JOHN G. YOUNGER

AEGEAN SEALS OF THE LATE BRONZE AGE: STYLISTIC GROUPS

VI. FOURTEENTH-CENTURY MAINLAND AND LATER FOURTEENTH-CENTURY CRETAN WORKSHOPS*

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* In the text the plain citation of Roman and then Arabic numerals refers to the volumes and catalogued seals in the Corpus der minoischen und mykenischen Siegel (Berlin, 1964 ff.). For abbreviations, see the Introduction, Kadmos 21, 1982, 104–5. Add: CMS Beiheft 0 = die kretisch-mykenische Glyptik und ihre gegenwärtigen Probleme (Boppard 1974)

Masters, I = John H. Betts and John G. Younger, "Aegean Seals of the Late Bronze Age: Masters and Workships. Introduction," Kadmos 21, 1982, 104–121.

Masters, II = John G. Younger, "Aegean Seals of the Late Bronze Age: Masters and Workshops. The First-Generation Minoan Masters," Kadmos 22, 1983, 109–136.

Masters, III = John G. Younger, "Aegean Seals of the Late Bronze Age: Masters and Workshops. The First-Generation Mycenaean Masters," Kadmos 23, 1984, 38–64.

Masters/Groups, IV = John G. Younger, "Aegean Seals of the Late Bronze Age: Stylistic Groups. Almond- and Dot-Eye Groups of the Fifteenth Century B.C.," Kadmos 24, 1985

Masters/Groups, V = John G. Younger, "Aegean Seals of the Late Bronze Age: Stylistic Groups. Minoan Groups of the Early Fifteenth Century B.C.", Kadmos 25, 1986.

Papapostolou 1977 = I.A. Papapostolou, Ta Sphragismata ton Khanion (Bibliotheke tes en Athenais Archaiologikes Hetaireias no. 7, Athens 1977).

Pini 1980 = I. Pini, "Kypro-Ägäische Rollsiegel," JDI 95, 1980, 77-108.

Renfrew 1985 = C. Renfrew, Phylakopi. The Archaeology of Cult. Chapter 7 publishes the sealstones in the Melos Museum.

Savignoni 1904 = L. Savignoni, "Scavi e scoperte nella necropoli di Phaestos," MonAntichi 14 (1904) 501–666.

The drawings in Figures 1–8 are numbered consecutively, and are cited in bold face, 1, 2, etc. The reader is cautioned that the figures constitute solely an aide-mémoire to the stylistic features; more detailed understanding is given by the primary and secondary publications cited in the text.

Once again I wish to thank Dr Ingo Pini for his permission to use the drawings made for CMS as the basis for the following illustrations: 1, 3, 5, 7, 9–11, 13–20, 25–28, 30, 35–47, 50–52, 57–62, 64–74. The other illustrations are reproduced either from their primary publications or from other publications cited in the text. Corrigendum: Masters/Groups, IV, p. 70, "13. Dot-Eye Mumps" should read "11. Dot-Eye Mumps"; and, p. 73, "14. Miscellaneous Seals" should read "12. Miscellaneous Seals".

61	X 236		73	X 209
62	AGDS I Munich 24		74	V 224
63	X 200		75	V 397
64	I 472		76	V 156
65	X 192 b		77	VII 194
66	Seal from Epidauros		78	V 164
67	X 193		79	V 372
68	X 196		80	V 410
69	V 165	D	81	V 343
70	V 407		82	V 390
71	V 618		83	V 388
72	V 371	E	84	V 34

This article treats the stage of Aegean Bronze Age glyptic that appears, on the strength of present evidence, to have been this artform's final accomplishment. On the Mainland only a few masters succeeded the Almond-/Dot-Eye artists of the Crystal Ring Group, Running Calves, and Contorted Bulls, and these produced seals contemporaneously with the Spectacle-Eye Group at Knossos (see Masters/Groups V). While lanky proportions and unerased tool-marks are traits common to both the Mainland and Cretan artists in the first quarter of the fourteenth century, the Knossians delighted in confident, symmetrical compositions and the unerased marks of both tubular and solid drills; the Mainlanders, however, continued to concentrate on torsional poses like the bull regardant, paratactic compositions like bull-leaping with assistants, and awkward modelling which, in conformity with the smooth modelling of Spectacle-Eye animals, had become plastic, dry, and tight.

In the second half of the fourteenth century B. C. only one figural glyptic group can be discerned in Crete. The Group with the Wicked Eyes consists almost exclusively of steatite seals that draw their inspiration, not from their immediate predecessors at Knossos, but archaistically, perhaps, from Dot-/Almond-Eye styles.

