

STUDI MICENEI ED EGEO-ANATOLICI

FASCICOLO XXXVII



ISTITUTI EDITORIALI E POLIGRAFICI INTERNAZIONALI®
ROMA, 1996

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INSCRIPTIONS WITH HIEROGLYPHS AND LINEAR A FROM PETRAS, SITEIA*

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Five inscriptions in Linear A were found in the excavations at Petras – the Minoan Siteia – in the years 1990-1993¹: two tablets (PE 1 and PE 2), a pithos with an inscription on the rim (PE Zb 3), a pottery sherd from a closed vessel with an inscription (PE Zc 4) and a possible inscribed nodulus (PE Wy 5). The excavation also revealed one medallion with a hieroglyphic inscription (PE H 1). The two tablets were found in a surface layer, while the remaining inscriptions were found in sealed LM IB deposits – a period to which the two tablets most likely also belong.

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- * We wish to thank Dr. Lucia Nixon for correcting the English text.

Abbreviations others than those used in *AJA*:

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|----------|---|
| ASSA | <i>Aegean Seals, Sealings and Administration</i> , Ed. T.G. Palaima (<i>Aegaeum</i> 5), Liège 1990. |
| GORILA | <i>Recueil des Inscriptions en Linéaire A</i> , Vol. 1-5 (Études Crétoises 21, 1-5), Paris 1976-1985. |
| Politeia | <i>Politeia. Society and State in the Aegean Bronze Age</i> . Proceedings of the 5th International Aegean Conference, University of Heidelberg, Archäologisches Institut 10-13 April 1994. Eds. R. Laffineur and W.-D. Niemeier (<i>Aegaeum</i> 12), Liège 1995. |
| SM 1 | A. Evans, <i>Scripta Minoa</i> 1, Oxford 1909. |

¹ The general area of Siteia previously produced one Linear A inscription SI Zg 1 found on an oval stone cf. *GORILA* 4, 168-169. According to N. Platon, «Η αρχαιολογική κίνηση εν Κρήτη κατά το έτος 1957» *Kr. Chron.* 11 (1957), 340, the inscription is said to come from Hagia Photia.

THE EXCAVATION

*Introduction to the excavation at Petras*²

The region around the Siteia Bay has played an important role in the past because of its geographical situation: it is the natural link between western East Crete and the eastern extremity of the island. The rocky backbone of the island divides the land into a series of enclosed territories, combining inhospitable mountainous areas and the occasional highland plain. In prehistoric times the Siteia Bay area, from Chamaisi in the west to Cape Stavros in the east, forms a unit constituted by foothills along the edges of the containing mountains, a series of low hills closer to the sea, a large bay (today the plain of Siteia), and the coastal plain of Hagia Photia³.

Minoan cultural, political and economic geography suggested that there should be a significant site in the region, most probably near the four contiguous hills strategically located across the present-day plain. Apart from a brief and inconclusive visit by R.C. Bosanquet in 1901⁴, the area was ignored by archaeologists until survey activity in 1984 confirmed the existence of a major Minoan site.

Excavation at Petras began in 1985, within the larger framework of a systematic investigation of prehistoric occupation and settlement patterns in

² The author is grateful to the Greek Ministry of Culture for the opportunity to direct the excavation, and for the indispensable expropriations, and to the Institute for Aegean Prehistory for generous contributions towards the costs incurred from 1987 onwards in the excavation and study of the Minoan town of Siteia. The architectural plans were drawn by Ms Maria Klontza, engineer at the 24th Ephorate (House II) and Dr Michael Wedde, archaeologist of the Petras Mission (general plan of the central building on the basis of previous work by M. Klontza). All photographs were taken by M. Tsipopoulou, and developed and printed by Mr Giorgos Maravelias. Conservation of finds from Petras was carried out by Ms Stephanía Klouveraki (1989-1993), Mr Kostas Georgantakis (1990-1992), and Ms Kleio Zervaki (1990-1994). Supervision and documentation in the trenches which produced the inscriptions were the responsibility of the archaeologists Ms Anastasia Papacostopoulou (House II), Ms Eleni Chatzidopavlaki, Ms Louise A. Hitchcock (north-western sector and North Magazines), and M. Tsipopoulou (Central Court). A significant contribution towards the final version, particularly its English form, was offered by M. Wedde. For this, and for continuous help, friendship, and support since the 1993 campaign, I express my deepest gratitude.

³ Geological investigations undertaken by Professor M. Dermitzakis, of Athens University have determined that the Minoan sea-level reached to within five metres of the «cyclopean» fortification wall immediately below the road traversing modern Petras. The bay would have stretched westward as far as the Anemomilia hill, upon which has been discovered the Klimataria site. Tectonic movement and silt carried by the Stomion (Pandelis) river created the plain which was, still at the beginning of the present century, subject to inundation.

⁴ Cf. the brief report published in *BSA* 8 (1901-02), 282-285. The presence of a site on Hill I had been signalled by Sir Arthur Evans during his 1896 East Cretan voyage (unpublished notebook, information kindly provided by Prof. P.M. Warren).

the Siteia Bay area⁵. The objectives are to locate sites, define their relationship to the prehistoric coastline and to each other, as well as to understand the reasons for the abandonment of certain areas in different periods in favour of others. The site of Petras is situated on the middle of the four hills – Hill I – along the southern edge of the modern plain. Prehistoric human activity is attested on all four, but the main occupation was concentrated on a plateau of some 7000 m² and 40 m above sea level, and on the slopes below it. Two freestanding buildings, and a corner of a third, indicate, together with survey data, the presence of an urban centre, dominated by the large building on the plateau, palatial in architecture and function⁶.

Due to its nature, Petras has become the centrepiece of the ongoing investigations. The main focus is the Neopalatial period, and the evidence to date has permitted the suggestion that the site was the chief administrative unit in the Siteia Bay area, controlling the production and movement of goods from the outlying «villas» and farmsteads within its domain⁷. The small size of the complex could argue for a larger palatial centre situated further west, while the architecture precludes a designation as «villa»⁸. Evidence for an extensive Pre- and Protopalatial presence on the plateau, as well as LM III remains, necessitates parallel studies to be made for each of these periods⁹.

Description of House II

House II (figs. 1-2) is situated on a low terrace on the eastern flank of Hill I, just above what in Minoan times was a small, protected cove between

⁵ To date, three excavations and associated surveys have been conducted, at Aghia Photia, Petras, and Achladia. For Aghia Photia and Petras, see the bibliography in M. Tsipopoulou, «Έρευνα στον Πιετρά και τον Κόλπο της Σητείας», *ADelt* 41 (1986) Μελέτες, at 340, n. 1. For Achladia, see M. Tsipopoulou, L. Vagnetti, *Achladia. Scavi e ricerche della Missione Greco-Italiana in Creta Orientale*, Rome 1995.

⁶ The building is termed palatial on the basis of the following features: the plan, characterized by a central court, a monumental staircase, and large storage facilities (over 40 pithoi); the quality of the architecture, including ashlar blocks with mason's marks; fine polychrome wall paintings; written documents; cf. fig. 3, and description below.

⁷ M. Tsipopoulou, A. Papacostopoulou, «'Villas' and villages in the hinterland of Petras, Siteia», in R. Hägg (ed.), *The Function of the Minoan 'Villa'*, Acts of the 8th International Symposium at the Swedish Institute at Athens (1992), in press, argue the point at greater length.

⁸ The palatial nature of Petras will receive extensive treatment in a forthcoming paper by M. Tsipopoulou.

⁹ On the LM III period in general, and the particular interest of Achladia, the site of a Neopalatial «villa» and a Mycenaean-type tholos tomb, both excavated by N. Platon, and the latter recently published, cf. Tsipopoulou and Vagnetti (*supra* n. 5), and M. Tsipopoulou, «Late Minoan III reoccupation in the area of the palatial building at Petras, Siteia», in E. Hallager, B. Pålsson-Hallager (eds.), *Late Minoan III Pottery. Chronology and Terminology*, Acts of a Meeting held at the Danish Institute at Athens (1994), forthcoming. See also *infra* p. 17.

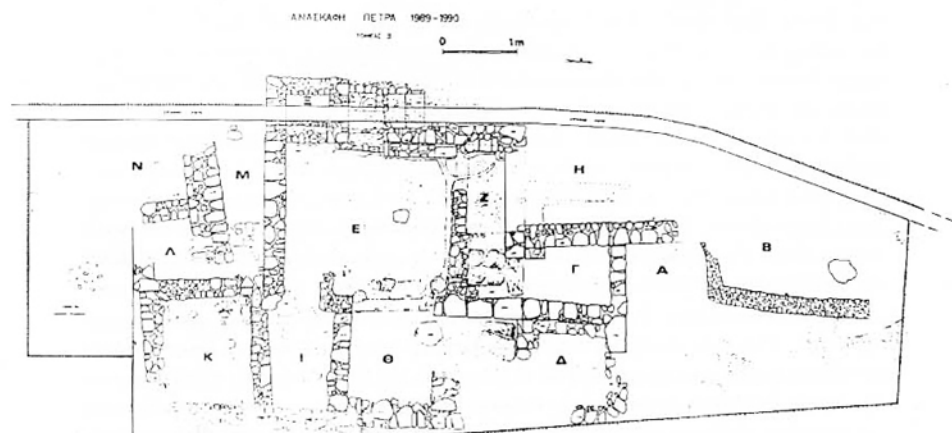


Fig. 1 – Petras: plan of House II 1989-1991.



Fig. 2 – General view of House II.

Hill I and its eastern neighbour, Hill II. It consists of 19 rooms and open spaces, covering some 250 m². Three Neopalatial phases are attested by the pottery: the foundation took place in MM IIIB, it remained in use throughout LM IA, and was destroyed during LM IB. In the final phase, the entire building was used as a workshop for the wool industry, with washing, dying and weaving taking place in the various rooms. The complex was excavated in 1989-91.

Its plan is dominated by the large, almost square Room E with a 2 m long stone bench in its north-western corner, and a column base and a circular hearth on its plastered floor. A staircase led out into the open area to the west of the building. During the third phase, drains and pits were cut into the bedrock in Room E, probably connected to the use referred to above. The south-west corner had a cupboard from which numerous cups had spilled.

The neighbouring room or corridor Z – possibly a paved light-well – contained a plastered stone bench, a foundation deposit comprising a dozen conical cups, a juglet, and some animal bones. Fragments of wall paintings had fallen from an upper storey.

Room I was a kitchen, producing more than 60 vases *in situ*, and having an adjacent magazine, K, with three pithoi. Areas A and B to the north, and M and N to the south were activity areas, producing two double *gournes* from M, tripod cooking pots, and loom weights, some of which, along with three conical cups, with the pictogram for cloth; these items could all have been used in the textile production. Some of the rooms (Z, Γ, H, M) were partially cut into the bedrock. A notable find is the 48 kg stone anchor fallen from the upper floor into Area Δ. The same area also produced a mould for the fabrication of a feline head, probably for attachment to a rhyton, and a similar head (though not from this mould).

