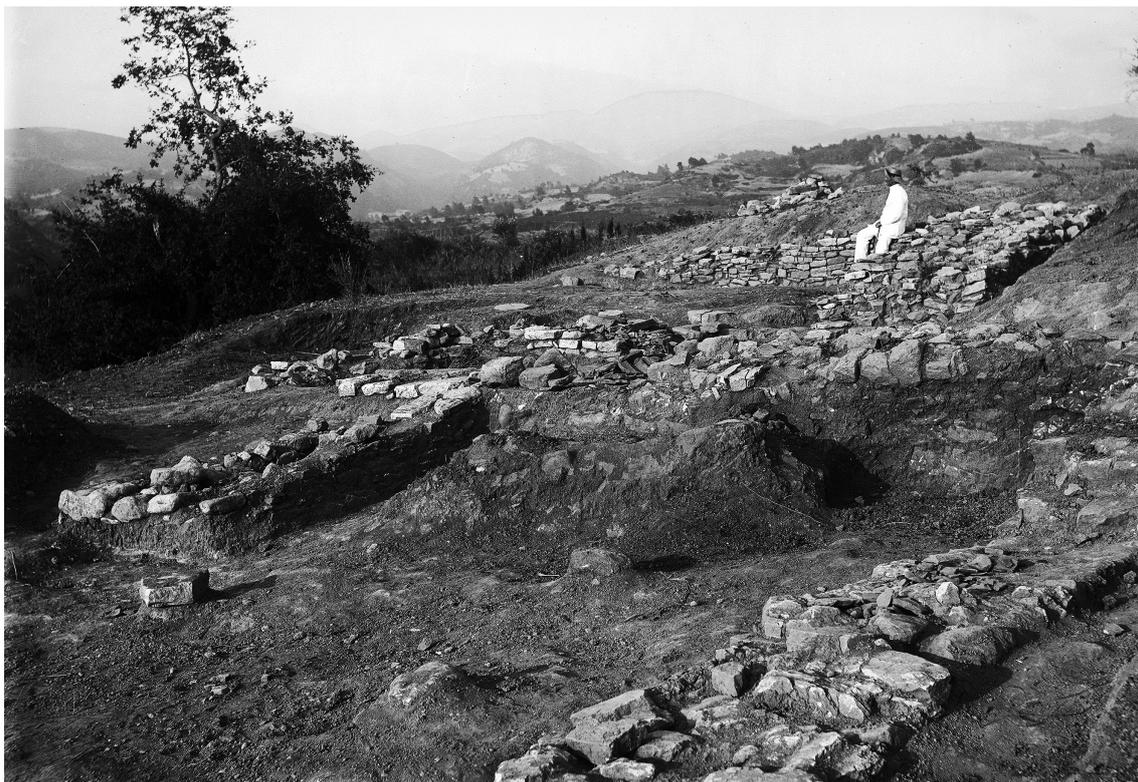


Fig. 1: Excavations on the hilltop of Kakovatos in 1907–08 by W. Dörpfeld (in the background). The area in the photograph corresponds with the recent excavation areas Ka 1 and Ka 3 (German Archaeological Institute Athens)

based on the geographical indications contained in the Homeric *Iliad*.⁵ Apart from three tholos tombs, he uncovered building remains of what he called ‘the royal house’ with storage facilities on the acropolis hill (Fig. 1).⁶ Unfortunately, he never completed his plan to publish the results of these excavations with detailed maps and documentation.

The site lies on a hill of about 70 masl in a prominent location, now about 2 km off the sandy shoreline. The hilltop offers a perfect view of the region. Towards the south lies Messenia with the dominant ridge of the Aigaleon and with Kyparissia just at the foot of the mountain.⁷ The view across the coastal plain to the north ends at Samikon, where the Bronze Age site of Kleidi lies on the western tip of the Lapithos Mountain range (Fig. 2).⁸

At the foot of the Kakovatos hill lay three large tholos tombs (Fig. 3), which were excavated by W. Dörpfeld and published in an exemplary manner by Kurt Müller shortly after their discovery. A thorough and detailed re-evaluation and republication of the burial goods by Christine de Vreé is under way.⁹

Almost exactly a hundred years after W. Dörpfeld, renewed fieldwork began in 2009 when Birgitta Eder resumed the archaeological work at the site of Kakovatos with a team from the University of Freiburg and in collaboration with the Greek Archaeological Service under the direction of Georgia Hadzi-Spiliopoulou and in cooperation with Barbara Horejs, who managed the excavation fieldwork.

⁵ Dörpfeld 1907; Dörpfeld 1908; Dörpfeld 1913.

⁶ Dörpfeld 1907, XIV; Dörpfeld 1913, 130–131.

⁷ Cf. Eder 2018a, 90–91, with illustration.

⁸ Cf. Nikolentzos – Moutzouridis, this volume; Eder et al., forthcoming; Huber, forthcoming.

⁹ Müller 1909; Eder 2011b; Eder 2018a, 90–92; cf. de Vreé, this volume.



Fig. 2: View from the hilltop of Kakovatos to the northwest, towards the western end of the Lapithos Mountain range (photo: B. Eder, 2010)

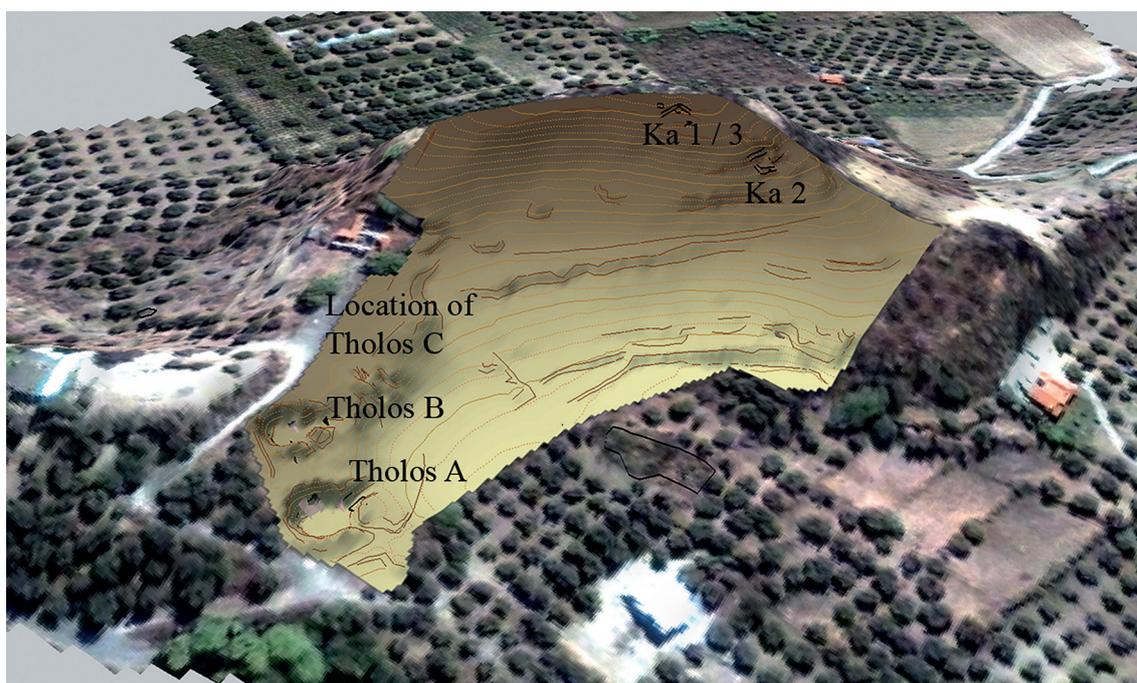


Fig. 3: Terrain model of the site of Kakovatos (Ch. Kurtze)

A survey in 2009 established that traces of human activity in the form of built structures and pottery fragments concentrated in the west of the acropolis plateau, where the remains of Dörpfeld's excavations were located. There was no evidence pointing to the existence of ancient buildings in the east of the acropolis or further downhill.¹⁰ However, the hilltop had apparently suffered

¹⁰ Eder 2010.

from intensive erosion, because the natural soil was present almost everywhere. Geoarchaeological borings at the foot of the hill confirmed the existence of up to 3 m-deep colluvial layers with remains of cultural deposits.¹¹ Like the rest of the region in general, the geology of the hill is made of Neogene sand and marl and thus easily susceptible to erosion by wind and rain.

