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## SEALS AND SCRIPT III

### CRETAN SEAL USE AND THE DATING OF LINEAR SCRIPT B

The publication of "On the Knossos Tablets,"<sup>1</sup> with its separate treatments of the evidence for the dating of the Linear Script B Tablets found in the Palace, does not give the impression that the issue is now resolved. Rather, the opposite impression is given, and the opinions concerning the merits and demerits of the rival hypotheses as varied as before, confirm that impression.

One experienced and learned professor of Greek confesses that now he does not know what to think, adding in an undertone, "As Dionysos says of Aeschylus and Euripides in the *Frogs*, 'One is so clever, and so clever the other.'"<sup>1a</sup> Notices in the English Press however, whilst virtually agreeing with this dictum, suggest a regrouping of the critics. None comes down completely in favour of either of the protagonists, except those in some way connected with the Press; and they, unhesitatingly, are on the side of Professor Palmer. One, indeed, in a lengthy notice did not even mention the second part of the book at all.<sup>2</sup> Apart from this condemnation by silence, no critic has so far dismissed either point of view completely. Many readers, it is believed, including scholars with more than a passing acquaintance with Ancient Crete, are mazed by the tortuous

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<sup>1</sup> L. R. Palmer, *The Find-places of the Knossos Tablets*—J. Boardman, *The Date of the Knossos Tablets*, abbreviated OTKT I/II. Other abbreviations: AG = Furtwängler, *Antike Gemmen*; Antiquarium = Furtwängler, *Beschreibung der geschnittenen Steine im Antiquarium*; AM = Ashmolean Museum, Oxford; BMCG = *Catalogue of the Engraved Gems and Cameos in the British Museum*; CdM = *Cabinet des Médailles*, Paris; CS = Kenna, *Cretan Seals*; HM = *Register of Antiquities*, Heraklion Museum; KN = *Register of Sealings from Knossos*, Heraklion Museum; MMNY = *Metropolitan Museum, New York*; NMA = *Nationalmuseum, Athens*; PM = Evans, *Palace of Minos at Knossos*; SM = Evans (-Myres), *Scripta Minoa I/II*.

<sup>1a</sup> The learned professor was using the text which read  $\delta \mu\epsilon\nu \sigma\omicron\phi\omega\varsigma \gamma\alpha\rho \epsilon\lambda\pi\epsilon\nu, \delta \delta'\epsilon\tau\epsilon\rho\omicron\varsigma \sigma\omicron\phi\omega\varsigma$  (*Frogs* 1434). It would seem, however, in view of the two parts of the publication under review, that the alternative reading for the second adverb  $\sigma\omicron\phi\omega\varsigma$  would be more apt.

<sup>2</sup> Jacquetta Hawkes in the *Sunday Times*, December 29th, 1963

nature of the evidence as it is now presented. One scholarly notice<sup>3</sup> was entitled "Labyrinth," and if the critic was intending both the more primitive and the later meaning of the word to be understood, he was justified. At the best the apparent indeterminacy must either provoke fresh assessment and investigation, or become a stalemate.<sup>4</sup>

In determining the chronology of an object, or in this case, of a group of them, if the evidence is equivocal, then although expressions of belief or opinion are allowable and often welcome, the question must remain open, until some decisive factor is elicited, by which the equivocation is resolved. Or the evidence in itself may not be equivocal; yet it may appear so by preconceptions which affect the way the evidence is selected, or by the force or feeling with which it is presented. In this case, the force or feeling may be due to a desire to justify some conception or other interest, not necessarily wrong in itself, but at this stage in the investigation improper. In archaeology, the ordering of objects in their proper sequence is the prime concern: their interpretation, however important, is secondary.<sup>5</sup>

In the controversy over the dating of the Knossos Tablets, apart from the changing tone and vicissitudes of the discussion which must have affected in some degree an objective evaluation of the evidence, there seem to have been some interpretations of the finds tacitly accepted, others tacitly ignored. If the latter were wrong, this was justifiable. What seems strange is that the finds, from which the interpretations came, were also ignored. This, in some measure has now been repaired,<sup>6</sup> but perhaps too late for the relevance of this part of the evidence to have its true weight; so, since in the earlier stages of the discussion all the evidence either for or against the new dating of the script was not used, earlier

<sup>3</sup> That of Professor G. Huxley in the *Spectator*, January 3th, 1964

<sup>4</sup> Since the foregoing was written, one of the finest and most penetrating archaeological reviews of recent years was published in the *Times Literary Supplement*, January 30th, 1964, p. 90

<sup>5</sup> This is more perfectly impressed by H. Frankfort, *The Stratified Cylinder Seals of the Diyala Region*, cap. I

<sup>6</sup> Earlier, during the course of a lecture at Cambridge, Professor Palmer dismissed any evidence from seals and sealings on the grounds of typology as of no value. In the section 3 in OTKT I (p. 197ff.) entitled "The Clay Sealings" he apparently regards the sealings with greater consideration. Some of the consequences of this change of front may be seen in the Appendix "Seals and Find Places".

conclusions are bound to be defective, and may vitiate a clear movement in subsequent discussion.

With regard to the former, for example, it has been accepted by some scholars that Linear Script B, whether from Pylos or Knossos, is a form of Greek, and therefore to them it seemed necessary to bring down the date of the Knossian tablets to 1200 B. C.<sup>7</sup> so to make them contemporary with the tablets from Pylos. Other scholars, not entirely convinced of either the complete identity of the script from Pylos with that at Knossos, and of either, with the Greek language as it is now understood, inclined more to the traditional date of 1400 B. C. for the destruction of the Palace at Knossos. Not that the earlier date is in itself more acceptable to the conservative philologists—except, perhaps, that it suggests a closer relationship between Linear Script A and Linear Script B<sup>8</sup>, but because the earlier date seemed to be a reasonable conclusion from the archaeological evidence as it stood. Does therefore the importance attached to the date 1200 B. C. derive from a philological interest? If it does—although it is true to say some archaeologists have also been puzzled by the gap of 200 years between the hitherto accepted dates of the destruction of the Palaces at Knossos and Pylos<sup>9</sup>—then archaeological evidence is being invoked to support a philological hypothesis. This can lend itself both to selective choice and to special pleading. If on the other hand, the dating is regarded primarily as an archaeological problem upon whose solution philology may wait, should no reasonably firm conclusion emerge from the finds themselves, then archaeology must be aided by hypotheses history and philology can offer.

In other words, apart from the content and character of the script itself, is there enough evidence from which a reasonable conclusion can be deduced. Evidence of the find places should be prime for dating—on this both parties agree—then agree to differ, since the deposits were not in character with the function of the script, nor undisturbed. That later disturbance has taken place and the stratigraphy in certain areas has suffered, must be admitted,

<sup>7</sup> See the review of Professor John Evans, *Observer* January 5th, 1964

<sup>8</sup> This has more cogency, if the sequence, overlaps and occasional contemporaneous use of all three systems is remembered.

<sup>9</sup> Professor Blegen and Mr. Hood independently. With respect to these eminent archaeologists, neither solution they offer, viz: in the first, to bring down the date of the Knossos destruction to fit Pylos; in the second to bring up the destruction of Pylos to fit Knossos, in the face of the evidence, is acceptable.

yet although the destruction of a multi-storied building with subsequent looting and partial reoccupation may not always give clear evidence, a number of reputable archaeologists claim,<sup>10</sup> that in spite of these areas where the evidence is not decisive, Mackenzie's notes on the Room of the Stirrup jars and the Room of the Saffron gatherer, in any case show that an earth floor separated tablets from pottery associated with the last phase of the Minoan occupation at Knossos; and that the latest vases from Knossos scorched during the destruction of the Palace, as indeed were the tablets themselves, belong to an earlier phase.