The building was not destroyed by fire like the central palatial building, but perhaps by an earthquake, and then abandoned. The study of the relevant pottery should resolve the question as to whether a single event accounts for the break in human occupation in all areas of the settlement¹⁰. It is, however, possible to assign the stone and rockcut staircase, and Room E with its bench, to the final phase.

Description of the palatial building

The palatial building at Petras (figs. 3-4) is organized around a central court, orientated roughly north-south. The LM IA court measures ca. 6.5 x 18 m, and was originally enclosed by substantial walls on all four sides. At the

¹⁰ The pottery studied to date suggests that the LM IB destruction and abandonment of House II took place somewhat later than the IB fire at the palatial building.

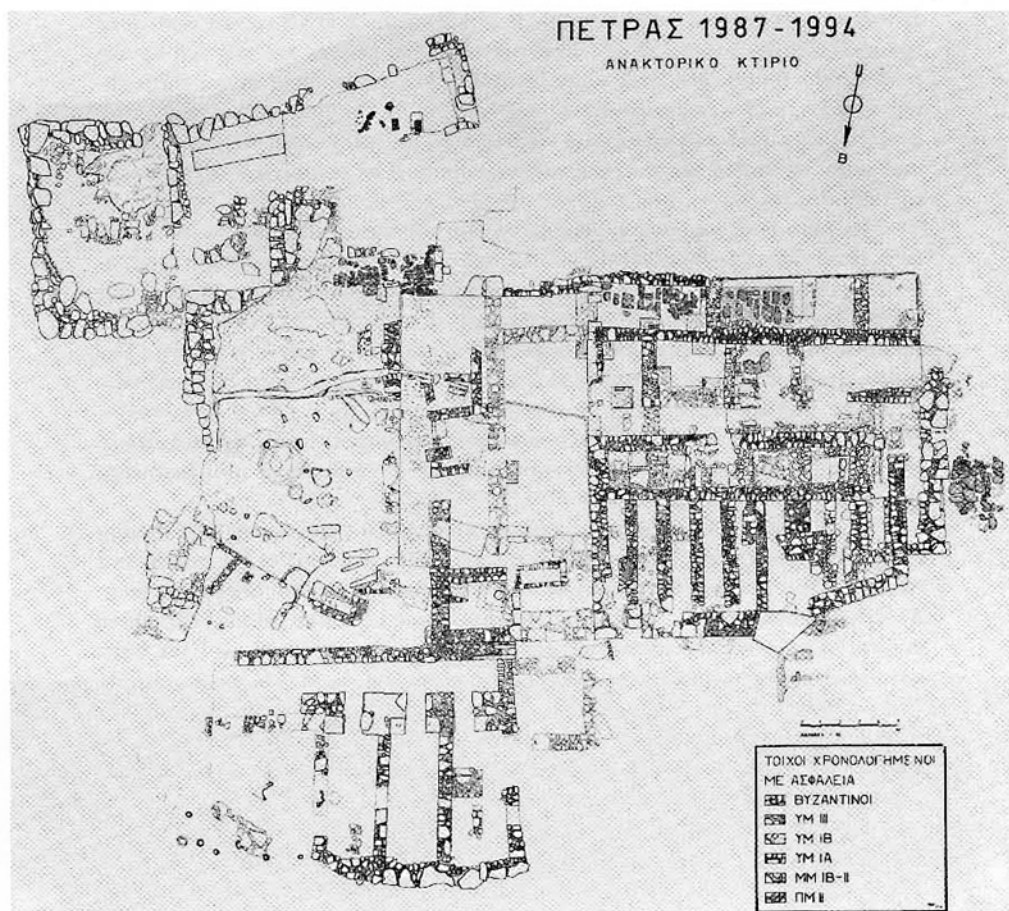


Fig. 3 – Plan of the palatial building 1987-1994.

western half of the north wall, a monumental staircase with a fine plaster surface functioned as the main entry into the building complex. In the LM IB phase, the central court was reconstructed to reduced dimensions, ca. 4.5 x 10 m. This was achieved by cutting just over 2 m from the south end, 3 m along the eastern side, which was now open, with alternating columns and pillars to create a stoa similar to that of the east side of the central court at Malia, and 5 m from the north side. The monumental staircase was no longer functional and was covered, thus creating an open space. In the LM IA destruction, which was not caused by fire, and which damaged the staircase, the area was



Fig. 4 – General view of the palatial building.

sealed by a massive deposit of conical cups, of which 16 contained pumice. To its immediate north a square room was added to the original plan, and used as a magazine.

In its LM IA phase, the monumental staircase formed the north-eastern end of the North Façade, which stretched at least 10 m (the north-western corner of the building being temporarily inaccessible due to the presence of an electricity pole). West of the unexcavated pentagon, the North Façade continues after a break, but at an angle of some 20 degrees to the south. This wall, of lighter construction than the North Façade, therefore meets the West Façade at an angle greater than 90 degrees. Furthermore, it does so by means of a thin wall forming an indentation.

Behind the North Façade, ten narrow corridor-like spaces, 1.10 x 6 m, blind at both ends, dominate the north-western sector. The first six spaces are regular, whereas the sixth interior wall is shorter and thicker (same thickness as the North Façade), and the subsequent four spaces shorter in proportion to the oblique angle of the north wall. A number of older and younger walls running in various directions confuse the picture to a certain extent. To date only partially excavated, they constitute a major problem in that the sherd material from the lower levels is exclusively Protopalatial.

In the sixth space, the 1993 campaign brought to light a major deposit of conical cups, pumice, animal bones, and a cup-shaped rhyton, all within a layer of burnt matter. Further investigation in 1994 removed the baulk and revealed the full extension of the destruction horizon, 6.5 square metres, covered with conical cups, restorable or fragmentary, various other cup types, sherds from larger closed and semi-closed shapes (both fine and coarse), a pedestalled lamp, decorated plaster fragments from wall paintings and a libation table, tools, pumice, all encased in a thick layer of ashes and animal bones. A first layer was documented and removed in 1994.

To the north of the North Façade, remains of a flagstone floor are visible, possible to be connected to a better-preserved floor immediately to the west of the West Façade (the so-called «West Court»).

The south wall of this area is one of four major east-west walls which enclose more than half of the built-up space. A first parallel wall, 2 m from the south wall of the parallel spaces, creates a long, narrow rectangle subdivided by a series of perpendicular walls.

The first such space immediately to the west of the central court is 2 x 2 m. It has no entrance from the court, from the east-west corridor, or from the rectangular area to the west of it. Excavation began in 1992, and tangible results were attained in 1993. The south-west quarter had a plaster floor which continued up against the walls. In the north-east quarter, there came to light fragmentary vases, including a pedestalled lamp and a fruitstand, both of Middle Minoan IB-II date, lying on a floor of smaller stones.

To the west of it, a further three areas were partially excavated in 1993. Since all finds, and at least some of the internal walls are protopalatial in date, it would appear that these areas were covered in neopalatial times. An EM III- MM IA floor was uncovered on a very restricted surface, necessitating further work to ascertain whether it continues in the other areas. In 1994 it was possible to confirm the early date of the deposits in the first of these areas, in which an EM IIB floor came to light.

The corridor has a column base in a niche halfway along its length. At its western end, there is a covered drain running north-south, which forms the eastern limit of a small workshop with a flagstone and plaster floor of high quality. Finds included stone tools, obsidian blades and flakes, a very thin sheet of silver, and many kalathoi.

To the south of the corridor there is a series of rooms or open spaces, 2.5 m wide. The western-most, 6 m long, contained fragments of painted plaster. The room is partially cut out of the bedrock which intrudes at both ends and along the northern side. The next room has no north wall, being open to the corridor along its entire 3 m length. The floor is covered with flagstones. To the east there is another room, 3.5 m long. As the north wall visible in the plan belongs to an earlier phase, it appears that the room was open. It contained four pithoi. The fourth and final room was likewise open to the corri-

dor along its 2 m length. It contained three large «stretch-amphorae» of a shape unique to Petras. The two rooms closest to the central court had a thick LM IB destruction stratum of burnt wood and ash.

Behind these four rooms lies a second series of narrow rooms. Access to the eastern-most is gained from the central court: 5 m long, and just over 2 m wide, it has a flagstone floor, and was found empty. In the destruction level, with traces of intense burning which rubified the walls, there appeared several ashlar architectural fragments, some with mason's marks.

No door has been found to the second room, 7 m long and 2.5-2.8 m wide, and divided into two parts by a wall pierced with a door. The larger part, 4 m long, has a gypsum and plaster floor, and a plaster-covered bench along its south and west walls. Remains of an earlier wall, and the finds, indicate that this space was constructed in Protopalatial times, and covered during the Neopalatial period.

Stratigraphical trenches dug in 1994 indicate that the crosswalls in this area are later intrusions. The flagstone floors of the first two rooms are Protopalatial in date, and part of a single rectangular space, probably partitioned in some manner.

The third and final room in the south-west corner has no entrance. It measures 2.5 x 3 m. Whereas its north and east walls are of substantial stone construction, the west and south walls are of orthostates, those along the west wall being no longer *in situ* but assured by the extant cuttings in the rock. The room contained fragments of a polychrome plaster libation table.

The orthostate wall continues from the south-west corner room eastward into the room with the bench and its annex. It was originally covered with plaster as indicated by some remains thereof on the visible orthostates in the two smaller rooms. In the room with the bench, the plaster is extant, and of high quality. Further excavation along the south wall is necessary, but it appears that the orthostates were backed by the cut rock. Apparently the building ends at this wall, but since the bedrock rises to the surface in this area, certainty cannot be attained.

The presence of remains of what appears to be a monumental entry at the south-eastern corner of the Central Court, to the south of the line created by the orthostate wall, could argue against such an interpretation. Three ashlar blocks forming the first, and part of the second step of a staircase running east-west, and a fine flagstone floor leading up to the staircase, form a curious adjunct to the plan. The area is poorly preserved, but as two pairs of doorjambs cut into the ashlar threshold indicate, the northern side had two doors leading onto the flagstone floor.

In the area to the south-east of the palace massive Protopalatial walls came to light in 1994. They appear to be part of a unit comprising the large rectangular building (4 x 15 m) to the south, as well as the eastern terrace wall, and the South-Eastern Bastion, both investigated in 1994.

In immediate connection with the flagstone floor leading to the south staircase, there are the remains of a wall running south-north, parallel to the east wall of the earlier central court. It appears to have an opening immediately next to the flagstone floor and the two thresholds. Further to the north it is broken by the major feature of the eastern part of the plateau upon which stands the palace, a rockcut drainage channel.