The Character of the Residential Building and the Destruction Horizon of LH IIB

In 2010 and 2011 excavations took place on the acropolis, where three trenches were laid out in the western part of the plateau, and the terrain model in Fig. 3 illustrates the locations of the excavation areas Ka 1 and Ka 3 on the acropolis plateau and Ka 2 further downhill on the western slopes. In areas Ka 1 and Ka 3 two corners of two different built structures were revealed next to each other. In Ka 1 the southeastern corner and the smaller western wall of the building were still preserved, while the northern end remains unclear due to the erosion of the slope (Fig. 4).

A pebble layer appeared in large sections throughout the building of Ka 1 and indicated a floor of river pebbles. Pieces of secondarily fired clay and pottery with signs of secondary burning in situ on the floor suggest a final destruction of the building by fire.¹² For example, a ring-handled cup (FS 237) and a Keftiu cup with foliate band (FS 224) were found broken and discoloured by fire. They were almost completely restored and offered the first indication of a LH IIB date for the destruction of the building. In addition, the pottery from this deposit includes plain goblets (FS 254) and a squat jug (FS 87). Fragments of the characteristic Ephyraean goblet with the motif

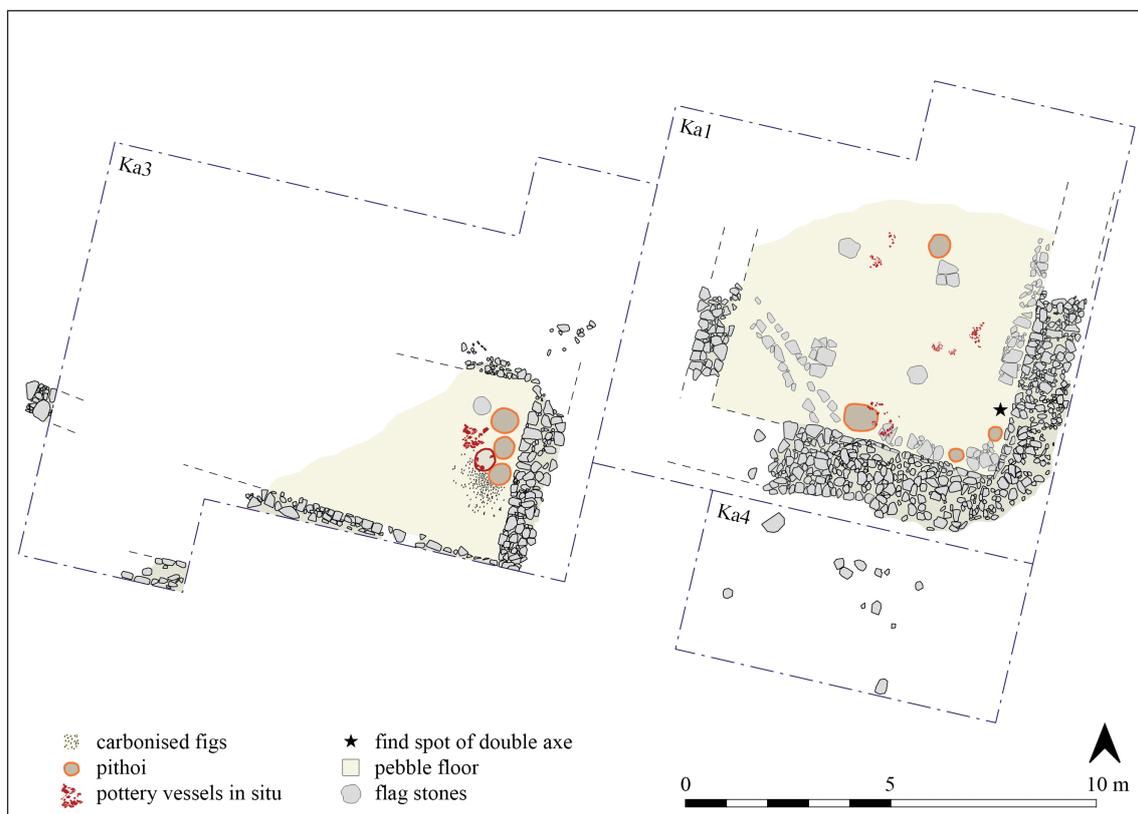


Fig. 4: Plan of the building remains and finds in situ in the excavation areas Ka 1 and Ka 3 on the hilltop (M. Börner)

¹¹ Geoarchaeological borings were conducted in 2011 by Andreas Vött and his team from the Institute of Geography of the University of Mainz.

¹² Eder 2011a, 95–96; Eder 2012, 92–93; Eder – Hadzi-Spiliopoulou 2016a, 780–781; Eder – Hadzi-Spiliopoulou 2016b, 313–314.



Fig. 5: Pottery from the LH IIB destruction layer in Ka 1: Mycenaean fine ware (drawings: A. Ferretti, N. Math, R. Pritz)

of an argonaut (FS 254) also come from the destruction horizon and conform to the LH IIB character of the assemblage (Fig. 5).

The group of vases may mirror the emergence of a Mycenaean drinking set.¹³ The elegant shallow cup with broad rim and ring handle (FS 287) represents a typical shape of the early Mycenaean period,¹⁴ which had been taken over from the Cretan repertoire and frequently appears in

¹³ Wright 2004, 98–99.

¹⁴ Cf. RMDP: LH IIA: 93, fig. 15; 95, no. 61; LH IIB: 101–103, fig. 18, no. 91; and *passim*.

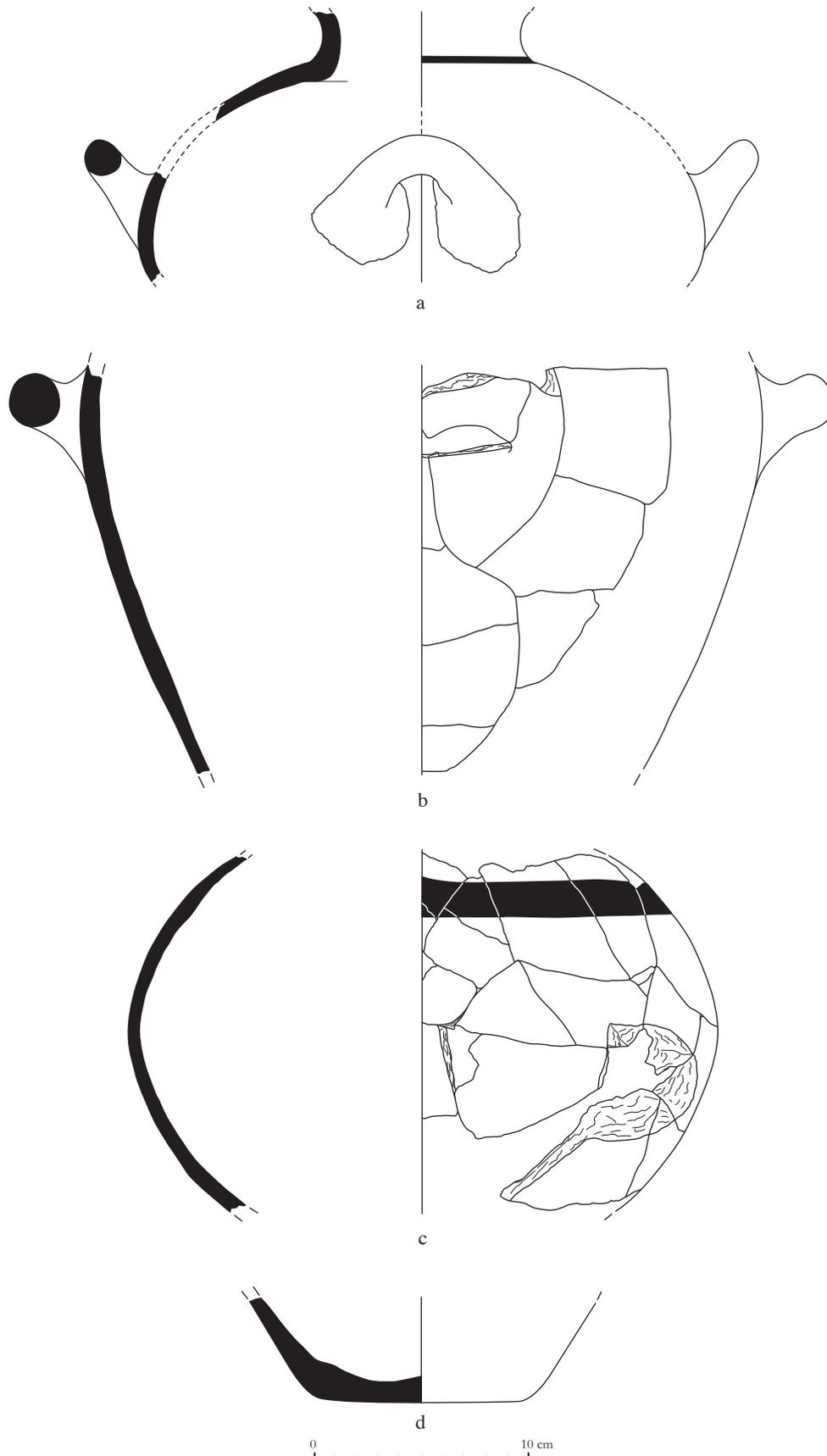


Fig. 6: Pottery from the LH IIB destruction layer in Ka 1: handmade closed vessels (drawings: A. Ferretti, N. Math, R. Pritz)