Should this be rejected however, because of the equivocal nature of the evidence in other find places, the question, whether there is any other archaeological date, which by its nature and as evidence for the chronology of the tablets does not wholly depend upon the spot in which it was found, becomes important. If related to the script, as it must be, and to other artifacts, it should in a measure be independent of the find places on which there is so little agreement. This data, it is believed, exists in the seal use of the Late Minoan Age, the typological evidence of which has been so little taken into account.<sup>11</sup>

It could not perhaps have been expected that pottery and tablets would be found together.<sup>12</sup> Administrative records are not usually found with pottery. The finding of both together usually signifies a votive deposit, inconclusive for the chronology of the script. An inscribed jar in a dateable context offers more hope, until it is remembered that votive use sometimes favours archaism in this respect also. If sealings are found near written tablets, since both are the result of business procedure, the possibility that they are contemporary is very strong. But if a sealing is found inscribed with the script it is desirable to date, whatever the difficulty is of dating, proximity or contemporaneity could not be closer.

<sup>10</sup> Professor G. Huxley has expressed this perfectly in his review, see note 3 above.

<sup>11</sup> So far in all reviews except one, OTKT II Appendix B has not been mentioned.

<sup>12</sup> In the one case it does, there is however quite a degree of silence about it: OTKT I Pl. XXIII CAE/NB 1902, p. 34, ref. 141. This vase is referred to by Evans PM II, 331; PM IV, 264, fig. 195 and note 2; and was there a comparative absence of illustrations of this shape in *The Palace of Minos*, the fine and germane examples discovered by Hood in the Warrior Graves at Knossos, BSA XLVII, 248, fig. 9, 1.3, 1.4, fig. 10, III 2, will repair the deficiency. For the style of the decoration, see Furumark, *The Mycenaean Pottery, analysis and classification*, pp. 179.

In the comparative absence of associated pottery, evidence for the dating of the Late Knossian sealings may come in part from a study of the sealings themselves and from their relationship with other groups of seals and sealings of dateable character. Against the background the general pattern of seal use in Crete—for which there is evidence of nearly a thousand years development, and of the Mainland which develops more rapidly later—a typological examination of the Knossian sealings themselves is of profit, and a comparison of them with their antecedents possible. For the latter, the sealings of the Temple Repositories,<sup>13</sup> Zakro,<sup>14</sup> Hagia Triada<sup>15</sup> and Sklavokampo<sup>16</sup> are available. The Temple Repository sealings, and seals and sealings from other stratified deposits of MM III provide parallels for the earlier seals of Zakro and Hagia Triada; other sealings from these deposits are then seen to be related stylistically to the Sklavokampo sealings, and to some of the seals of the Vapheio Deposit.<sup>17</sup> Thus the character of LM I seals becomes clear.

Greater clarification is made possible by the recent excavations of Hood near the Royal Road at Knossos,<sup>18</sup> where by reason of good stratigraphy and abundance of pottery, stylistic distinctions between seals of LM I A and LM I B found in the deposit can be made. An appreciation of the seal use of the Late Minoan Age, however, can only be made if the character of the period called LM II is properly assessed in relationship with the other two periods LM I and LM III. If the numbering of these periods merely indicated a simple succession in time, this would be unnecessary. But since LM II, appropriate to North Central Crete, describes a development peculiar to the Palace use at Knossos and therefore at some points contemporary with LM I A and LM I B in other parts of the island, the tale of development is complicated.

That there is an LM II style in pottery is generally accepted, a style which is distinct from LM I A and B and from LM III A and B. The question, most pertinent to the dating of the Knossian Tablets, is whether there are seals whose style could also be de-

<sup>13</sup> Evans, PM I 463 seq.

<sup>14</sup> JHS XXII (1902), 333—8, pl. XII

<sup>15</sup> *Annuario*, VIII—IX (1925—1926), 157—201, Tav. XI—XVIII

<sup>16</sup> *Arch. Eph.* (1939—41) 87 seq.

<sup>17</sup> *Ibid.* (1889), pp. 130 seq. 164 seq., pl. X

<sup>18</sup> I am grateful to Mr. Hood and the Committee of the British School at Athens for allowing us to make these references.

scribed as LM II—a style not strictly related to that of the pottery,<sup>19</sup> but comparable with or related to the style of seals of LM I A and B, and with that of the seals of LM III A and B, yet virtually distinct from them; and whether this style is in any way related to the sealings in use at the time of the destruction of the Palace. For they, unless they are imports, must be related to one or more of these groups.

There is, so to speak, at a certain stage in the Late Minoan Age, a double variation in the development of pottery and seals. This double variation does not, however, suggest a discontinuity in the culture, or that development occurred at Knossos alone. It merely emphasizes different uses, and in seals, for example, certain important differences, which can only be understood if LM II is considered in some degree of isolation. This is necessary if the development of the Palace use at Knossos from LM I to LM II is to be appreciated, and the extent of the influence LM II had on the latter part of this age, first on the other palatial centres, and then upon the seal use of LM III—the greater part of which has been called the Reoccupation Period—is to be assessed. It will then be seen that the characteristics of seals dateable to the earlier part of LM III—hereafter called LM III A, considerably less in extent than the time covering the Reoccupation levels, usually called LM III B—are special and do not appear to be a direct link between the seals of LM II and those of LM III B.<sup>20</sup>

Three groups of Seals in LM II contexts are important:

1. Grave I at Isopata.<sup>21</sup>
2. Knights' Tombs at Knossos.<sup>22</sup>
3. An outstanding example of contortion of a fine rock crystal lentoid found by Evans at Knossos with mature LM II pottery.<sup>23</sup>

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<sup>19</sup> This may have occurred in a few instances in the Early Minoan Age and during the First Transitional Phase, perhaps too in the Middle Minoan Age, but it is not of any frequency.

<sup>20</sup> The style of LM III A seals seen in the Heraklion Museum from the Sellopoulo excavations (not yet published) is clearly different from that of any LM II examples and the many instances of carved stones from the LM III B levels. In the author's opinion, the seal stones of LM III A incline more to LH II style.

<sup>21</sup> *Archaeologia* 65, 1913—1914

<sup>22</sup> Reprints from BSA XLVII and LI

<sup>23</sup> PM IV, 588 fig. 583

Distinctive characteristics of these examples are:

- Greater elaboration of detail.
- Finer style.
- Finer technique.
- Supreme confidence.

Although a small group, these seals exemplify five of the six main tendencies of this period:

- Studies of struggle.
- Sensuous elaboration of detail, or
- Harsh rigorism which advertises technical processes.
- Torsional experiments.<sup>24</sup>
- Fragmentation of subjects with consequent amalgams of diverse parts.<sup>25</sup>

The sixth, the perennial inclination towards natural subjects done in verisimilitude, is not pre-eminent in this group. It exists, however, in sealings judged on analogy to be contemporaneous.

At this stage developments, unlike in certain respects, like in others can be seen among the later examples of the Hagia Triada sealings, which suggest a development in LM I A to LM I B, and which is not generally related to Knossian development of LM II. But the development perceptible among the sealings of Hagia Triada is something in its own right.