As excavated to date, the channel runs from the edge of the Central Court some 4.5 m from its south-east corner, where it disappears under a LM IIIA room, in an easterly direction to the terrace wall which constitutes the eastern edge of the plateau. Its width attains 0.30 m, its depth 0.40 m, and its length 7 m. A smaller and shallower channel enters it halfway through its present length.

The area to the immediate south and north of the channel shows no traces of construction. The bedrock has repeatedly been cut, creating *gournes* and shallow basins. Further work remains to be done before these features are fully understood but the substantial cutting at the northern edge of the bedrock produced pure EM IIB deposits, and suggests an early prepalatial industrial area, called the «Early Minoan activity area». The 1994 campaign identified this feature as an EM IIB house with two rooms, cut into the bedrock, and rebuilt at least once. Its eastern end was partially cut away when work on the Protopalatial terrace wall was initiated at this point. Later interventions have disturbed the stratigraphical sequence, LM III pottery being uncovered from a deep shaft descending well below the level of the MM and EM horizons. Five rockcut Byzantine graves were sunk into the bedrock in this area.

The northern sector of the plateau is covered by the North Magazines. In the LM IA period, the bedrock was cut back in line with the North Façade as bedding for a substantial wall forming the southern limit of the magazines. A 15 m long corridor gave access to five magazines, ca. 2.5 x 6.5 m (fig. 5). The doorways were formed by massive built pillars 2 x 2 m. The inside corners of the doorways were constituted by ashlar blocks 0.85 x 0.85 x 0.85 m. It is clear that this manner of construction was sufficient to support a substantial weight, indicating that these magazines, one storey lower than the rest of the palace, carried at least one further storey, if not two. A staircase in the western-most magazine supports this interpretation. As noted above, in the LM IB phase, an additional magazine was added in front of the monumental staircase, no longer in use. The removal, in 1994, of the modern retaining wall revealed the original Neopalatial north wall of the magazines, describing a slight curvature as imposed by the terrain.

The palatial building presents very interesting and sophisticated architectural features. Many architectural fragments are preserved, both *in situ* and fallen from upper floors, made of local and imported stone, and cut with bronze tools.



Fig. 5 – North Magazines.

The central building at Petras was destroyed by fire and abandoned in an early phase of Late Minoan IB. Evidence for a partial reoccupation in Late Minoan IIIA and B was found in both its eastern and north-western parts.

In 1991 a partially preserved early LM IIIB room, which had been destroyed by fire, was excavated in the area where the long narrow rectangular spaces are situated. On the floor two pithoi with typical LM III rope decoration and a cluster of cups, bowls and kylikes were found, made of the characteristic reddish orange Palaikastro fabric. The most interesting object from this area was a large fragment of a clay larnax with painted decoration consisting of double axes between horns of consecration. It is not sure whether this was a reused burial larnax or a clay chest intended for domestic use.

The 1994 campaign added a 6 m long wall running north-south on the Neopalatial wall between the ninth and tenth narrow rectangular space.

Three more LM IIIA rooms were uncovered in 1992 at the east side of the second central court, with a slightly different orientation, measuring 2.5 x 2.8 m, 1.6 x 2 m and 2 x 2.5 m respectively. Two of them preserved stone thresholds and door sockets *in situ*. The pottery (stirrup jars, amphorae, bowls and kylikes) were also made mainly of Palaikastro fabric.

Another building complex probably connected to the palace is situated

on a higher and smaller plateau to the south-west of the main excavated area. The remains of Neopalatial structures in this area probably reached two storeys in height. Fragments of plaster were preserved *in situ* on the walls. From this area a large quantity of pottery was uncovered as well as several stone vases, both complete and fragmentary. This area was excavated in 1988 and 1993.

Stratigraphical trenches and excavation of pits showed that the first occupation of this high part of the hill dates to EM II. Almost all pottery types of this period (Vasiliki ware, dark-on-light, grey burnished etc.) known from the Mesara area and also from East Crete were present at Petras, with both local and imported specimens. From the same early period came a large amount of obsidian (blades, tools, cores and flints) suggesting a possible workshop.

Further stratigraphical trenches in 1994 revealed that the EM II occupation covers the larger part of the lower plateau. They also showed that a MM IB-II occupation can be reconstructed on the basis of evidence from such areas where the soil cover is sufficiently thick to have protected these layers from the levelling undertaken when the central building was constructed. A number of trenches suggest that the core of the Neopalatial structure goes back into Protopalatial times.

The contexts of the inscriptions

From House II

PE Zc 4. Sherd with two painted signs, from the shoulder of a closed vase, probably a jug or stirrup jar. It was found on the floor of Room E, immediately in front of the cupboard (figs. 1 and 6), associated with the final use of the area. However, since it is a single sherd, the context – LM IB – can give no more than a *terminus ad* or *ante quem*. Some of the complete vases from this room are shown in fig. 7a-e.

PE Wy 5. Lump of clay with three signs. It came to light in Room K, the magazine (figs. 1 and 8), together with the pithoi and the pithoid vases. A fire from the kitchen area may have baked the «nodulus», which might therefore be dated to the LM IB period¹¹. Some of the complete vases from this room are shown in fig. 9a-c.

¹¹ Excav. inv. nr Π 89/189. Trench II.3, level 1α. Associated with pottery bag 189, excavated 24-7-89. Total 362 sherds, weight 4,95 kg., 327 diagnostic sherds (90.3%). Various wares from coarse, 60 sherds, to medium, 206 sherds, and fine, 20 sherds. Shapes include 18 fragments from pithoid jars, five from tripod cooking pots, ten from basins, 71 from conical cups, 30 from cups, and also a few MM fragments probably from mudbricks, namely 11 from tum-

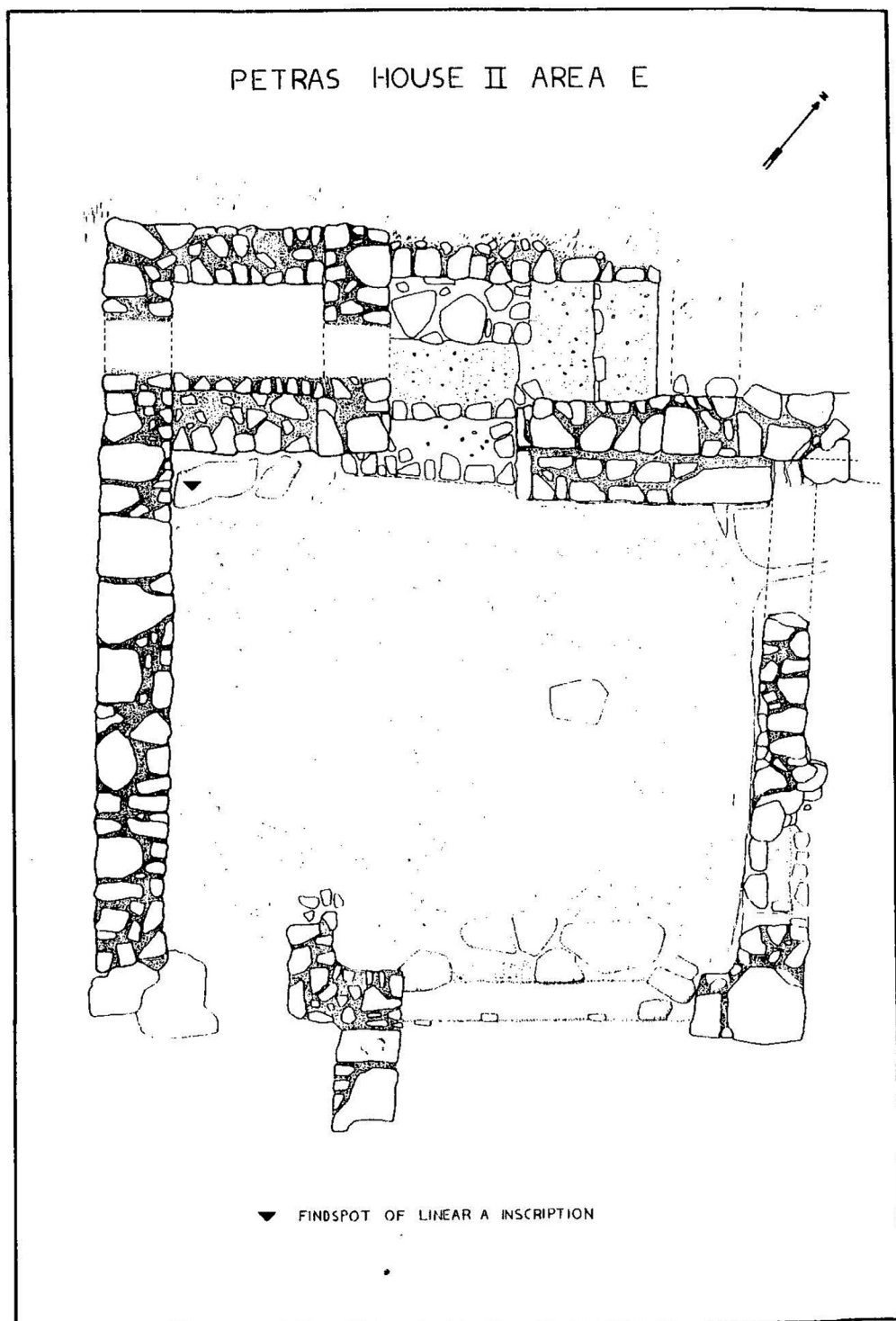


Fig. 6 – House II. Plan of Room E where sherd with two painted signs was found.



a



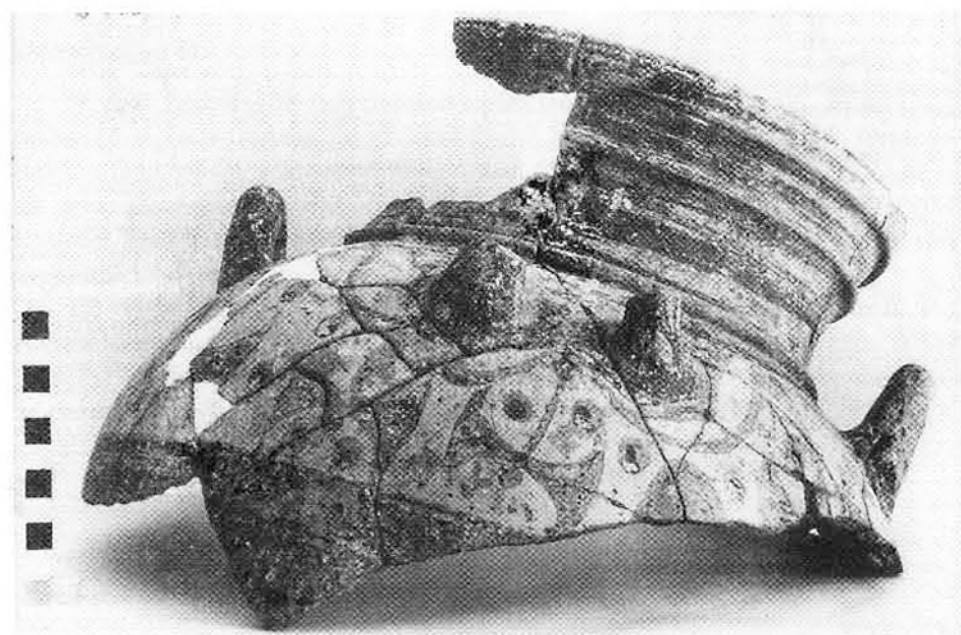
b



c



d



e

Fig. 7 – Vases from House II, Room E. a. Straight sided cup. b. Tripod cooking pot. c-d. One handled footed cups. e. Fragmentary «palace style» amphora, probably fallen from the upper floor.