Fig. 7: ‘Spinning bowl’ from the LH IIB destruction layer in Ka 1 (photo: I. Geske)

metal form (gold, silver, bronze) in wealthy tomb assemblages of LH I–III A1 date.¹⁵ The shallow form, broad rim with (occasional) spout, and ring handle suggest that this cup was not so much intended for drinking, but for pouring liquids. When the vessel was tilted while pouring the liquid, the interior decorative pattern, which is common on the ceramic examples, became visible. Hartmut Matthäus has already noticed the religious connotation of some bronze specimens on Crete,¹⁶ and the conversion of this shape into precious metal vessels may imply the important role it played on special occasions. All this appears to be characteristic of a libation vessel, which was used during religious ceremonies.

Moreover, the presence of handmade household vessels such as amphorae and at least one ‘spinning bowl’ in the destruction context of Ka 1 illustrates that handmade MH-type vessels and Mycenaean pottery were contemporaneously in use (Fig. 6). In general, the preliminary results of the evaluation of the pottery from the LH IIB destruction horizon suggests that mainly closed or rather large shapes continued to be made in a MH tradition, when smaller, mainly drinking vessels of Mycenaean-type pottery decorated with lustrous paint were produced.

Several aspects allow reconstructing the character of the room, which can be described as a workspace and storage area. Three pithoi or rather the bases of these storage vessels were found inside the room, and one of them still contained a few carbonised figs. Shaft smoothers provide evidence of craft activities that are associated with the processing of wood. A large pit next to the southern internal wall face was formed by a large pithos, which was directly connected to a drain running through the southwestern corner of the building. This drain was probably intended to channel away fluids from inside the building. The purpose of the installation is far from clear, but it points to some sort of craft activity and underlines the workspace character of the room (Fig. 4).

In addition, numerous burnt fragments of a basket-like container with an interior handle belong to the destruction phase (Fig. 7). Similar bowls are almost exclusively known from Messenia, where they occur in settlement and tomb contexts of MH III to LH IIA and have no

¹⁵ For bronze vessels, see Matthäus 1980, 207–218 (large one-handled broad-rimmed bowls); 222–224 (one-handled broad-rimmed cups); for examples in precious metals, see Davis 1977, 260–261, 297, nos. 46, 97 (Mycenae, Shaft Graves IV and I), 107 (Vapheio), 112 (Dendra, Chamber Tomb 10), 129 (Mycenae, Tsountas Chamber Tomb 84), 137 (Kazarma); Demakopoulou 1993, 59, pl. 1c (Kokla, tholos). A golden ring-handled cup was apparently also among the burial gifts of the ‘Griffin Warrior’ of Pylos: Davis – Stocker 2016, 634–635.

¹⁶ Matthäus 1980, 213–214.

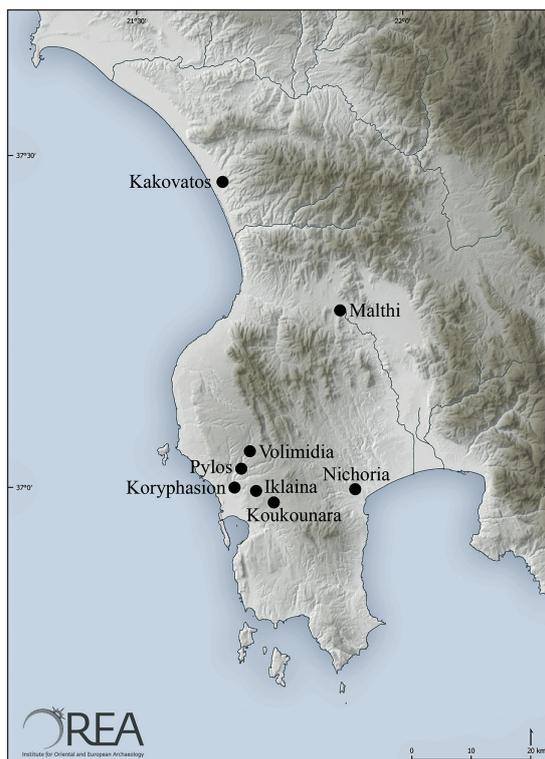


Fig. 8: Distribution map of 'spinning bowls' in the southwestern Peloponnese (B. Eder, J. Huber)

further parallels on the Greek mainland (Fig. 8).¹⁷ Spyridon Marinatos has already explained the use of these bowls in the context of textile production.¹⁸

Bowls with interior handles (one, two, but also three or four handles) are known mainly from Egypt and the Levant from the second and first millennia BC. Their identification as spinning bowls is based on the grooves that are visible on the underside of the loops and derive from the wear and tear caused by textile threads. However, one has to be aware that the Messenian 'spinning bowls' are much larger, and their interior handles do not show any grooves.

Egyptian tomb paintings of the 12th Dynasty, but also models of textile workshops, illustrate their potential function and use. Here, working men and women pull the thread out of the bowl to add twist to the fibre and in the other hand hold the spindles rolling up the spun thread. The primary function of these bowls was to keep the fibres clean and tidy. Secondly and more importantly, the interior handles served to add tension to the fibre. This is less suitable for bundles of combed wool, which are far too

fluffy, but these bowls are quite useful for processing flax.¹⁹ The so-called spinning bowls from the southwestern Peloponnese display similar concave and convex shapes as the ones on the Egyptian wall paintings, and, despite their much larger capacity, we are inclined to understand them as related to textile production.

In Kakovatos, there are fragments of at least eight such either concave or convex 'spinning bowls' from various contexts. Their characteristic shape relates the bowls from Kakovatos to their Messenian counterparts, and this is only one of the clues that indicate the existence of close cultural ties between Kakovatos and Messenia in the early Mycenaean period.²⁰ Together with a few clay spindle whorls (Fig. 9) and spools or reels (Fig. 10), the so-called spinning bowls indicate textile production that can be associated with the room in Ka 1.²¹

¹⁷ For the Messenian sites with 'spinning bowls' (Nichoria, Volimidia, Koryphasion, Malthi), see Zavdil 2013, 199–201 with references; cf. Lolos 1987, 338, figs. 250–252 (Koryphasion, tholos); 364–365 (Kephallovryso, Tomb 1 at Volimidia). Chasiakou 2003 mentions in her μέρος Γ, Κεραμεικές Κατηγορίες – Σχήματα, αγγεία υφαντικής (22/39) broad strap handles from Koukounara-Katarrachaki, which she considers to belong to such vessels. In addition, the recent excavations at Pylos and Iklaina have brought to light more examples of 'spinning bowls', and we are grateful to Sharon Stocker and Michael Cosmopoulos for their permission to refer to them. Lena Papazoglou-Manioudaki, this volume, mentions the fragment of a bowl with interior handle from Mygdalia in Achaia, which could represent the first 'spinning bowl' from the northwestern Peloponnese.

¹⁸ Marinatos 1966, 88 (δίμητρύς) on the examples from Volimidia-Kephallovryso, where he points out that a spindle whorl was found next to one bowl supporting the interpretation.

¹⁹ Barber 1991, 70–76 (spinning bowls); 83–91 (ground loom) with references to the wall painting in the tomb of Khnumhotep at Beni Hasan, and the model of a textile workshop from the tomb of Meket-Re at Egyptian Thebes, 12th Dynasty.

²⁰ Strong cultural relations between Messenia and Triphylia in the Mycenaean period: Eder 2011b; Nikolentzos 2014; Eder et al., forthcoming; Huber et al., this volume; Huber, forthcoming. Cf. more generally on the tholos tombs in the 'cultural zone' of the southwestern Peloponnese, Bennet – Galanakis 2005, 146–147; Korres 2012, 437–438.