A contrast between the characteristics of the seal types of LM II with those from the Vapheio deposit is equally instructive. The group is mixed, being in the opinion of the writer the first private collection of seal stones of the Western World, and contains examples of LM I (twenty) and LM II early (three). The remainder by criteria of style and technique, appear homogeneous and of mainland origin.<sup>26</sup> On all counts the seals from the LM II strata, as indeed the sealings of the Late Knossian Palace, are more developed and appear later products than those gems from the Vapheio Tomb.

For apart from the use of the amygdaloid, whether full, narrow, or truncated, as in Vapheio Nos. 12, 19, 22, 23, 24, 26, 27, 28, 29, 30, 36—over a quarter of the total number, and the shape of the narrow amygdaloid is almost unknown among LM II seals and among the late sealings of the Palace, the true amygdaloid shape

<sup>24</sup> CS 55

<sup>25</sup> Ibid. 56

<sup>26</sup> Ibid. 52 seq.

being reserved for the talismanic stones—even styles and subjects are virtually different. Except for Vapheio No. 13, the goddess with the captured animals, which shows an almost late Palace complication, the subjects, despite their beautifully elaborate treatment in some cases are basically simple, e. g. No. 3. Nos. 2 and 4 are fine examples of LM I B circular arrangements to be distinguished from the torsional treatment of a form in itself; No. 11 is a study in apposition, marking the beginning of a whole series. Even the two chariot motifs Nos. 1 and 30, whose contrasting style and technique suggest their place of origin, are basically simple. Indeed No. 1 for all its detail does not favourably compare with the Hagia Triada sealing No. 117.<sup>27</sup> True, Vapheio No. 21, the study of a lion attacking a bull, employs the same formal scheme as two other motifs of near date, that from Menidi<sup>28</sup> and the other from a warrior grave near Knossos<sup>29</sup>, but in spite of superlative work on Nos. 3, 10, 12, 18, 25, 32, 33, 34, 36 and 37, only one gem suggests any torsional treatment of form and that is relative to the motif itself rather than torsional in the form. There is nothing in any of the forty examples on Pl. X, Eph. Arch. 1889, to compare with the strong and assertion of the gems of LM II, both those from stratified deposits and those without provenience, whose style proclaims for them the same period. So too with many of the sealings from the Late Knossian Palace.

If such comparisons give the higher limits of dating for LM II by stylistic and technical comparisons, the seals from LM IIIA and LM IIIB tombs give the lower limits. Of LM III sites so far the three most important are those of

Gournes Pedeadā  
Kalybia Messara  
Siteia  
Sellopoulo

The seals from the Gournes tombs<sup>30</sup> are not contemporary with the pottery, but of earlier periods (LM II and LM III A). The pottery in both tombs at Gournes Pedeadā reaches up to LM IIIB, but the seals in Tomb I, the rock crystal lentoid (HM 1223) of two bulls back to back, sharing one head, with the sacral shield above clearly advertises its LM II style and composition, the extensive

<sup>27</sup> Ibid. 54 figs. 112, 113, 114

<sup>28</sup> Furtwängler and Lolling, *Das Kuppelgrab von Menidi* pl. VI. X

<sup>29</sup> BSA LI, 94, fig 5 No. 4

<sup>30</sup> Arch. Deltion 4 (1918), 56, pl. V



and ancient damage to its edge a connection with some catastrophe, that of the taurokathapsia is of another of the schools of the Palace style—unless it came from a contemporary use at Mallia, while the third, that of a cow and calf is more fitted to the LM III A period. In Tomb II the beast attacked by a bird can best be placed in the Palace period, the other, another cow and calf motif again, in LM III A at the very beginning still under strong Palace influence—as that from Tomb I, shows signs like the Sellopoulo gems of Helladic influence.

The stylistic appreciation made of these five seals found in LM III B1 contexts, although helped by other parallels, is made possible by the evidence of the seals from the excavated tombs of Kalybia Messara,<sup>31</sup> Siteia<sup>32</sup>, and Sellopoulo<sup>33</sup> of LM III A chronology. The two latter unfortunately are unpublished. Of the five stones associated with the deposit at Sellopoulo, one, the stag hunt with the two men, is LH IIB, the flattened cylinder and truncated amygdaloid both engraved with a walking bull, like the red and white agate of the running agrimi are LM III A. These three at any rate are contemporary with the pottery. The fourth bears a beautifully engraved bull man of LM II, made not long before the walking bull of the flattened cylinder, but more Minoan in character and content.

The solitary red jasper lentoid from Siteia of the snake framed mother goddess, attended by gryphons—like the fine example in the Fogg Museum, Harvard—has, in the midst of most detailed and fine engraving, aniconic feet. The head is missing by damage; again signs of a palace origin, although found with LM III A pottery.

It is perhaps the tombs of Kalybia Messara, which give the final clues to the presence of fine LM II work in later contexts. These sixteen tombs contained, in addition to predominantly LM II A pottery, a miscellaneous collection of artifacts of LM II style, seals of LM II and LM III A. None of LM III B. In only three graves were found one seal alone and only in two in positions which implied normal use. In all other cases, a disproportionate number and in what seems to be a votive position. In Tomb I<sup>34</sup> four fine examples of LM II work. One indeed only a fragment, yet of the finest

<sup>31</sup> *Monumenti Antichi XIV* (1904), pp. 507 seq. pl. 40

<sup>32</sup> Not yet published

<sup>33</sup> Not yet published

<sup>34</sup> *Monumenti Antichi XIV* (1904), 526, figs. 85. 88. 93. 94

Palace style. In Tomb II near the head of one skeleton, another example of fine LM II work on a gold signet of the goddess by the pillar with devotee and monkey.<sup>35</sup>

In Tomb VIII associated with the secondary burial of a young girl were five sealstones,<sup>36</sup> of which three are LM III A, one LM I B possibly from South Crete. In Tomb IX<sup>37</sup> also associated with a secondary burial, were one LM II and the three sided prism of LM III A, engraved on two sides only.<sup>38</sup> Tomb XI<sup>39</sup> contains first a multiple burial, and then underneath a layer of earth and stones one solitary grave, that of a woman containing ornaments with other fragments of gold, the Phaistos gold signet of LM I B style. Other artifacts of bronze, stone and ivory,<sup>40</sup> whose style is that of LM II, scattered, throughout the tombs, suggest that many of these stones also were in all probability taken from the Palace at Knossos after its destruction. Of the sealstones, that are damaged, the fractures are ancient.

So the seals of LM II, those found in dateable contexts, those extant related to them, fall clearly between the seals and sealings of LM I and those from Vapheio on the one hand and those from Sellopoulo with the related examples from Gournes and Kalybia on the other. A further indication of the limits of LM II is found in the large number of carved stones, clearly dateable in Knossos and its environs as also in East Crete, to the Reoccupation levels of LM III B.

In no case has any sealing from the Late Knossian Palace or from the Little Palace been found which corresponds in style and technique with the seals of the reoccupation levels. Or with the seals from the LM III B tombs of Zafer Papoura<sup>41</sup> or Episkopi Pedeadia,<sup>42</sup> therefore parallels must be sought among seals of the

<sup>35</sup> Ibid. fig. 51

<sup>36</sup> Ibid. figs. 89, 87, 92, 91

<sup>37</sup> Ibid. 520. pl. XL, 10, 11, 12, also fig. 10

<sup>38</sup> Ibid. The style and technique of the lion and two Minoan genii on the three sided stone of LM IIIA work should be compared with the work on the stones in Tomb I; note 33 above

<sup>39</sup> Ibid. 534 seq. fig. 50, pl. XL, No. 6

<sup>40</sup> Ibid. fig. 20a, 25, perhaps the steatite pedestal lamp fig. 36 and the stone vessels figs. 37, 38, 39 and 40. The latter are imports; as such are more likely to have entered Crete in LM II than LM III; fig. 30, the rim of the large bronze basin. On the LM II date of this Dr. Platon is in wholehearted agreement.