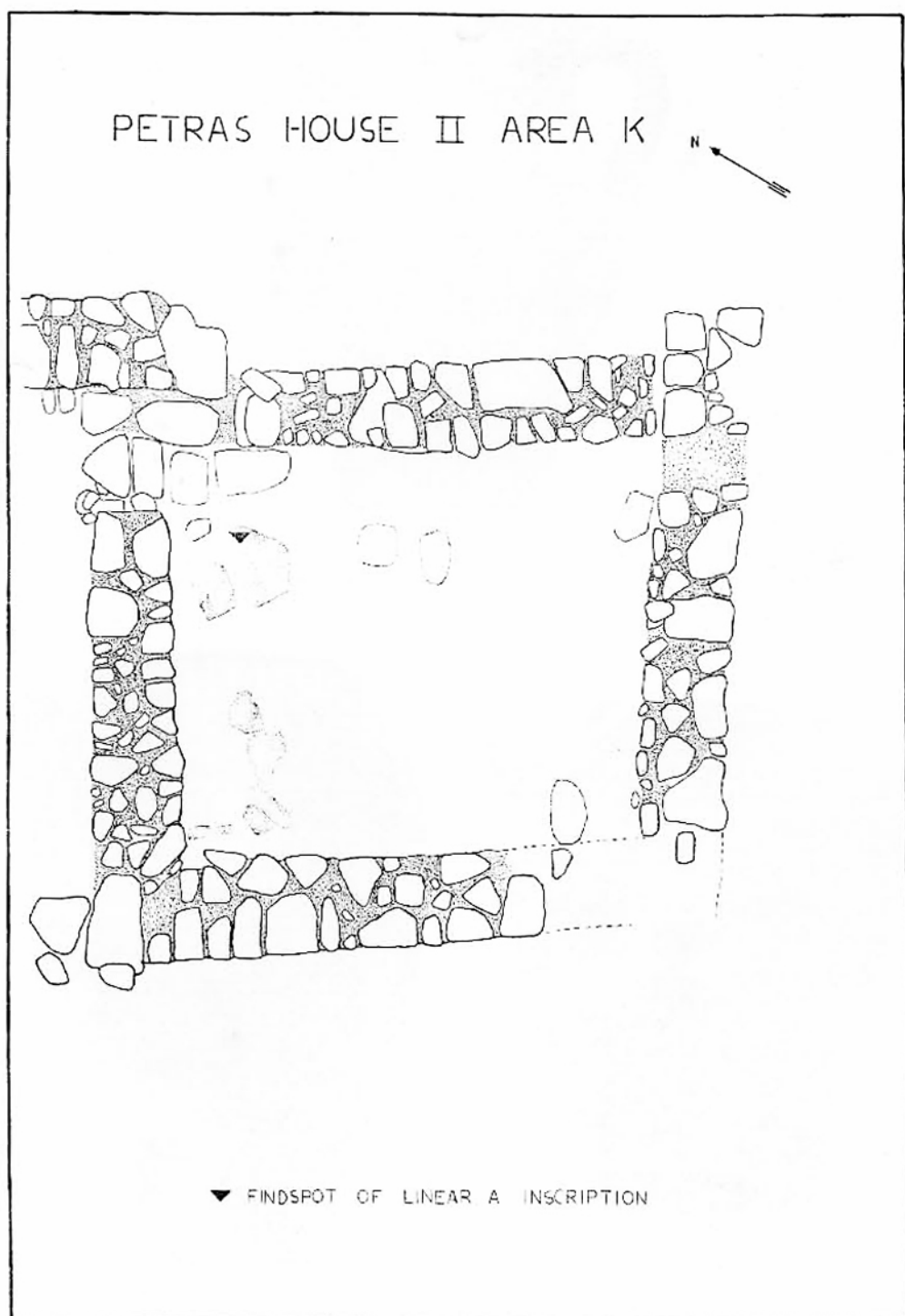


Fig. 8 – House II. Plan of Room K where the nodulus was found.



a



b



c

Fig. 9 – Vases from House II, Room K. a. Pithoid jar. b. Tripod cooking pot.
c. Wide mouthed jar.

From the palatial building

The two tablets, **PE 1** and **PE 2**, were found in a surface level at the southern end of the fourth parallel rectangular space in the north-western sector of the complex¹². The pottery was mixed MM (from mudbricks), LM I, LM IIIB, and Byzantine in date. The area has produced the remains of a LM IIIA2-B building, the so-called 'West House'¹³, but also three partially destroyed Byzantine graves. There is abundant evidence for the LM IB destruction of the site (burnt mudbricks, fragments of painted plaster) in the western side of the building. The tablets would originally have come from its second floor (see the comments below).

The pithos with the incised inscription on its rim, **PE Zb 3**, was found on the Central Court, immediately west of the northern column base¹⁴. The level showed definite signs of violent and fiery destruction, with little other ceramic material, chiefly fragments of conical cups, undecorated and largely undiagnostic.

The hieroglyphic inscription, **PE H 1**, originates from the east-west corridor of the North Magazines, immediately to the south of the eastern-most cubic ashlar block (fig. 10). It was found on the floor, among pithos sherds. At least four of the pithoi in the magazines were discovered in the corridor. The destruction layer throughout the magazines was filled with ash and burnt matter, pieces of mudbrick, and fragments of plaster, mostly red painted. The

blers and one from a carinated cup. 14 monochrome specimens and seven with dark-on-light decoration.

¹² **PE 1**; excav. inv. nr. Π 91/1941. Trench E1, surface level. Associated with pottery bag 328, excavated 01.08.91. Total 68 sherds, weight 2.25 kg., 28 diagnostic sherds (41.2%). 38 coarse sherds and 6 of medium ware. Shapes include six amphorae, seven tripod cooking pots, two conical cups. Also four fragments of Byzantine roof tiles. Six sherds with dark-on-light decoration, one with light-on-dark, five monochrome, one with polychrome decoration. Dated MM, LM IIIB, 12th-13th cent. A.D.

PE 2: Excav. inv. nr. Π 92/1075. Baulk E1-Δ1. Associated with pottery bag 51, excavated 02.07.92. Total 40 sherds, weight 0.4 kg., 19 diagnostic sherds (50%). Various wares, from fine (14 sherds) to coarse (21), including nine fragments of conical cups, one Byzantine amphora and one Byzantine bowl with *sgraffito* decoration. Dated LM I, LM III, 12th-13th cent. A.D.

¹³ Cf. the Danish meeting paper (*supra* n. 9).

¹⁴ The pithos was excavated in two successive campaigns in 1991 and 1992. Excav. inv. nr. Π 91/966. Trench Γ2β, Level 1. Associated with pottery bag 206, excavated 17-7-91. Total 48 sherds, 5.25 kg., 40 diagnostic sherds (83.3%). Various wares, from fine to coarse, including nine pithos fragments, three fragments of conical cups, one of a jug, and one from a MM tumbler, probably coming from a mudbrick. Dated LM I. Excav. inv. nr. Π 92/997. Baulk Γ1-Δ1. Red burnt level above floor of central court. Associated with pottery bag 69, excavated 3-7-92. Total 43 sherds, weight 0.7 kg., 24 diagnostic sherds (55.8%). Various wares, from fine to medium, including three fragments from amphorae, four from tripod cooking pots, 12 from conical cups, and two from jugs. One fragment with dark-on-light decoration, one monochrome. Dated LM I.

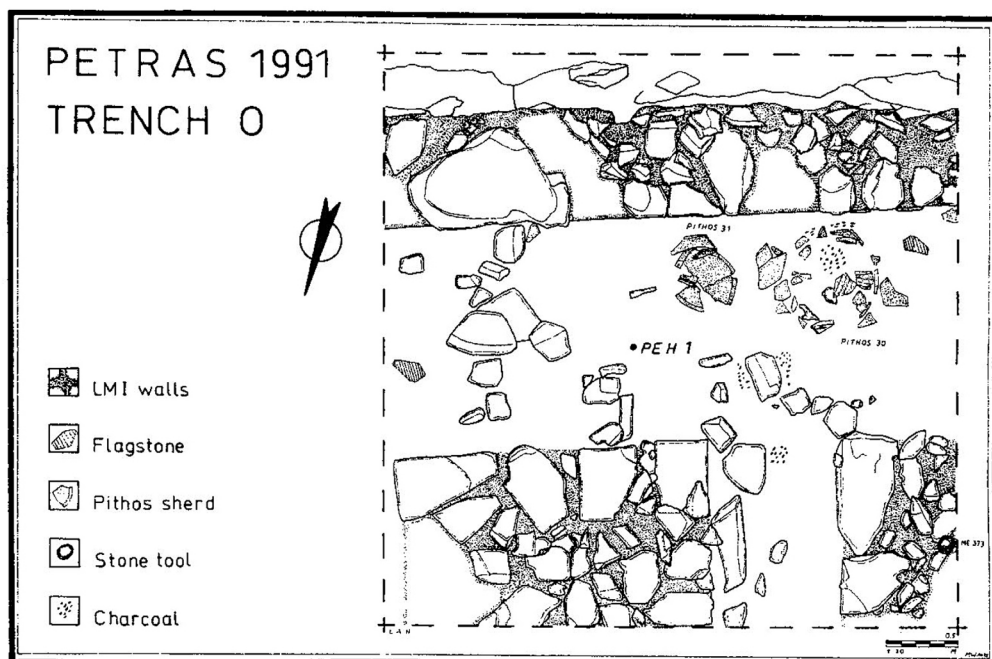


Fig. 10 – Palatial building. North magazines, corridor with find spot of hieroglyphic inscription.

deposit suggests a massive conflagration caused, in large part, by the combustible contents of the pithoi (results of analyses of the contents are still to come). The ceramic material found on the rockcut floor, and particularly in the corridor, is sparse and undiagnostic. Apart from the pithoi no other restorable vases were discovered. In this area, the conical cups are few in number.

