THE HIEROGLYPHIC DEPOSIT AND THE TEMPLE REPOSITORIES AT KNOSSOS *

In this paper I shall discuss:

- 1. the use of seals for some kind of administrative purpose before the "Hieroglyphic Deposit";
- 2. the date of the "Hieroglyphic Deposit" at Knossos and its relation to the other "Hieroglyphic Deposits" on Crete;
 - 3. the date of the sealings from the "Temple Repositories".

AE/NB: A. EVANS, Note Book of the Knossos Excavations.

BIESANTZ, KMS: H. BIESANTZ, Kretisch-Mykenische Siegelbilder (Marburg 1954).

DM/DB: D. McKENZIE, Day Book of the Knossos Excavations.

HM: Herakleion Museum,

OxAM: Oxford, Ashmolean Museum.

PINI, Pepragmena 4: I. PINI, "Ein Beitrag zur chronologischen Ordnung der frühkretischen Siegel", Πεπραγμένα τοῦ Δ΄ Διεθνοῦς Κρητολογικοῦ Συνεδρίου (Athens 1981) 421-435, pls. 120-129.

POURSAT, Sceaux et imprints: J.-Cl. POURSAT, "Sceaux et imprints de sceaux", in: B. DETOURNAY, J.-Cl. POURSAT and F. VANDENABEELE, Fouilles exécutées à Mallia. Le Quartier Mu II. (Vases de pierre et de métal, vannerie, figurines et reliefs d'applique, éléments de parure et de décoration, armes, sceaux et empreintes) ÉtCrét XXVI (Paris 1980) 157-234.

SSMC I: J. WEINGARTEN, "The Sealing Structures of Minoan Crete: MM II Phaistos to the Destruction of the Palace of Knossos. Part I: The Evidence until the LM IB Destructions", OJA 5

(1986) 279-298.

SSMC II: J. WEINGARTEN, "The Sealing Structures of Minoan Crete: MM II Phaistos to the Destruction of the Palace of Knossos. Part II: The Evidence from Knossos until the destruction of the Palace", OJA 7 (1988) 1-25.

WALBERG, Kamares: G. WALBERG, Kamares: A Study of the Character of Palatial Middle Minoan Pottery (Uppsala 1976).

YULE, ECS: P. YULE, Early Cretan Seals: A Study of Chronology. Marburger Studien zur Vor- und Frühgeschichte 4 (Mainz 1980).

^{*} I am most grateful to Olga Krzyszkowska for correcting my English. All errors which remain or which were added later are my own. My thanks are due to the Committee of the British School at Athens and to the Archaeological Museum Iraklion for permission to include my own photographs of sealings from Knossos. The following abbreviations are used in addition to the standard ones:

CHAPOUTHIER, Écritures: F. CHAPOUTHIER, Les écritures minoennes au Palais de Mallia. ÉtCrét II (Paris 1930).

GILL, KSPI: M.A.V. GILL, "The Knossos Sealings: Provenance and Identification", BSA 60 (1965) 58-98.

This is a difficult task since much has been written about these subjects even though most of the material has not yet been published properly. And on the occasion of this symposium I am neither able to fill this gap nor do I intend to do so. I shall simply discuss the old material using some new photographs and new information. The discussions will be primarily concerned with the motifs of the seals. I follow the general trend in presenting lots of long and tiring tables which may sometimes be of help in better understanding the situation.

1. The use of seals before MM II

In her recent study of the sealing structures of Minoan Crete, Judith Weingarten has stated that at present there is nothing comparable in time to the sealings from the "House of Tiles" at Lerna ¹. She mentions the sealing from Myrtos (*CMS* V no. 20) and the impression on a jar handle from an EM III/MM I level at Palaikastro ² as the only exceptions. In short, she did not find any clear indication of the use of seals for administrative purposes on Crete during the prepalatial period. Since I do not totally agree with her view of the situation before MM II, I have put together in Table 1 a selection of sealings which not only proves that seals were used for some kind of administrative purpose during the period in question, but also suggests that earlier seals remained in use for a considerable time after their manufacture. The bibliography in the table is extremely abbreviated, but I think it is still understandable ³.

Table 1
A selection of Early Cretan nodules in the Herakleion Museum impressed by seals not later than MM I.

inv. no.	provenience	Gill no.1	type of seal used	publication
HM 151	Knossos	T2	plate seal	Plate IIIa; BSA 60, p. 85 T2
HM 341	Knossos	?	conoid or stamp cylinder	Plate IIId
HM 372	Knossos	?	plate seal	=
HM 373	Knossos	?	conoid or stamp cylinder	Plate IIIc
HM 375	Knossos	Vb	bar with multiple seal faces (?)	Plate IIIe-f; BSA 10, p. 57 fig. 20
HM 406	Knossos	Ta	impression flat & round	Plate IVa-b; BSA 9, p. 20 fig. 9
HM 407	Knossos	T?	plate seal ?	_
HM 426	Knossos	Tc	conoid or stamp cylinder	Plate IIIb; BSA 60, p. 85 TC
HM 432	Sphoungaras		conoid?	E.H. HALL, Excavations in Eastern Crete. Sphoungaras (1912), 68 fig. 40C
HM 712	Phaistos		conoid or stamp cylinder	CMS II,5 no. 281
?	Palaikastro		?	BSA 60, p. 301 fig. 18
HM 1099	Knossos	_	conoid or stamp cylinder	Antichità Cretesi I, p. 103f figs. 1-2
HM 1180	Knossos	-	conoid or stamp cylinder	Plate IVc

¹ SSMC I, 279 ff.; SSMC II, 1 ff.

2 L.H. SACKETT and M.R. POPHAM, "Excavations at Palaikastro VI", BSA 60 (1965) 248-305, esp. 301, 304, fig. 18 no. 21. SSMC I, 295 n. 1.

³ Gill no(s). refers to GILL, KSPI. I do not attempt here to present the full bibliography for all the pieces discussed in this paper. Here, as in the other tables, I have taken special care to mention the earliest references to the pieces under discussion. Unfortunately it is not possible to publish photographs or drawings of all the pieces listed in this and the following tables.

HM 1200	Knossos	-	plate seal	Plate IVd
HM 1294	Knossos (?)	_	impression flat & round	Plate IVe; Pepragmena 4 pl. 122 no. 73
HM 1177	Archanes		conoid or stamp cylinder	Ergon 1987, 124 fig. 151
HM 2934	Archanes		conoid or stamp cylinder	Praktika 1980, p. 379 pl. 218g
HM 4806	Palaikastro		impression flat & round	Plate IVf; BSA 40, pl. 49 no. 37 fig. 38
HM 4814	Palaikastro		impression flat & oval	BSA 40, p. 49 no. 41 fig. 27
HM no no.	Palaikastro		impression flat & round	BSA 60, p. 304; 301 fig. 18; 304 no. 21
HM no no.	Trypiti		?	ARepLondon for 1986/87, 57
ANM ² no. 3237	Myrtos		impression flat & oval	CMS V no. 20
?	Mallia		stamp cylinder?	JCl. POURSAT, ÉtCrét 26, p. 218 R 28 fig. 307
?	Mallia		stamp cylinder?	JCl. POURSAT, ÉtCrét 26, p. 218 R 29 fig. 308
OxAM no no.	Knossos	-	plate seal?	=

¹ These are the numbers given by GILL, KSPI.

According to Margaret Gill HM 151 (Pl. IIIa) and 426 (Pl. IIIb) come from the "South-East Pillar Room" (=Kamares Pit Area) 4. HM 151 is a 3-finger-"nodulus"; HM 426 sealed strings and/or cloth. Both designs are unlikely to be later than MM I. In particular HM 426 seems to have been impressed by an ivory seal. But in the same room Evans also found some sealings with impressions of typical hieroglyphic seals. He mentions both fine eggshell ware and pottery which was "clearly earlier" from that area 5. Therefore, these finds seem not to come from a closed context. For the next three "noduli" (HM 341, 372 and 373) the exact provenance within the palace of Knossos is not known. They are more or less irregular conoids without string holes. The faces of the seals used were all flat and the motifs should be dated no later than MM I. HM 373 (Pl. IIIc) comes from an ivory stamp cylinder or conoid. The central motif of HM 341 (Pl. IIId) may be best compared to that of the ivory seal CMS II,1 no. 313 from Platanos tholos A. The pear-shaped sealing HM 375 (Pl. IIIe-f), with a string hole at the top, from the "Arsenal Deposit" is a very strange case. The two highly stylized quadrupeds (?), one above the other, definitely do not belong together with the sealings of undoubtedly LM date. While the type of sealing does point to LM I, I hope the photograph of the plasticine impression showing the original seal surface supports my theory that the impression was made by a bar similar to CMS II,1 no. 391 from Archanes/Phourni, but with seal faces on more than four sides. It may have been pentagonal or hexagonal in section. It is unlikely that such a seal was still in use in the LM period, and it seems impossible to ascertain how it might have come into a context which contained LM sealings. Therefore one may ask whether it was a closed context or not.

The next nodule on table 1, HM 406, was found together with HM 320a in the "Room of the Olive Press" 6, and HM 407 was attributed to the same find spot by Gill. Both probably

² ANM = Ayios Nikolaos Museum.

⁴ GILL, KSP1, 85.

⁵ A. EVANS, BSA 9 (1902/03) 18.

⁶ According to GILL, KSPI, there is no reference to the sealings from this deposit in the notebooks. But cf. WALBERG, Kamares 119-121; SSMC II, 2.

show impressions of cloth on the rear. The first one is only incompletely preserved in several impressions. Weingarten believes that it is "surely not earlier than MM II B" ⁷. And she sees on these nodules impressions of two different seal faces. In my opinion, the absolutely flat impressions are doubtless from one and the same seal face. The sketch by Evans is somehow misleading. One can clearly make out a human figure behind the quadruped, and above it another quadruped in a position at right angles to the first (Pl. IVa-b). Such a composition may well belong earlier within the MM period ⁸. The clay conoids HM 432 from Sphoungaras, HM 1177 and 2934 from Archanes/Phourni, with string holes below their top ends, have impressions (in relief) of flat and round seal faces at their lower ends. The first seems to be typical of MM I, the last probably should be dated to EM III/MM I while HM 1177 comes from a MM I A context. HM 712 (CMS II,5 no. 281) bears the impression of an ivory stamp cylinder or conoid which again can be best dated to EM III/MM I. The two impressions from Quartier Mu at Mallia ⁹ may have been made with stone seals of the same period.