<sup>41</sup> *Archaeologia* 69, 2 (1905); *BSA* XXVIII (1926/27), 243 seq. and VI (1899/1900), 81 seq.

<sup>42</sup> Unpublished. I am grateful to Dr. N. Platon for allowing me to mention this.

earlier groups. In the appreciation of the seals of the LM III B tombs from Gournes, as also in Episkopi Pedeadia, those from the earlier period can be readily distinguished from the later products. These later carved stones from the environs of Knossos are a considerable number. There are at least 300 of them in the Heraklion Museum alone, of which 130 come from Knossos and its neighbourhood. Add to these many in other collections,<sup>43</sup> and the statement that no sealing with a type comparable with the carved stones of LM III B has yet been found among the Late Palace sealings becomes impressive.

Characteristics have been found among some of the Late Knossian sealings like those in seals of LM III A and LH II date. Some even bear resemblance to later examples from the Vapheio group, but the large majority show characteristics which are not seen in LM III B seals as a whole, but have been seen in seals of LM II date and others similar to them found in the Mycenaean tombs of Tsountas.<sup>44</sup> Indeed the six main characteristics of LM II seal use are exemplified in the majority of the Late Knossian sealings, and when these with LM II stones, and others of the same class from the Mainland, are compared with those of the earlier and later periods of this age, the distinction of the Knossian LM II period is as justifiable for the seals as it is for the pottery.

The Late Knossian sealings have been placed by Evans into five main groups.<sup>45</sup> Other smaller groups recorded by him in the Knossos Reports and *Scripta Minoa* I were later, and in some cases put in the larger groups. Of these groups, three by reason of their siting are fairly composite, viz: — The Central Shrine Deposit, the Archives Deposit and the Little Palace Deposit. A comparison of the styles, motifs and presumed shapes of sealings from these deposits show a restricted and probably votive character of the Central Shrine Deposit; the extensive scope of the Archives Deposit, and the advanced character of the Little Palace Deposit. A comparison of the general character of the sealings of the Palace at the time of the destruction with the gems from the shaft graves at Mycenae and from Vapheio suggests that the sealings are more closely related to seals of LM II date and nearer in character to

<sup>43</sup> In the forthcoming volume of the *Corpus of Cretan and Mycenaean Seals* which deals with the English private collections, some very interesting examples of LM III B carved stones may be seen.

<sup>44</sup> Arch. Eph. 1888 pl. X

<sup>45</sup> PM IV, 591

the seals from the Mycenaean tombs than to those from the earlier groups.

This involves a consideration not only of subjects and styles, but wherever possible, of technique and the shape of the seal responsible for the impression. Any inference with regard to the material of which the responsible seal was made is more problematical, although in one case, that of the Archives Deposit No. 21,<sup>46</sup> the delicate and smooth manner of its engraving suggests it derives from a gold signet. The consideration of subjects and shapes must be internal, that is among the groups of the late Knossian sealings themselves, then external, a comparison of these results with results from a similar examination of comparable stones.

### Internal

(a) Subject	Classes of Motifs	Number of Motifs
Archives Deposit	12	82
S. W. Basement Deposit	4	23
East Hall Borders Deposit	6	22
Central Shrine Deposit	2	3
Little Palace Deposit	10	48

of which in the Archives Deposit 30 were of natural subjects; 13 religious or mythological; 4 were of natural subjects formally treated. In the Little Palace Deposit, there were 6 natural subjects only; 12 religious or mythological; 10 of natural subjects but formally treated.

### (b) Presumed Shapes

#### Archives Deposit

Flattened cylinder	2
Amygdaloid	2
Glandular shape	2
Lentoid	54
Hoopd signet	9
Cylinder proper	1
Unknown	12

#### S. W. Basement Deposit

Amygdaloid	1
Lentoid	19
Hoopd signet	3

<sup>46</sup> PM IV 598, fig. 593

## East Hall Borders Deposit

Glandular shape	1
Lentoid	19
Hooped signet	2

## Central Shrine Deposit

Lentoid	1
Hooped signet	2

## Little Palace Deposit

Glandular shape	3
Lentoid	37
Hooped signet	7
Cylinder proper?	1

If the statistics of shapes from each group are compared amongst themselves, it will be seen that despite the predominance of the lentoid—always a mark of seals after LM I B (except for LM III A) the Archives Deposit has examples of all shapes although those connected with the earlier part of the age were in the minority; the Little Palace has no example of sealings from flattened cylinders or from amygdaloids.

## External

## (a) Subjects

If the two groups of sealings from the Knossian Palace which contained the greatest number of classes of motifs and of types of motifs are compared statistically with groups of gems from the Shaft graves at Mycenae, the Mycenaean tombs of Tsountas, Vapheio, Prosymna, Dendra and the LM III A graves at Gournes and Kalybia Messara, LM III B at Episkopi, it will be seen that Vapheio approaches nearer to the Archives Deposit and to the Little Palace Deposit than any other group, except that of the Mycenaean tombs of Tsountas. Prosymna is nearer that of the Little Palace group with Dendra not far behind. The classes and types from the Shaft grave bear little resemblance. The LM III A graves from Gournes and Kalybia are also well related statistically both to the group of the Archives Deposit and to that from the Little Palace. The LM III B groups bear little relationship to any except in so far as they reuse older talismanic stones.

## (b) Presumed Shapes

In a statistical comparison of presumed shapes from the Archives Deposit and the Little Palace Deposit on the one hand, and the Mycenaean Shaft grave, Vapheio, Mycenaean tombs of Tsountas, Prosymna, Dendra and the LM III graves in Crete on the other, it will be seen that while Vapheio again more nearly approaches the Archives Deposit group as also the Little Palace, the preponderance of lentoids in the Mycenaean tombs as in Dendra and Prosymna shows the general trend of glyptic in the LM and LH ages, and suggests that LM II is about the right position for many of the Knossian sealings on this criterion. The LM IIIA graves at Gournes and Kalybia Messara come naturally more closely to the sealings of the Little Palace. So indeed do the later tombs of Episkopi Pedeadra, for the comparatively large proportion of amygdaloids is due solely to a survival use of earlier talismanic stones.

Shapes	Mycenaean Shaft Graves	Vapheio	Archives Deposit	Little Palace Deposit	Mycenaean Tombs (Ts)	Prosymna	Dendra	LM III Graves	
Flattened Cylinder .....	3		2			2		G. P. and K. M.	E. P.
Amygdaloid ....	1	6	2		2				3
Glandular Shape		6	2	1					
Lentoid .....	2	26	54	22	35	11	11	20	5
Hoop Signet ..	2	2	9	2	2	1	2	2	
Cylinder Proper .			1		2	1			
Three Sided Prism		1					1		

A consideration of the style of selected sealings from the Archives Deposit and the Little Palace Deposit, which are noted by Evans and illustrated by him in the Palace of Minos may be useful<sup>47</sup>, for except for the Central Shrine Deposit these two groups have perhaps more reason to be considered as a whole than any other. This as such, however, has no bearing on the style of the motif on any individual sealing.

<sup>47</sup> Sealings have been selected which are illustrated in the Palace of Minos. On the whole, these drawings are trustworthy.