²¹ 'Spinning bowls' in the southwestern Peloponnese may be related to a MH tradition of processing textile fibres that did not survive into the Palatial period, when it was probably substituted by more industrial techniques of spinning



Fig. 9: Spindle whorls from the residential buildings at Kakovatos
(photo: I. Geske)



Fig. 10: Two spools from the residential buildings at Kakovatos
(photo: B. Eder)

We met a similar situation in Ka 3, which lies just west of Ka 1 (Fig. 4). Here, three walls form the southeastern part of another building, the rest of which has fallen victim to the erosion of the slope. Between the preserved walls, a burnt layer of clay covered a floor, which was again paved with pebbles.²² In this layer stood three pithoi, or rather the lower parts of them, and several vessels in situ (Fig. 11). The group of vessels comprises a piriform amphora, a large spouted handmade krater, another smaller open vessel in a handmade fabric of possibly MH tradition, a small miniature amphora and a one-handled carinated kylix of an early type (FS 267), which suggests that this deposit may date to an advanced stage of LH IIB (Fig. 12).²³

with distaff and weaving with the warp-weighted loom. Currently, there are no later examples known than that from the LH IIB destruction level at Kakovatos. In this context, it may appear of interest that the excavation has produced only spindle whorls and longitudinally pierced spools, but no loom weights, which could suggest the employment of the warp-weighted loom. For Middle Bronze Age spools and their possible association with the use of the horizontal loom cf. Cutler 2012, 148; Pavúk 2012, 123–126, with references. Kostas Nikolentzos has taken over responsibility for presenting and discussing the implements for textile production in the final publication of the Kakovatos Excavations.

²² Eder 2012, 94; Eder – Hadzi-Spiliopoulou 2016b, 315.

²³ Carinated kylikes become common in LH IIIA, but start to appear already in LH IIB. For a review of the current evidence, see Thomas 2011, 302; Kardamaki 2017, 98–99. Kylikes with a similar profile as the Kakovatos specimen come from Pit E in the subfloor of Room VII of Mansion 2 at the Menelaion, where they should be associated with the construction of Mansion 2 in LH IIB/IIIA1; cf. Catling 2009a, 49, 109–110, cat. nos. VII49, VII52;



Fig. 11: Destruction deposit in Ka 3: broken pithoi and storage vessels in situ (photo: Kakovatos project, 2011)

Typical elements of LH IIIA such as kylikes and monochrome goblets seem to be lacking in both destruction contexts at Kakovatos. However, one should be aware of the preliminary character of the present discussion that only takes account of the more complete vases on the floors, and only the full documentation and statistical evaluation of all the pottery will provide the complete evidence for the composition of the destruction deposit.²⁴ Pure LH IIB deposits remain rather rare on the mainland, and assemblages with comparable material comprise LH IIB/III A1 contexts at Tiryns (House D1), Asine (Room F, Layer 3), the construction deposits for Mansion II at the Menelaion, four early Mycenaean wells from the south slope of the Athenian Acropolis, and Ayia Irini (Phase VIIc) on Keos.²⁵ LH IIB deposits from Tsoungiza have been published very recently.²⁶

The pottery from buildings Ka 1 and Ka 3 on the acropolis of Kakovatos conforms to a typical settlement assemblage, with fine, coarse and cooking wares as well as storage vessels. A systematic petrographical analysis of the pottery is being undertaken in collaboration with the Fitch Laboratory of the British School at Athens under the direction of Evangelia Kiriatzi together with Georgia Kordatzaki. This study is complemented by NAA conducted by Hans Mommsen in Bonn. Among cooking pots and storage vessels, several clearly foreign fabrics were macroscopically identified. Our assessment indicates that the buildings on the acropolis stored pithoi and storage vessels of various sizes and fabrics as well as cooking pots from Kythera, in addition to transport containers from Crete. A cooking pot of Aiginetan tradition and other vessels of non-local pottery were identified. The presence of flat-based tripod cooking pots suggests some influence from

Catling 2009b, 133, fig. 137. Cf. Rutter 2020, 704–705 (Tsoungiza); Vitale et al., this volume, where one-handed angular kylikes are also considered as indicative of a late stage of LH IIB.

²⁴ Cf. the arguments of Kardamaki 2017, 80.

²⁵ For references and discussion, see Kardamaki 2017, 74–78, and *passim*. Cf. Cummer – Schofield 1984, 60–61, pl. 29a–e, h–i, k–l for the plain and Ephyraean goblets from the LH IIB level in Room 10 (Ayia Irini, House A).

²⁶ At Tsoungiza in EU 2, substantial LH IIB deposits (Group G) were recovered consisting of numerous examples of common shapes for drinking such as conical cups, teacups, and painted (including Ephyraean) and unpainted goblets as well as angular kylikes. Cf. Wright et al. 1990, 633; Thomas 2011, 302; see now Rutter 2020, 657–818.

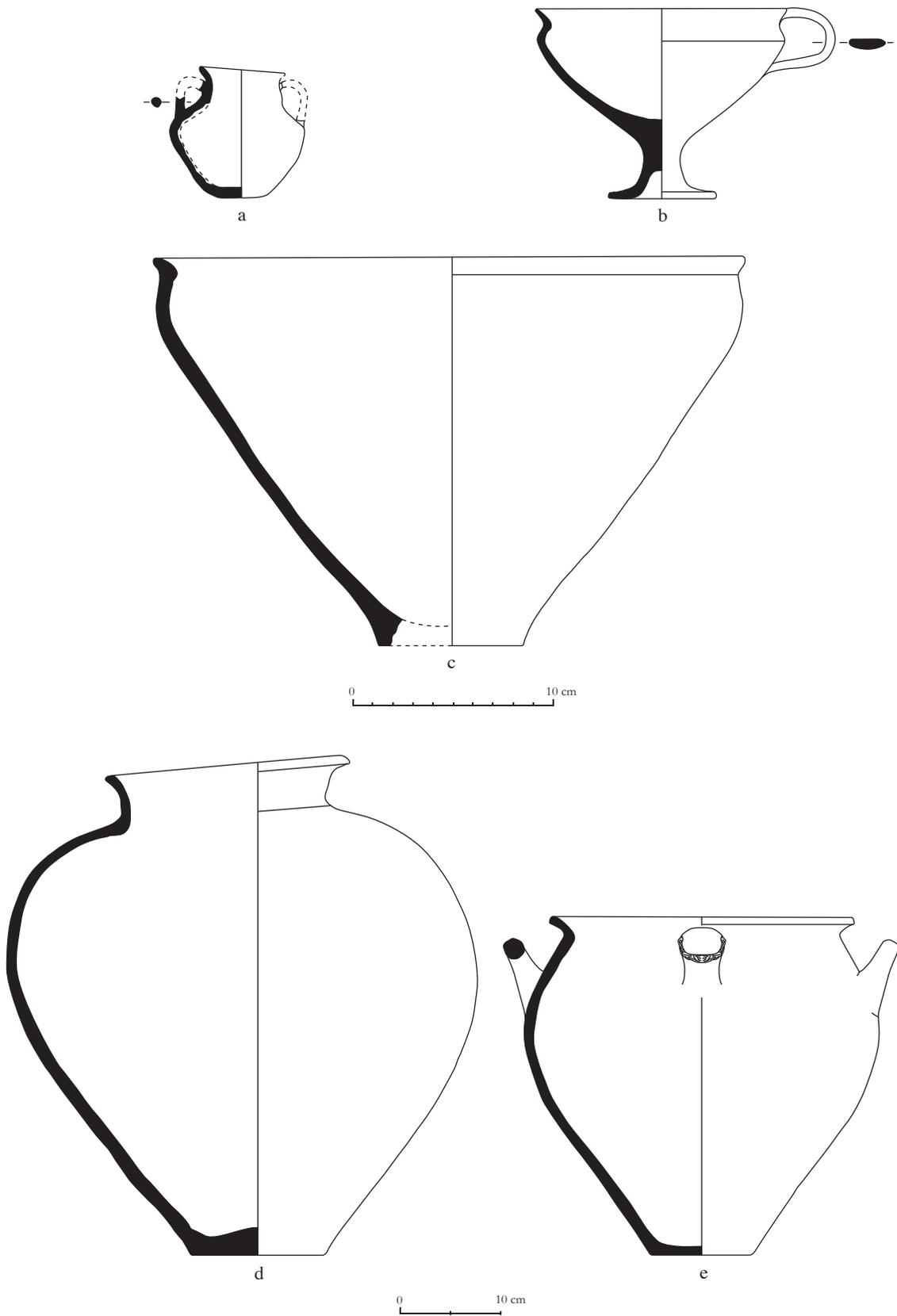


Fig. 12: Pottery from the LH IIB destruction layer in Ka 3 (drawings: A. Ferretti, N. Math, R. Pritz)

Cretan cuisine, which may well have gone beyond the mere introduction of Cretan-type cooking vessels and included also Minoan(ising) recipes.²⁷

The excavation revealed intense concentrations (of about 6 kg) of carbonised figs, and the botanist Simone Riehl (University of Tübingen) was also able to identify charred grains of barley as the content of the storage vessels. In this context it deserves mention that figs and barley constitute the components of food rations to dependent workers in the Linear B texts from the palace at Pylos, which are, however, more than 200 years later than our present archaeological context.²⁸ Storage capacities point not only to the ability to provide foodstuffs for dependent personnel, but also to the control of a part of the agricultural production of the area, which was administered by the group residing in Kakovatos.