Important evidence for a rather early administrative use of seals, or at least a use for sphragistic purposes of seals on Crete, is the stopper HM 1099 from an EM III/MM I context at Knossos which had sealed a narrow-mouthed jar or jug with an inner diameter of 2.75 cm. 10. The motif is not very clearly preserved, but it consists of three lions running peripherally within a border of leaves 11; in the centre is, perhaps, a plant design. HM no. 1180 (Pl. IVc) without known provenance, which perhaps also sealed a narrow-mouthed vessel, shows another impression of an ivory stamp cylinder or conoid. Likewise the strange seal impression on the nodule HM no.1200 (Pl. IVd) should be dated to the beginning of the MM period. The "nodulus" in the shape of a conoid HM no. 1294 12 has an impression of a flat and oval seal face (Pl. IVe) which belongs to a large group consisting mainly of 'white pieces' 13. From Palaikastro there are at least two loom-weights with typical impressions of "early" seals. One is on the block HM 4806 (Pl. IVf) from "House ξ", the other on the disc HM 4814 which was "found in House δ32 at the lowest level with E.M. sherds". The former one seems to find a good parallel on an EH II sealing from Makronisos 14. The impression of a flat oval seal on a jar handle from an EM III/MM I level at Palaikastro has been mentioned already 15. A handle from Myrtos/Pyrgos bears the impression of an EM III/MM I seal with lions running peripherally 16. A fragmentarily preserved nodule of a flat and rectangular seal with a maeandroid device, most probably from Knossos, is now in the Ashmolean Museum 17. On the rear it shows a string impression. Again the date of the seal should not be later than MM I.

SSMC II, 2. For the dating she relies on WALBERG, Kamares 120-122. But A. EVANS, BSA 9 (1902/03) 19 mentions that "the room was dug out to the Earlier Palace floor-level which lies about 3.20 metres beneath that of the room of the Olive Press itself. Immediately above this earlier level, from about three metres below the later pavement, were found abundant remains of the fine polychrome ware that characterizes the Middle Minoan Period".

A. EVANS, BSA 9 (1902/03) 21 fig. 10 published another sealing from the same room with a device typical for ivory seals of EM III-MM I date; but cf. J. BOARDMAN, "The Date of the Knossos Tablets", in On the Knossos Tablets (Oxford 1963) 51, who found out that the nodule is from late walls built in the «Court of the Stone Spout».

POURSAT, Sceaux et imprints, 218 R 28 and R 29, 219 figs. 307-308.

¹⁰ S. HOOD & V. KENNA, "An Early Minoan III Sealing from Knossos", in Antichità Cretesi: Studi in Onore di Doro Levi (Cronache di Archeologia 12-13 [1973-4]) I, 103 ff., figs 1-2.

¹¹ The leaves are not indicated in the sketch published by HOOD & KENNA (supra n. 10).

¹² PINI, Pepragmena 4, 428 no. 73 pl. 122.

¹³ Cf. PINI, Pepragmena 4, 421 ff., pls. 120-127.

¹⁴ P. SPITAELS, "Provatsa on Makronisos", AAA 5 (1982) 155 ff. esp. 160 fig. 4.

¹⁵ For full reference cf. supra n. 2.

¹⁶ Knossos, Stratigraphical Museum no. MP 73/257. My thanks are due to Professor G. Cadogan and the Managing Committee of the BSA for the permission to mention this piece here.

¹⁷ This sealing seems to be hitherto unpublished.

The few sealings and loom-weights dated by their contexts to EM III/MM I are in themselves sufficient evidence to prove some kind of administrative use of seals on prepalatial Crete. We should also remember that the situation on the Greek Mainland was similar until in 1954 Jack Caskey found the hoard of sealings in the "House of Tiles" at Lerna. Based on the evidence from Lerna, the few sealings from other EH sites seem to prove an administrative use of seals, too. Such a hypothesis is not dependent on the quantity of sealings found. We should not make a distinction between one sealing from an excavated site as evidence for securing private property and more than ten or fifty from another site as evidence for an official administrative control of goods. In my opinion, the impressions of "early" seals provide additional support, even though some of the seals—impressed on nodules from undated contexts—may have been used for the purpose of sealing a long time after their manufacture. But it seems not very probable to assume that all these EM III/MM I seals first served a different purpose (e.g., perhaps worn as talismans) and that their use changed in MM II, almost 200 years after they had been made. Seals existed on Crete from EM II onwards and I see no reason to believe that their use for sealing purposes only started much later.

We have seen that already at the beginning of the MM period seals were used in different ways. From the discussion thus far, it is clear that we have conoid "noduli", nodules which sealed various kinds of objects, and seal impressions on loom-weights. At the same time seals were already being used to mark vessels.

2. The Hieroglyphic Deposit

The group of sealings from the so-called Hieroglyphic Deposit is fairly well known, since Sir Arthur Evans in his *Scripta Minoa* I published photographs of many of these nodules as well as drawings of some of the impressed motifs and of the inscriptions. In Table 2 I list all of the sealings which are from that deposit and/or which have been attributed to it. No. 130 was added by myself.

Table 2
The Hieroglyphic Deposit at Knossos: list of sealings

AE/NB 1900, 80-81; DM/DB 1900, May 21, 23.

EVANS, BSA 6 (1898/1900) 61-63; 7 (1900/1901) 48; 9 (1902/1903) 20; 10 (1903/1904) 13; SM I, 19-22, 142-147, 159-166, 271-272; PM I, 8, 271-274, 276 f., 283, 558, 671, 684, 703; II, 247, 268, 453, 501, 707, 779, 835; IV, 115 f., 400, 407, 448, 474, 488, 491, 571, 717, 763, 986; BIESANTZ, KMS, 125 f. Liste 1(A); M.A.V. GILL, BSA 60 (1965) 66 f.; J.J. REICH, AJA 74 (1970) 406 ff.; P. YULE, Kadmos 17 (1978) 1 ff.; YULE, ECS, 16, 215 ff.

inv. no	motifs	P-no.	publication
HM 107 ¹	2 motifs	(P51)	BSA 6, p. 61; SM I, 159 P51 pl. III, IVA; BSA 60, p. 66, 67.
HM 126	1 motif	Pa	Plate Va; BSA 6, p. 63?; PM I, 273 Abb. 202a; CS 5S; BSA 60, p.67.
HM 128	1 motif	Pb	Plate Vd; BSA 6, p. 63; SM I, 22 fig. 11b pl. IVB.C; PM I, 273 fig. 202b; PM II, 502 fig. 306; PM IV, 490 fig. 422; BSA 60, p. 67.
HM 130?	2 motifs	P?	
HM 131	1 motif	Pe	BSA 6, p. 63; BSA 9, p. 88 fig. 60; SM I, pl. IVB, B; PM I, 273 fig. 202e,
HM 515			fig. 373; PM III, 467 fig. 326; BSA 60, p. 67.
HM 132	5 motifs	P73	SM I, 22 fig. 11a, 146 fig. 93, 162 pl. III; PM I, 274 fig. 203; BSA 60, p. 67.

HM 140	1 motif	Pc	Plate Vc; BSA 6, p. 63; PM I, 273 fig. 202c; PM II, 453 fig. 265; PM IV, 116 fig. 81; BSA 60, p. 67
HM 144	1 motif	Pd	Plate Vb; PM I, 273 fig. 202d; BSA 60, p. 67.
HM 169	_	P76	SM I, 165 pl. IVB (= OxAM 1910.206 without seal impression); BSA 60, p. 67.
HM 170 ²	1 motif	P53H2	SM I, 163 pl. III, IVA.B; BSA 60, p. 66 pl. 5.
HM 171	1 motif	P68	SM I, 161.165 pl. III, IVA; BSA 60, p. 67.
HM 172 ²	2 motifs	P64H1	BSA 6, p.61; SM I, 145, fig.91.161.164 pl. III, IVA.B; PM I, 276 fig. 205; PM II, 834 fig. 551; BSA 60, p. 66.
HM 173	2 motifs	P52	SM I, 163 pl. III, IVA.B; BSA 60, p. 67 pl. 5.
HM 174	2 motifs	P54	SM I, 160.163 pl. III, IVA.B; BSA 60, p. 67.
HM 175	2 motifs	P75	SM I, 162.165 pl. III, IVA (plaster cast = OxAM 1910.207); BSA 60, p. 67.
HM 176 ²	1 motif	P62H4	SM I, 164 pl. III, IVA; BSA 60, p. 66.
HM 177	1 motif	P57	SM I, 164 pl. III, IVA; BSA 60, p. 67.
HM 178	2 motifs	P74	SM I, 162.165 pl. III, IVA; BSA 60, p. 67.
HM 179	2 motifs	P71	BSA 6, p. 63; SM I, 162 pl. III 272 fig. 123-124; PM I, 8 fig. 2a, 272 fig. 201a, 276 fig. 226; PM IV, 474 fig. 399; BSA 60, p. 67.
HM 180	3 motifs	Pf	BSA 6, p. 63; SM I, 272 fig. 125 pl. IVB, A; PM I, 8 fig. 2b, 272 fig. 201b; BSA 60, p. 67
HM 181	1 motif	P59	SM I, 160.164 pl. III, IVA; BSA 60, p. 67.
HM 182	2 motifs	P60	SM I, 160.164 pl. III, IVA; BSA 60, p. 67.
HM 183	_	P77	SM I, 166 pl. IVB (= without seal impression); BSA 60, p. 67.
HM 184	1 motif	P55	SM I, 164 pl. III, IVA; BSA 60, p. 67.
HM 185	2 motifs	P67	Plate Ve; SM I, 161 pl. III; BSA 60, p. 67.
HM 186	_	P?	BSA 60, p. 66.
HM 187	_	P78	SM I, 166 pl. IVB (= without seal impression); BSA 60, p. 67.
HM 189	2 motifs	P70	SM I, 161.165 pl. III, IVA; PM I, 704 fig. 527a; BSA 60, p. 67.
HM 190	2 motifs	P72	SM I, 162.165 pl. III, IVA; BSA 60, p. 67.
HM 191	1 motif	P50	SM I, 146 fig. 92; 159.163 pl. III, IVA.B; BSA 60, p. 67.
HM 192	2 motifs	P69	SM I, 161.165 pl. III, IVA; BSA 60, p. 67.
HM 194	1 motif	P58	SM I, 164 pl. III, IVA.B; BSA 60, p. 67.
HM 195	1 motif	P66	Plate Vf; SM I, pl. III, IVA; BSA 60, p. 67.
HM 198	1 motif	P61	SM I, 160.164 pl. III, IVA.B; BSA 60, p. 67.
HM 200	1 motif	P56	SM I, 160.164 pl. III, IVA; BSA 60, p. 67.
HM 202	1 motif	P?	AM 79, p. 15 no. 7 Beil. 1, 2; BSA 60, p. 66.
HM 204 ?	_	_	—
HM 206	2 motifs	P63	BSA 6, p. 61; SM I, 161.164 pl. III, IVA; PM I, 281 fig. 213, PM IV, 717 fig. 702; BSA 60, p. 67.
HM 207	2 motifs	P65	SM I, 165 pl. III, IVA.B; BSA 60, p. 67.
HM 249	1 motif	P?	BSA 60, p. 66.
OxAM	0.000		
1938.9402	2 motifs	НЗ	BSA 60, p. 66 pl. 10, H3.
OxAM			
1938.982	1 motif	Pa	BSA 6, p. 63; PM I, 273 fig. 202a; CS 5S; BSA 60, p. 67.