Comments

The inscribed documents from Petras illustrate the inherent chronological problems faced by the excavator. After the Neopalatial destruction the site saw limited reoccupation in Postpalatial times, the focus of human activity having shifted to Hill II. The site was abandoned in LM IIIB, with a possible LM IIIC phase, before lying largely untouched until Byzantine times, when a cemetery was established on the plateau. Thirty-three graves, and an ossuary, have been excavated, some of the former situated immediately on or cutting into the Minoan walls. The ossuary was dug so deeply into Minoan layers that it reaches Protopalatial material at its base. Whether a chapel is to be associated with the graves cannot be determined since no architectural frag-

ments have been uncovered, but it is known that during the Turkish occupation substantial amounts of stone were removed from the site. In the previous century a vineyard was established on the plateau.

These activities have resulted in extensive displacement and mixing of the various fills. In many areas of the site, there is a thick surface layer extending down to bedrock (on the eastern flank, in particular), exhibiting no distinct levels, and containing mixed ceramic material of Neopalatial, LM III, and Byzantine date. Elsewhere, the surface layer is thinner, overlying the destruction horizon. Thus, Byzantine sherds have been uncovered right on the second floor of the Central Court, and elsewhere in contexts in which undisturbed Minoan material would have been the norm, had not this turning of the soil taken place. There are also pockets of uncontaminated, but unsealed, material in various parts of the site. For instance, the levels below the findspots of the two tablets from the main complex are free from Byzantine intrusions, suggesting that agricultural activity dredged the tablets up from a higher Minoan layer: hence the suggestion that they originate from the upper floor.

In addition, the two most significant destruction deposits, that on the monumental staircase at the north end of the Central Court, and that in the sixth and seventh parallel rectangular spaces, are dominated by massive numbers of conical cups, or otherwise undecorated wares (amphorae, tripod cooking pots, bridge-spouted jars, cups, etc.), present in mere fragments. The exact moment of each destruction requires further study before it can be determined, but the absence of characteristic later LM IB ware suggests that the final one did not take place in an advanced phase of LM IB, a time when Petras appears already to have been abandoned.

M. T.

THE INSCRIPTIONS¹⁵

PE 1 (Excavation no: P 91/1941; Mus. no: 6606). Fig. 11.

Linear A tablet, almost completely preserved. Clay red greyish, gritted with several small sand grains – otherwise fine. All surface well polished. Tiny deep hole (at least 0.7 cms) at lower edge. Very faint traces of papillary lines on both sides. Squarish in section and rounded corners. Inscribed with Linear A on obverse with a medium fine stylus pressed deep into the clay. H: 9.8; W: 6.1; Th:1.05.

¹⁵ Unless otherwise stated drawings and photographs of the inscribed material are by E.H.



Fig. 11a – PE 1. Photo and facsimile, scale 1:1.

The inscription is almost completely preserved in five lines. It consists of four sign groups, two ideograms repeated twice and numerals:

.1 AB 10-77-27 AB 08-09-41-
 .2 06 AB 81-03-53 AB 100/102 50[
 .3 A 574 26 A707 AB 38-77[
 .4 AB 100/102 72 A 574 30
 .5 6

.1 U-KA-RE, A-SE-SI-
 .2 NA, KU-PA-RI HOMO 50[
 .3 GRA+PA 26 A707 E-KA[
 .4 HOMO 72 GRA+PA 30-
 .5 6

Comments

All signs are clear and easy to read, although few of them have peculiarities. AB 10 (U) has the small vertical stroke formed as a «hook» turning right, which is otherwise found only on a few of the Hagia Triada tablets, with possibly the best parallel on HT 95a.5 and b.5. AB 77 (KA) and AB 27 (RE) are simple types found in all archives. AB 08 (A) is of the simple classical type with a long central stroke which is also found in almost all archives. AB 09 (SE) belongs to the relatively rare type consisting of an AB 01 (DA) to which is added four vertical strokes. This variant is mainly found at Hagia Triada and rarely at Khania and Zakro, while it is the most common variant in Linear B. AB 41 (SI) is characteristic with its horizontal line added very low down as is found a few times at Hagia Triada (Wa 1241-1245) and Khania (5, 6 and 7). AB 06 (NA) is in principle of the very simple type stroke, dot, stroke mainly found at Hagia Triada, but the Petras specimen does differ from the others in that the dot is in fact two half circles as is very often seen in Linear B, but very seldom in Linear A. AB 81 (KU) is unusual with its strict horizontal position – this also recalls the later Linear B version of the sign. AB 53 (RI) is also unusual having both an upper «eye» and a small horizontal stroke, a phenomenon which is also usual in Linear B. AB 38 (E) is of the type with a full upper horizontal stroke while the lower one is broken into two, as is the most common at Zakro and found also once at Khania. The ideograms are both unusual. A 574 (AB 120 + 03 [GRA + PA]) is written not with two upper half circles, but rather as a closed AB 27 (RE), as also at Archanes (ARKH 3a+b). The last ideogram is unmistakably AB 100/102 with its two feet, the small stroke marking the head and «box» leaning backwards; but it is rendered in a way which has no parallels in the previously known Linear A.

This brief survey of the palaeography of the tablet PE 1 clearly shows that the tablet does not fall into the tradition of any particular archive with parallels at Hagia Triada, Archanes, Zakro and Khania. On the contrary the

unique signs NA, KU, RI and 100/102 indicate an independent scribal tradition which has pointers towards Linear B.

All the sign groups are unique, i.e. found for the first time in the corpus of Linear A, unless KU-PA[on KH 29.2 should prove to be from the same sign group. None of the sign groups is found in Linear B.

The tablet as such must probably be understood to have had an «introduction formula» in two «words». Thereafter follows twice, a sign group, the ideogram 100/102 + numeral (HOMO?)¹⁶ and GRA+PA? + numerals. It is extremely tempting to interpret the tablet as a record of disbursements of grain to or (less likely) collection from two different groups of people. Most interesting to note in connection with the last entry (which is completely preserved) is, that for each person 1/2 unit of «grain» is registered. It would be very tempting to see two parallel entries on the tablet. If so, the 26 A707 in l.2 can only be read 26 1/2, and the number behind AB 100/102 in the same line should thus be restored to 53, adding the three units below the last 10. This is not the usual way to place the units, but it is perfectly possible, and a parallel is found, for example, on ZA 4a.4.

This is not the place to embark on a major discussion on the fractional signs of Linear A, but the suggested reading of A707 = 1/2 does require some comment. First of all we have noted that A707 is the most common of all fractional signs occurring 93 times in the corpus of Linear A. The second most used is A704 which occurs 52 times, while the third is A732 which occurs alone in 25 cases. In any book-keeping or administration one would expect «1/2» to be the most frequently used fraction, and the second most used would be half of the half «1/4», while it would not be unreasonable to think that 3/4 would be the third most frequent fraction. As others have pointed out before us A732 consists of two elements A707 + A704 ($1/2 + 1/4 = 3/4$)¹⁷.

How would this suggestion fit the few complete tablets with KU-RO and fractional signs? HT 104 would benefit from this interpretation since the addition in l.5 would now be correct. HT 13 might also benefit from this interpretation. We think that 5 A707 in l.2 is complete, while we feel convinced that the signs line .4-5 instead of 18 must be read 17 A707; thus the sum 130 A707 would be correct. Finally HT 9a. If the suggested reading of the three fractional signs are correct the sum of the units of wine on side a should have been 31 and not 31 A732. The scribe on this tablet, however, made a mistake since he/she first added the sum to 30 A732 and then afterwards added a 1

¹⁶ HOMO is our suggestion after studying J.-P. Olivier, «Une rondelle d'argile d'Haghia Triada (?) avec un signe en Linéaire A» *BCH* 107 (1983), 75-84.

¹⁷ Only with the difference that A704 has been by some considered the «1/2» and A707 the 1/4, cf., for example, W. C. Brice, *Inscriptions in the Minoan Linear Script of Class A*, Oxford 1961, 7-8, and Table 2.

behind 30¹⁸. Might the scribe after this correction regrettably have forgotten to erase the (incorrect?) A732? After the discovery of **PE 1** we are prepared to believe so; but the crucial part of the Petras tablet is missing and we have no proof. Emmett L. Bennett's warning to be cautious (also concerning the reading of these HT tablets) is still valid¹⁹.

PE 2 (Excavation no: P 92/1075; Mus. no: 9103). Fig. 12.

Linear A tablet, central part in full width. Clay dull brick red, brownish; roughly gritted with white specks and larger lumps of kouskouras(?) and pebbles. Concave rounded sides. In stead of the usual polish this tablet seem to have a very heavy, thick slip. Surface grey, burnt dark at areas. No papillary lines, but imprints from pressure of fingers, three on the left side and one on the right side. If these imprints were from the scribe, the person was left handed. Few scratches on reverse. Obverse inscribed with four lines in Linear A with a fine stylus not pressed very deep into the clay. H: [7.0]; W: 8.1; Th, at centre: 1.7, at edges: 0.8.

The inscription consists of at least eight sign groups followed by numerals and/or fractional signs:

sup. mut.

- .1 *vest* [
 .2 3 A702, AB 26-39-*vest*]-A 305-AB 73 I A705
 .3 AB 08-A 325-AB 17 A704, AB 08-53-03 A704, AB 16-16-01
 .4 A707, AB 05-13 A702, AB 05-49-27 I
 .5-6 *vacat*

inf. mut.

- .1 *vest*
 .2 3 *720 RU-PI-[....]-*305-MI I *705
 .3 A-*325-ZA *704, A-RI-PA *704, QA-QA-DA
 .4 *707, TO-ME *702, TO-*49-RE I

Comments

PE 2 is very different from **PE 1**. The physical appearance, section, clay and slip are different, and so is the scribal tradition. When the same sign is found on the two tablets they are executed differently (fig. 16). This applies for example to AB 08 (A) which is here rendered in the relatively unusual way with a small upper horizontal stroke as is found at rare occasions at Hagia Triada, Khania, Palaikastro, and Skhinia. Most of the signs on this tablet will find parallels in the Hagia Triada material, for example, the wide flattish

¹⁸ *GORILA* 1, 19.

