

THE 'JASPER LION MASTER':
SOME PRINCIPLES OF ESTABLISHING LM/LH WORKSHOPS
AND ARTISTS*

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There seem, broadly speaking, to have been two methods of establishing a chronological development for LM/LH sealstones. The first seeks to create a stylistic typology and afterwards relate it to ceramic or absolute dates but, while this may be a sound method, for example, for flint-types, spindle-whorls or vase-shapes, it proves less suitable for a major and much more complex art form such as Bronze Age seal-engraving; for it can take little or no account of the fact that variations of style and technique often represent the products of different artists or 'schools' within a single period rather than a chronological progression. For example, the technique which Boardman has called 'Cut Style' and dated to the final phase of the palace at Knossos¹ developed in Crete – despite numerous pieces from later contexts on the Mainland² – from the 'Talismanic Style' as early as LM IB³ and in that period was contemporary with very different and often more 'naturalistic' styles. Again, soft stone pieces of the so-called 'Cretan Popular Group' have often been regarded as inferior and consequently decadent and late (LM/LH III)⁴,

* I would like to thank Mervyn Popham who first drew my attention to the sealing illustrated in *Fig. 3* and supplied the photograph and to the Management of the British School of Archaeology at Athens for permission to publish it and the two impressions illustrated in *Figs. 2 and 10*. Sinclair Hood kindly drew my attention to the Edith Eccles collection which includes the seal illustrated in *Fig. 13*; the whole collection of nine seals is to be published shortly and to be placed in the Ashmolean Museum, Oxford.

Sources of illustrations: *Figs. 4, 7, 11*: photo C. Albiker. – *Figs. 8, 14*: photo G. Kelsey. – *Figs. 1, 2, 9, 10, 13, 15–21*: photo I. Pini.

The following special abbreviations are used:

ASAtene: *Annuario della Scuola archeologica di Atene e delle Missioni italiane in Oriente*

CMCG: A. Xenaki-Sakellariou, *Les cachets minoens de la collection Giamalakis, Études Crétoises X* (1958)

CS: V.E.G. Kenna, *Cretan Seals* (1960)

GGFR: J. Boardman, *Greek Gems and Fingerrings* (1970)

¹ GGFR 48.

² e.g. CMS I 212, Prosymna Tomb 13, LH IIIB.

³ GGFR 48; V.E.G. Kenna, CMS VII p. 187. Two examples, as yet unpublished, come from clear LM II contexts in the Unexplored Mansion at Knossos and elements of the style are not unknown among the LM IB sealings at Agia Triadha, e.g. ASAA 8–9 (1925–1926) 97, no. 42, fig. 63.

⁴ e.g. GGFR 59–60, pls. 190–193 and 199–200. Kenna consistently dated such pieces late, e.g. CS nos. 365–389, pls. 14 and 15 or CMS VII 197 and 198 which he called LH IIIC; he even suggested once on the basis of sealings impressed by soft stone lentoids depicting clumsy bird-women (ASAtene 8–9 [1925–1926] 118, nos. 104 and 105, figs. 120 and 121) that the Agia Triadha sealings do not represent a homogeneous LM IB group.

whereas they merely represent a different 'school' of engraving in LM I–II, contemporary with the 'Cut Style' and with other styles used in the engraving of hard stones⁵. These examples may indicate that problems of style and chronology in this art form are too complicated to admit facile solutions based on a simple typological sequence and on preconceptions of what constitutes stylistic development.

The second and sounder method of establishing a chronology for LM/LH glyptic is to create a sequence directly from the evidence of sealstones found in stratified contexts, which at least provide a series of *termini post quos non*⁶. Such a method has the merit of giving subjective aesthetic judgements an objective basis in archaeological fact and it should thereby resist the temptation to bend facts to fit preconceived notions of stylistic development. (For instances where this has sometimes been the case, see footnote 4 or the arguments of Kenna and Boardman as to whether, in the MM period, abstract motifs developed from naturalistic ones or vice-versa⁷.) From the substantial series of *termini post quos non* now available for the late Bronze Age it is possible to draw conclusions about the date of certain motifs or engravers' mannerisms before proceeding to more subjective matters of style. For example, the mannerism in which two seated bulls are depicted with the head and neck of the rear one turned away from the viewer seems to have begun in LM IB and been used in Crete and on the Mainland no later than LM/LH III A1⁸; when isolated instances occur in later contexts they most probably represent survival⁹. If careful interpretation of the evidence provided by a series of *termini post quos non* is cautiously extended to questions of style, then the characteristic style (or styles) of a particular period may emerge more clearly. But the chronological limits of such a *Zeitstil* may be quite wide; the seated bull mannerism, for instance, was in use for over one hundred years, though more detailed study would certainly reveal within the range of examples stylistic variations and perhaps sequential developments.