This sealing is known to have come from Magazine 4. Found in space beneath the staircase at the north end of the long Gallery and illustrated in Evans's notebook (last entry for 1900). 1 2

As is known from Gill's study *KSPI*, Evans sketched only four of these sealings in his notebooks. Some more are mentioned in his report of the excavations in 1900 which appeared the same year. For a better understanding of the situation, I quote from Gill's article: "Of those [sealings] published in SM I and elsewhere as belonging to the Hieroglyphic Deposit it is uncertain how many came from the cupboard under the stairs and how many, found in adjacent magazines, were assumed to be strays from the main hoard" ¹⁸. The question must be raised how Evans could know without notes several, or even many, years after the excavation which sealings belonged to his "deposit" and which did not. One cannot avoid the suspicion that Evans grouped them mainly on typological grounds. And even if they all had come from his "deposit", such information would not be very important, since no pottery or any other material has been published from there. So I shall speak in more general terms of the Knossian "Hieroglyphic Group". Its date is established only by the style and iconography of the impressed motifs. Evans and other scholars have dated it variously either to MM II or to MM III. The last detailed discussion is by Paul Yule who dated the group to MM II. The present study concentrates on this problem once more.

As is well known the majority of the nodules are of the crescent shaped type which has a string running through it. They normally have a flat underside which bears the main (?) inscription. Some of them have additional inscribed signs on the sides. Most of the nodules have more than one seal-impression, frequently from different seal faces. In Table 3, I have listed the types of nodules; the number of impressions on each; as well as the types of seals used; and finally the position of the inscription on the nodule.

Table 3
The Hieroglyphic [Deposit] Group from Knossos: types of nodules;
number of impressions and types of seal faces; position of inscriptions on nodules.

inv. no.	type of nodule	no. of impressions & type of seal-face	position of inscription
HM 107	disc-shaped nodulus	1 = rectangular & flat, from prism	_
		1 = flat & oval ¹ , from prism	
HM 126	parcel	1 = strongly convex & round, from discoid or lentoid; (impression of same seal on OxAM 1938.982)	_
HM 128	pendant	1 = from cushion (?)	_
HM 130	gable & parcel	1 = convex, from unknown shape	_
		1 = flat & round, from discoid or button	
HM 131	3-finger-nodulus	1 = flat & round	_
HM 132	parcel	1 = convex & oval ² ; from ring bezel	-
		 2 = flat & rectangular, from the same face of prism 1 = flat & rectangular, from one side of (?) 	
		same prism	
		2 = convex, from two different seal faces of unknown shape	
		1 = convex & round ³ , from discoid (?)	
HM 140	"molar"	1 = convex & round, from discoid or lentoid	_
HM 144	parcel	1 = convex & round, from discoid	_
HM 170	crescent	2 = flat & round, from the same seal face	bottom & one side
HM 171	crescent	1 = flat & round	bottom
HM 172	crescent	2 = flat & round, from same seal face2 = flat & round, from another seal face	bottom & one side

¹⁸ GILL, KSPI, 66.

HM 173	crescent	2 = flat & round, from two different seal faces	bottom & one side
HM 174	crescent	1 = flat & rectangular, from prism	bottom
	Croscon	1 = flat & oval, from prism	Colloni
HM 175	crescent	2 = flat & rectangular, from two different faces of the same prism (?)	bottom
HM 176	crescent	1 = flat & round	bottom & one side
HM 177	crescent	1 = flat & oval, from prism	bottom
HM 178	crescent	2 = flat & rectangular, from two different faces of the same prism (?)	convex bottom
HM 179	crescent	1 = flat & round	concave bottom
		1 = flat & rectangular, from prism	
HM 180	irregular (cylinder	1 = convex & oval, from ring stone	_
	with parcel)	2 = convex & round, from two different discoids	
HM 181	crescent	2 = flat & rectangular, from same face of prism	bottom & one side
HM 182	crescent	2 = flat & oval, from same face of prism	bottom & one side
HM 184	crescent	1 = flat & round	bottom
HM 185	crescent	1 = flat & rectangular, from prism (impression of same seal on 195)	_
		1 = flat & round	
HM 189	crescent	1-2 = convex & oval (?), from seal with eight or more oval faces (?)	bottom & one side
HM 190	crescent	 1 = flat & round 2 = flat & rectangular, from the same face of prism 	bottom
HM 191	crescent	2 = flat & oval, from the same face of prism	bottom & side
HM 192	crescent	2 = flat & rectangular, from two different	bottom
11111 172	Cicscent	faces of prism	bottom
HM 194	crescent	1 = flat & oval, from prism	bottom
HM 195	parcel	1 = flat & rectangular, from prism (impression of same seal on 185)	_
HM 196	parcel	1 = from cushion	-
HM 197	parcel	1 = convex & round, from discoid or lentoid	_
HM 198	crescent	1 = flat & rectangular, from prism	bottom & side
HM 200	crescent	1 = flat & oval, from prism	_
HM 202	crescent	1 = from cushion	bottom
HM 203	parcel	1 = from cushion (strongly convex)	_
HM 206	crescent	1 = flat & round	bottom & side
		1 = flat & rectangular, from prism	
HM 207	crescent	2 = flat & rectangular, from two different faces of prism	bottom & side
HM 249	crescent	1 = flat & oval, from prism	_
OxAM	crescent	2 = flat & oval (?); from two different	_
1938.940		faces of prism	
OxAM 1938.982	parcel	1 = strongly convex & round, from discoid or lentoid; (impression of same seal on 126)	_

Flat and oval impressions possibly may also have been impressed by seals like YULE, ECS, 55-56 Class 13: Foliate Backs.

2 Concave and oval impressions possibly may also have been impressed by ring stones.

3 Concave and round impressions may also have been impressed by petschafts or buttons.

From this table we learn that besides an overwhelming majority of crescent-shaped sealings the "Hieroglyphic Group" also contains some irregular ones and a few of the parceltype, known much better from the "Temple Repositories" and, in particular, from pure LM I

deposits ¹⁹. None of the two latter types is inscribed. Of the crescents listed above, only four do not bear any incised inscription. The rest are inscribed on one, two or three sides with the main inscription normally on the larger flat bottom face of the sealings. On the smaller sides there is often only one sign, normally P94. But it is scarcely possible to find any strict rule.

Out of the forty sealings listed in Table 3, twenty show only one single impression, five show two or more impressions of one and the same seal face, thirteen show impressions of two different seal faces, and one has impressions of five different seal faces. In some cases, e.g., when one out of two impressions on a sealing is flat and oval and the other is flat and rectangular, the use of two different seals is apparent. In other cases when there are two flat and rectangular impressions with more or less the same dimensions on the same sealing, these were probably made with two different sides of a prism. But it is difficult to prove this definitely; and from the list we can hardly deduce any rule.

In Table 4, I have listed the types of seal faces and the sealing types on which they appear. It is immediately apparent that the majority of seal faces are more or less flat. These are almost all concentrated on the crescents, while round and convex seal faces are restricted to the parcel-type of sealing. This is not mere chance, since convex faces generally tend to be later within the MM period. A clear preponderance of flat seal faces can also be observed among the seals and sealings from Quartier Mu at Mallia, dated by their context to MM II ²⁰. On the other hand, convex seal faces are to be met fairly frequently among the sealings from the archivio di cretule at Phaistos ²¹. In this connection, it is interesting that Gisela Walberg favours a date within MM II B-III A for the pottery from *vano* 25 at Phaistos ²². And there can be no doubt that some of the pictorial motifs from that deposit stylistically and iconographically represent a more developed stage than those from Mallia and most of the motifs from the Knossian "Hieroglyphic Group" ²³. The latter mainly represent typical hieroglyphic motifs which are also met at the other places. But as is well known they show more advanced motifs which led Evans and other scholars to postulate a date in MM III for the "deposit" ²⁴.

Although the "Hieroglyphic Deposit" has been discussed several times, we shall now concentrate once more on some of the 'advanced' motifs. Evans in his report of 1900 described the motif of no. 126 (Pl. Va) as "a hart...crouched by a water-brook in a mountain glen". There is a strange discrepancy between the groundline below the quadruped and the landscape formation above it. The rocks may be distantly compared to those on an oval seal from the Giamalakis Collection ²⁵. The latter is best dated to MM III. Moreover, the two quadrupeds

¹⁹ For this observation cf. also SSMC II, 2-3. SSMC II, 18, gives a list of sealing-types using the classification in SSMC I, 282 fig. 1.

²⁰ POURSAT, Sceaux et imprints, esp. 226-227 Table 4-5. Exceptions are 181 fig. 252; 182 fig. 253;183 fig. 255; and the impression p. 219 fig. 309. The latter represents iconographically and compositionally a rather advanced type among the material from Quartier Mu.

²¹ I. PINI, CMS II, 5 p. XIII.

²² G. WALBERG, "The Date of the Archivio di Cretule", in I. PINI (ed.), Studien zur Minoischen und Helladischen Glyptik, CMS Beiheft 1 (1981) 241-249. But contra cf. J.-Cl. POURSAT in the same volume. One may ask if the development of ceramic phases is really so well defined that the pottery from vano 25 at Phaistos cannot be dated at least partially to MM III A as Walberg assumes.

