AN INSCRIBED MINOAN SEALSTONE

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I  The Seal *

The sealstone discussed here and illustrated (figs. 1-3) is in the collection of the British School of Archaeology at Athens.1 It was listed in Scripta Minoa II 111, no. M. 28 and has also been published by Brice2 and further discussed by Kenna.3 The purpose of this note is to rectify mistakes made in all of those publications and to suggest that the signs may not be of Linear A script, as hitherto proposed, but a somewhat crude version of some other type of script.

The material of the piece is carnelian, varying from pale orange to bright red with two small areas of dark brown. SM II lists it as steatite; Brice corrects the error; Kenna omits to mention its material altogether. It is conical in shape with a roughly oval base and a string-hole close to the top and parallel to the longer axis of the base. The height is 18 mm., the base 10 x 8 and the diameter of the string-hole 2.5 mm. The top of the cone is slightly pinched in at about the point of the string-hole’s diameter. Across the top and parallel to the string-hole runs a channel semicircular in section, apparently indicating an earlier string-hole, which, drilled close to the top of the stone, either broke during manufacture or more probably wore through in the course of a long period of use; so that for continued use the existing string-hole had to be drilled lower down (fig. 3). There are signs of some wear on the

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1 We are indebted to the Managing Committee of the British School of Archaeology at Athens for allowing us to study and publish this sealstone, which we first did as part of a catalogue of the collection, BSA 66 (1971) 49 ff.
3 V.E.G. Kenna, Kadmos 1 (1962) 10 ff.
sides of the cone and at the top but the engraved base does not seem to be similarly worn, though there is a small chip in its edge just over the B-shaped sign.

Cones, conoids and other stamp-seal shapes, with more or less pinched-in tops for easy holding and a string-hole in roughly the same position as the upper broken one in this piece, were common in the Prepalatial era and go back as far as the EM II period to which the earliest stratified Cretan seals from Lebena and Myrtos belong. Similar shapes may well continue into the succeeding period; they appear, for example, in tholos tombs whose latest burials stretch into MM I at Koumasa, Lebena and Platanos but they probably did not continue much after that. The shape and physical condition of this piece might therefore suggest that it was an early sealstone, engraved, for example, with characteristic simple cross-hatching, or even an unengraved pendant; that its string-hole wore through and was re-drilled lower down, lower in fact than was normal in relation to the pinched-in top of a stamp-seal of this type — partial loss of the top or "handle" of the seal would account for the fact that it is much more difficult to grip as a stamp-seal than most of its early parallels; — and that the inscription was a later engraving, probably added at the same time as the new string-hole.

Such an explanation would be more plausible were it not for the hard semi-precious material. The EM parallels already given for its shape are without exception in relatively soft stones, mainly steatite or serpentine, occasionally limestone and one from Myrtos in local amygdaloid basalt. In the EM period even simple beads for necklaces tended to be in malleable or at least soft workable materials, gold, clay, faience and different coloured steatites or serpentines. Tholos B at Koumasa, for example, whose latest burials seem to fall within MM I, produced a large number of necklace beads but only one of "sard" (carnelian?) and one of lapis lazuli. From other tholos tombs at Koumasa where burials appear to continue into MM II there is a pendant of rock-crystal and of the beads "a good many are of rock-crystal or sard". For sealstones these harder materials hardly come into use until MM IB to MM IIA. In Corpus der minoischen und mykenischen Siegel II 1, which publishes the Prepalatial seals in Herakleion Museum, among just over 500 pieces the only hard stones listed are one each of amethyst, carnelian, onyx and sardonyx and four of rock-crystal. Where they derive from tholos tombs they are from those whose material extends into MM II or later and in some cases they give some indication of the difficulties the engraver is having with

5 Loc. cit. n. 4 above; P. Warren, Myrtos (London, 1972) 226 f., no. 129, pl. 77.
6 S. Xanthoudides, The Vaulted Tombs of Mesara (Liverpool, 1924) 31, pl. XXVI a.
7 Ibid. 48, pl. XXII; for the material of these beads cf. K. Branigan, The Foundations of Palatial Crete (London, 1970) 147; The Tombs of Mesara (London, 1970) 71.
An inscribed Minoan Sealstone

the harder material (e.g. CMS II 1 432) or with the application to it of new techniques (e.g. CMS II 1 118, 366 and 468).