A tighter and more effective chronology will emerge if groups of sealstones can be recognized as the products of a particular 'school' or 'workshop', even of a single artist whose working life would, on average, be no more than 25 years. That workshops existed at some centres we know and we may postulate others¹⁰. Isolation of the work of individual

⁵ In addition to examples among the Agia Triadha and Zakro sealings of LM IB, there are several examples of the 'Cretan Popular Group', as yet unpublished, from LM I and II contexts in the Unexplored Mansion and on the Royal Road site at Knossos.

⁶ For the caution with which such contexts must be treated, see W.-D. Niemeier, *Probleme der Datierung von Siegeln nach Kontexten*, in the present volume 91ff.

⁷ V.E.G. Kenna, *The Cretan Talismanic Stone in the Late Minoan Age* (Lund, 1969); GGFR 44; J.H. Betts, *Bibliotheca Orientalis* 31 (1974) 312.

⁸ *Crete*: HM sealings 501 and 548, Agia Triadha, LM IB; HM seals 1657 and 1658 (with tree behind), Knossos Hospital Tomb 3, LM II; and perhaps a number of Knossos sealings, PM IV 601, no. A10 and 604, nos. D9 and 10, HM sealings 295 and 329, Knossos South West Basement and East Hall Borders Deposits, LM III A1. *Mainland*: CMS I 275, Rutsi Tomb 2, LH III A1; CMS I 240 and 241, Vapheio Tholos, LH IIA; CMS I 142, Mycenae Chamber Tomb 515, LH IIB; CMS V 195 and 196 (with bull in profile behind), Thebes, probably from a tomb of similar date.

⁹ CMS V 432 and 433, Nichoria Tholos, LH III A2–B1; CMS I 318, Pylos sealing, LH IIIB; for a case of similar survival, contrast CMS V 157, Kokkalata, LH IIIB–C, with its associated material and compare it with CMS I 88 and perhaps CMS I 57 from much earlier Mycenae Chamber Tombs.

¹⁰ GGFR 63f.; *Mallia workshop*: BCH 81 (1957) 693ff., *Comptes Rendues* (1957) 123ff., J.-C. Poursat, *L'atelier de sceaux de Mallia et la chronologie des sceaux protopalatialux*, in DFG-Forschungsbericht: Die

artists (who would, in so specialized an art-form, have been few in any one period) has been attempted somewhat unsystematically and with varying degrees of success in the field of Bronze Age engraving¹¹; in the LM/LH period there is now sufficient material to go further. When it proves possible to define the limits of a specific group or to isolate a single artist's work, the series of *termini post quos non* which exist for it and for its characteristic traits may lead to a much closer chronology than would otherwise have been possible. Provenience for a group of products representing a 'school', 'workshop' or individual artist will indicate whether the centre of its or his activity was at some place in Crete, in Messenia, the Argolid or Boeotia, or in the Islands¹².

The methods used to establish the work of artists and groups are broadly those used by Morelli and Berenson for Renaissance painting, adapted by Beazley for Attic vase-painting, and already applied by Boardman to Island, archaic Greek and Greco-Persian gems¹³. The techniques, motifs and styles available to the Bronze Age engraver were perhaps less varied than those available to the Renaissance painter or the decorator of Athenian vases and this may render the differentiation of hands more difficult. But there is certainly no less material for LM/LH glyptic than for Island or Greco-Persian gems and it is often material of a more stylistically varied nature and of higher quality.

An individual artist's style appears firstly in the techniques he employed for specific details, the tools he chose to use for eyes, leg-joints, hooves, paws etc. and the detection of his hand and isolation of its products depends very much on close observation of such *minutiae*. Secondly his style is revealed in a more general way in what we can assess of his 'personality', his preference for particular motifs or mannerisms, his treatment of them and his overall conception of *Form* in rendering them. Both the details and the whole of his compositions must be taken into account.

Some simple examples may serve to illustrate ways in which the work of individual artists or groups can be drawn together. The best starting point is clearly repeated motifs. Where an artist repeats a rare motif in a distinctive style his hand will be readily identifiable; such is the case with CMS I 263 (Tragana Tomb 1, LH IIIA) and CMS VII 130. On the other hand repetition of a rare motif does not in itself always point to the same hand; CS 306 and 307, claimed by both Evans and Kenna to be the work of a single artist, differ in both technical details and overall conception and should be by different, if contemporary, engravers¹⁴.

kretisch-mykenische Glyptik und ihre gegenwärtigen Probleme (Bonn, 1974) 111ff. and CMS II₂ 86-198; *Knossos Lapidaries' workshop*: PM IV 594f.; and for evidence of a possible LM IB gold-ring engraver's workshop at Knossos, see J.H. Betts, *New Light on Minoan Bureaucracy*, *Kadmos* 6 (1967) 15ff.