## A Consideration of selected sealings from the Late Knossian Palace

### I. Sealings from the Archives Deposit<sup>48</sup>

4. Three warriors with body shields (not typical LM II, possibly from South Crete), PM III 315 Fig. 205; Fig. 204 is more in the LM II style.
7. LM II, PM IV Fig. 597 A, c
8. LM II, PM IV Fig. 597 A, a
10. LM II or LH II, PM IV Fig. 597 A, b
11. LM II fine work for gold signet, PM IV Fig. 597 A, k
13. LM II (early), PM IV 441 Fig. 365
15. LM II, PM IV Fig. 597 A, l
21. LM II, in all probability for a gold signet by the fine manner of engraving, PM IV Fig. 597 A, d
38. LM I B possibly. This does not derive from a flattened cylinder (PM IV 601 No. 1), but from a glandular stone. Style and shape suggests LM I B.
41. LM II possibly fine elliptical gold bead seal, PM IV Fig. 597 B, m
42. LM II (late) specimen of taurokathapsia, PM IV Fig. 597 B, n
43. LM II (late) specimen of taurokathapsia, PM IV Fig. 597 B, k
46. LM II (early), PM IV 564 Fig. 534
48. LM II (late), PM IV Fig. 597 B, a. Torsion and accessories.
50. LM II (late), PM IV Fig. 597 B, g; cf. HM 1233 from Gournes Pedeadá
51. LM II, PM IV Fig. 597 B, c. Late spoked arrangement of animal forms.
55. LM II (early), PM III 317 Fig. 209. For finer work than Ibid. Fig. 208 which is possibly LH II. See PM III 299 seq. Fig. 196 for LM I A date of shield fresco.
68. PM IV 598 Fig. 593. Fragment of cylinder either Syro-Hittite or of Frankforts 2nd Syrian group, but perhaps used in Cyprus.

### II. Sealings from the Little Palace<sup>49</sup>

1. LM II, possibly for a gold signet with ring handle, PM IV Fig. 597 A, j
2. LM II, PM IV Fig. 597 A, i

<sup>48</sup> References of sealings in this group are those from PM IV 602 and SM I—II. Where the Heraklion Museum number is known it is given KN.

<sup>49</sup> PM IV 605

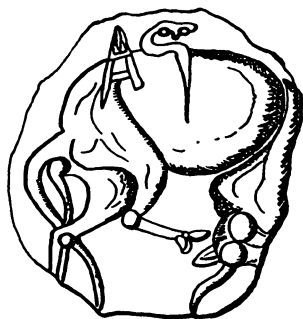
8. PM IV Fig. 597 A, g. These are lions, and possibly LH II work.
10. LM IIIa, PM IV 626 Fig. 614b
13. LH, PM IV 151 Fig. 116. This the writer believes to be a helmet.
19. LM II, PM IV Fig. 597 B, b
16. LM II and LH II, PM IV 827 Fig. 805. The horse is a later engraving superimposed upon the ship. This is believed to be LH II work.
43. LH II, PM IV 535 Fig. 486

If, however, it is said, that the forgoing examples do not assist in any great degree, because, although they are included under the groups Archives Deposit or Little Palace Deposit, the group like the find spot is too vague to be of real use, (moreover on Evans own admission, the position of many sealings in the Archives Deposit came about by their precipitation from rooms in the upper stories of the Palace at the time of its destruction) the sealings in the next group, Section III, were associated with particular find spots.

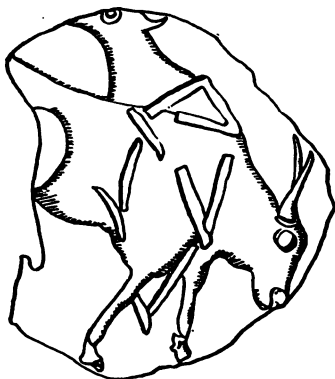
### III. Individual Sealings

1. Northern Entrance Passage. HM 109. Pale grey and red well fired clay. PM IV 568 Fig. 542a LM II, OTKT XIII 215 PL XV; 48, 49. Two walking oxen, part of a frieze above a cornice reminiscent of an altar base. The lower decoration appears to be between style of Antiquarium 22 and another from Mycenae (AG II 18). The style and technique—the engraving is very shallow—is more related to one phase of LM II than to any in LM III. The size of the seal was also exceptional, as the flatness of the field. These together would also suggest LM II.
2. Northern Entrance Passage. HM 146. Blackish grey clay. Ship, LM II, PM IV 827 Fig. 806. The engraving of ropes and thwarts show a fineness, which except for the ship sealing from the Little Palace (PM IV 827 Fig. 805) has no parallel.
3. 10th Magazine. PM IV 626 Fig. 613. OTKT I 97, 11th March 1901. LM II or LM III A. Extracts from Notebooks OTKT I 96, 2nd March 1901, and OTKT I, 8th March 1901 suggest pottery is LM II. Similar types on sealings KN 653, 654.
4. Armoury Deposit. Pale red clay in good condition: two fine specimens. PM IV 615 Fig. 602; cf. South West Basement Deposit No. 13, PM IV Fig. 597 B, e. Three large water fowls in two registers with papyrus flowers. The variation in size, position

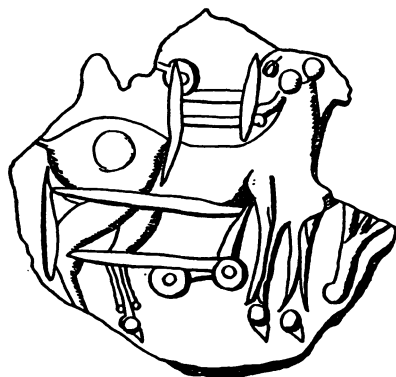




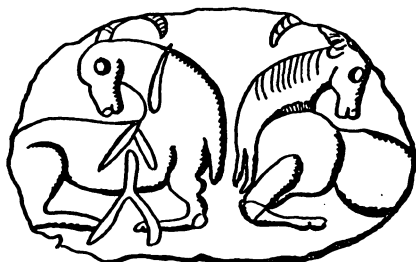
1



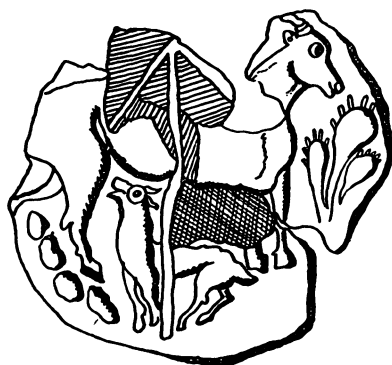
2



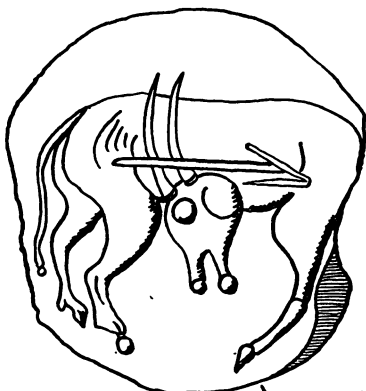
3



4



5



6



7



7

- in the two registers, details of plumage and papyrus, suggest LM II. See Appendix I p. 52.
5. Entrance of Royal Tomb, Isopata. KN 415, LM, PM IV 562 Fig. 530. Combination of running bull regardant on a stepped base with spiral form design. The chronology of the tomb, PM IV 562—563, seems as clear as the style of the sealing, LM II. Although not strictly related to the Palace sealings, its use is germane. But if it should be said that although the foregoing sealings have individual provenience and stratigraphic reference, their association with script is not certain, then Section IV may give some evidence to help on this difficulty, since in this section are included sealings with particular provenience, which are inscribed with Linear Script B.
  6. Vth Magazine. AM 1938. 1080 = CS 52 S (PM IV 617, 618 Fig. 604b). SM I 42 gives Vth Magazine, OTKT I 93, seq. and 198 Note 1 suggest VIII Magazine 34. The disturbed condition of both Magazines makes precise stratigraphy impossible. LM II; see below in Group V.