These are mainly the impressions of oval ring bezels CMS II, 5 nos. 258. 259. 270 (for the landscape elements cf. J. BOARDMAN, Greek Gems and Finger Rings: Early Bronze Age to Late Classical [1970] pl. 60), 276, 277, 285 and 319). J.-Cl. POURSAT in I. PINI (supra n. 22) 249 tries to explain this phenomenon by different workshop traditions.

²⁴ For the arguments of these scholars cf. YULE, ECS, 215-219 (quoting earlier discussions).

²⁵ A. XÉNAKI-SAKELLARIOU, Les cachets de la collection Giamalakis, ÉtCrét X (Paris 1958) 28 no. 172 pls. VI (=not very accurate drawing), XXII.

Table 4
The Hieroglyphic [Deposit] Group. Types of seal faces and types of sealings

Type of Seal Face	Type of Sealing							
	crescent inv.	no.	parcel	inv.	no.	other	inv.	no.

flat & round (various shapes)	170, 171, 172, 172, 173, 173, 176, 179, 184, 185, 190, 206, 249, Oxam 1939.940, Oxam 1939.940(?)	130	131
flat & oval (prisms)	174, 177, 182, 191, 194, 200		107
flat & rectangular (prisms)	174, 175, 175, 178, 178, 179, 181, 185, 190, 192, 192, 195, 198, 206, 207, 207	132, 195	107
convex & round (dis- coid, petschaft, button or lentoid)		126, 132, 144, 140, 197, OxAM 1938.982	
convex in one direction & rectangular (cushion)	202	196, 203	128
convex & oval (ring bezel or ringstone)		132, 180	
convex, of unknown shape	189	130, 132, 132	

with the long necks and triangular heads are stylistically related. Other examples of this group of goats are the two discoids *CMS* II,3 nos. 339, 340 and the sealing no. 144 from the "Hieroglyphic Deposit". The goat on no. 144 (Pl. Vb) is characterized by a pronounced shoulder and hip, a kind of emphasis which I do not know from any MM II motifs. *CMS* X no. 251 perhaps may provide a parallel for the water-brook—if it is one at all ²⁶. No. 140 (Pl. Vc) was described by Evans in his report as "a grotto...surmounted by rugged rocks, on which appear, perched or climbing, certain monkey-like forms" ²⁷. The new drawing based on the impression shows the motif fairly clearly: there are rocky structures and what appears to be a cave. To the left one can detect a sitting monkey in left profile and another one further up on the rocks. Compared to this motif, *CMS* II,5 no. 297 from Phaistos seems somehow archaic. The dating

²⁶ Cf. also J.H. BETTS, CMS X, p. 29. The wavy lines above the animal could also be interpreted as the border between the cave and the surrounding landscape. A strange feature is the groundline below the animal which does not harmonize with the details of landscape.

²⁷ BSA 6 (1898/1900) 63.

of the Saffron Gatherer to MM III A seems to be too low ²⁸; and all the other representations with monkeys are no earlier than LM I ²⁹. Another 'advanced' motif is the well-known marine scene no. 128 (Pl. Vd): a fish which has caught an octopus in a rocky inlet. The rocks find their closest parallels among LM I relief vases ³⁰.

It is hard to believe that the seals with these 'advanced' motifs were engraved at the same time as the rest from the "Hieroglyphic Deposit". I think it cannot be pure chance that three of these 'advanced' sealings (nos. 126, 140 and 144) belong to the parcel-type and one (no. 128) is on a pear-shaped nodule. The parcel-type is frequent among the later sealings from the "Temple Repositories" which will be discussed below, while it is absent in the MM II deposits at Quartier Mu in Mallia, at Phaistos, and at Monastiraki. Pear-shaped sealings are well known, especially from the LM I deposits at Ayia Triada and Khania 31. Even if one takes into consideration the "naturalistic" style of some reliefs from Mallia—such as the sphinx and the relief vases from Quartier Mu 32 or the male figure on the pommel of the golden dagger from Ouartier III in the palace at Mallia 33, all from MM II contexts—the motifs discussed above with their landscape elements in my opinion should be dated to a later stage. And since no pottery was found with the "Hieroglyphic Deposit", the dating of the sealings must be based exclusively on stylistic, compositional and iconographic criteria. As I have tried to show, it seems almost impossible that all of the seals used on the sealings from that hoard were engraved at more or less the same time. Since it is not clear from the notebooks and publications how many and which sealings belong to the "Hieroglyphic Deposit" found beneath the staircase at the north end of the Long Gallery, we are free to comment on the 'deposit' in different ways:

- 1. The 'later' (MM III ?) sealings discussed here do not belong to the main hoard of sealings. In this case we could separate them chronologically from the rest.
- The majority of the sealings including the 'later' examples discussed here, belong to a hoard assembled over a longer period.

Personally I am inclined to favour the second possibility. But there may be one argument against this assumption. On the crescent no. 185 (Pl. Ve) there is an impression of the same flat and rectangular seal face with hieroglyphs as on the parcel-type sealing no. 195 (Pl. Vf). Although this fact might suggest that the seal had been used on the two sealings contemporaneously, it could likewise indicate that the seal had been in use for some time. As

1 Cf. SSMC I, 282 fig. 1 (Type VII).

33 O. PELON, "L'épée à l'acrobate et la chronologie maliote (I)", BCH 106 (1982) 165-190, esp. 186f. fig. 27.

²⁸ Cf. also W.-D. NIEMEIER, "Das mykenische Knossos und das Alter von Linear B", in O.-H. FREY und H. ROTH (eds.): Beiträge zur Ägäischen Bronzezeit. Kleine Schriften aus dem Vorgeschichtlichen Seminar Marburg, Heft 11 (1982) 29ff., esp. 93 n. 452.

²⁹ For example, the painting from the House of the Frescoes: M. CAMERON, BSA 63 (1968) 1-31 esp. fig. 13; the monkey-fresco from Akrotiri: S. MARINATOS, Thera VI (Athens 1971) pls. 114-115; the seal impressions CMS V no. 233 on a roundel from Khania/Kastelli. For LM representations of monkeys cf. also N. MARINATOS, "The Monkey in the Shrine: A Fresco Fragment from Thera", in Εἰλαπίνη. Τόμος Τιμητικὸς γιὰ τὸν Καθηγητὴ Νικόλαο Πλάτωνα (Irakleion 1987) 417-421, figs. 1-6.

³⁰ Cf. e.g. S. MARINATOS - M. HIRMER, Kreta, Thera und das Mykenische Hellas² (Munich 1973) pl. 108 right; 113 above. Cf. also B. KAISER, Untersuchungen zum Minoischen Relief (Bonn 1956) 126-136, pl. 16, 5-13, cf. esp. 130 fig. 15b. C. BAURAIN - P. DARCQUE, "Un triton en pierre à Mallia", BCH 107 (1983) 1-73, esp. 16 fig. 13; 26-29; 50.

³² J.-Cl. POURSAT in B. DETOURNAY, J.-Cl. POURSAT, F. VANDENABEELE (eds.), Fouilles exécutées à Mallia. Le Quartier Mu II, ÉtCrét XXVI (Paris 1980) 116-118 Nr. 169, figs. 164-165 (sphinx), 120-124 no. 172-174, figs. 170-174 (vases with cats in relief).

the use of heirlooms is frequently attested ³⁴, I think that we can accept the continued use of the seal for some years.

A few words may be added here on the Hieroglyphic Deposit from the vestibule of room III8 in the Palace of Mallia 35. It is of specific interest because, among other finds, it contains the only crescent-shaped nodule with seal impression and hieroglyphic inscription from Mallia 36. Also found were a sealing of the parcel-type with the impression of a hieroglyphic seal 37, roundels with seal impressions including one with a Linear A sign 38, a conoid clay seal with the motif of a lion attacking a bull (CMS II,1 no. 419) 39, some objects with hieroglyphic inscriptions, and others with Linear A inscriptions 40. This constitutes a surprising mixture of elements. We notice not only the presence of two scripts side by side, but also the appearance of hieroglyphic seals alongside others with rather 'advanced' motifs. Chapouthier dated the deposit variously: first to MM III 41 and later, under the influence of Evans, to MM II 42. Recently Olivier Pelon, after a reinvestigation of room III8, questioned the homogeneous character of the 'deposit' which he now dates again towards the end of MM III 43. But the conoid clay seal, CMS II,1 no. 419, can hardly be earlier than LM I as I have tried to show elsewhere 44. In particular the chiastic composition of the animal attack 45 is, in my opinion, a new invention which cannot be traced back to the MM period. The same is true for the slightly oval impressions with the flying bird on the roundel HM no. 568 46, which should be more or less contemporaneous with the 'talismanic' ones in LM I. This means that the 'deposit' or better the finds from that 'deposit', if it is one at all, most probably date to MM III and the beginning of the LBA. Again, it is not surprising to find in the same deposit sealings on which earlier hieroglyphic seals were used.

In Table 5 are put together some characteristics of nodules and roundels from five different MM find spots on Crete. In addition, the table shows which deposits have yielded tablets or other material inscribed with hieroglyphs or Linear A. Although such a list is neither detailed nor exhaustive, it provides some interesting information. We know that Knossos,

Cf. two impressions of hieroglyphic seals from House A at Kato Zakros: D.G. HOGARTH, JHS 22 (1902) 89 nos. 136.137; one impression of a hieroglyphic seal from Ay. Triada: D. LEVI, ASAtene 8/9 (1925/26) 86 no. 2 fig. 29, pl. VIII; also the LM I sealing in the Ashmolean Museum, most probably from Knossos (P. YULE, Kadmos 17-18 [1978] 1-7, pl. 1, fig. 2; I. PINI, Kadmos 21 [1982] 1-4, pls. I-II). Cf. also I. PINI, CMS II, 3 p. XXXVI; CMS II, 4 p. XXXIII-XXXV.

³⁵ CHAPOUTHIER, Écritures 3 ff.

³⁶ CHAPOUTHIER, Écritures 5 fig. 4b, 19 H. 6 pl. 1 (= HM no. 1402).

³⁷ CHAPOUTHIER, Écritures 10 fig. 7a-b, 18f. H. 4 pl. 1 (= HM no. 1403).

³⁸ CHAPOUTHIER, Écritures 3 ff. fig. 4a (= HM no. 568); 19 H. 5 pl. 1 (= HM 1401).