¹¹ e.g. V.E.G. Kenna, *Some Eminent Cretan Gem-Engravers*, in *Festschrift für Friedrich Matz* (Mainz, 1962) 4ff.; J. Boardman, *The Danicourt Ring*, *Revue Archéologique* (1970) 3ff.; A. Tamvaki, *A Late Minoan Seal in the N. Metaxas Collection*, *AAA* 4 (1973) 308ff.; Evans too attempted on occasion to identify hands - see footnote 14.

¹² For a Mainland group, see J.G. Younger, *The Mycenae-Vapheio Lion Group*, *AJA* 82 (1978) 285ff.; and for an artist probably from the Islands, the same author's *The Island Sanctuaries Group*, in the present volume.

¹³ e.g. *Island Gems* (London, 1963) 85ff.; *Archaic Greek Gems* (London, 1968); *Three Greek Gem Masters*, *Burlington Magazine* (1969) 587ff.; *GGFR* 303ff. and *Pyramidal Stamp Seals in the Persian Empire*, *Iran* 8 (1970) 19ff.

¹⁴ PM IV 443; CS p. 132; *Festschrift für Friedrich Matz* 10.

The bulls licking raised hind-foot on CMS VII 99 and CMS XIII 31 are close not only in pose and overall composition but in details: the double ground-lines below, the dot eye somewhat sunken (in the impression) into its socket, and the outlined muzzle which is rather exaggerated on the second piece. A third example is provided by CMS I 235 (Vapheio, LH IIA), while CMS IX 109 and CMCG 224 may be related. Four certainly or probably come from Crete and one from the Mainland. All five are carnelian and, while it is one of the commonest materials, it may prove that some artists had access to or a preference for particular materials.

A peculiar mannerism or quirk of composition in an otherwise common motif may betray the work of an individual artist; CMS I 63 (Mycenae Chamber Tomb 26, LH IIB; – *Fig. 1*) has a bull in extremely contorted pose and depicts only three of its legs, while a second seal (known only from a cast marked ‘Munich’ in the British School of Archaeol-



Fig. 1 CMS I 63.



Fig. 2 Impression in the British School of Archaeology at Athens.

ogy at Athens; – *Fig. 2*) reproduces similar features. Minor details are different on each piece but the two may represent the work of the same artist at different stages of his career. On similar grounds, which seem not wholly convincing, Boardman juxtaposed CMS I 167 (Mycenae Tomb of Clytemnestra, LH IIIA) and CMS I 185 (Midea Tholos, LH III A1) on account of the wavy ‘landscapes’ below the main motifs, which are otherwise dissimilar¹⁵.

The comparison of different motifs produced by the same hand is more problematical. We may recognize and group together an artist’s characteristic lions but we may not always see that a group of bulls are also his work, unless a lion attacking a bull allows us to make the link or there are very special technical details which bring them together. In this respect seals engraved on two or three sides are often instructive. Within the ‘Cut Style’, for instance, CMS V 191 and CMCG 185 help to forge such links. If the

¹⁵ GGFR 57.

two motifs on CMS I 193 (Midea Tomb 10, LH II–III) had appeared on separate pieces, the neatly bearded goats with hairy bellies would have made association easy but, if the lion had appeared alone on a separate piece, almost nothing, except perhaps the treatment of the eye, could have related him to the goats.

Shape, size and material may also add support to a grouping made on technical and stylistic grounds; such is the case with many of the products of the 'Island Sanctuaries Master' and with CMS I 140 and 141 (Mycenae Chamber Tomb 515 *dromos*, LH IIB), which were apparently cut from the same piece of veined agate for the same client, presumably by the same artist who belonged to the 'Mycenae-Vapheio Group' (see footnote 12)¹⁶.

These examples serve to show, at a simple level, something of the methods that can be used to group together the products of a single artist. Mostly they juxtapose no more than a pair of pieces; but the methods can be employed to establish larger groups and such is the case with an artist who may be called the 'Jasper Lion Master'. His work can be collected on the basis not only of repeated motifs and general considerations of *Form* and style but also on the basis of details of technique and because he often used an otherwise rare red-brown jasper for lentoids all of roughly the same size and shape – factors which act as an objective cross-check on subjective aesthetic judgements. From *termini post quos non* his date and from the proveniences of his products his probable centre of activity can be pinpointed.

A sealing (*Fig. 3*), recently discovered in the Stratigraphical Museum at Knossos, probably came from an LM III A1 destruction deposit there, though the seal which impressed it is almost certainly earlier¹⁷.