7. Room of the Niche. PM IV 617, 618 Fig. 604 a; SM I 42, 43, Fig. 20a. SM II 1701. OTKT I 26 south of Vat Room, also 34, 55, 80, 106. In the few remains, chronological evidence is equivocal. Early LM II or LM IB; see in Group V.
8. XIth Magazine. OTKT I 97, AE NB. 15th March 1901. These fragments have so far not been identified.

#### IV. Individual Sealings with Countersigns<sup>49a</sup>

Archives Deposit 5, SM II no. 1713, LM II; see Archive Deposit 55 above.

Archives Deposit 45, PM IV Fig. 533, LM II. The motif shares a combination of diverse centres of gravity in the finest LM II tradition.

Little Palace 15, LM II of Class 6

The three following have not so far been found.

#### XVth Magazine

SM II No. 1709, found together with tablet  
SM II 639, No. 1710. 1711 (BSA VII, 1901,  
43; PM IV 706 note 3)

Since these sealings have not been found in the Heraklion Museum, it cannot be known whether they were LM or LH work. Their provenience suggests Late Minoan, and by their motifs

LM II

SM II No. 1712, found with tablet SM II 1516,  
PM IV 597 ("not identified")

SM II No. 1706, PM IV 736 Fig. 721

Evidence of a more particular kind comes from fifteen sealings which are either countersigned or endorsed with Linear Script B.

Group V (Ashmolean Museum)	Suggested Chronology on stylistic grounds
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AM 1938. 1052 = 1938. 1016 (CS 45 S). Young  
bull with tree and two sacral shields,  
countermarked with banner SM II AB  
66 + AB 5

LM III A

<sup>49a</sup> Cf. Evans-Myres, Sealings with surcharged signs, SM II p. 64 seq.

- AM 1938. 1080 (SM I 43 Fig. 20 b 1; PM IV 617 Fig. 604a; CS 52 S) The bull wrestler from the Vth Magazine, countermarked with barred S-sign SM II AB 25c and endorsed with SM I Fig. 20 b 2 = SM II 1703 b LM II
- AM 1938. 861 Two lions attacking a running bull, countermarked with SM II B 51; for the endorsed signs, see OTKT I Pl. X LH II

#### Group VI (Heraklion Museum)

- KN 121 A contorted bull scratching its head; for the countermarks see Fig. 1 and OTKT I Pl. VI LM II
- KN 124 A bull walking to right, another behind; see Fig. 2 and OTKT I Pl. V c LM II (late)
- KN 129 Equals AM 1938. 1052, 1016; for the countermark (SM II B 81?) see Fig. 3 LM III A
- KN 156 Two calves at rest antithetically disposed, regardant; countermarked with variants of SM II AB 27 or 58; see Fig. 4 LM II
- KN 122 A cow with a calf to the right, and cactus tree; countermarked with the impaled triangle SM II B 88a; see Fig. 5 and OTKT I Pl. Va LM III A (early)
- KN 119 Bull contorted in the third degree; for the countermark and the endorsed signs see Fig. 6 LM II (late)
- KN — (SM I 43 Fig. 20a 1; PM IV 617 Fig. 604a) Bull charging to right, below the hands of an acrobat; countermarked with balance SM II AB 63 and endorsed with SM I Fig. 20a 2 = SM II 1701 b LM II?/LM I B
- KN — (PM IV 564 Fig. 533) Boy leading beast, countermarked with SM II AB 28 LM II

But if it be thought that the appreciation of these sealings with script countersigns suggesting the presence of one LH II and three LM III a types, thereby detracts from the evidential value of the LM II types which remain, the sealings described in the next group, Group VII, may satisfy all requirements. Find is assured by two places. Style, subject, and technique, can all be paralleled by

dateable example, and as the sealings are countersigned and in two cases endorsed with Linear Script B, they appear to be completely relevant.

#### Group VII (Heraklion Museum)

Sealings of a lion from the Armoury Deposit. The central sealing in Evans PM IV 616 Fig. 603 (KN 400) is from a different seal than the other sealings there shown, KN 401 and 403, which are endorsed. Another has also been found in the Heraklion Museum stamped by the same seal and endorsed in the same way as KN 403; one more (SM II Pl. I xxxviii) found in the South East Quarter of the Palace (1901 Notebook gives the Corridor of the Sword Tablets) is countersigned with the man-sign. As the design or motif of the sealing in each case was faint, the nodules being deep black and of an appearance as if affected by oil—in fact Evans had apparently confused KN 401 and 403 with KN 400—an attempt to reconstruct the design from the four sealings was made. By providence, sealing 401 provided the crucial details viz. the relative position of the eye and nostril, making the head of the lion in profile, and fixing it in both angle and direction in relation with the body of the beast. Then the dotted mane, the body markings on the loins and the beginning of the tail. This sealing also gave faint outlines of the 'Boss' treatment of the shoulder. From 402, the position of the fore and hind legs and the direction of the tail were seen; from 403, the relative size of head and body and its general position. This sealing confirmed the profile of the head, the position of the eye and nostril. The fourth impression countersigned with the man sign, later confirmed the 'Boss' shape of the shoulder, head and nostril. This reconstruction of the seal responsible for these four sealings showed a lion contorted in second degree.<sup>50</sup> This stylistic mannerism unacceptable to Mainland taste, can be dated by another examples, one being Ashmolean CS 315 found with mature LM II pottery,<sup>51</sup> and by stylistic comparison to be placed after Vapheio and the amethyst lentoid from Prosymna Tomb 44.<sup>52</sup>

<sup>50</sup> See Fig. 7 Reconstruction

<sup>51</sup> In the LM II studies of lions, in particular, the nearer shoulder joint was often expressed by a technical device of a deep drill cut with a rim; so that in the impression it appears as a raised knob. This occurs in Ashmolean CS 315, BMCG 89a, Berlin Antiquarium No. 15, Tsountas, Arch. Eph. 1888, pl. X, No. 17.

<sup>52</sup> Prosymna I, 273—274, 11, 136—144

Another sealing of a contorted lion KN 253 (OTKT I Pl. VII a) found with the Chariot Tablets has been re-engraved in one respect, the stylised shoulder knob has been rayed.<sup>53</sup> This is considered to be a Mainland alteration and re-use of the Cretan seal. Another Cretan seal re-used in a similar manner is a sealing from the Little Palace Deposit in which a horse has been engraved on an earlier seal which bore a ship design.<sup>54</sup> In each case this points to the possibility of other Mainland sealings in the Late Knossian Deposits. This has now been confirmed; and sealings of a LM III A character have also been noticed. Of sixty sealings from the Little Palace, eleven, with a possible addition of eight, are from the Mainland, fourteen are from LM III A seals. Of 300 sealings from the Palace proper, twenty-five are LM III A, twenty nine are from the Mainland, and one from a Syrian Cylinder Seal which has been dated c. 1400 B. C. The remainder are believed to be of LM II date. No sealings of LM III B date—that is after the destruction of the Palaces—have been found amongst the Late Knossian sealings.