³⁹ CHAPOUTHIER, Écritures 5 fig. 4c. For the find spot cf. also H. VAN EFFENTERRE, Le palais de Mallia et la cité minoenne II (Rome 1980) 549 ff. But CHAPOUTHIER, Écritures, 3 n. 6 characterizes the find spot as ... "trouvé dans le voisinage et vraisemblablement de la même époque [as the Hieroglyphic Deposit]". I. PINI, "Minoische und Helladische Tonsiegel", in : Aux origines de hellénisme. La Crète et la Grèce. Hommage à Henri van Effenterre (Paris 1984) 73-81, esp. 77 ff. pl. 14, 1a-c.

⁴⁰ CHAPOUTHIER, Écritures 20-30 pls. 2-5 and 55-56 pl. 6. For the Linear A inscriptions cf. GORILA 1, MA 1-9; GORILA 2, MA Wc <5> and MA Wc 7.

⁴¹ CHAPOUTHIER, Écritures 6-7. But from the neighbourhood of the tablets he mentions a preponderance of the transitional MM III-LM I 'rippled ware'. Cf. also PELON (supra n. 33) 189 ff.

⁴² CHAPOUTHIER, BCH 71/72 (1947/48) 406.

⁴³ O. PELON, "L'épée à l'acrobate et la chronologie maliote (II), Addendum", BCH 107 (1983) 701ff., esp. 703 n. 54.

⁴⁴ PINI (supra n. 39) 78.

⁴⁵ PINI (supra n. 39) 78 n. 46.

⁴⁶ Cf. supra n. 38. A. ONASSOGLOU, Die Talismanischen Siegel, CMS Beiheft 2 (1985) pl. 54f, perhaps rightly, separated it from the 'talismanic' types of birds.

Table 5
Seal motifs, types of nodules and scripts at five spots with MM sealing deposits

Motifs of seal impressions fig. / advanced hier. orn. naturalistic "					Types of nodules with seal impressions rear= rear= rear= nodulus" crescent* parcel peg other rounde					Inscriptions Date		
KN, HD	х	х	X	х	X (hier)	х		х		x		ММ ІІ-ІІІ
MA, Q. Mu, HD	x	х	X(?)	х	х	(agai	х	х		х		мм пв
MA, Pal., HD	х		Х		X (hier)	х			X (LA)	х	х	MM IIIB-LM I
МО		Х		1,22			х	х		?	?	мм пв
PH	?	x	x	X			х	х	X (LA)		x	MM IIB-IIIA(?)

^{*}HD = Hieroglyphic Deposit; KN = Knossos; MA = Mallia; MO = Monastiraki; PH = Phaistos.

Whether crescents or roundels bear (hier)oglyphic or Linear A (LA) inscriptions is indicated in parentheses.

Mallia and Phaistos were important MM centers, situated not too far from each other; and we know of an exchange network between these locations. Monastiraki was on a lower level, perhaps dependent on the palace at Phaistos. With the exception of the 'Hieroglyphic Deposit' in the palace of Mallia, they are all more or less dated to MM II B. So one would expect broadly similar features at all of these places. But apparently this is the case only to a very limited extent. The hieroglyphic 'deposit' in the palace of Mallia is listed here for the sake of completeness. Even if Pelon would not have questioned its homogeneous character, our suspicions would be raised by the range of sealings and seals represented. The crescent-shaped nodule with a hieroglyphic inscription, the parcel-type sealing with the impression of a hieroglyphic seal, the roundel with impressions of a seal which should be dated to LM I, and finally the hieroglyphic and Linear A inscriptions on other objects—all these can hardly be contemporary. Hieroglyphic seals were used at three of the sites. From Monastiraki we do not yet have proof. And whether they were used at Phaistos is a matter of definition. As examples may be quoted, e.g., the wolf's head P62 as the main motif on CMS II,5 nos. 299 and 300 47 or CMS II,5 no. 247, the impression of the rectangular face of a prism with "signs" of an unknown character. These, at least, are not typical examples of hieroglyphic seals. Although at Quartier Mu hieroglyphic seals were used, the crescent-shaped nodules there bear no hieroglyphic inscriptions like the one from the palace or those from Knossos. It is not surprising to find typical MM II figurative and ornamental motifs on the sealings from all sites. But "advanced naturalistic" motifs are restricted to Knossos and Phaistos 48. Likewise, it is not surprising that different types of nodules or nodules in different combinations were in use at the various find spots since most probably different kinds of objects had to be sealed. In addition, different local traditions may have been responsible. In this connection, we should keep in mind the production of the seal engravers workshop at Mallia which is almost unparalleled elsewhere on the island. However, the appearance of roundels with seal impressions and Linear A inscriptions—not otherwise known before MM III B-LM I (Knossos) 49—in the archivio di

⁴⁷ Cf. J.-P. OLIVIER, "Les sceaux avec des signes hiéroglyphiques" in I. PINI (ed.), CMS Beiheft 1 (1981) 105-115, esp. 112 ff.

⁴⁸ With the possible exception of one example from Quatier Mu, POURSAT, Sceaux et imprints, 219 fig. 309.

⁴⁹ For the date in LM I, cf. infra p. 52.

cretule at Phaistos, traditionally dated to MM II B, remains strange. It provides another reason for supporting Walberg's dating of the deposit to MM II/III A ⁵⁰. Thus the gap in time would at least be reduced. If we do not accept this, we are confronted with a strange situation: at Mallia and Knossos hieroglyphic signs being used for seals, at Knossos such signs being used for inscriptions as well, at a time when Linear A had already been adopted at Phaistos ⁵¹. The Knossians would have learned the new script a hundred years later, although the distance between the two sites is hardly more than 60 kilometers. And no one can doubt that Knossos was a major site in this period. These problems can only be solved when we get more evidence from future excavations at the main palaces.

3. The sealings from the Temple Repositories

The last complex to be discussed here comprises the sealings from the "Temple Repositories". The Eastern and Western Repository were excavated by Evans in 1903 on the west side of the central court in a room behind the so-called tripartite columnar shrine. According to Gill's thorough investigations ⁵², not a single seal impression was described or illustrated in Evans's notebooks or in D. Mackenzie's daybooks. So the main source of information is Evans's report for 1903 published shortly after the excavation ⁵³. There he mentioned 160 (150 according to *PM* I, 496) seal impressions from the lower stratum of the Eastern Repository and presented a list of fifty different designs with short descriptions and a few drawings. Some other drawings were published later by Evans and a few by Gill in *KSPI*. Evans, in his report, further mentions "about a dozen in too imperfect a condition to be made out with certainty". Of the 150 or 160 sealings, seventy-five appear in Tables 6 and 7: these present a few minor additions to the information found in *KSPI*. The present whereabouts of the other seventy-five sealings is unknown. Eight motifs from Evans's list (L21-23-28-30-34-36-37-44) could not be identified to date.

The contents of the repositories are fairly well known, especially the various splendid faience objects and the pottery. We do not know for what purpose all of the objects were collected in these cists. Evans mentioned that a missing part of the Snake Goddess from the eastern cist was found in the western one ⁵⁴. He concluded that a considerable disturbance was caused probably by plunderers "at the time of what seems to have been the first catastrophe of the Later Palace". But one should not exclude the possibility that the disturbance already occured when the cists were filled in.

Table 6 The Temple Repositories: list of sealings

DM/DB 1903, May 29.

A. EVANS, BSA 7 (1900/1901) 27; BSA 9 (1902/1903) 1 ff., 38-94; BSA 10 (1903/1904) 26 ff., 29; D. McKenzie, Jhs 26 (1906) 258 ff., 261 ff., 266; SM I, 28 ff., 36 ff., 50 ff.; PM I, 494, 496, 505, 515, 537, 564 ff., 617, 620 ff., 672, 675, 678 ff., 684 ff., 689, 691 ff., 694-697, 699 ff.; PM II, 754 ff., 827, 829, 831; PM III, 35, 96, 214, 218, 465, 503 ff.; PM IV, p. XVIII, 94, 111, 485, 491, 507, 563, 567, 569 ff., 591, 952; BIESANTZ, KMS, 127 ff. Liste 1(B); M.A.V. GILL, BSA 60 (1965) 69-71; YULE, ECS, 19; J.

⁵⁰ Cf. WALBERG (supra n. 22).

⁵¹ There is one tablet with a hieroglyphic inscription, found accidentally during the excavations of 1901: L. PERNIER, *Il Palazzo Minoico di Festòs* I (Rome 1935) 425 ff. G.-1 fig. 248; *SM* I, 179 P. 121.

⁵² KSPI, 69-70.

⁵³ BSA 9 (1902/03) 38-94.

⁵⁴ BSA 9, 44 f.

WEINGARTEN, The Zakro Master and His Place in Prehistory (unpublished M.Litt. thesis, Oxford, 1981) App. III; J. WEINGARTEN, Aegaeum 3 (1989) 35-47; E. HALLAGER, BSA 82 (1987) 55 ff.