It shows two lions antithetically disposed, as if chasing one another around the circular field of the lentoid seal. The motif was commonly engraved on soft stone lentoids of the 'Cretan Popular Group' which began earlier than often supposed (see footnotes 4 and 5). Indeed some of that group's best engravers imitated the work of contemporaries working in harder materials and may sometimes even have been the same artists, though the techniques used for harder materials differ slightly. In soft stone the motif is executed in a variety of styles and with differing degrees of competence; almost all examples can be traced to a Cretan provenience and at least three specifically to Knossos¹⁸. The

¹⁶ From the same burial two other seals, CMS I 144 and 145, with the same motif (goddess with lions and snake-frame) are by the same hand; and there are instances, especially on the Mainland, where pairs of sealstones with the same motif, ostensibly but not necessarily by different hands, were found in a single burial: e.g. CMS I 269 and 271 (standing griffins, Rutsi Tomb 2, LH III A1); CMS V 437 and 438 (seated griffins) and 432 and 433 (seated bulls, both Nichoria Tholos, LH III A2–B); CMS V 195 and 196 (seated bulls, Thebes tomb group?); CMS I 221 and 222 (woman with dead animal), 229 and 230 (chariot), 231 and 232 (genius with jug), 240 and 241 (seated bulls), 243 and 244 (seated lions), 247 and 248 (wounded contorted lions), 249 and 250 (antithetic pairs of lions), 251 and 252 (lion attacking bull), and 255 and 256 (dog scratching neck, all Vapheio Tholos, LH IIA).

¹⁷ J.H. Betts and J.G. Younger, *Eight Sealstones and a Sealing from the Stratigraphical Museum at Knossos*, BSA 74 (1979) 274ff.; for other instances of LM I seals in use to impress sealings in LM III A1 deposits at Knossos, see *Kadmos* 6 (1967) 27f.

¹⁸ e.g. BSA 62 (1967) 28, no. II (Knossos, LM III A1?); CMS VII 238 (Knossos, N. of Palace); CMCG 300 (Knossos); AGD III 354, no. 8, pl. 247 (from the Johannes Jantzen collection which seems wholly Cretan); CMS XIII 125 (from the mainly Cretan collection of Edith Hall Dolan); CMS VIII 79 (from

lions on these are usually in crouching-running position with hind-legs tucked under their bodies and long tails outstretched around the edges of the lentoid field.

By contrast the lentoid which impressed the sealing from the Stratigraphical Museum showed the lions in 'flying gallop' with both fore and hind legs outstretched around the field and their short tails curling in to the centre. The tips of the tails, the eyes and the ends of the creatures' rather beak-like jaws were produced with a tiny circular solid drill sinking, while the manes consist in two rows of vertical cuts; the profile of the bodies is strongly outlined and the powerful, rather square heads have a similar firm outline of cuts. Most of these detailed features can be very closely paralleled on a clearly defined group of seals – so closely that all or many of them may be by the same hand as the lentoid which impressed the sealing.

CMS VII 90 (*Fig. 4*), a red jasper lentoid (diam. 1.5–1.6) came from Crete. The position of the legs and tails of the two lions is the same, as is the drilling of eyes, tail-tips and jaws, the two rows of vertical cuts for the manes and the strong outlining of the bodies and heads. This seal also preserves three other features which cannot be seen on the surviving portion of the sealing: there is a ground-line close to the edge of the engraved face below the belly of each lion; the forelegs seem rather unwieldy, attenuated and bent in an unnatural way to enhance the circular movement around the field; and the claws of both fore and hind paws are disproportionately large, each a row of short vertical cuts.

CS 245 (*Fig. 5*), a white agate or chalcedony lentoid (diam. 1.4) was found at Knossos. The whole treatment is very similar to that of the previous piece, though at least one of the two lions has three, rather than two, rows of vertical cuts for its mane. There is a groundline beneath each lion as on the previous piece. The dot-drilled eyes, jaws and tail tips and the exaggerated claws are all very similar and the only difference is the appearance of a spikey drilled 'blob' (sun or star?) between each lion's head and fore-paws.

This last feature also appears on CMS V 493 (*Fig. 6*) a lentoid of red-brown material (diam. 1.3–1.5) from Agia Irini (Kea), House B, Room II (LM IB–LH II). The pose of the lions, the dot drilling of tail-tips, jaws and eyes, the treatment of fore-legs and claws, the firm outlining of bodies and heads all suggest the same hand. There is a ground-line and an additional solid drill sinking below one lion; whether the same arrangement appeared below the other is impossible to tell because there is a break at the end of the string-hole. The manes have three, rather than two, rows of vertical cuts. The material is in this case not jasper but red-brown baked clay with a jasper-like coating or slip¹⁹.

A less successful experiment, probably by the same artist, is represented by CMS X 250, a red and black mottled jasper lentoid (diam. 1.45–1.5) of unknown provenience,

the Richard M. Dawkins collection which came largely from Crete); CMCG 296–299 (all from Crete); HM 72, 1217 and 2138 (all from Crete); CMS IX 143; and CMS X 155 and 156 (provenience unknown).