The difficulties of dating the British School's piece are therefore severe. Its shape should make it not later than MM I, its material not earlier than MM II and its inscription, if it were indeed Linear A, hardly earlier than MM III to LM I! This may be an exaggeration of the problem, but a problem undoubtedly exists and there seem to be four solutions which singly or in combination may explain the peculiarities of the piece.

(1) An early sealstone or pendant, unique in its semi-precious hard material and therefore perhaps especially prized, has been re-drilled and engraved with an inscription at a date somewhat later than that of its original manufacture. The evidence for this solution has been given above.

(2) The inscription is not in Linear A but in some other script. If contemporary with the main use of the shape — but not the material —, it should be what Evans called "primitive linear signs and figures." 8 In this early period Warren has suggested that the irregular linear patterns on one of the Myrtos seals "may possibly consist of simple symbols or signs, and would thus belong to Evans's primitive linear class" and Branigan has argued that some of the seal motifs of this period reproduce ideograms and some sort of system of numeration. 9

But the inscription on this sealstone appears to be of a more advanced type than these earliest signs and symbols and it will be argued below (II) that it is of the Hieroglyphic/Pictographic class. Such a conclusion allows a convincing closure of the gap between the apparent date of the stone and its inscription, not however so complete a closure that it avoids the necessity of proposing or precludes the solution suggested under (1) above. A combination of the two solutions seems closest to the truth.

It seems inherently unlikely that the inscription is in Linear A. As opposed to Hieroglyphic/Pictographic Script, Linear A is very rare on sealstones. There are only three other examples:

(i) the gold ring from Mavrospeloio 10
(ii) a black steatite amygdaloid from the Little Palace at Knossos 11 and
(iii) an unusual, roughly triangular pendant of steatite which was purchased by Evans in Athens. 12

9 Warren, op. cit. (n. 4 above) 34; Branigan, Kadmos 8 (1969) 1 ff.
10 E.J. Forsdyke, BSA (1926-7) 269, no. IX E1 and 284 F., fig. 37, pls. 17 and 19; Evans, PM II 557, fig. 352 and PM IV 510; G. Pugliese Carratelli, MA 40 (1945) 596, no. Cn 13, fig. 240; Brice, op. cit. 24, fig. 19, pl. 30.
11 Evans, PM I 670, fig. 490; Pugliese Carratelli, loc. cit., no. Cn 12; Brice, loc. cit., no. V 12, where he mistakenly gives the shape as lentoid.
12 Evans, PM I 639 f., fig. 475; Pugliese Carratelli, loc. cit., no. Cn 11, which he
Both Evans and Brice regard (iii) as of Cretan origin and Pugliese Carratelli even includes it mistakenly in his Cn (Knossos) series. It has on the sides four symbols which seem to bear no relation to known Cretan scripts and on the base three and a half signs of what Evans calls “anticipations of regular signs of the Linear Script A.” It is therefore unusual in respect of both shape and script. Pugliese Carratelli gives no reading of the inscription and Brice takes his from the original (8), though for (ii) his reading is from the impression. Kenna’s view, for which he gives no reason or evidence, that the peculiarities of the piece may result from its Helladic origin, runs contrary to what Evans, Pugliese Carratelli and Brice all say of it. His view can be based on nothing but the irrelevant fact that it was bought in Athens and, as he believes the script to be Linear A, seems frankly incredible. Limited amounts of Linear A occur on Kea, Kythera and Melos but there is an almost total absence of inscriptions of it on the Mainland. The peculiarities of (iii) therefore set it apart and for comparison with the British School’s piece it may be best to concentrate on (i) and (ii). A major problem is to determine whether the inscriptions are to be read from the original object or from its impression. Brice, following Pugliese Carratelli, reads (i) from the original gold ring and this appears to make the best sense though a reading from the impression may not be impossible. He reads (iii) from Evans’ drawing which is of the original object, not its impression. Kenna is therefore wrong to maintain that Brice has transcribed all three sealstones from their impressions. A transcription of (ii) seems to come best from its impression and this is how Brice takes it, having first inverted the sealstone as it appeared in Evans’ drawing. Kenna’s statement that all four inscriptions should be transcribed from the original object may well be wrong; it is dictated by his desire to see these inscribed sealstones as having a “talismanic”, non-sphragistic use, an argument which, in turn, seems to hinge on two assumptions, both of them incorrect, that the British School’s piece comes from Melos and that all “Cretan sealstones from Melos were of the talismanic type” (see under 4 below).