inv. no.	number of sealings	number of motifs	L-no.	publication
HM 333	8	2	L13, 25	PM I, 696 fig. 518a, i; BSA 60, p. 70.
HM 334	2	2	L13, 26	PM I, 696 fig. 518b, i; BSA 60, p. 70.
HM 335	2	1	L13, 26	<i>PM</i> I, 696 fig. 518b, i; <i>PM</i> IV, 570 fig. 544a; <i>BSA</i> 60, p. 70.
HM 336	1	1	L50	Plate VIIc; <i>BSA</i> 9, 56 fig. 35; <i>PM</i> I, 689 fig. 509; <i>PM</i> III, 504 fig. 349; <i>BSA</i> 60, p. 71.
HM 337	1	1	L49	BSA 9, p. 58 fig. 36; PM I, 698 fig. 520; PM IV, 952 fig. 921; BSA 60, p. 71.
HM 338	1	1	L49	BSA 9, p. 58 fig. 36; PM I, 698 fig. 520; PM IV, 952 fig. 921; BSA 60, p. 71.
HM 339	1	1	L49	BSA 9, p. 58 fig. 36; PM 1, 698 fig. 520; PM IV, 952 fig. 921; BSA 60, p. 71.
HM 340	1	1	L43	BSA 9, p. 56 fig. 34; PM I, 696 fig. 518h; BSA 60, p. 70.
HM 342	1(r ¹)	1	L19	BSA 60, p. 70; BSA 82, p. 58 KN Wc 23 fig. 1 pl. 5, 9.
HM 343	1(r)	1	L47	Plate VIIa-b; <i>BSA</i> 9, p. 59 fig. 38; <i>PM</i> I, 505 fig. 363b, 680 fig. 500e; <i>PM</i> II, 831 fig. 547; <i>PM</i> III, 465 fig. 324A; <i>BSA</i> 60, p. 70; <i>BSA</i> 82, p. 58 KN Wc 25 fig. 1 pl. 5, 8.
HM 344	1(r)	1	La	PM I, 620 fig. 456b; BSA 60, p. 71; BSA 82, p. 58 KN Wc 29 fig. 1 pl. 6.
HM 345	1(r)	3	L9,27,45	Plate VIIe; BSA 9, p. 90 fig. 61; PM I, 515 fig. 374 620 fig. 456c, 696 fig. 518c; BSA 60, p. 70; BSA 82, p. 60 KN Wc 30 fig. 2 pl. 6.
HM 346 (?)	1(r)	4	L16	BSA 60, p. 70; BSA 82, p. 59 KN Wc 41 fig. 2 pl. 10.
HM 347 (?)	1	1	L?	BSA 60, p. 69.
HM 348	I	1	L42	Plate VIId; BSA 60, p. 70.
HM 349	1	1	L31-33 (?)	BSA 60, p. 70.
HM 350	1	1	L49	BSA 9, p. 58 fig. 36; PM I, 698 fig. 520; PM IV, 952 fig. 921; BSA 60, p. 71.
HM 351	1	1	L49	BSA 60, p. 71.
HM 352	1	1	L49	BSA 60, p. 71.
HM 354 (?)	1	2	L16-17	BSA 60, p. 70.
HM 357 (?)	1	1	L?	BSA 60, p. 69.
HM 358 (?)	1	1	L36 (?)	BSA 60, p. 69.
HM 359 (?)	1	1	L?	BSA 60, p. 69.
HM 374	1	1	L1	PM I, 700 fig. 524; BSA 60, p. 70.
HM 383	7	1	L46	Plate VIc-e; <i>BSA</i> 9, p. 59 fig. 37; <i>PM</i> I, 505 fig. 363a, 680 fig. 500a; <i>PM</i> II, 831 fig. 546; <i>PM</i> III, 465 fig. 325; <i>BSA</i> 60, p. 70.

HM 384	3	1	L15,22	BSA 9, p. 55 fig. 30, 31; PM I, 696 fig. 518k, 697 fig. 519; PM IV, 490 fig. 423; BSA 60, p. 70; AJA 72, p. 149 pl. 61 fig. 1.
HM 385	1	1	L20	PM I, 696 fig. 518l; BSA 60, p. 70.
HM 386	1	1	L24	BSA 60, p. 70 pl. 5.
HM 387	3	2	L13, 25	PM I, 696 fig. 518a, i; BSA 60, p. 70.
	9	2		BSA 9, p. 55 fig. 28; PM I, 696 fig. 518g, j;
HM 388	9		L7, 40	BSA 60, p. 70.
HM 389 (?)	1	2	L?	BSA 60, p. 69.
HM 390	1	1	L1-6	BSA 60, p. 70.
HM 391	1	1	L38	Plate VIb; BSA 9, p. 56 fig. 33; PM I, 696 fig. 518f; BSA 60, p. 70.
HM 393	1	1	L39	BSA 60, p. 70.
HM 394	1	1	L35	BSA 9, p. 56 fig. 32; PM I, 696 fig. 518e; BSA 60, p. 70.
HM 395	1	1	L46	BSA 9, p. 59 fig. 37; PM I, 505 fig. 363a, 680 fig. 500a; PM II, 831 fig. 546; PM III, 465 fig. 325; BSA 60, p. 70.
HM 396	1	1	L48	PM I, 694 fig. 514; PM III, 218 fig. 149; PM IV, 506 fig. 451; BSA 60, p. 70.
HM 397	1	1	Lb	Plate VIa; BSA 60, pl. 6.
HM 398	1	1	L31-33	BSA 60, p. 70.
HM 399	1	2	L8-12, 27	Plate VIIf; <i>PM</i> I, 565 fig. 411a; 696 fig. 518c; <i>PM</i> IV, 567 fig. 531; <i>BSA</i> 60, p. 70.
HM 404	1	2	L41	BSA 60, p. 70.
HM 405	1	1	L8-12?	BSA 60, p. 70 pl. 5.
HM 413	1(r)	2	L18, 19	<i>PM</i> I, 620 fig. 456a; <i>BSA</i> 60, p. 70; <i>BSA</i> 82, 57 KN Wc 3 fig. Pl. 5.
HM 1215	1	1	L8-12	PM I, 565 fig. 411b; BSA 60, p. 70.
HM 1240	1	1	L29	PM I, 696 fig. 518d; PM IV, 563 fig. 531; BSA 60, p. 70.
HM 1259	1	1	L14	BSA 9, p. 55 fig. 29; PM I, 699 fig. 522a; BSA 60, p. 70.
HM 1620 (?) OxAM	1	1	L?	_
AE 1800 (?)	1	1	L?	<u> </u>
OxAM				BSA 17, p. 265 fig. 2; CS 8S; BSA 60, p. 69;
AE 1199u	1	1	L46	J. WEINGARTEN, unpubl. thesis, app. III/4 ff.
OxAM				BSA 17, p. 265 fig. 2; CS 8S; BSA 60, p. 69;
AE 1199ξ	1	1	L46	J. WEINGARTEN, unpubl. thesis, app. III/4 ff.
OxAM AE 1799 (?)	1	1	L?	BSA 82, 331 ff. fig. 1-3.
OxAM 1938.1439a-c	3	2	L13, 25	PM I, 696 fig. 518a, i; BSA 60, p. 70.
OxAM 1938.1440	2	2	L7, 40	BSA 9, p. 55 fig. 28; PM I, 696 fig. 518g; CS 9S; BSA 60, p. 70.

¹ r = roundel.

Table 7
The Temple Repositories types of nodules, consistency of clay, number of impressions and type of impressed seal(s)¹

inv. no.	type of nodule	consistency		number and shape of impressions nd type of seal(-s)				
HM 333/1-8	disc-shaped nodulus	soft	1 =	concave & round, from discoid (impressions of same seal face on 334, 387, OxAM 1938.1439a)				
			1 =	flat, from unknown shape (impressions of same seal face on 387, OxAM 1938.1439a; the latter one = concave)				
HM 334/1-2	disc-shaped nodulus	soft		concave & round, from discoid (impressions of same seal face on 333, 387, OxAM 1938.1439a)				
			1 =	flat, from unknown shape (impressions of same seal face on 335, 387)				
HM 335/1-2	disc-shaped nodulus	soft	1 =	flat, from unknown shape (impression of same seal face on 334)				
HM 336^2	3-finger-nodulus	soft	1 =	slightly concave, from oval ring bezel (?)				
HM 337	parcel	soft	1=	slightly concave, from oval ring bezel (?); (impressions of same bezel also on 338, 339, 350-352)				
HM 338	parcel	soft	1 =	slightly concave, from oval ring bezel (?); (impressions of same bezel also on 337, 339, 350-352)				
HM 339	parcel	soft	1=	slightly concave, from oval ring bezel (?); (impressions of same bezel also on 337, 338, 350-352)				
HM 340	?	soft	1=	round & almost flat, from discoid (?)				
HM 342	roundel	hard	2 =	concave & round, from same discoid (impressions of same seal on 413)				
HM 343	roundel	hard	8 =	from same cushion				
HM 344	roundel	hard	9 =	slightly concave & round, from same discoid				
HM 345	roundel	soft (?)	2 =	from same discoid				
			2=	flat & rectangular, both from same seal face of prism (impressions of same seal face on 413?)				
			1 =	from lentoid (?); (impression of same seal on 399)				
HM 346	roundel	soft (?)		flat & rectangular, from seal face of prism				
			2 =	flat & rectangular, from another seal face of prism				
			1 =	flat, from seal face of unknown shape				
5.0.0.0.0			1 =	concave, from seal face of unknown shape				
HM 347	3-finger-nodulus	soft	1 =	from oval ring bezel (?)				
HM 348	parcel	hard		from amygdaloid				
HM 349	3-finger-nodulus	soft		from lentoid (?); (impression of same seal on 398)				
HM 350	parcel	hard		from oval ring bezel (?); (impressions of same bezel on 337-339, 351, 352)				
HM 351	parcel	hard	1 =	from oval ring bezel (?); (impressions of same bezel on 337-339, 350, 352)				
HM 352	parcel	hard	1 =	from oval ring bezel (?); (impressions of same bezel on 337-339, 350, 351)				