¹⁹ E.L. Bennett, «Linear A Fractional Retracting», *Kadmos*, 19 (1980), 12-23.

upper part of AB 26²⁰, the closed version of A 305, the unusual A 325, the simple form with a long upper stroke of AB 53, the full half circles at the side of AB 16, and the three legged version of AB 49. The very oblique first stroke of AB 73, however, can be paralleled only at Knossos (KN 22c) where the bent lower stroke of AB 39 is also found. We believe, however, that this tablet is more in a Zakro tradition than anything else. Parallels to several of the signs are found in the Zakro material: AB 26 and 39 on ZA 4, same version of AB 08 (A) on ZA 10, and AB 16 on ZA 14. The main link between this tablet and the Zakro tradition is the fractional signs, provided they are correctly interpreted as such. On three Zakro tablets ZA 6, 11, and 18 – as the only other place in Crete – we find fractional signs executed with two or three straight strokes in stead of one curved. These signs are also reversed compared to the normal way of rendering them. Thus we venture to suggest that the last sign in l. 2 A705 (reversed) and that the two «7's» in l. 2 are A 704, and that they are executed in a special East Cretan tradition. Furthermore it should be noted that the neat tidy way of inscribing the tablet has, as far as we know, only one parallel: ZA 20. We feel that those two tablets may have been written by the same scribe – the two signs they have in common (RU and MI) would not be incompatible²¹, but too few signs for comparison are preserved to argue the case. The tablet is badly mutilated at the beginning of the third and fourth line for which reason the reading of AB 17 and AB 13 must remain uncertain.

The tablet or inscription as such is most likely to belong to the type with an introductory heading, then a transaction sign and a single ideogram, followed by entries each with numerals and/or fractional signs as for example ZA 8, HT 6, 8, etc.

As with PE 1 all sign groups are new, i.e. found for the first time in the corpus of Linear A. None of the sign groups is found in Linear B. Worthy of note are the two sign groups in .4, both starting with AB 05 (TO), a relatively rarely used sign which was not previously known as the initial sign in a Linear A inscription. A 325 and AB 49 are also seldom used signs.

PE Zb 3 (Excavation no: P91/966+967+P 92/997; Mus. no: 9102). Fig. 13a-b.

Pithos, almost completely preserved. Undecorated. On upper part of rim a completely preserved Linear A inscription. H: 1.095, Ø of rim: 0.575, Ø of base: 0.32.

²⁰ On HT 7, 8 and 128.

²¹ Also the unusual way of rendering the PA on PE 1 recalls the way the TE is executed on ZA 20.

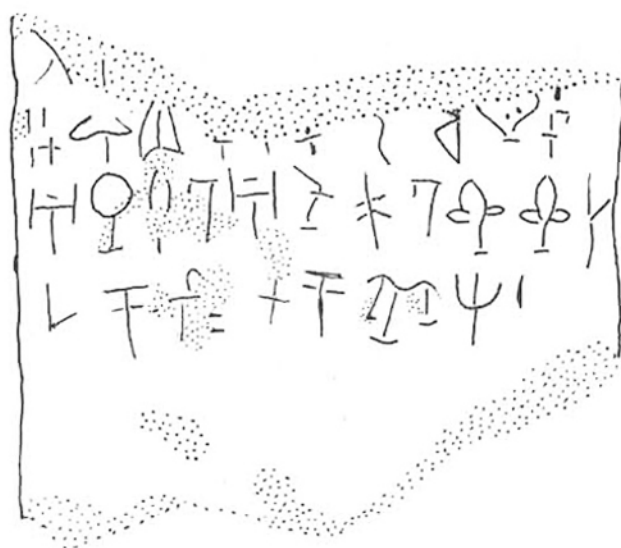
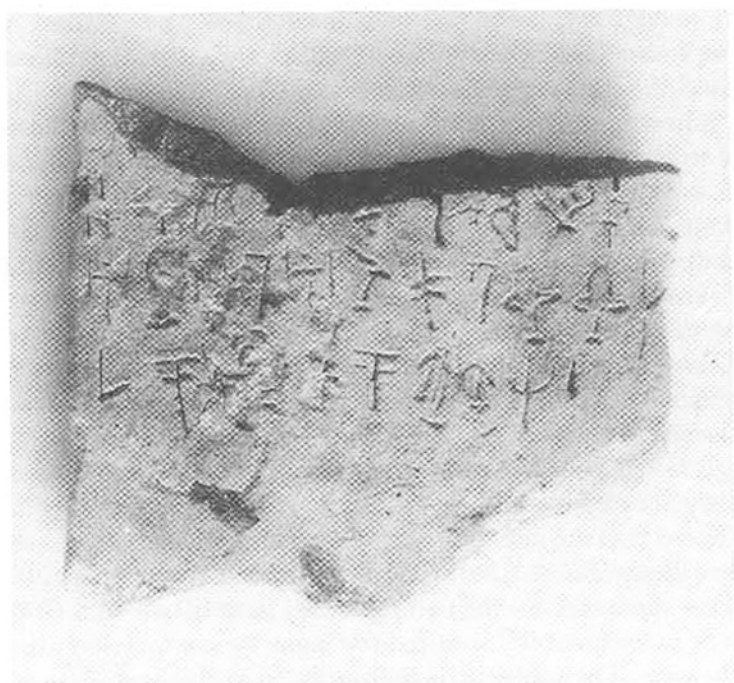


Fig. 12a – PE 2. Photo and facsimile in scale 1:1.

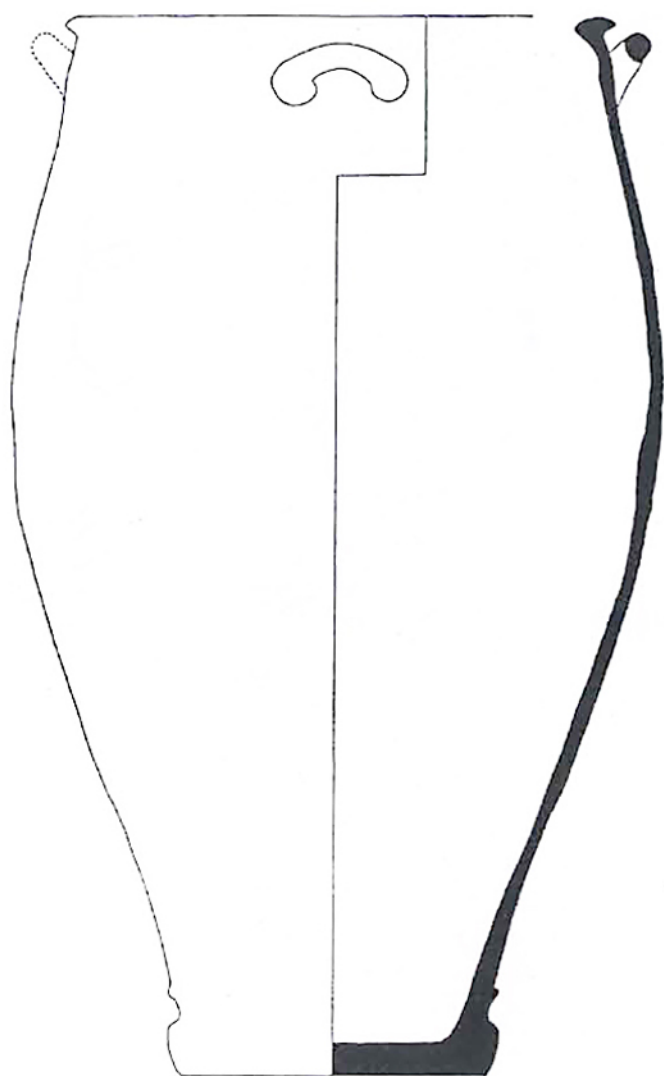


Fig. 13a – Pithos 9102 with inscription on top of rim. Scale 1:8.
Drawing I. Psikarakis.

The inscription is completely preserved and consists, as it appears, of two sign groups and a ligatured ideogram:

| | | |
|-------------|----------------------|-----------------------------|
| AB 08-77-60 | AB 67-59-06-41-57-09 | AB 100/102+17 ²² |
| (A-KA-RA | KI-TA-NA-SI-JA-SE | HOMO+ZA) |

²² What on the photograph appear to be a horizontal stroke behind the last sign is not an incision, but the imprint from a small organic remain – fragment of a chaff or the like. Thus the inscription has no numerals.

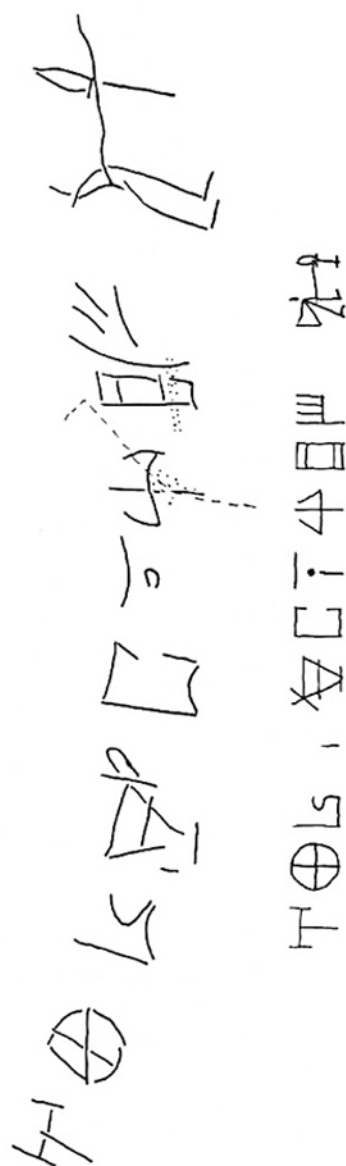


Fig. 13b - PE Zb 3. Photo and facsimile in scale 1:1.

Comments

Two different scribes were at work on this inscription. The first eight signs (A-KA-RA, KI-TA-NA-SI-JA) of approximately the same size and with the same distance between the signs were done by a scribe holding the stylus at an almost 90° angle towards the rim, while the last sign in the second sign-group (SE, which is too close to the JA) and the «ideogram» was done by a different scribe holding the stylus at an almost 45° angle towards the rim. There are in our opinion no clear signs of erasure, and it seems that a second scribe simply added to the work of the first scribe.

Palaeographically the first eight signs of the inscription on the pithos rim seem to fall within the tradition of **PE 1**, since the common signs are similarly rendered (apart from the fact that the scribe on the pithos rim forgot the lower stroke on the AB 06 (NA) *sic!*). Also on this inscription we note features which are more reminiscent of some Linear B hands than of Linear A as, for example, the lower bent stroke on both AB 59 (TA) and AB 60 (RA) which is also turned in the Linear B position and not the more usual reversed version found in most Linear A inscriptions. The AB 67 (KI) on the other hand is the reversed version compared both to Linear B and most of those of Linear A. The ligature AB 100/102+17 of the second scribe is unique, although the way of rendering the main sign is closer to the way found on **PE 1** than on other inscriptions. AB 17 has not previously been found ligatured to another sign.

As with the remaining Petras inscriptions the two sign groups on the pithos rim are also new in the corpus of Linear A. It should be noted, however, that the pithos inscription **HT Zb 159** ends with the same three signs (SI-JA-SE) as does the Petras inscription.

PE Zc 4 (Excavation no: P 90/269; Mus. no: 9191). Fig. 14.