Nor are the differences between the subjects and their treatment on the Pylos sealings and those from the Palaces at Knossos, negligible. On the contrary, although in some sense related, the majority of the sealings from Pylos show what is in effect a new tradition.<sup>55</sup> There is relatedness, for even when the subjects and style of many of the Pylos sealings differ greatly from those of Crete, there seems little doubt they are Aegean in character and derive ultimately from Crete. Perhaps in their derived and borrowed

<sup>53</sup> On the gem responsible for the sealing KN 253, the shoulder knob has been rudely altered into the likeness of the Solar Symbol. No LM II engraver would be a party to this, except under duress.

<sup>54</sup> Close examination of this sealing shows that unlike PM IV 827, fig. 805 the forehoof is over the oar. See BSA XI (1905), 13, fig. 7, also PM II 244, Note 1.

<sup>55</sup> Strong similarities and strong dissimilarities occur between the Late Minoan sealings and those from Pylos. There are even two examples of torsion on sealings among the Pylos sealings. Gems found also in Pylos include a fine agate lentoid of a torsioned lion. There are also other seal stones in an undoubted Cretan idiom, including a Cretan talismanic stone. So the instances of torsional subjects among the sealings may well derive from earlier Cretan seals re-used on the Mainland, a practice earlier disliked, as far as torsional subjects were concerned. The possibility of an older Cretan tradition, belonging to earlier immigrants and kept in use, may not be ruled out. This likeness or similarity in style only refers to a small percentage of the sealings. Others although deriving ultimately from Cretan use, either directly from Crete itself of an earlier time or from a chance survival of a tradition on the Mainland itself—have in the course of time become so different from the Cretan ethos that the presence of other—even non-Aegean influence—must be suspected. This is apparent when the late sealings from Pylos are examined.

character—thus more subject to influences from Egypt and Anatolia—the presence of certain sealings and seals of Cretan character from the excavation has tended to confuse the differences between the products of the Late Minoan Age and those of Pylos. Although a similar script was used, and the shapes of the seals used and subjects of the sealings seem the same, they are different in many respects. In shape, there is a reappearance of the flattened cylinder, the lentoids used were in general larger and flatter, and subjects even if they are closely related to Cretan prototypes, were treated in a different idiom. This can be seen in those sealings already published, particularly those of the two athletes with the seated bull and the dancing ladies. In others, in particular those of a man leading a horse, of the athletes running, or in combat, and the two lively gryphons *en face*, all from the Archives Room complex; and the exceptional fragment from Trench XX, of a single lion in heraldic position flanked by two devotees in Mycenaean dress, with another of the goddess with snake frames flanked by agrimi from another spot, and the beautiful study of three date-palms, show significant differences.

The presence of some seal stones which certainly appear to have come from Crete, in particular a talismanic stone of a serpent above an altar, a magnificent study of a torsioned lion near in time and of comparable workmanship, with the Ashmolean CS 315; studies of birds and butterflies, may imply the presence of a small group of settlers from Crete itself, obstinately preserving the relics of a former glory; or may have been the result of spoil. Whatever the cause of their presence, it now has the merit of throwing into high relief the differences between the two traditions. And those differences once perceived are such as would require in the Pylos style, the passing of one hundred and fifty years with the effect of non Aegean traditions in addition to achieve. A comparable state of affairs existed in Enkomi in Cyprus at about the same time and a little later, where as could be expected the presence of stronger Near Eastern and Egyptian elements produced even greater changes.

The overall evidence justifies the special character of LM II and the dating of the majority of the sealings of the great Palace at Knossos to this period. Thus the sealings from the Palace proper fall between the earlier seals of Vapheio and those from the LM IIIB tombs; they are like many seals from the Mycenaean tombs of Tsountas and Wace; although partly related to the finer gems

of Dendra and Pylos, they are unlike them, and belong to a different world from that of the majority of the sealings of Pylos of Mycenaean III B date.

## APPENDIX I

### SEALS, SEALINGS AND FIND PLACES

Because seals and sealings are sometimes disassociated from the place where they would be expected, their value for dating has been largely discounted. Used and unused, carried about and lost, they may often be found in odd places. Add to this the more ancient use which regarded both seals and sealings as amuletic or of use as votive offerings, and an even greater complication ensues. Further difficulties come from archaizing styles and shapes, or sometimes from lack of stylistic change; sometimes if script is used, the use and addition of venerable names of past worthies to help the living, will further cloud the issue. So seals and sealings must be used with caution, if evidence for chronology is to be gained from them. They have, however, two virtues. Seals are usually in much the same condition as they were when buried; so they do not need restoration. And, seals and sealings will not suffer evidence from other sources to be read into their shape and the style of their motif.

The seal use of Ancient Crete has such a constant and unbroken tradition, such experimentation in shapes, subjects and styles, that its thousand years duration and its very many types—at least 6000 extant—and the excellence of its work makes it a registry of changes which can be linked with chronology from other sources, or if sufficient evidence be lacking, be even used for chronology. Sealings, for example, may well be crucial in the dating of the Linear Script B. Professor Palmer having earlier discounted their value in this respect, then felt in the controversy over the script, they might be used as evidence. On this point the author is in full agreement with him. The Professor is, however, inclined to forget some of the dangers attendant upon their use. For instance, when in Mycenaean and Minoan, 201 and Fig. 36, he discusses the Large Armoury sealing PM IV 615 Fig. 602, above No. 1 Section III, it is a great pity that he misread the Pendlebury reference (*Archaeology of Crete* 247); for Pendlebury's statement about the appearance of birds refers to pottery only.



Birds appear with some frequency on Early Minoan carved three sided prism beads, and often in the MM Age on seal stones; a sealing of Hagia Triada of LM I date of the flying birds is famous, *Annuario VIII—IX* No. 28 p. 93, fig. 52 CS 47. Fig. 84; nor are examples of LM I A and LM I B lacking in the Vapheio deposit Nos. 5 and 19; nor are they lacking in LM II. For selected examples, see in the Ashmolean Collection CS 9, 10, 111, 118, 168, 187, 289, 297, 328, 343, 344; also in Berlin, *Antiquarium* No. 58a, assignable to MM III A by reason of the script on sides b and c; in Paris, CdM, N 4304, N 3489; in New York, MM 26.31.21, 26.31.101, 26.31.130, 26.31.166, 26.31.179, 26.31.184, 26.31.233, 26.31.249, 26.31.188, 26.31.276, 26.31.279, 26.31.306. On the contrary they do not occur much in LM III A or LM III B. If they do, they are usually part of a mythological scheme. Professor Palmer takes me severely to task, *Antiquity XXXV* (1961), p. 310 for an error I made in *Cretan Seals* 43 Fig. 71, where I inadvertently gave a wrong provenience for the clay sealing of the young bull's head with a cult object between the horns thereby making a schema of the double axe (HM 152). I was so preoccupied with its relationship with some of the earlier Zakro sealings—precursors of the fantastic combinations of parts of animals—and with some of these earlier Zakro sealings with those of the Temple Repository, that I made that error of provenience. I did, however, advertize my error in the footnote No. 11, where the relevant reference to PM I 699 Fig. 522 b was given. So I am grateful for the Professor's correction, if only to apologize for my error, but also in so doing to stress the typological connection in part of two groups of sealings one of MM III A—B, the other of MM III D—LM I, the overlap being of the greatest importance.