¹⁹ This unusual method of artificially producing what looks like a stone seal can be paralleled in the same period by a lentoid or discoid seal from Gournia, House D11 (LM IB) which is of baked clay with a black slip to resemble high quality steatite – Boyd-Hawes, Gournia (1908) 54, fig. 28, 4a; and also perhaps by CMS I 256 from Vapheio (LH IIA).

now in the Musée d'Art et d'Histoire, Geneva. On this piece the artist is rather less assured; for he has tried to elaborate on his usual motif by introducing a third lion thereby cramping his composition and to some extent throwing it into imbalance²⁰. Here the tails stream out behind rather than curling in to the centre; but forelegs, claws, manes and the use of minute drill sinkings for eyes, jaws and tail-tips all fit with the artist's other compositions.

The engraver of these pieces was certainly not one of the greatest artists of LM glyptic but his pieces have a certain sprightly vigour and he appears to have gained a more assured feel for composition when he disposed of ground-lines and made his lions more curving, sinuous and agile, their heads more rounded, their legs and claws less heavy. All these features help to enhance the whirling quality of the motif and three pieces serve to illustrate this advance in his style.

CS 244 (*Fig. 7*), a lentoid of red-brown jasper with whitish markings (diam. 1,7) came from Central Crete and shows many of the same technical details as the previous pieces. Its assured feel for the 'circularity' of the motif is shared by another red-brown jasper lentoid (diam. 1,50–1,55), of unknown provenience, with a perhaps archaic Greek gold attachment. It was formerly in the Webb collection and since 1863 in the Victoria and Albert Museum, London (*Fig. 8*)²¹. HM 888 (*Fig. 9*) a lentoid of red-brown stone (diam. ca. 1,5) is of unknown provenience in Crete. The whole composition of the motif is somewhat clumsier than on the previous examples; the eyes were produced with a larger drill and the manes have horizontal as well as vertical cuts, giving an almost cross-hatched effect, but the bent and attenuated legs, the large claws (clearest on the hind leg of the upper lion) and the dot drilling of jaws and tail-tips, as well as the material, all suggest a very close relationship with the group.

It is also worth comparing another seal (diam. 1,9) whose provenience and present whereabouts are unknown. A cast of it (*Fig. 10*), marked 'Munich' exists in the British School of Archaeology at Athens. Most of its basic techniques are the same as those of the rest of the group, outlining of heads and bodies, solid dot drilling for eyes, jaws and tail-tips, straight cuts for manes; however, the lions are somewhat more delicate and elegant, less curvilinear, and the artist has used as fillers the neat, straight-cut sprays of foliage and double zig-zag lines which he would have derived from engravers of the 'Architectural' motifs in MM III, the 'Talismanic Style' of MM III–LM I and perhaps even the 'Cut Style' as it began in LM I.

Examination of the examples so far discussed (except the last which is only available in a cast) shows them all to be round-backed lentoids of relatively small dimensions, all under 2,0 cm. in diam. and mostly between 1,4 and 1,7 cm. CS 245 is of rather unusual white agate or chalcedony, CMS X 250 of rare red and black mottled jasper and five are of an otherwise rare red-brown jasper. CMS V 493 is of baked clay with a hard red-brown slip, intended to simulate the artist's favourite material.

²⁰ The composition of three or more animals in radial symmetry was ambitious and not often successfully attempted; there is a carnelian lentoid with three small crouched lions depicted full face from Midea – CMS I 194.

²¹ Inv. no. 8793–1863; GGFR102, pl. 116.



Fig. 3 Sealing from the Stratigraphical Museum at Knossos.



Fig. 4 CMS VII 90.



Fig. 5 CS 245.



Fig. 6 CMS V 493.

A number of lions, in poses different from those on the pieces so far described, have enough technical and stylistic features in common with the whirling lions to suggest the same artist or a hand very closely related to his. As with the whirling lion motif, that of standing lion attacking the back of an animal placed vertically or diagonally in front, as if in its jaws, is commonly found on soft stone seals of the 'Cretan Popular Group'²².

²² e.g. CMS I 510 (Mitsotakis collection, from Crete); CMS IV 302 (Metaxas collection, from Spilia in N. central Crete) – especially close in style to our group; CS 270. A version of the same motif also occurs on an agate lentoid from the Vapheio Tholos (LH IIA), CMS I 254 (*Fig. 13*); its style is very close to that of CMS I 194 (see footnote 20); a number of Mainland seals especially at Vapheio seem to reproduce in semi-precious hard stones motifs executed in softer materials by artists of the 'Cretan Popular Group', e.g. CMS I 221 and 222 (female figure with dead animal). 250 (whirling lions). 255 (dog scratching neck) and 260 (helmet).



Fig. 7 CS 244.



Fig. 8 Seal in the Victoria and Albert Museum in London.



Fig. 9 HM 888.



Fig. 10 Impression in the British School of Archaeology at Athens.