1 = concave & round(?), from discoid (?) HM 357 (?) parcel hard 1 = from discoid (?) HM 358 ? soft (?) 1 = concave, from seal face of unknown shape HM 359 ? around string hard 1 = from oval ring bezel or cushion HM 374 gable-shaped nodulus hard 1 = slightly concave, from seal face of unknown shape HM 383/1-6 3-finger-nodulus soft 1 = from oval ring bezel (impressions of same 395, OxAM 1199υ & ξ) HM 384/1-2 3-finger-nodulus soft 1 = from oval ring bezel HM 385 ? around string hard 1 = slightly concave & round, from discoid or leading the soft 2 = slightly concave & round, from discoid or leading the soft 3938.1439a; HM 387/1-3 disc-shaped nodulus soft 1 = flat, from unknown shape (impression of same seal on 333-335)	e bezel on entoid entoid
HM 358 ? soft (?) HM 359 ? around string hard HM 374 gable-shaped nodulus hard HM 383/1-6 HM 384/1-2 HM 385 ? around string soft HM 385 ? around string hard HM 386 gable-shaped nodulus soft HM 387/1-3 HM 387/1-3 HM 387/1-3 HM 387/1-3 HM 387/1-3 HM 386 ? around string hard HM 387/1-3 HM 387	e bezel on entoid entoid
HM 359? around stringhard1 = from oval ring bezel or cushionHM 374gable-shaped nodulus1 = slightly concave, from seal face of unknownHM 383/1-63-finger-nodulussoft1 = from oval ring bezel (impressions of same 395, OxAM 1199v & ξ)HM 384/1-23-finger-nodulussoft1 = from oval ring bezelHM 385? around stringhard1 = slightly concave & round, from discoid or least slightly concave & round, from	e bezel on entoid entoid
HM 374 gable-shaped nodulus hard HM 383/1-6 3-finger-nodulus soft 1 = from oval ring bezel (impressions of same 395, OxAM 1199υ & ξ) HM 384/1-2 3-finger-nodulus soft 1 = from oval ring bezel 1 = from oval ring bezel 1 = slightly concave & round, from discoid or leading to the state of the same seal on 333-335 and 1938.1439a; 1 = flat, from unknown shape (impression of the same seal on 333-335).	e bezel on entoid entoid
 HM 383/1-6 3-finger-nodulus soft 395, OxAM 1199υ & ξ) HM 384/1-2 HM 385 ? around string hard 1 = slightly concave & round, from discoid or least the slightly concave & round, from discoid or least th	e bezel on entoid entoid
395, OxAM 1199υ & ξ) HM 384/1-2 3-finger-nodulus soft 1 = from oval ring bezel HM 385 ? around string hard 1 = slightly concave & round, from discoid or letter 1 = slightly concave & round, from discoid or letter 1 = concave & round, from	entoid entoid
HM 385 ? around string hard 1 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round, from discoid or letter 1 the string hard 2 = slightly concave & round,	entoid
HM 386 gable-shaped nodulus soft HM 387/1-3 disc-shaped nodulus soft $1 = concave \& round, from discoid or leading from disc$	entoid
HM 387/1-3 disc-shaped nodulus soft 1 = concave & round, from discoid or (impressions of same seal on 333-335 1938.1439a; 1 = flat, from unknown shape (impression of	
(impressions of same seal on 333-335 1938.1439a; 1 = flat, from unknown shape (impression of	4
333)	of seal on
HM 388/1-9 parcel soft 2 = concave & round, from different disc (impression of both on OxAM 1938.1440a	
HM 389 disc-shaped nodulus soft 1 = concave & round, from discoid (?);	
1 = flat, from unknown shape	
HM 390/1 3-finger-nodulus soft 1 = concave & round, from discoid or lentoid	
HM 390/2 2-finger-nodulus soft 1 = concave & elongated, from amygdaloid (?)	
HM 391 flat with skinlike soft 1 = from ring bezel (?)	
structure on rear	
HM 393 parcel soft 1 = concave & round, from discoid or lentoid	
HM 394 parcel (?) hard 1 = concave & round, from lentoid (?)	
HM 395 parcel soft 1 = from oval ring bezel; (impressions of sa	ame bezel
also on 383, OxAM 1199υ & ξ)	
HM 396 3-finger-nodulus soft 1 = from cushion	
HM 397 ? around string hard 1 = concave & round, from lentoid (?)	
HM 398 3-finger-nodulus soft 1 = concave & round, from lentoid (?)	
HM 399 parcel ? 1 = slightly concave & round, from discoid (?);	
1 = from lentoid (impression of same seal on 3	45)
HM 404 irregular, parcel (?) soft 1 = flat & round; 1 = flat & oval, from prism	
HM 405 parcel soft 1 = from cushion	
HM 413 fragment of roundel hard 2 = concave & round, from same lentoid of (impressions of same seal on 342);	or discoid
1 = flat & rectangular, from prism (impression seal face also on 345)	ns of same
HM 1215 parcel ? 1 = from discoid (?)	
HM 1240 irregular, sealing ? 1 = slightly concave from unknown shape	
HM 1259 parcel ? 1 = from lentoid (?)	
HM 1620 parcel soft 1 = from discoid (?)	
OxAM	
AE 1199u parcel soft 1 = from oval ring bezel (impressions of same 383, 395, OxAM AE 1199z)	e hezel on
OxAM	C DOZET OII
AE 1199ξ parcel soft 1 = from oval ring bezel (impressions of same 383, 395, OxAM AE 1199u)	C DEZEI OII

OxAM	2.5	ft (2)		Grand Grand and Grand Gr
1938.	3-finger-nodulus	soft (?)	1 =	concave, from unknown shape (impressions on 333,
1439a-c				387);
			1 =	concave & round, from discoid (?); (impressions of
				same seal face on 333-335, 387)
OxAM				
1938.	irregular, parcel	soft	2 =	concave & round, from different discoids or lentoids
1440a-b				(impressions of both on 388)

Flat and oval impressions may also have been impressed by seals like YULE, ECS, 55-56 Class 13: Foliate Backs. Concave and oval impressions may also have been impressed by ring stones.

2 That is a lump of clay held between the tips of three fingers.

Table 8
The Temple Repositories: types of seal faces and types of sealings

type of seal face		type	of sealir	ng	
	discoid nodulus	parcel	roundel	2/3-finger-noduli	other
flat & oval (from prism)					404
flat & rectangular (from prism)			345,346,		
			346,413		
flat & round (various shapes)					404
flat (from unknown shape)	333,334,335, 387,389		346,354		
convex & round	333,334,354	357,388,	342,344,	OxAM	340
(from discoid?)		388,399,	345,413	1938.1439а-с	
		1215,1620,			
		OxAM 1938			
		1440a-b			
convex & round (from lentoid?)		394,1259	345	349,398	397
convex & round	387	393		390	385,386
(from discoid or lentoid)					
from amygdaloid		348	390a ?		
from cushion		405	343	396?	359?
from oval ring		337,338,339,350,		347,383,	336,359,
bezel or ring stone?		351,352,383, 395		384	391
		OxAM AE.1199 υ&ξ			
convex, from			346	374,	358,
unknown shape				OxAM 1939a-c	1240





b

a



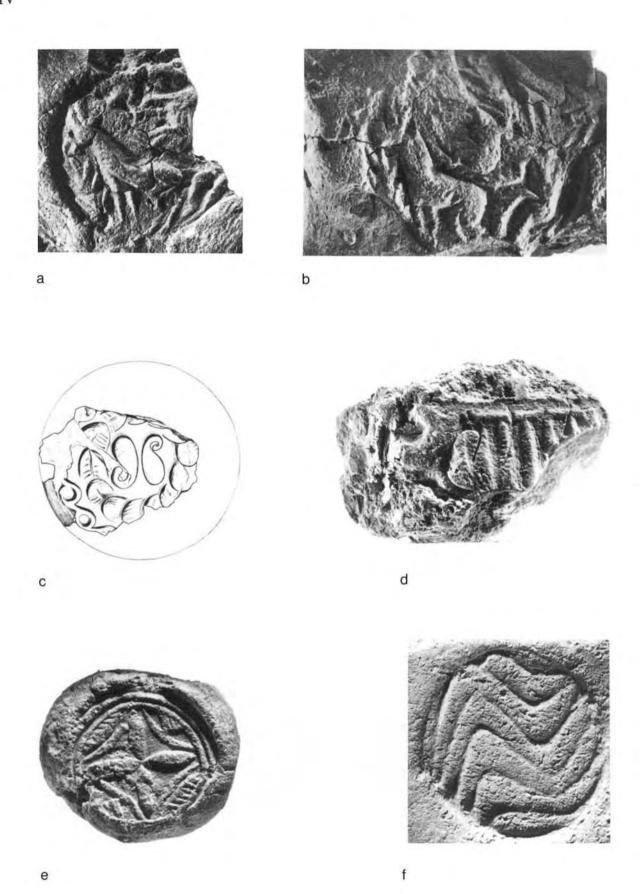


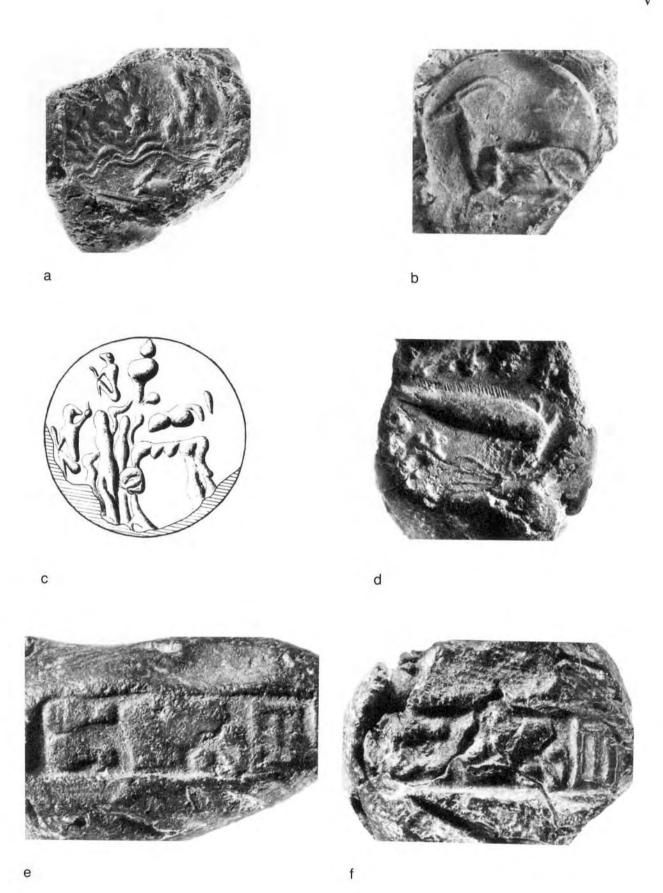
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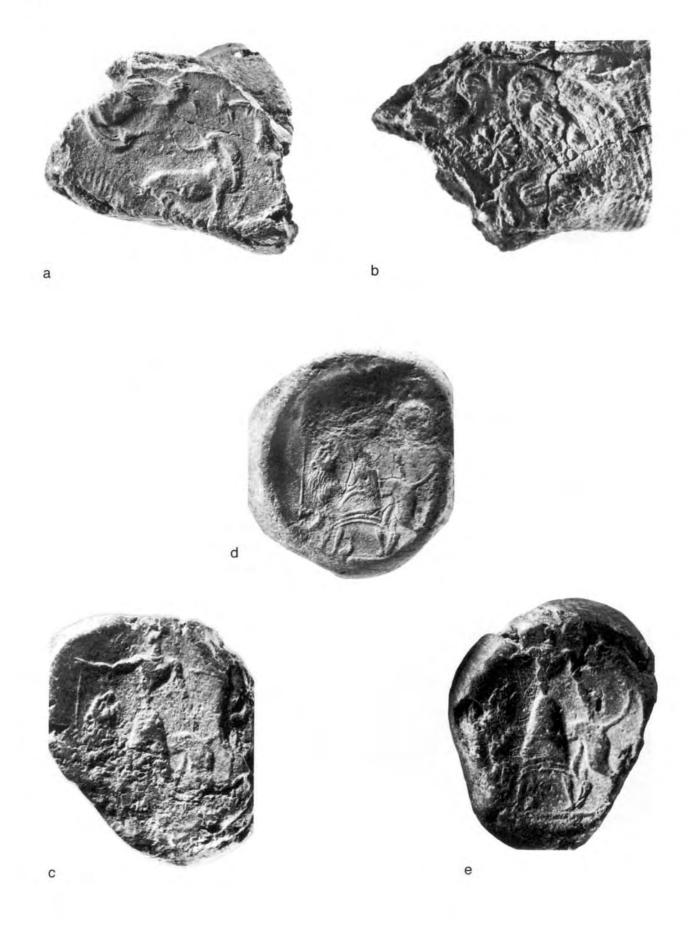