The analysis of the animal bones is being conducted by Norbert Benecke and his team at the German Archaeological Institute in Berlin. He suggests that we found the rather common remains of meat consumption. Species of domestic animals include cattle, pig, sheep and goat. However, bones of red deer, hare and wild boar and even of a brown bear complement the variety of animals and illustrate that people from Kakovatos went hunting. The presence of cockleshells, purple dye murex and dog cockle (or ‘amandes de mer’) shows that seafood also formed part of the diet, although fish bones were not preserved. The hunt was probably one of the favourite pastimes of Mycenaean elites from early on, as the illustration of the deer hunt with the chariot on the golden signet ring from Shaft Grave IV at Mycenae makes abundantly clear.²⁹ Likewise, the boar hunt must have played an important role as boar’s tusk helmets feature prominently in early Mycenaean burials, and the one from Tholos A of Kakovatos provides an example in point.³⁰

According to our current state of knowledge, we have uncovered the remains of an early Mycenaean residential complex, of which two corners of two separate rooms in the basement are still preserved. These buildings were perhaps part of an originally larger complex, whose remains fell victim to the erosion of the marly and sandy geology. The excavated rooms should be considered the storage areas and workspace in the basement of two buildings, which were originally taller. The width of the walls of these rooms, between 0.90 m and 1.60 m, speaks for reconstructing two or even three-storeyed buildings (Fig. 19).

Nine short-lived botanical samples from LH IIA and LH IIB contexts were submitted for radiocarbon analysis to laboratories in Mannheim (Germany) and Athens (Greece) (Tab. 1). In order to determine the date for the transition between LH IIA and LH IIB, as well as for the LH IIB destruction at the site, a Bayesian probability approach was employed to make full use of the stratigraphy of the site. Bayesian analysis allows taking additional information into account, such as the sequence of the samples based on archaeological stratigraphy.³¹ Radiocarbon calibration and modelling was done using OxCal 4.3.2 and the INTCAL13 radiocarbon calibration curve.³² According to our model, the LH IIB destruction horizon in Ka 1 and Ka 3 ends sometime between 1496 and 1410 BC, most likely around or just before 1450 BC (Fig. 13).³³

The presence of one complete carinated kylix (and a few additional fragments of this type) may be taken to suggest that this date correlates with an advanced stage of LH IIB. Moreover, the excavation data support this assumption, because the large western terrace wall was also built within LH IIB, before the final destruction (see below).

²⁷ Cf. also Huber et al., this volume.

²⁸ Cf. Chadwick 1988; Gregersen 1997; Killen 2004.

²⁹ CMS I, no. 15.

³⁰ Cf. de Vreé, this volume.

³¹ Buck et al. 1991; Weninger et al. 2006; Bronk Ramsey 2009.

³² Bronk Ramsey 2009; Reimer et al. 2013.

³³ ¹⁴C analysis was carried out at the Curt-Engelhorn-Centre for Archaeometry at Mannheim, where the organic materials were processed by Bernd Kromer and Ronny Friedrich. In addition, K. Nikolentzos had carbonised figs from Dörpfeld’s excavations examined in the Demokritos Laboratory (DEM-1996): Nikolentzos 2011, 401. A detailed report on the radiocarbon dates and their implications for Late Bronze Age Aegean chronology is currently in preparation by Felix Höflmayer and Birgitta Eder.

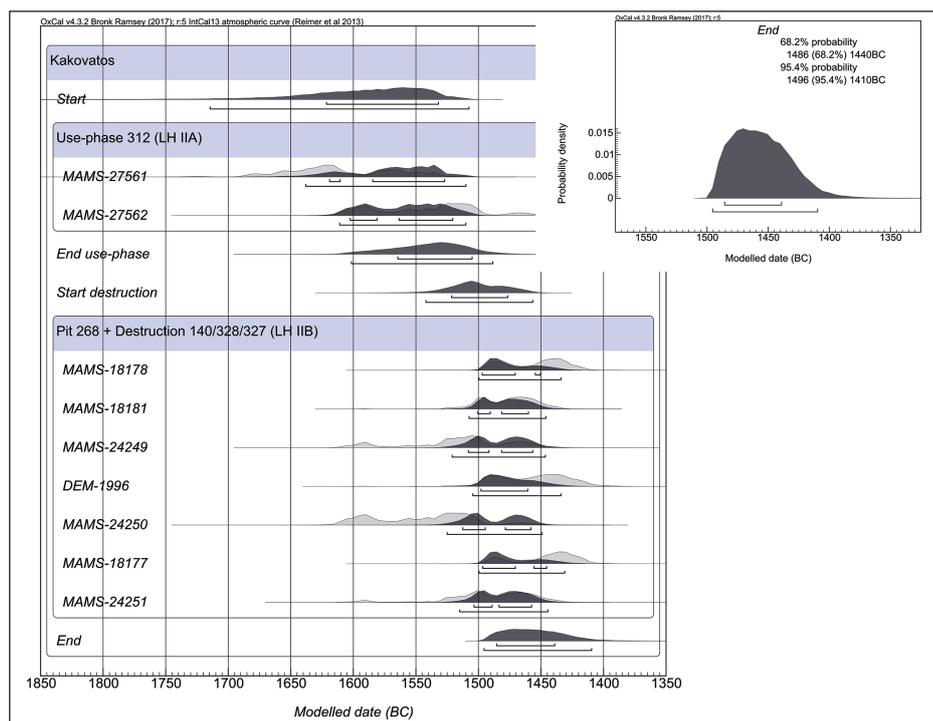


Fig. 13: Modelled probability ranges for each individual sample and boundaries. Light shaded areas represent individual calibrated ^{14}C determinations; dark shaded areas represent modelled calibrated ^{14}C determinations based on the stratigraphic sequence of the site (F. Höflmayer)

Event	Labcode	Sample description	Measurement	Calibrated date		Modelled date	
				68.2%	95.4%	68.2%	95.4%
Start						1622–1533	1715–1508
	MAMS-27561	Bone: cattle Ka 1: SU 312	3330±26	1661–1607 (47.8%) 1583–1559 (17.1%) 1553–1547 (3.2%)	1686–1531 (95.4%)	1620–1611 (5.3%) 1585–1528 (62.9%)	1639–1511
	MAMS-27562	Bone: sheep/ goat Ka 1: SU 312	3259±25	1607–1583 (19.5%) 1559–1554 (3.2%) 1546–1500 (45.5%)	1614–1496 (91%) 1476–1460 (4.4%)	1603–1582 (21.8%) 1564–1521 (46.4%)	1612–1511
End use-phase						1565–1506	1602–1489
Start destruction						1522–1477	1543–1457
	MAMS-18178	Fig Ka 1: SU 140 (Pithos)	3175±17	1494–1479 (19.6%) 1456–1427 (48.6%)	1497–1418	1498–1471 (63.2%) 1455–1451 (5.0%)	1500–1435
	MAMS-18181	Carbonised figs Ka 3: SU 328 (Pithos)	3217±17	1504–1492 (19%) 1483–1453 (49.2%)	1516–1437	1501–1491 (22.7%) 1482–1461 (45.5%)	1508–1447
	MAMS-24249	Grain Ka 3: SU 327 (Pithos)	3241±24	1595–1589 (3.7%) 1532–1494 (47.5%) 1478–1457 (16.9%)	1608–1581 (11.7%) 1562–1446 (83.7%)	1509–1492 (27.6%) 1482–1457 (40.6%)	1522–1447
	DEM-1996	Carbonised figs (Dörp- feld excavations, Ka1/3)	3179±30	1496–1474 (26%) 1461–1427 (42.2%)	1507–1407 (95.4%)	1499–1461	1505–1435
	MAMS-24250	Barley Ka 1: SU 268	3261±24	1607–1583 (20.1%) 1559–1553 (3.6%) 1546–1501 (44.5%)	1615–1496 (92.3%) 1475–1461 (3.1%)	1513–1495 (33.6%) 1479–1459 (34.6%)	1526–1450
	MAMS-18177	Carbonised fig Ka 1: SU 218	3166±18	1490–1484 (6.6%) 1452–1418 (61.6%)	1497–1471 (20.4%) 1465–1411 (75%)	1497–1471 (57.1%) 1456–1446 (11.1%)	1500–1432
	MAMS-24251	Grain Ka 1: SU 218	3226±24	1518–1491 (30.2%) 1484–1451 (38%)	1600–1586 (3%) 1535–1432 (92.4%)	1504–1490 (24.6%) 1484–1458 (43.6%)	1516–1445
End						1486–1440	1496–1410