CMS VIII 154 (Fig. 11), a red brown jasper lentoid (diam. 1,7), belongs to the wife of the late Humphrey Payne and may well, therefore, have come from Crete. The standing lion has the same eye, tail-tip and beak-like jaws produced by characteristic drill sinkings. Its solid head is outlined like those of the whirling lions and the mane and claws follow the pattern established for the group. The lion raises its head and its jaws fasten on a slender victim (sheep or fawn?) which is outstretched as if in 'flying gallop' around the upper part of the field. This pose and the strong outlining of the victim's body alone might have related it to the whirling lions on the previous pieces, even if the lion itself did not also have so many similar features.

CMS XII 271 (Fig. 12), a red-brown jasper lentoid (diam. 1,66–1,72), was once in the Richard B. Seager collection and most probably came from Crete. The motif is exactly similar to that of the previous piece and, though worn, shows many of the group's



Fig. 11 CMS VIII 154.



Fig. 12 CMS XII 271.

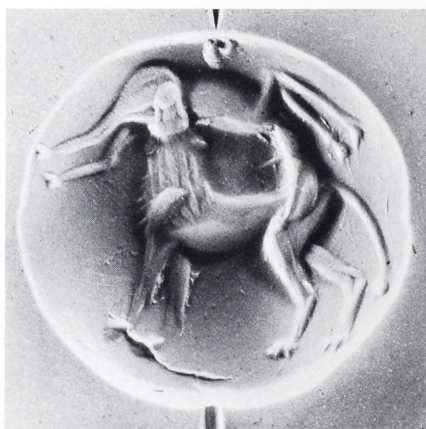


Fig. 13 CMS I 254.

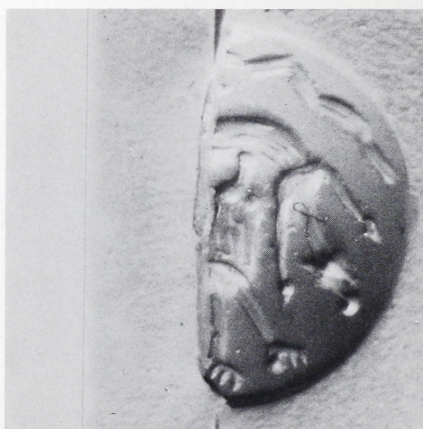


Fig. 14 Seal from the Edith Eccles Collection in Oxford.

characteristic features. The lion is a little more slender but has the exaggerated claws, this time rather clumsily rendered with a horizontal cut above the vertical ones. The victim is more clearly articulated with tiny solid drill sinkings for eye, hooves and, in this instance, leg-joints.

A broken lentoid (*Fig. 14*) of dark-red jasper (diam. 1.6) is in the collection of the late Edith Eccles which seems to have a Cretan origin. It reproduces the same motif, lion with victim, and some identical technical details. Here the lion is shown full face, inviting close comparison with CMS I 254 (Vapheio Tholos, LH II A, *Fig. 13*) and perhaps CMS I 194 (see footnotes 20 and 22). The double zig-zag line filler above the motif may also be compared with those of the British School cast already described and illustrated (*Fig. 10*).

Another series of seals with motifs depicting standing lions or lionesses with unusual combinations of filling ornamentation, especially *bucrania*, water-birds and sprays of foliage,



Fig. 15 Seal in the National Museum in Copenhagen.



Fig. 16 HM 661.

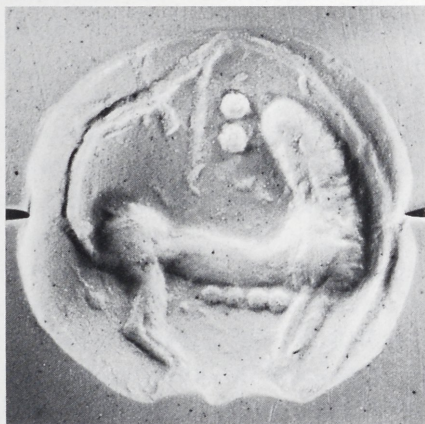


Fig. 17 CMS X 303.



Fig. 18 CMS V 304.

but using the same detailed techniques as the whirling lions and the lions with victim, should be taken into account.

Copenhagen 1364 (Fig. 15), a lentoid of red-brown stone (diam. ca. 1,7), shows a lioness standing with head turned back and what may well be a *bucranium* above its back. Its eye and dug, the tip of its long curling tail and the muzzle of the *bucranium* are executed as dots with the small solid drill. The mane is a series of vertical cuts with two horizontal cuts across them, giving a cross-hatched effect not dissimilar to that on HM 888 (Fig. 9) and the disproportionately large claws are represented by a horizontal cut with a series of short verticals below as on CMS XII 271 and the Eccles piece (Figs. 12 and 14). The pairs of vertical lines on the edges of the field in front and behind the lioness recall the ground-lines used beneath each lion on some examples of the whirling lion motif (Figs. 4, 5 and 6).