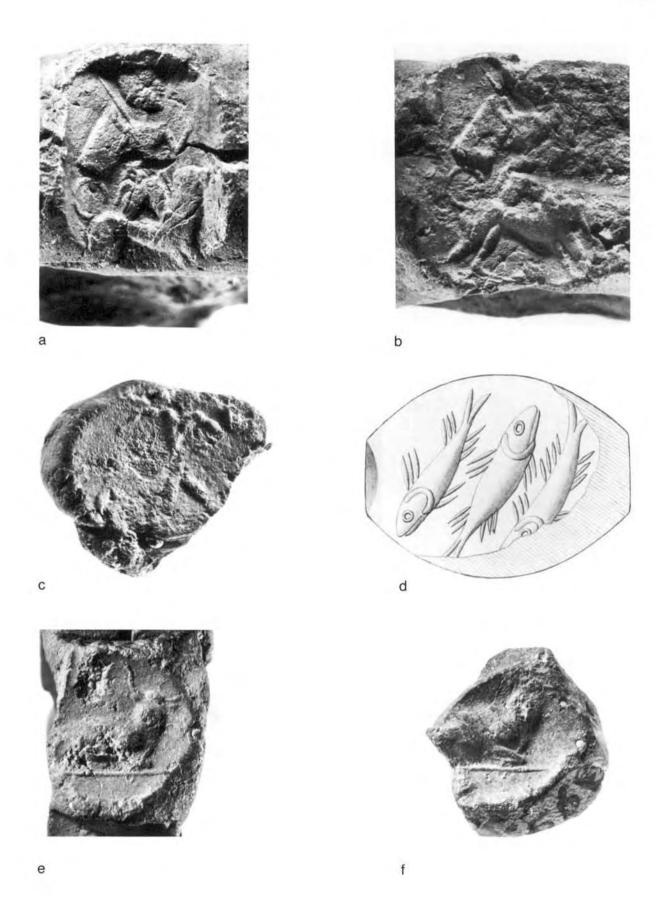


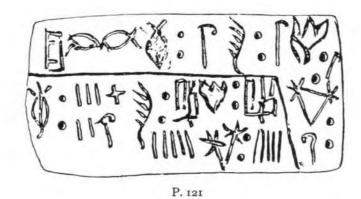
f











P.121: Hieroglyphic Tablet from Phaistos: commodity signs for grain, oil, olives, figs.

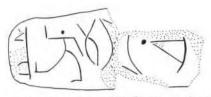


PH 7b: Linear A Tablet from Phaistos: first sign on third line perhaps is commodity sign for wine.



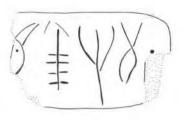
HM 1509-[3,20] x [4,70] x 1.000.

PH 8a: Linear A Tablet from Phaistos: ideographic signs for vases with fractional signs adjoined before numerical quantities (7 and 1) on preserved lines 1 and 3.



HM 1513 + 1524 -[5,10] x 1,20 x 0,000.

PH 12a: Linear A Tablet from Phaistos: commodity sign for grain and dot signifying quantity 10, followed by a possible fractional sign.



PH 15a: Linear A Tablet from Phaistos: commodity sign for grain and number 11+.

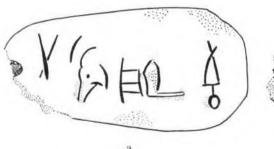


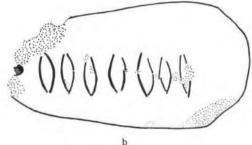
HM 1530 - 2.00 x 2.10 x 1,00 cm

PH Wc 41: Linear A Roundel from Phaistos: commodity sign for wine and quantity 1 + a fractional unit.



P.52c: Hieroglyphic Clay Sealing from Knossos with grain ideogram inscribed on face c.





HM 1679 : Hieroglyphic Perforated Leaf Tablet from Mallia : large quantity 7000 written on side b.

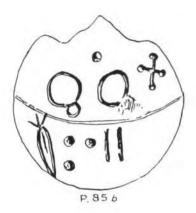


P. 54 C

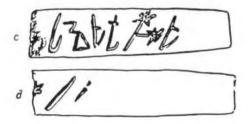
P.54c: Hieroglyphic Clay Sealing from Knossos: ideogram for olives inscribed (leftmost sign on face c).



P.82b: Hieroglyphic Clay Medallion from Knossos: grain ideogram and 3 units.



P.85b: Hieroglyphic Clay Medallion from Knossos: grain ideogram and 32 units listed in lower register.



P.112c: Hieroglyphic Clay Bar from Knossos: commodity sign for figs inscribed (second sign from right) to left of fractional sign on face c.

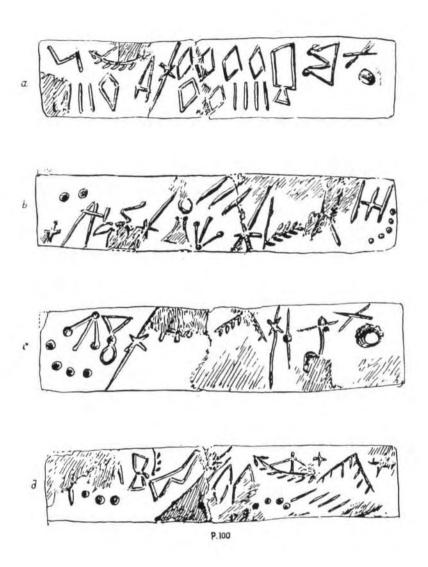




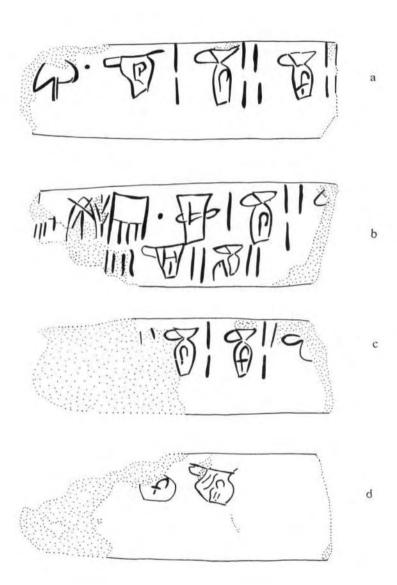




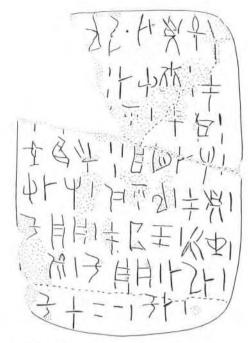
P.114: Hieroglyphic Clay Bar from Knossos: Ideogram for wine inscribed (rightmost sign) on face b to the right of two digit-strokes.



P.100 : Hieroglyphic Clay Bar from Knossos with extremely large numerical quantities listed on each face : face a has one entry of 6400; face b 300; face d 2660.

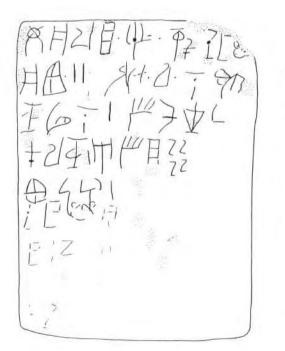


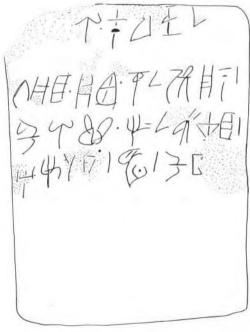
MA 10: Clay Bar from Mallia with Linear A Inscription recording vases with fractional ligatures, perhaps serving as units of measurement.



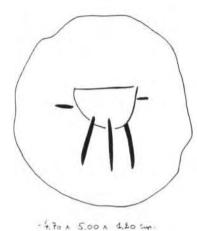
HM 1366 - 5,80 x 8,70 x 0,80 cm.

HT 122a : Linear A Tablet from Hagia Triada : lengthy text with total at bottom (31) without apparent ideograms.





HT 115 a and b : Linear A Tablet from Hagia Triada inscribed on both sides with ca. 13 distinct entries recording at least four different quantities of the commodity grain.

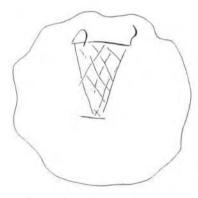


KH Wc 2012: Linear A Roundel from Khania with tripod ideogram inscribed.



-4.40 x 4.10 x 1.50cm

KH Wc 2030: Linear A Roundel from Khania with ligatured man ideogram.

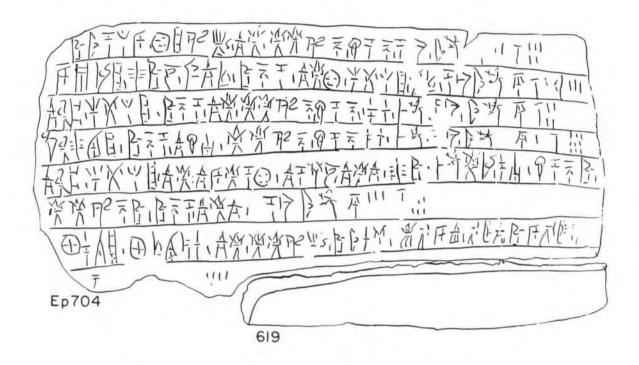


-4.50 x 4.40 x 1.60 cm



KH Wc 2006: Linear A Roundel from Khania with ideogram for basket or conical vessel inscribed.

GO Wc 1: Linear A Roundel from Gournia: ideogram for male ox and quantity 5 inscribed on face b. Face a has six seemingly phonetic characters inscribed.



PY Ep 704 + 619: Linear B Tablet from Pylos recording landholdings.



PY Wa 114: Linear B Clay Label from Pylos referring to monthly rations for women in the further province. Backside of label shows clear traces that clay was impressed on wickerwork.