Closed vessel, body or shoulder fragment. Clay is fine, well fired, and light brown greyish. Slip as clay. Paint: dull dark brown colour. Probably an import. Decoration: two signs in Linear A. H: 3.8; W: 3.0; Th: 0.3-0.4.

The inscription is only partially preserved and reads:

- | | | | |
|----|------------|----|------------|
| 1. |]AB 57-41[| or |]AB 08-57[|
| | (])JA-SI[| or |]A-JA[) |

Comments

As an inscription this sherd should preferably be read]A-JA[, but the first reading is for two reasons most likely to be correct one, considering the artifact as a sherd from a complete vase. Firstly the sherd is thicker upwards where it starts to bend towards the neck of the closed vessel. In this ceramically most probable position (fig. 14a) the inscription must be read]JA-SI[, and this seem confirmed by the paint. A brief survey of many vases and sherds in the Khania museum showed in most cases that when paint is un-

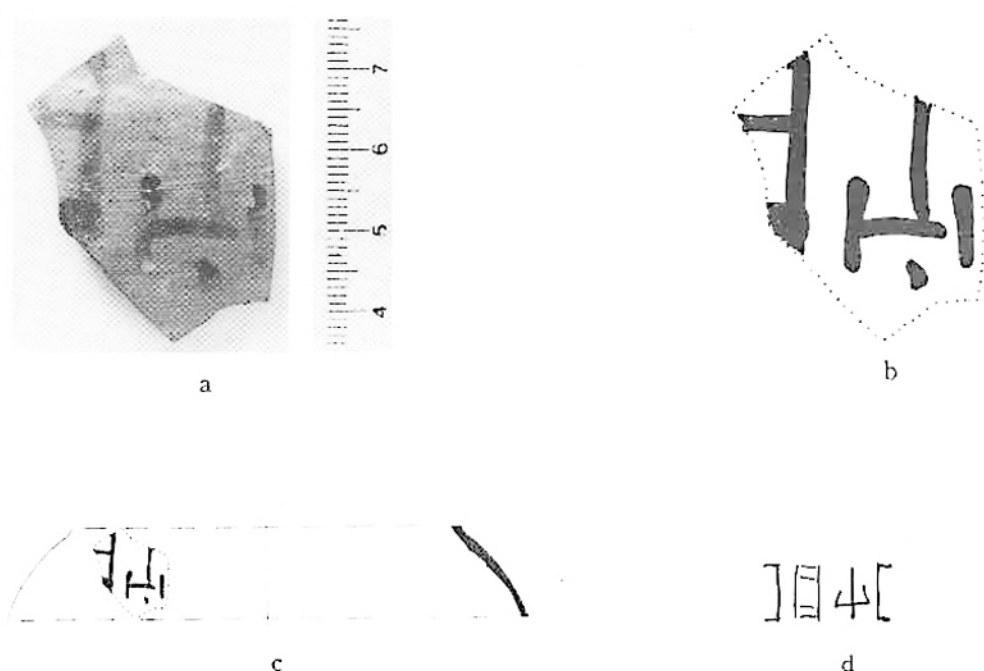


Fig. 14 – a-b. **PE Zc 4**. Photo and facsimile in scale 1:1. c-d. Profile drawing of closed vessel 9101 and facsimile of the inscription in scale 1:3. Drawing I. Psikarakis.

evenly applied to the surface of a vase the main part remains where the brush is first put to the surface of the vessel. If this also applies to **PE Zc 4** there can be little doubt that the second sign must be **AB 41 (SI)**.

The horizontal part of the sign is, in this case, placed extremely low – even lower than we find it on **PE I** – and the wings are rather open and projecting also below the horizontal stroke. These features are rather unusual, but with parallels to the **SI** on **HT Wa 1194** and **1216** the suggested reading is plausible and fits the *sherd*. Read this way the inscription can only be Linear A while read in the other position the signs might also have been understood as Linear B – were it not for the **LM I** date.

The combination **]JA-SI[** is found three times in the corpus of Linear A. On **KN Zb 4** we find it as a sign group as part of a longer inscription on a pithos. On an offering table from Palaikastro (**PK Za 12**) the combination is found as the ending on a long inscription on side c; and finally the combination occurs on a tablet from Phaistos (**PH 7a.4**) as part of a sign group.

While painted inscriptions on pottery are common in Linear B they are rare in Linear A. The Petras sherd is only the fourth example known. The others are the two conical cups from Knossos (**KN Zc 6** and **7**) with long inscriptions on the interior, while the third is a fragmentary inscription (**PK Zc 13**) on the interior of a cup from Palaikastro.

PE Wy 5²³ (Excavation no: P 89/189; Mus.no: 8606). Fig. 15.

Nodus? Almost completely preserved clay lump of rough / irregular dome shape. Very pale red-brownish soft clay, porous, few larger inclusions. The preserved polish/slip on surface is light greyish somewhat recalling that of **PE 2**. Top incised with probably an inscription in Linear A. The stylus is fine and not pressed very deep into the clay. L: 4.9; W: [3.4]; H: 2.5.

The inscription, if correctly interpreted as such, consists of an ideogram, a «transaction sign», number and fractional sign:

1. A 302, A 307 1 A707.

Comments

We are not happy about this inscription, but the incisions taken one by one may be read as Linear A signs. The first sign A 302 is not canonical since

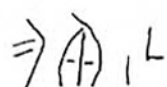
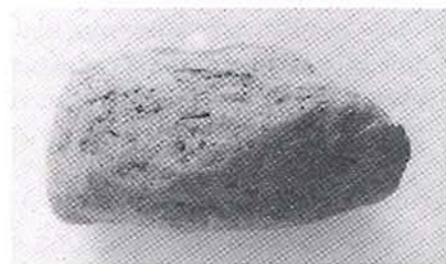
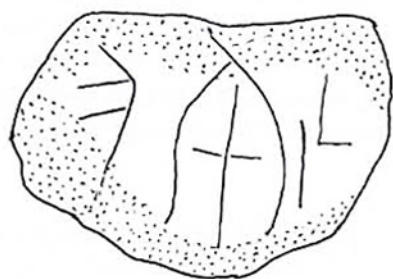


Fig. 15 – **PE Wy 5**. Photo and facsimile in scale 1:1.

²³ The designation **Wy** has been given to miscellaneous inscribed Linear A documents, cf. E. Hallager, «Nomenclature of administrative Linear A documents,» in *10. Mykenologisches Kolloquium, 30. April – 6. Mai 1995, Salzburg*, forthcoming.

the strokes turning left are turning downwards and not parallel to the upper part as is usually the case. Examples near the Petras sign are, however, noted on **HT 53, 101, 114** and **129**. The second incision may be read as A 307. At the lower part it has all its characteristic features with a cross inside a TI while the upper part differs, missing the horizontal stroke and having the vertical stroke as the prolongation of the right «leg». The last two incisions fit with the numeral 1 and the fractional sign A707.

The first sign A 302 has very reasonably been identified as the ideogram for olive oil while the second has been interpreted as a «transaction» sign. This sign does in almost all cases occur on tablets with people, mainly AB 100/102, and ideograms for agricultural products²⁴. The inscription was found next to a pithos in a store room of a house close to the main building and it is tempting to understand this little lump of inscribed clay as a nodulus, in the sense suggested by Weingarten, with parallels to noduli from Hagia Triada also inscribed with ideograms of agricultural products. For the Petras example to be such a nodulus – the person carrying it being entitled to a certain quantity of oil – there should also be a seal impression. Such an impression may, of course, have been made on the missing part of the «nodulus(?)», although we do not consider this likely because it would then be in a position where it is otherwise never found. On the other hand there exist from the excavations of Quartier Mu at Malia two cone-shaped «noduli» with hieroglyphic inscriptions but without seal impression (MA C 20 and 21). These were also found in a store room and might have recorded information concerning the products stored in that room²⁵.

Whatever the correct interpretation an inscribed clay lump found in a store room is not without parallels and seen in this light the incisions on **PE Wy 5** do make sense interpreted a Linear A inscription – although not done by a «master scribe».

PE H 1²⁶ (Excavation no: P 91/396; Mus.no: 9100). Fig. 16.

²⁴ On **HT 27** with **32, 89, 127, 5.1** (very fragmentary), **36, 85** and **97** (the last two as A307-307); **KH 9, 14, 19, 42**.

²⁵ J.C. Poursat, «Hieroglyphic Documents and Sealings from Malia, Quartier Mu: A functional Analysis», in *ASSA*, 25-32.

²⁶ The number has been suggested by us. We are most grateful to J.-P. Olivier for providing us with the necessary information to follow the new numeration of signs to be found in the forthcoming corpus of hieroglyphic inscriptions. For the convenience of the reader we here give a concordance list of the new numbers and those of Evans:

| Godart & Olivier | Evans |
|------------------|-------|
| H 042 | 36 |
| H 033 | 108 |
| H 011 | 62 |
| H 040 | 57 |

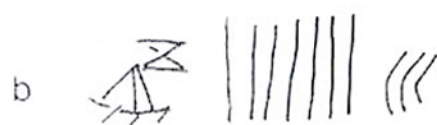
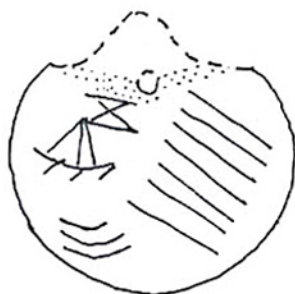


Fig. 16 - PE H 1. Photo and facsimile in scale 1:1.

Medallion, almost completely preserved – small part of top around perforation is missing. Clay dull red greyish, some sand grains. Well polished on both sides. No finger prints nor pressure from fingers. Both sides inscribed with hieroglyphic signs with a fine stylus pressed medium deep into the clay. Ø: 3.65 x [2.9]; Th: 1.05.

Obverse has an inscription with one sign group while the reverse has a ligature(?) and numerals:

Obverse: x H 042-033-011
Reverse: H 040+[,] 703

Comments

Compared to Linear A and Linear B the incised hieroglyphic signs are few, but parallels to most of what is found on **PE H I** can be established. Side a: The 'initial cross' is quite usual and provides us with the direction in which to read the inscription. H 042 occurs in practically all hieroglyphic archives where, however, the sign appears consequently to be differently executed, rather having the form of the «double axe» sign as executed as a «mason's mark», i.e. a closed cross with a stroke through the centre. This Petras sample is more reminiscent of the way the sign is rendered on several of the hieroglyphic seals (as for example P 24c) or as found in Linear A on **IO Za 7** and **KH Wa 1001-1002**. The incised version of H 033 is known a single time on P 111a which is the same kind with five «rays». H 011 is found on several of the Knossos inscriptions with the best parallels, i.e. the most simple version where the «horns» are only given as a single stroke is found on P 64c, 91a, 107a, b & c. Compared to these the Petras sign is further simplified being without «eyes». Side b: The ship sign H 040 is a small and simple version of the ones previously known from Knossos (P 100a & d)²⁷ and Malia (H 19, 20b, and 22c.2)²⁸ with a single stroke for the «body» and only three oars. Another sign is attached to the top of the mast – a cross between two parallel strokes. This may be interpreted as a simple version of the «double axe» H 042 without the central stroke, as found incised on a vase from Prodomos Botsanou, Chamaizi²⁹. If so H 042 is executed in two extremely different ways on the same medallion, strongly indicating the presence of two different scribes – one for each side of the medallion. The alternative would be a ligatured ship-sign, and even though ligatures are extremely rare in the hiero-

²⁷ *SM I*, 170, and 203-204.