Hieroglyphic/Pictographic script appears on sealstones that had a regular sphragistic function, a fact of which the Hieroglyph Deposit of sealing at Knossos gives ample evidence, and there seems no need to suppose that a sealstone inscribed with Linear A was any different in this respect. It is not altogether clear which way up Brice attempts to transcribe the British School’s piece or whether he does so from the original or the impression. Read in the impression (fig. 2), the X-shaped and inverted B signs are intelligible as versions of sign nos. L22 and L66, though Brice suggests L88 for the latter.

repeats as Cn 14 wrongly ascribing it to Mavrospelio; Brice, loc. cit., no. V 4; Kenna, loc. cit. (n. 3 above).

13 Sign numbers and variants are here taken from G. Pugliese Carratelli, Le Epigrafi di Hagia Triada in Linea A, suplementos a Minos III (Salamanca, 1963).
The central sign is much more puzzling; in some respects it looks like a human figure. Brice proposes L31; LM7 (= L124) might be a candidate, but would not account for the dot (head?) and and the extra member (arm?) at the “top”. L127 is probably too rare a sign to merit serious consideration, but L64 is more common and occurs in carelessly drawn versions (like that of the fifteenth sign on the Mavrospelio gold ring as read by Brice) which bear a superficial resemblance to the sign on this seal.

All this reasoning falls, if the inscription is not of Linear A and the central sign in particular makes it difficult to accept as such.

(3) The peculiarities of the piece are to be explained on the grounds that Linear inscriptions, being unusual, occur on unusual shapes. Kenna imagines that these shapes had a non-sphragistic “talismanic” use. The sphragistic possibilities of the stones have been examined above under (2). Gems regarded as talismanic are usually confined, especially in the period when Linear A was current, to a number of specific shapes, particularly the amygdaloid and three-sided prism with amygdaloid-shaped faces. This piece and (iii) are indeed unusual in shape but their inscriptions are also unusual and problematical. Of the other two pieces, (ii) is an amygdaloid, one of the most common shapes for all types of engraving from MM III onwards; and, though oval bezels are very much more common on gold rings than circular ones, the shape of (i) has a parallel in the British Museum ring with copulating goats and there is an almost circular bezel on a gold ring from Archanes as well as unique examples in lead from Sphoungaras and in ivory from Phylakopi.

(4) The piece is from a peripheral area; in this case Melos is proposed by Kenna. His parallel suggestion that (iii) may be Helladic has already been dismissed but on the subject of the British School’s piece it may be well to quote him in full (n. 3 above):

“The latter from the Finlay collection in the British School at Athens is thought to have come from Melos and to be of Cretan origin. Both conjectures are justified since a number of Cretan sealstones have been found on the islands of the Aegean. Many of these with other so-called Melian or Island stones found on Melos were published together by early travellers. It is of importance however in this connection to realize that the Cretan sealstones from Melos were of talismanic type; another from Cythera with LM II seal motifs was a three sided prism bead, so they were not strictly seals at all.

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14 Kenna, _The Talismanic Stone in the Late Minoan Age_ (Lund, 1969) 26, where he makes no mention of unusual shapes or of Linear A inscribed sealstones having a talismanic function.

The Middle Minoan use of this shape is regarded as exceptional. Might not therefore the conical stone of the Finlay collection, a shape not in seal-use at a time when Linear A script was being used, also signify a non-sphragistic use? The cone-shaped pendant engraved on the base was like the three sided prism bead, a replica of a seal shape from the last phase of the Early Minoan Age and First Transitional Phase.