Tab. 1: Radiocarbon determinations, individual and modelled calibrations for samples from Kakovatos

The Stratigraphy and Chronology of the Residential Building

The stratigraphic investigation in Ka 1 makes it possible to reconstruct the deposition of several layers and to model the history of this architectural complex.

The fill that had been levelled for the subfloor (stratigraphic unit, hereafter SU, 218) of the final (pebble) floor contained plenty of pottery, of which most seems to be of MH character, notwithstanding its factual absolute chronology (Fig. 14): there are fragments of MH-type goblets and kantharoi (Fig. 14f–h); bowls (Fig. 14j–k); storage vessels (Fig. 14p); conical cups (Fig. 14i), which are quite frequent in this layer in comparison with what comes later; two fragments of ‘spinning bowls’ (Fig. 14l) and pottery with incised decoration (Fig. 14m–o). The pebble floor with the LH IIB destruction provides a *terminus ante quem* for this layer. A few painted Mycenaean sherds are assigned to LH IIA, such as the piriform jar fragment with the traces of an ivy leaf (?) decoration (FM 12) (Fig. 14e). The shallow cup sherds with spiral pattern (FS 218) (Fig. 14a–b) as well as the body fragment of a semi-globular cup (?) with the decoration of a double axe (FM 35) (Fig. 14c), and one of a piriform rhyton (?) with curved stripes (FM 67) (Fig. 14d) also conform well to a LH IIA chronology.³⁴ This may be taken as a *terminus post quem* for dating the construction of the latest floor. The graph in Fig. 15 schematically illustrates the stratigraphy in Ka 1 with the destruction layer, the final pebble floor (SU 70) and the fill (SU 218) underneath.

The removal of the pebble floor of the destruction phase and of the underlying fill brought to light an earlier phase of the building. Just in front of the eastern wall, a completely preserved double axe of bronze lay on the ground.³⁵ Its position under the final floor level may suggest a foundation deposit that corresponds to the latest building phase.

A few patches of an earlier pebble layer indicate a previous level of use of the building. According to the current state of the evaluation of the pottery from the first floor level (SU 312), fragments of Mycenaean pottery comprise two Keftiu-type cup fragments (FS 224) with spiral and tangent with blob (FM 46) and possibly a squat jug with hatched loop (FM 63) (Fig. 16). They should be not later than LH IIA and provide an approximate date for the first phase of use of the room.³⁶ The earliest level (SU 334) corresponds to the fill under the first pebble floor (Fig. 15). It contains at least one, although not very characteristic, fragment of Mycenaean pottery, but which is indicative of a Mycenaean chronology, i.e. LH I or IIA.

Apart from Mycenaean-type pottery, plenty of shapes and fabrics in a MH tradition are present in the various levelling fills, which also include a variety of fragments of incised pottery that has been termed ‘Adriatic Ware’ in the past. This might be taken to suggest the existence of chronological phases preceding LH II and an even earlier phase of occupation on the hill during the MH III/LH I transition. However, no architectural remains can be associated with this potential MH III–LH I phase. We are thus inclined to propose that pottery in a MH tradition continued well into LH IIA and was only gradually substituted by Mycenaean pottery wares. It therefore seems quite possible that habitation started (early) in LH IIA or in the LH I/IIA transition. This scenario suits perfectly the re-evaluation of the chronology of the tholos tombs by Ch. de Vreé, who suggests that Tholos A at least was founded in the LH I/IIA transition.³⁷

³⁴ For a comparable LH IIA context from Tsoungiza, see Rutter 1993. LH IIA deposits with similar pottery have been distinguished at Keos (Ayia Irini, Phase VIIa–b): cf. Cummer – Schofield 1984, 80, pl. 60, no. 678 (Room 17); 118, pl. 81, no. 1415 (Room 28) for shallow cups (FS 218) with spirals; 126, no. 1561, pl. 86 (Room 31) for a complete piriform rhyton with curved stripes and rows of dots from Period VII destruction deposits in House A; Schofield 2011, 72, pl. 52 nos. 834, 835, for cups with double-axe motif (Room W.50, Phase VIIa context, i.e. earlier LH IIA).

³⁵ Small double axe with oval shaft hole, Type IV after Buchholz 1959, 8–9; Eder 2012, 93, fig. 7; Eder – Hadzi-Spiliopoulou 2016b, 314, fig. 24; Eder 2018b; see also the illustration in Weilharter, this volume.

³⁶ For comparanda for the Keftiu cup with tangent spiral and blob, see Mountjoy 2008, 368, no. 3645, fig. 6.35 (from Area Nu at Ayios Stephanos); Schofield 2011, 59–60 no. 838, pl. 52 (Room W.50, Phase VIIa context, i.e. earlier LH IIA, at Ayia Irini on Keos), cf. Lolos 1987, 392–396, for references to examples from the southwestern Peloponnese; see also RMDP, 315 with n. 109. For LH IIA squat jugs with racket motif, see O. Dickinson, in: Shay 1992, 225–226, no. P3002, fig. 4.24, pl. 4.18 (Little Circle at Nichoria); Cummer – Schofield 1984, 61, pl. 51 (Period VII, Room 11, House A, Ayia Irini, Keos); cf. Lolos 1987, 453–456, for examples from the southwestern Peloponnese.

³⁷ See de Vreé, this volume.