²⁸ F. Chapouthier, *Les écritures minoennes au palais de Mallia*, (Études Crétoises, 2), Paris 1930, 23-24, and 32.

²⁹ *SM I*, 12, fig. 6. We are grateful to Jean-Pierre Olivier for the identification of the sign as H 042.

glyphs, we find this suggestion the most likely solution. The numbers appear canonic with crescents for units and long vertical strokes for hundreds.

To our knowledge the sign combination occurring on **PE H 1** does not occur elsewhere in the corpus of hieroglyphs, while the combination «ship» 040 (without additional sign) and numbers also occurs on P 100a and d – in both cases, as in Petras, with very high numbers, 1.400 and 2.660 respectively.

The Petras inscriptions

The collection of inscriptions from Petras is not impressively large, but it is significant in that different kinds of inscriptions are represented. The context of each inscription is well documented, while the actual dates, because of the scarcity of the material, are less certain. The tablets most probably belong to the (early) LM IB destruction, while this is certainly the case with the inscribed pithos, although the pithos and its inscription may have been earlier. The medallion **PE H 1** was also found in the LM IB destruction debris, but it is an isolated find and we have no definite proof that it also belonged to this period. The same holds true for the two isolated inscriptions from House II.

Given these uncertainties, the general context does not preclude the contemporary use of the Linear A inscriptions and the Hieroglyphic medallion. There are, indeed, indications of the same phenomenon from other sites. The best known is the MM III «hieroglyphic deposit» from the old excavations at Malia where hieroglyphic inscriptions together with Linear A inscriptions were found in a restricted area in Room III.8³⁰. These finds are thought by most French scholars to come from a rubbish deposit³¹, but there is good reason to agree with Chapouthier that the inscriptions originated from the same archive³². At Knossos there likewise exist good evidence that Linear A and Hieroglyphs may perhaps have been used contemporarily. The discovery in the SW house of a fragment of a Linear A tablet from a MM IIA deposit certainly shows that Linear A was in use at a time before the Hieroglyphic deposit³³ and it would thus not be unreasonable to suspect that both two

³⁰ Chapouthier (supra n. 28), 3, n. 5.

³¹ Poursat in ASSA, 55; H. van Effenterre, *Le Palais de Mallia et la cité Minoenne I-II*, (Incunabula Graeca, LXXVI), Rome 1980, 386.

³² E. Hallager, *The Minoan Roundel – and other sealed documents in the Neopalatial Linear A administration*, (Aegaeum 14), Liège 1996, 58-61.

³³ C. Macdonald, «Crete: Minoan Knossos», *BSA Annual Reports of the Managing Committee for the Season 1991-1992*, 18.

scripts may have been used during MM II/III at Knossos. Also at the Palace at Phaistos has been discovered both scripts. The Linear A inscriptions may be dated within the MM II period, but unfortunately the exact context and date for the hieroglyphic tablet, discovered during the first year of excavation, is unknown. The old excavations at Palaikastro produced both inscriptions of Linear A and Hieroglyphs. Here the linear A tablet (**PK 1**) apparently date to the LM IA period while the provenance of the hieroglyphic inscription is unknown³⁴ and contemporaneity cannot be argued. Finally hieroglyphs and Linear A occur contemporarily at Mikro Vouni in Samothrace where both an inscribed nodulus and two roundels bear witness to the Linear A administration, while three or four of the seals used on roundels and nodules/noduli had hieroglyphic inscriptions³⁵.

There is thus plenty of evidence that hieroglyphs and Linear A were in contemporary use at the same site during the MM II/MM III period – a phenomenon which Petras now shows might have been continued into the LM I period.

If it was part of the final destruction debris, the medallion from Petras, found next to a pithos in a store room, recalls the context for similar documents from Quartier Mu in Malia where the medallions were invariably found in the store rooms, probably indicating what was stored or delivered there³⁶. At Knossos and the Palace at Malia the medallions were found together with many other documents and are there probably as part of actual archive.

Another interesting find – recalling that of the medallion – is **PE Wy 5** which also turned up in a store room with an inscription indicating that olive oil is involved. Here there seems, as in quartier Mu, to be a direct connection between the minor documents and the contents of a store room.

In some cases when a pithos is inscribed the inscription may be understandable, i.e. when it contains an ideogram of what the content of the pithos may perhaps have been. What the meaning of the ligatured AB 100/102 is on the Petras pithos we do not at present venture to guess.

³⁴ R.C. Bosanquet, R.M. Dawkins, *The Unpublished Objects from the Palaikastro Excavations 1902-1906*, (BSA Suppl. 1), London 1923, 146.

³⁵ D. Matsas, «Samothrace and the North-eastern Aegean: The Minoan Connection», *Studia Troica* 1 (1991), 159-179; Id. «Minoan Long-Distance Trade: A view from the Northern Aegean», in *Politeia*, 235-247. *CMS V* suppl. 1B, nos 325, 326, 327 while 323 is doubtful. When, however, we find this combination of hieroglyphic seal impressions on Linear A documents it is likely that the seal functioned as an «ordinary» seal and not as a message in hieroglyphs. Something similar is seen on hanging nodules from Hagia Triada (HM 556/1-3, Levi type 2) and Hogarth's House at Zakro (HM 33, type Z 136; HM 34, type Z 140 and HM 35/1-3, type Z 137).

³⁶ Poursat (*supra* n. 25), 28.

| | PE 1 | PE 2 | PE Zb 3 | PE Zc 4 | PE Wy 5 |
|-------|------|------|------------|------------|------------|
| AB 01 | ┐ | | ┐ | | |
| DA | | | | | |
| AB 03 | ≠ | ≠ | ≠ | | |
| PA | | | | | |
| AB 02 | ⊥ | ⊥ | ⊥ | | |
| TO | | | | | |
| AB 06 | ┐ | ┐ | ┐ | | |
| NA | | | | | |
| AB 08 | ⊥ | ⊥ | ⊥ | | |
| A | | | | | |
| AB 09 | ≠ | ≠ | ≠ | | |
| SE | | | | | |
| AB 10 | ⊥ | ⊥ | ⊥ | | |
| U | | | | | |
| AB 13 | ≠ | ≠ | ≠ | | |
| ME | | | | | |
| AB 16 | ♀ | ♀ | ♀ | | |
| QA | | | | | |
| AB 17 | ♀ | ♀ | ♀ | | |
| ZA | | | | | |
| AB 26 | ⊥ | ⊥ | ⊥ | | |
| RU | | | | | |
| AB 27 | ⊥ | ⊥ | ⊥ | | |
| RE | | | | | |
| AB 38 | ⊥ | ⊥ | ⊥ | | |
| E | | | | | |
| AB 39 | ⊥ | ⊥ | ⊥ | | |
| PI | | | | | |
| AB 41 | ⊥ | ⊥ | ⊥ | ⊥ | |
| SI | | | | | |
| AB 49 | ≠ | ≠ | ≠ | | |
| - | | | | | |
| AB 53 | 2 | 2 | 2 | | |
| RI | | | | | |

Fig. 17 – Table of Linear A signs used on the Petras inscriptions. All signs are ren-

| | PE 1 | PE 2 | PE Zb 3 | PE Zc 4 | PE Wy 5 |
|------------|------|------|------------|------------|------------|
| AB 57 | 目 | | 目 | | 目 |
| JA | | | | | |
| AB 59 | 目 | | 目 | | |
| TA | | | | | |
| AB 60 | 目 | | 目 | | |
| RA | | | | | |
| AB 67 | 目 | | 目 | | |
| KI | | | | | |
| AB 73 | 目 | | 目 | | |
| MI | | | | | |
| AB 77 | 目 | 目 | 目 | | |
| KA | | | | | |
| AB 81 | 目 | 目 | 目 | | |
| KU | | | | | |
| AB 100/102 | 目 | 目 | 目 | | |
| A 302 | 目 | | | | |
| OLE | | | | | |
| A 305 | 目 | 目 | | | |
| - | | | | | |
| A 307 | 目 | | | | |
| - | | | | | |
| A 325 | 目 | 目 | 目 | | |
| - | | | | | |
| A 574 | 目 | 目 | 目 | | |
| GRA | | | | | |
| A 702 | 目 | 目 | 目 | | |
| 'B' | | | | | |
| A 704 | 目 | 目 | 目 | | |
| 'E' | | | | | |
| A 705 | 目 | 目 | 目 | | |
| 'F' | | | | | |
| A 707 | 目 | 目 | 目 | | |
| 'J' | | | | | |

The sherd with the painted inscription is interesting, particularly if our feeling that it must be an import is correct. In this case it would show that the medium of inscribed vases was part of the link between Petras and other literate sites.

Tablets in themselves do not necessarily imply an archive, as is well known from, for example, Hagia Triada (Casa del Lebate and Villa B), and Khania (GSE House I) and probably elsewhere. In an archive or central archive there are usually other documents like nodules and or roundels – in other words documents with seal impressions – and these are conspicuously absent from the site of Petras. This may be due to chance³⁷ or it may be that Petras was administered on different and perhaps more independent lines than other sites like Zakro, Hagia Triada and Khania.

E. H.

Addendum

During the excavations in 1996 at Petras, parts of a hieroglyphic archive came to light in the northwest corner of the palatial building. This archive, dated to the end of the Protopalatial period, had fallen from a room above the entrance to the building of the MM II period. The excavated part of the archive contained two complete 4-sided clay bars, eight inscribed and one uninscribed medallion, two more or less complete inscribed crescents, two door/chest sealings, three two-hole hanging nodules and nine direct sealings.

It is possible, but by no means certain, that **PE H 1** may be part of the MM II hieroglyphic administration on the site. The four complete signs on **PE H 1** are all refound on the new documents, and it seems safe, already now, to conclude that they were *not* done by the same scribe. One more difference between **PE H 1** and the nine new medallions is that the new ones are pierced with a very small hole while a large one is found on the first discovered. Whether this is due to chronological differences or different contemporary scribes cannot at present stage be determined.

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³⁷ If they were stored on the upper floor above the upper part of the West Wing, as the tablets presumably were, any nodules or roundels at Petras could have ended up in high levels after the destruction and been removed with the erosion of the slope of the hill.