HM 661 (Fig. 16), a lentoid of creamy-yellow stone with red-brown tinges (diam.

1,60–1,75), came from Porti in the Mesara. It shows a lioness standing with a *bucranium* above its back, a foliage spray below its belly and pairs of vertical lines in front and behind, very similar to those on the previous example. The tiny, solid drill sinkings for eye, upper jaw, dugs and the tip of the long curling tail, as well as the large claws and the treatment of the mane and outlined head, all accord well with the style of the group, though the bodies of the lionesses on these last two pieces are considerably more clumsy and angular than those of most of the whirling lions.

CMS X 303 (*Fig. 17*), a lentoid of red-brown stone (diam. 1,62–1,88) in the collection of the late Ernst Heller, has no known provenience and is too worn to allow close technical and stylistic parallels to be drawn but its material and the fact that it shows a lioness standing with head turned back, long curling tail and solid drilled dots for dugs and jaws indicate that it should not be excluded from the group.

CMS V 304 (*Fig. 18*), a lentoid of red-brown jasper with creamy flecks (diam. 1,5), came from Volomidia in Messenia (Angelopoulou Tomb 8, LH I–II). It shows a lioness standing with head turned back. There is a water-bird above and a *bucranium* below. The body has the same elongated angularity of Copenhagen 1364 and HM 661 (*Figs. 15 and 16*). The solid drilling of dugs, jaws, the tip of the long tail, as well as the head of the water-bird and perhaps the eyes of the *bucranium*, is consistent with the artist's style. The mane is a series of vertical cuts with horizontals above and below and the water-bird's body is engraved with similar straight cuts. The large claws of the lioness are typical of the whole group, though the *bucranium* is much more carefully depicted than on the Copenhagen and HM pieces; the lioness' eye is a larger dot than usual, as on HM 888 (*Fig. 9*).

Two other pieces may be related quite closely to the group, though one would hesitate to say they were the work of the same artist. CMCG 260 (*Fig. 19*) is a rather larger (2,2 × 1,5) amygdaloid of carnelian²³ from Apesokari in the Mesara; its similarities to the group consist in the lion's dotted upper jaw, the tip of the curling tail, the outlined head, the treatment of mane and especially claws and perhaps the ground line. The fillers, in front, behind and above the lion (rocks or foliage?) are not quite the same as anything in the group outlined so far. The object below the lion's belly, described by Sakellariou as a lion cub, is hard to distinguish but it could perhaps be a clumsy and smaller version of the water-bird on the previous example. The eye of the lion is rendered not as the single dot typical of the group but as a dot within a roughly circular outline. The same sort of eye is used for the lion on CMS XII 207 (*Fig. 20*), an amygdaloid of dark green jasper (1,98 × 1,47), once in the mostly Cretan collection of Richard B. Seager. It shows a lion standing with head turned back and a man standing beside it. Jaws, mane, elongated body, erect tail and especially the claws relate it closely to the work of our artist, while the short ground-line at the very edge of the field and the double vertical lines at either end are not inconsistent with his mannerisms.

Finally some other pieces may help with dating the group conclusively. CMS V 584,

²³ The French 'chalcédoine' refers to chalcedony but in CMCG Sakellariou also seems to describe the material of many 'Talismanic' seals as 'chalcédoine' (e.g. 217–220. 347. 356. 381–387. 390–393. 399–409 etc.). They are of the material which most authorities call carnelian ('cornaline').



Fig. 19 CMSG 260.



Fig. 20 CMS XII 207.

an unusual amethyst cylinder from the Kasarma Tholos (LH I–II) shows a griffin and lion with a human figure (as on CMS XII 207); the lion's large claws, mane, outlined head and drilled eye, jaws and tail-tip are close to the general style of the group. A sealing from Agia Triadha – HM 470 – and one from Zakro – HM 79 – (both LM IB) share some of the group's characteristics²⁴. CMS V 690 (Fig. 21) from Acrotiri, Thera (LM IA) shows a sphinx with fish and ground-line below; the manner in which the drill was used for the eyes of both fish and sphinx, the latter's tail-tip and dugs, and the treatment of the large claws all put it close to the group. What is more it is a round-backed lentoid (diam. 1,4) of the characteristic red-brown jasper!

Not quite all the pieces described here need be accepted as emanating from the hand of a single artist but they are so closely linked by size, material, and shape, by choice and treatment of motifs and by technical and compositional details that their relationship with one another is much tighter than it would be if they were merely examples of a general stylistic phase. Their similarities represent much more than a *Zeitstil*. Certainly most of them belong to the same 'school' or 'workshop'; many of them surely, to the same artist's hand.