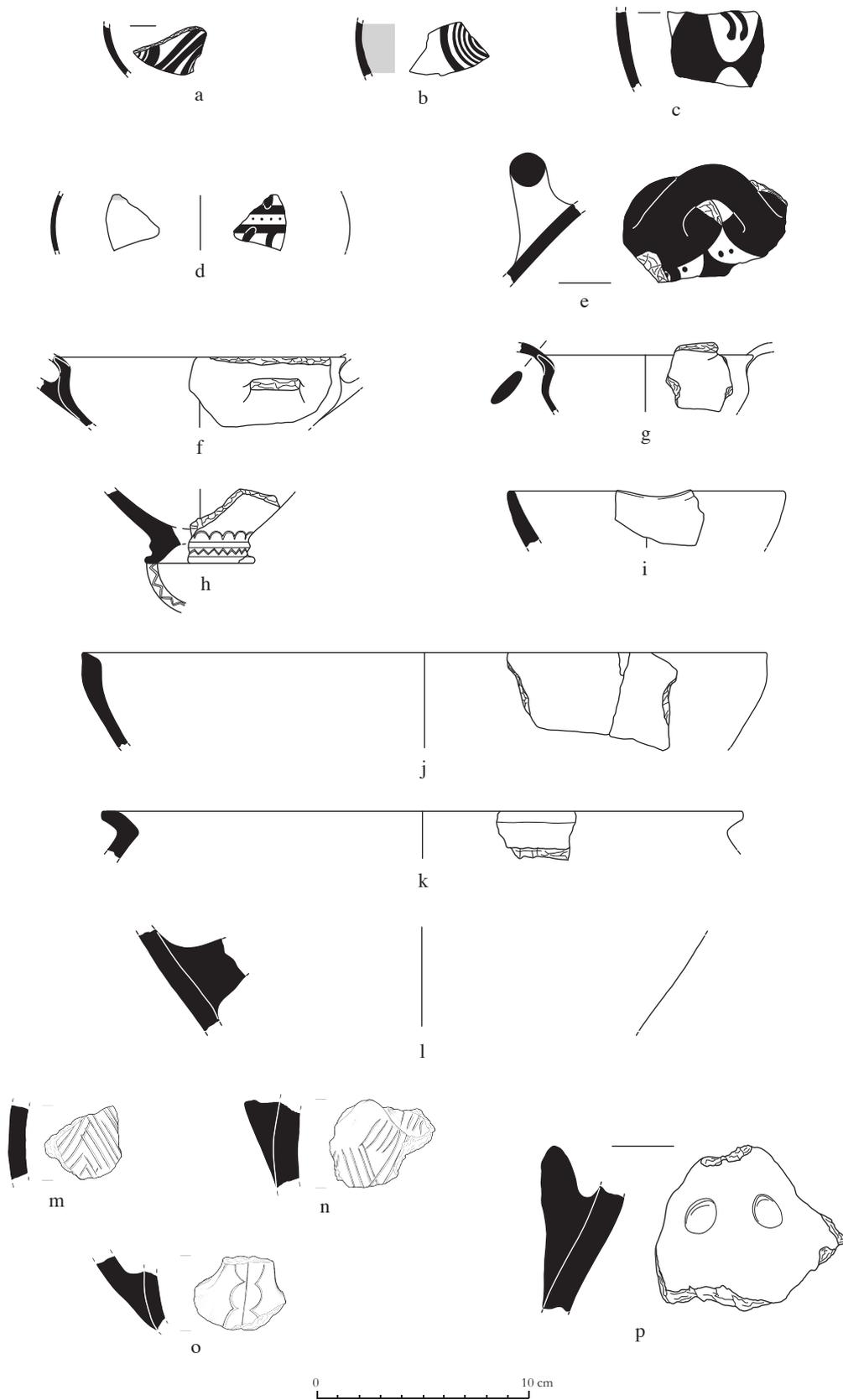


Fig. 14: Selected pottery fragments from subfloor SU 218 (drawings: A. Ferretti, N. Math, R. Pritz)

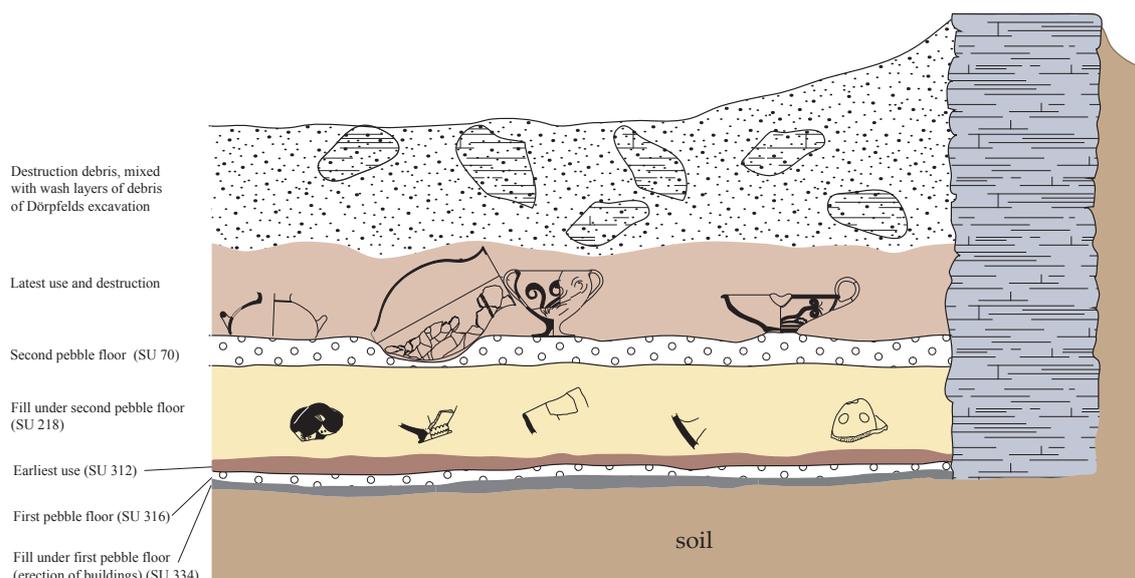


Fig. 15: Schematic graph of the stratigraphy in Ka 1 (J. Huber)

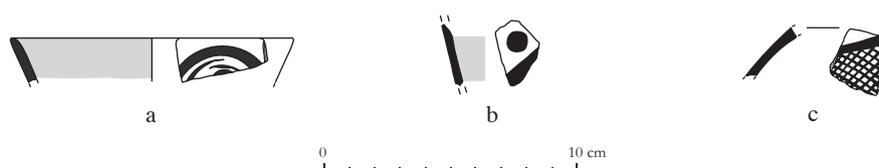


Fig. 16: Fragments of Mycenaean decorated pottery from the first floor level SU 312 (drawings: B. Eder, N. Math, R. Pritz)

Summing up the results of our stratigraphic study of the acropolis buildings, we can trace the erection of parts of an originally larger architectural complex on the acropolis of Kakovatos back to LH I/IIA and follow its use until its destruction in LH IIB.

Aggrandisement: The Western Terrace Wall

Just before the final destruction in LH IIB, the Kakovatos architectural complex underwent a period of aggrandisement and monumentalisation. On the western slope of the acropolis, a wall corner of massive blocks with an external face was built against the marly geology of the hill. This section, which lies about 7 m below the upper plateau, is characterised by intensive slope erosion and colluvial layers (Fig. 17).

A pit on the north side of the wall, which runs underneath it, contained an Ephyraean goblet, which provides a date for the construction of the wall within LH IIB.³⁸ The large wall probably served as a massive retaining wall for structures on the plateau above, which are now lost due to soil erosion. Its visibility and massive construction underline its symbolic character; its thickness suggests a rather tall structure. It is not part of a peripheral fortification wall, but a terrace wall with representative character, which perhaps supported a building on the upper plateau. (Fig. 18)

In terms of layout and orientation, the construction of this wall is related to the buildings on the plateau above it, and it was therefore likely part of an intentional overall plan. The poorly pre-

³⁸ Eder 2012, 94; Eder – Hadzi-Spiliopoulou 2016b, 316.



Fig. 17: The corner of the terrace wall on the western slope of the Kakovatos hill (photo: Kakovatos project, 2011)

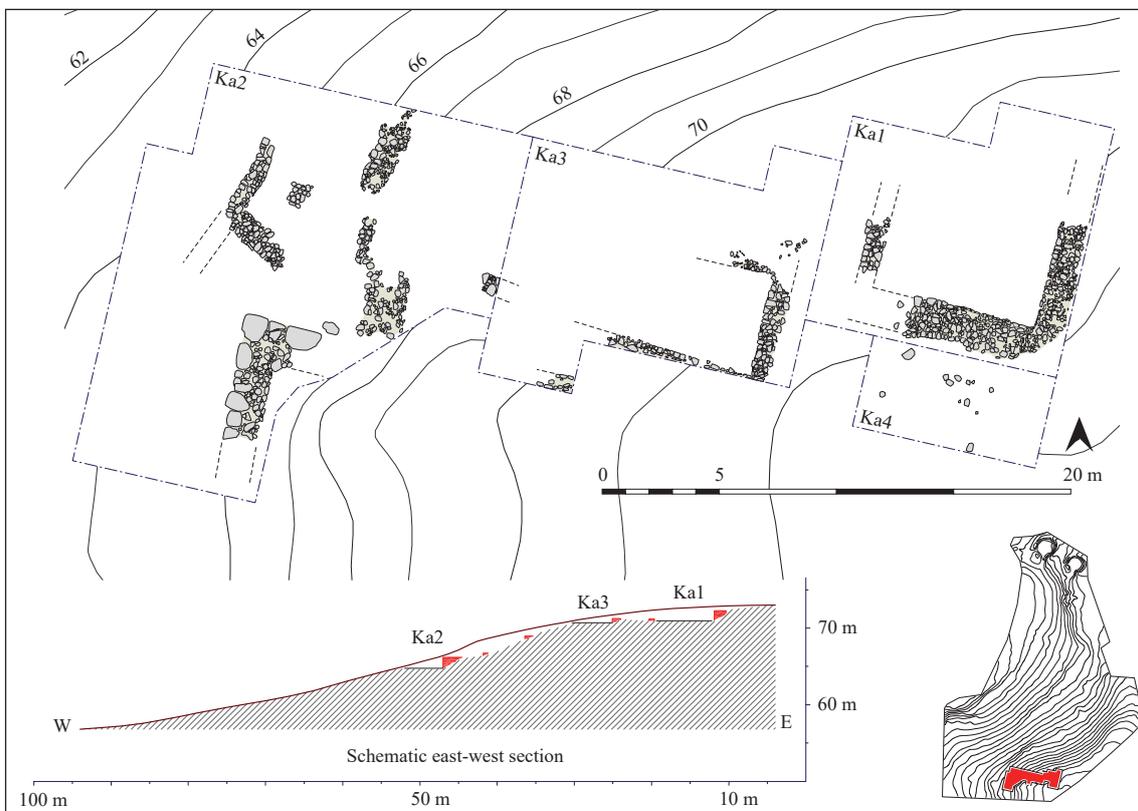


Fig. 18: Overall plan of the architectural remains in Ka 1, Ka 2, and Ka 3 (topography: Ch. Kurtze, plan: M. Börner)