The Professor's interest lies in the fact that the wall in the Court of the Stone Spout in which HM 152 was found appears to be an LM III erection. Indeed in OTKT I 199 Professor Palmer writes: "Of the find facts there cannot be the slightest doubt. We simply note that the expert on Cretan Seals betrays no stylistic misgivings about his MM III attribution of a clay sealing found in the deposit of a court rebuilt in LM IIIb." I should not presume to doubt the find facts, but I must also assure the Professor that even had the sealing been found in a wall built from LM III material, I should still have no stylistic misgivings in giving this clay sealing (HM 152) an MM III attribution. Anymore than I had when an EM three sided prism bead was found in an LM I context in Palaikastro: or when a chalcedony discoid of MM III A was found in an LM III

courtyard on the same site (BSA, Reprint No. XL p. 44, 1 (8) HM 567, P. 46, 24 (3) HM 562), or when in the LM III B tombs of Episkopi Pedeadia three LM I B—LM II talismanic stones were found, or when in a more recent excavation at Knossos, in predominantly LM I and II strata an ivory button seal of MM I B was found with a Minoan cylinder and several lentoids of the Late Minoan Age. What would cause me to have stylistic misgivings would be if an LM seal stone or sealing were found in a closed EM or MM Deposit.

Had HM 152 been found in a wall composed of LM III material it might have been the result of an accident; it would in any case have been inconsistent with normal use, but would be consistent with some votive uses. But in any case the composition of the wall in which HM 152 was found tells a quite different story. Here, with John Boardman's permission, I will quote his analysis: "I only touched on the circumstances of the Court of the Stone finds in *Antiquity* xxxvi (1962), 50 and in my book, p. 51. Briefly, the Court had been dug to the floor in 1900 leaving only late walls standing, and it was from these in 1901 that the sealing, fresco fragments and 'Kamare's' pottery were found. The testimonia appear in Palmer's book p. 182, and his pl. 24b shows the Evans NB with sketch of sealing and pot (a beaked jug which cannot be LM III, and is more probably MM III). My pl. 14a and fig. 10 show the late walls, which are omitted (as are all the reoccupation walls) from Palmer's plans. The fresco fragments I take to be pieces from the Toreador fresco series. On p. 183 Palmer shows that he does not understand that what is found in the construction of a wall antedates that construction, and any occupation which went with it. Evans' misdating of white on black vases in the East corridor near by does not invalidate the inevitable deductions about the sealing-find, that it is pre-final occupation."

In short, I had unwittingly<sup>56</sup> given HM 152 the provenience it deserved, but did not possess.

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<sup>56</sup> With regard to Professor Palmer's adverse notice of my dating of the lapidary's workshop in CS 77, *Antiquity* 38 (No. 149), March 1964, p. 49, I admit that in view of the lack of clear typological evidence — for the one engraved piece was unfinished — I accepted Evans' estimate of the date. With this the material of the unfinished lentoids would agree, but this factor, in view of the likeness of the unfinished motif to LM I B and LM II related types, would not militate against an earlier date if a re-reading of the stratigraphical evidence suggested it.

## APPENDIX II

## SEALS BEARING SCRIPT SIGNS

In addition to sealings countersigned or endorsed with Linear Script B, there are a small number of seal stones which are engraved on some empty part of the field with a sign from the same system. Four signs so far occur; the impaled triangle SM II B 88a, the double axe AB 49, the cross AB 3, and the bifid cereal sign B 89c. The other, an obscure sign surmounted with a bar and disc which appears to be the result of first, a cancellation, and then, the engraving of an ideograph, on NMA 2426, an amethyst lentoid of LM I B date from Prosymna, Tomb 44, does not in its present form so far appear in any lists.

Sealstones engraved with the impaled triangle, B 88; with suggested periods on stylistic criteria.

CS 322 Lentoid of Spartan basalt. A bull man in torsion. In the field an impaled triangle and a sacral shield

LM II

CS 495 Sealing: Two young bulls antithetically disposed, running to the right. In the field is an impaled triangle and a sacral shield

LM II late

BMCG 38 Truncated glandular gem of haematite. Young man leading two bulls. In the field is an impaled triangle, a sacral shield and AB 3

LM IB—LM II  
this stone shows  
signs of archaism in  
style and shape

BMCG 85 Lentoid of basalt; bull man in torsion; below an impaled triangle

LM IIIA

Colville Collection. Lentoid of Spartan basalt. Young bull to the left, impaled triangle in the field

LM II

Colville Collection. Lentoid of pale veined agate. Two goats to the left, the rear goat regardant. Impaled triangle with flattened top in the field

LH III

HM 877 Lentoid, deep brown serpentine; bull lying as sacrifice on altar; above an impaled triangle

LM II

- HM 1865 Lentoid of brown agate. A bull man in torsion; an impaled triangle in the field LM II
- NMA 2424 Lentoid jasper from Tsountas, Mycenaean Tombs, Eph. Arch. 1888, Pl. 10 No. 30 (PM IV 586 Fig. 576). Two sphinx bodies joined by a ram's head; an impaled triangle in the field LM II
- NMA (un-numbered) Cornelian amygdaloid. young bull running to the left, regardant: an impaled triangle in the field, but in a crowded and unusual position badly executed LH III

#### Sealstones engraved with variants of AB 49

- MMNY 23.160.27 Lentoid of red jasper. Two bulls lying antithetically disposed, decked with ceremonial double axes. Between them AB 49, the outer vertical strokes having extensions at 45 degrees. LM II
- HM 131 Lentoid of Spartan basalt, from Siteia. Two young bulls antithetically disposed, on watch. Between them AB 49, the right vertical stroke having an extension of 45 degrees; see PM IV 570 Fig. 544 LM II
- These two stones appear to be by the same hand, see author, AJA 68 (1964), 3 with Pl. 4 No. 16

#### Sealstone engraved with AB 3

BMCG 38: See above

#### Sealstones engraved with the bifid cereal sign B 89

- CS 342 Lentoid of haematite. Bull attacked by two gryphons, between them sign B 89; PM IV 624 Fig. 611 LM II late

#### Sealstones engraved with ideographs

- NMA 2426 Lentoid of amethyst from Prosymna Tomb 44 (Prosymna I, 273; II, 136 to 144) The above mentioned sign with additional bar and large cup sinking LM I A

BMCG 75 Lentoid of rock crystal. Bull to right, regardant; over the bull a sign like a cross with a long stem, or perhaps a schematic version of a sword

LM II/LM III A

Since the impaled triangle occurs either with the sacral shield or if alone in the position where the sacral shield or sacral knot is usually found, except in the case of HM 877 where the religious significance of the motif is clear enough to do without a religious symbol, it may well be that on these seals B 88 has the nature of a religious symbol. In this connection, the variations in the engraving of AB 49 on MMNY 23.160.27, and HM 131 may also be significant. The incorporation of B 89 into the motif of CS. 342 suggests that the sign is clearly part of the motif, in a truly pictorial and sphragistic sense.

Whatever the semantic or sphragistic values of the signs in these connections—B 88 is curved to match the torsion of the bull man—it is of interest and point to observe that they all appear on stones of LM II style; except in three cases, BMCG 85 being perhaps an LM III A version of an earlier LM II motif, as the Colville lentoid of LM III date and the LH III badly executed amygdaloid from Athens copy earlier Minoan prototypes. And of these stones, three are examples of mature torsional style, as three other show the mature antithetical arrangement of forms. The occurrence of the signs derived from the Linear Script B use on LM II stones or their near derivatives (for in BMCG 85, as in the Athens examples, the work is clearly hurried and derived) suggests an LM II date for the sporadic use of Linear B signs on seal stones. No signs from Linear Script B appear on any known stones of LM III B, and as significantly, none appear on any of the Vapheio stones; while the occurrence of B 88 on the lentoid from the Tsountas Tombs at Mycenae, with the absence of any signs on the Vapheio gems, agrees with the statistical analysis of shapes given above.