The weight of evidence suggests that 'the Jasper Lion Master' worked in N. central Crete, probably at Knossos, in the early fifteenth century (LM IB – early LM II) and maybe as early as the end of the sixteenth century (LM IA). His distinctive lentoids have smooth rounded backs and vary little in size, mostly being between 1,4 and 1,7 in diameter. Varieties of rusty red-brown jasper, not otherwise commonly in use, constitute his favourite materials. When jaspers were not available to him, he was at pains to recreate them by other means, as in the case of the 'porcelain' jasper of CMS V 493. One of his products (CMS V 493) found its way to Kea, perhaps another (CMS V 690) to Thera and one very close to his style (CMS V 304) to Messenia by the LM/LH II period. His motif of whirling lions was masterfully adapted for a seal found in the LH IIA

²⁴ ASAtene 8–9 (1925–1926) 71 ff., no. 45, fig. 66, pl. VIII; JHS 22 (1902) 76 ff., no. 109, pl. IX.



Fig. 21 CMS V 690.

context of the Vapheio tholos (CMS I 250), while both his lion with victim motif and his general style were imitated – with full face lions on a seal from Midea (CMS I 194) – these two perhaps by the same hand. Parallels for his style, such as CMS V 584, occur on the Mainland in LH II and for his main motifs among the ‘Cretan Popular Group’ in LM IB contexts. His style is distinctive; his slender, sprightly whirling lions and his rather clumsier standing lionesses on small lentoids represent the closing stage of Minoan ‘naturalism’. What follows tends to be more formal, bolder and more ‘tectonic’. At least one of his products, like many LM I pieces (see footnote 17), continued in use at Knossos into LM IIIA; and impressed the sealing from the Stratigraphical Museum with which this examination of his style began.

The methods used to collect the work of the ‘Jasper Lion Master’ depend sometimes on subjective aesthetic judgements of style but also on more objective analysis of technical details. A series of *termini post quos non* establish a firm date for his work. Many more groups of a similar nature can be assembled on the basis of the same criteria²⁵, choice of motif, treatment and *Form*, technical details and perhaps material, shape and size. They should ultimately provide a tighter and more ‘scientific’ chronology for LM/LH glyptic, than has hitherto proved possible.

²⁵ This paper, in the delivered version, attempted to draw together a second group based on that established by A. Tamvaki, AAA 4 (1973) 308ff. Some of the pieces included by her were rejected, new ones included and the whole group rearranged and firmly dated to LM III A 1, rather than the LM III B date she had suggested. As it is not yet clear whether the group represents the work of a single artist (with a preference for haematite and lapis lacedaemonius) or some looser relationship, full discussion is omitted here. The pieces included were as follows: *certainly by a single artist* – HM sealing 240 (Knossos, Magazine 4, LM III A 1); HM sealing 1023 (J.H. Betts, Some unpublished Knossos Sealings and Sealstones, BSA 62 [1967] 33, no. 17; M.A.V. Gill, The Knossos Sealings: Provenance and Identification, BSA 60 [1965] 64, no. G3, fig. 2); CMS IX 131; HM 2137; HM 877 (PM IV 41, fig. 26); *very closely related* – CMS VII 248; AGD I 26, no. 61, pl. 7; *related, perhaps from the same workshop* – CS 345; the Metaxas seal from which Tamvaki’s grouping arose; CMS VII 257; HM 1232 (Gournes Padiadha, Tomb 1, LM III B 1?); CMS X 141; CMS VII 257; CS 341; CMS VII 108 and 110; CS 248; CMCG 357; and perhaps HM 131.

DISKUSSION

I. PINI weist auf den Ansatz des Referenten als eine neue Art hin, eine Chronologie der Späten Bronzezeit aufzustellen. Den Datierungen stimmt er im allgemeinen zu, zögert jedoch, alle Löwen als das Werk eines Meisters anzuerkennen. PINI'S methodischer Vorschlag ist, durch einen Vergleich typologisch verwandter Darstellungen stilistische Gemeinsamkeiten aufzuzeigen, die unter Umständen einer Periode angehören können. Er bestätigt, daß die gezeigten Siegel im großen und ganzen in dieselbe Zeit gehören. Doch bedarf es weiterer Studien, um zu entscheiden, ob es sich wirklich um das Werk ein und desselben Meisters handelt. Abgesehen von den Beispielen des »Cut Style« wurden von Betts fast alle Löwen der frühen Spätbronzezeit auf Siegeln aus hartem Stein für eine Werkstatt in Anspruch genommen. Der gleiche Löwentypus fand jedoch gleichzeitig in verschiedenen Werkstätten Verwendung und stellt einen bestimmten Trend in der Glyptik einer bestimmten Zeit dar.

J.H. BETTS verweist auf das einheitliche Material – roten Jaspis – als Argument für seine Zuweisung der Steine an eine Werkstatt.

M.A.V. GILL und I. PINI bemerken, daß bestimmte Materialien zu bestimmten Zeiten in Mode waren¹.

¹ vgl. z.B. Amethyst in den Tsountas-Gräbern: A. Sakellariou, hier S.185.