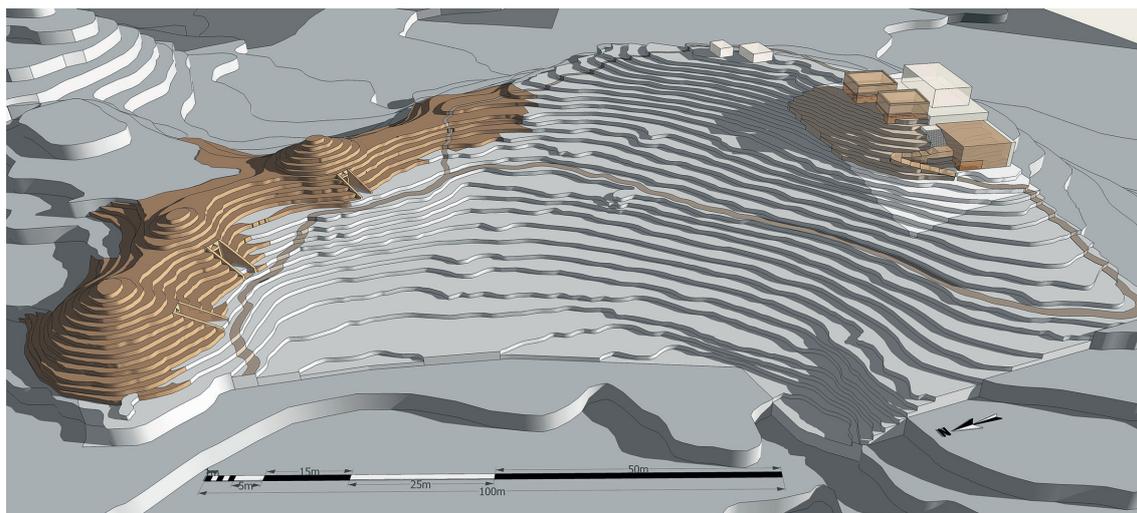


Fig. 19: Reconstruction of the early Mycenaean site of Kakovatos with residential buildings and three monumental tholos tombs (Ch. Diedrich, B. Eder)

served stretches of additional smaller walls further north probably also served as retaining walls and may be connected to a path leading to the buildings on the plateau. Based on the available evidence, the following three-dimensional reconstruction of the architectural complex of Kakovatos has been created (Fig. 19).

Built structures which have been documented during the excavation, as well as those features which can be safely restored, have been rendered in dark brown. Medium brown is the colour of more conjectural parts of the reconstruction that can be argued on the basis of the preserved structures. The exact appearance of these parts remains uncertain. Entirely hypothetical elements of the reconstruction have been translated into transparent white.

A ramp next to the great terrace wall probably led to the hilltop, while we suggest a quite hypothetical staircase for covering the last section of the slope. This part of the reconstructed ascent and the exact appearance of the slope behind the terrace wall must remain relatively uncertain. However, the indirect access via a ramp and subsequent steps and the multiple changes in the orientation of the path correspond generally with the access to Mycenaean representative buildings, as we know them from the later Mycenaean palaces.

Although much fell victim to soil erosion, it is clear that the two basement rooms lay next to an area that was supported by the large terrace wall on the lower slope (Fig. 20). Due to the massive character of the terrace wall, we consider it a reasonable assumption that the area just behind it on top of the hill once carried a building too. This notional construction of a central building has been rendered in transparent white in order to emphasise the hypothetical nature. The three tholos tombs stood at the foot of the acropolis, probably next to an ascending path, which lead to the western entrance area.

The Micro-regional Perspective

The building complex of Kakovatos apparently lay outside any settlement. Our survey has provided no evidence of a settlement or tombs in the immediate vicinity, neither on the slopes of the hill nor in the adjoining valley. Birgitta Eder has thus developed the working hypothesis that the tholos tombs and the architectural complex of Kakovatos always stood by themselves within the otherwise populated landscape. Just as the graves stood out among the tombs of the region by their size, expenditure in terms of construction and wealth of grave offerings, the building complex on the acropolis hill was set apart spatially, clearly visible above the Triphylian Plain.



Fig. 20: View of the plateau with building remains at the end of the excavation 2011: The area left to the storerooms may originally have carried an additional building (photo: Kakovatos project)

Even more hypothetical is the assumption that each of the two foothills adjoining the acropolis once also carried a residential building. The acropolis hill is the highest elevation in a group of hills and connected by cols with the two lower foothills in the northeast and the southwest. Two small pockets of sherds found during the 2009 survey may suggest some activity on these foothills in the Bronze Age. The three tholos tombs at the foot of the acropolis would be in accordance with such a perspective.

The comparison with the well-known Menelaion in Lakonia helps to support this interpretation. The representative building complex of LH IIB, the so-called Mansion 1, was equipped with a central hall and laterally adjoining rooms.³⁹ The Menelaion also lay on a ridge above the Eurotas Valley, and the immediately adjoining hilltops, the North Hill and Aetos respectively, produced also traces of activity in the early Mycenaean period. Although the three hills are located at a close distance of some 650 m to each other, they are clearly separated by cols.⁴⁰

In summary, the architectural development of the Kakovatos site suggests a major transformation in the LH I/IIA transition, when the tholos tomb(s) were built and an architectural complex with substantial storage capacities was erected. In LH IIB we can trace the enhancement of the complex through the building of an impressive retaining wall, which was possibly crowned by a representative building. Pottery from the storage areas and prestige objects from the tombs betray that the inhabitants were integrated into an Aegean network spanning at least the Peloponnese and the southern Aegean.⁴¹ Compared with the much more modest tombs in the region at Samikon and Makryisia,⁴² we can recognise this as strategies of early Mycenaean elites to elevate themselves symbolically, socially, economically, politically and spatially above the rest of the population.

³⁹ Menelaion/Mansion 1: Catling 2009a, 23–32; Catling 2009b, 11–15, figs. 12–16 (plans).

⁴⁰ For the topography, see Catling 2009a, 445; Catling 2009b, 1–4, figs. 1–4.

⁴¹ De Vreé, this volume; Huber et al., this volume.

⁴² De Vreé, this volume.

All social relations are spatial, and all spatial relations are social. The building and extension of the architectural complex and the construction of the tholos tombs transformed the built environment and the social relations between the social groups within the region of Triphylia alike. The construction of the site certainly served the expression of a political and social hierarchy, but also contributed to reinforcing asymmetrical relations and related spatial practices.

While Kakovatos emerged as the most important site of the region of Triphylia in the LH I–IIA period, LH IIB formed a turning point, when the fall of Kakovatos changed the political landscape again. There appears no evident successor to the site, which was destroyed and not rebuilt again.⁴³ However, sites on a medium level of hierarchy like Kleidi-Samikon apparently continued. This may reflect the expansion of another political power, i.e. probably Pylos, but this is an entirely different story.⁴⁴

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⁴³ However, during W. Dörpfeld’s excavations LH III pottery was recovered from the col, which separates the acropolis hill and the southwestern foothill. The character of this assemblage, which includes a great number of kylikes, is far from clear. Dörpfeld’s assumption that it may be related to a sanctuary rests on the find of a Mycenaean figurine (Dörpfeld 1908, 130–131). LH III material from the recent excavations on the acropolis is almost non-existent apart from two single fragments from colluvial layers.

⁴⁴ Cf. Eder 2011.

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Illustrations

Fig. 1: Excavations on the hilltop of Kakovatos in 1907–08 by W. Dörpfeld (in the background). The area in the photograph corresponds with the recent excavation areas Ka 1 and Ka 3 (German Archaeological Institute Athens, D-DAI-ATH-Triphylien-0065)

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Table

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