Herein lie a number of errors. The gem-collection of the British School is not, as both Kenna and Brice assume, the Finlay collection. That collection is in the museum of the University of Manchester. In the British School there are three Minoan gems of "talismanic" type and fifteen "Melian" gems. These were collected in Melos about the time of the School's excavations at Phylakopi. Of the Minoan pieces two may be those from Melos mentioned by Evans in a footnote and the third is identified as coming from Melos in a notebook of R.C. Bosanquet at the School's dig-house at Knossos. The Melian provenience of these pieces and of the island gems associated with them as a group has suggested to Brice and Kenna a Melian provenience for the inscribed cone also. But in the School museum's inventory it appears as M. 28 and is separated from the Melian group by M. 29, a neo-Babylonian scaraboid which was purchased in Salonika and is therefore clearly separate from the pieces of Melian origin (M. 30 - M. 47). In *Scripta Minoa* II 111 the cone was listed among items "mislaid in the Villa Ariadne and transferred to Candia Museum in 1949", which explains why Brice wrongly refers to it as "Her. Mus. M. 28". In fact the M numbers of the *Scripta Minoa* list are from the British School's museum inventory, tablets, seals and other items being catalogued under M (= Miscellaneous) either before or after they were moved there from the Villa Ariadne. All the School's tablets, including M. 1-27, were presented to the Herakleion museum but M. 28 remained in the School, where it was later joined by M. 29 from Salonika and M. 30-47 from Melos. The fact that it was originally in the Villa Ariadne with Knossian tablets means that it was almost certainly found in Crete and probably at Knossos.

Bronze Age sealstones from Melos include a considerable proportion of seals of the "talismanic" type, but there are at least as many of other types. Kenna's stated reasons for calling the British School's piece talismanic therefore collapse and it has been argued above that his statement about its "non-sphragistic use" is far from certain.

There exist two known seals from Kythera. The first is a prism of conical

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17 Evans, *PM* IV 445, n. 3; Betts, *BSA* 66 (1971) 49 f.
18 Boardman, *op. cit.* (n. 16 above) 97 ff., lists thirteen talismanic stones from Melos and fourteen others representing "a good selection of Late Minoan types".
section in the National Museum at Athens; it bears on the base a rough linear engraving and Kenna has elsewhere correctly dated it to EM III. The reader who follows his footnote reference to CS 19-22 discovers a discussion of seals in the EM period but no mention of the Kythera piece. The second stone, in the British Museum, is a three-sided prism which Kenna has dated to MM IIIA. He claims that it is "probably a local copy of fine Middle Minoan work", though there seems no good reason to suppose that it is anything but an import from Crete. Neither stone fits his remark about LM II motifs applied to an earlier shape and his comment in the footnote that Middle Minoan use of the three-sided shape is exceptional is nonsense; that was the period in which it had its greatest vogue!

Finally it should be added that there is no such thing as "The First Transitional Phase". EM III gives way to MM IA in what appears to be a peaceful artistic and cultural development and the fact that it is often impossible to say with certainty whether a sealstone belongs to the earlier or later part of that development is no reason to invent new and confusing chronological terminology. The shape of the British School's piece is characteristic of EM II to MM I.

In summary, therefore, Kenna inclines to the view that the problems associated with this sealstone are to be explained by a combination of solutions (3) and (4) above. It is the contention of this note that a combination of (1) and (2) provides a more cogent answer.

II The Inscription

It is puzzling to know why this inscription was ever identified as an example of the Linear A script. Both negative and positive considerations make it much more likely that it belongs to the Pictographic class. On the negative side, it must be said that none of the signs has any close resemblance to the characters of the Linear A script. On the other hand, the structure of the inscription is immediately recognizable as typical of Evans' 'Class B' of the Pictographic series, namely a group of two signs associated with a small cross. Owing to a penetrating observation by Ernst Grumach, we now know that the cross in this simple type of inscription has the function of an ideogram-marker. It follows that the enigmatic branched sign next to the

19 CMS I 413.
21 CMS VII 36; Kythera 270, pl. 88. no. 1; H.B. Walters, Catalogue of Engraved Gems in the British Museum (London, 1926) 1, no. 1, fig. 1.
22 Cf. P. 18a, 20a, 24b in SM I.
23 Minoica, Festschrift Sundwall (Berlin, 1958) 170.
cross in our inscription is an ideogram, even though its shape has no known parallel either in Linear A or in Pictographic. If the dot adjacent to this sign really forms part of it, we may have here a schematic drawing of a MAN ideogram, comparable with that on a Phaistos tablet, transitional between Pictographic and Linear A. 24 The remaining sign does not belong to the Linear A script at all: it is a well-known variant of Evans' no.114 of the Pictographic system. 25 It may be observed that no.114 occurs on another inscription often, but perhaps wrongly, assigned to Linear A: Brice's V 4. 26

24 Carratelli's no. 3a, ASAA n.s. 19-20 (1957-58) 365.
25 SM I 223.
26 Cf. n. 12 above.
1. The sealstone (base), 3:1

2. Impression of the base, 3:1

3. The sealstone (profile), 3:1