In this same period, however, three major groups of seals can be identified outside Crete: the Island Sanctuaries Group (hereafter, the IS Group) which consists of elegant animals in hard stones; the Fluorite Group of seals made from softer, almost transparent fluorite decorated with cut geometric motifs; and the Mainland Popular Group (hereafter, the MP Group) of steatite seals carrying schematically rendered quadrupeds and geometric designs. The earliest archaeological contexts for members of all three groups date to III Aii, suggesting that all three flourished within the second half of this century.

At the present time, no later groups can be recognized with confidence. The eighty or so Pylos sealings¹, which form the latest major collection of seal-types from a dated archaeological context (ca. 1220 B.C.), can almost entirely be attributed to the IS or MP Groups and their predecessors, both Cretan and Mainland; the unattributed Pylos sealings are all too poorly preserved for us to appreciate in detail the style of the seal which impressed them.

At the moment it is difficult to discern a style later than the IS and MP Groups for one major and practical reason. With the formulation of the three groups presented in this article there are, apart from the Talismanic and the Cut Style seals, few Late Bronze Age Aegean seals now left to be attributed. In our first article we estimated a total of 4711 extant LB sealtypes,² again omitting the Talismanics and the Cut-Style pieces. The estimate is rough, and even if it were even only approximately accurate such a number would be misleading, since many of those seals are worn, illegible, or unique, and therefore difficult to assess stylistically; JGY's working files in Durham, NC consist of more than 3100 legible seal-types of the total 4711. Of this working total, approximately 220 seals (7%) and 434 (14%) sealings, totalling 654, now (after this article) remain unattributed to groups, largely because, as in the case of the majority of the seals published in CMCG, they are not well illustrated. In any case, of these approximately 654 seal-types, 434 come from contexts dated no later than III Bii; thus, only the remaining 220 (7% of the total 3100) that come from undated contexts, or contexts dated later than III Bii, could serve as candidates for styles later than the IS, MP, or Fluorite Groups.

There are so few seals, therefore, whose style could conceivably be later than the fourteenth century, that the author, left with basically no more seals to attribute to stylistic groups, has come to the inescapable conclusion that the IS Group presents stylistically the last circle of artists who engraved hard-stone seals, and that the MP and Fluorite groups constitute stylistically the last seals in soft stones.

If this conclusion be correct, then it might be appropriate here to speculate briefly on the possible reasons for such an early and rather sudden end to the major art-form of seal engraving. Throughout the long history of Aegean seals, from the Neolithic pintaderas to the late fourteenth century B.C., their eponymous sphragistic function has actually always been an important but a secondary concern. Though

¹ Masters I: 116 fn. 30.

² Masters I: 112-113 fn. 21.

there are several groups of seal-types and seal-shapes that were developed specifically for sphragistic functions (e.g., the Lerna sealings V 43-119, the MM class of the rectangular prism with hieroglyphic inscriptions, and the Kato Zakro sealings made mostly by a single workshop and reflecting specialized seals many of which were probably bifacial), the primary decorative purpose of seals can be documented at every stage of the glyptic development: the Lerna designs and the one EB seal-type (V 478) with script, though affecting Egyptian hieroglyphs, are better suited, in their repetition of pattern or in their whimsy, to decorating household objects like the Keos hearth-rims (e. g., V 461, 463-468, and 474); the Phaistos, Ayia Triada, last Knossos, and Pylos sealing-deposits are so heterogenous, not only in the types of designs but also in the variety of shapes and kinds of seals used, that it is difficult to imagine that the seal-impresser was much concerned about a seal's sphragistic appropriateness; and the limited and repetitive repertory of animals and poses on the Late Bronze Age seals implies that they were not primarily developed to identify their owners or to distinguish bureaucratic functions. While only a few shapes, like the petschaft or the hard-stone lentoid with conical reverse, might have been specifically designed for impressing clay sealings, most seal-shapes are not well suited for clear impressing, as the many poorly or incompletely impressed sealings testify (e. g., the Tiryns sealing, AA 1979, 383-4, fig. 4). The main concern in sealing an object, therefore, was not the design imprinted but the act itself of imprinting; even an unegraved ring (AT 1) would do.3

While the artist may not have had predominantly in mind the sphragistic function of seals when he made them, he certainly had in mind the influential nature of their future owners. Except for the CP and MP Groups, and perhaps a few others like the Fluorite Group, all

other seals were made possible by, created among, and intended for the palace bureaucrats and their retinues⁴, in order primarily to adorn them suitably as befitted their exalted station, and secondarily to provide them with a tool for their business. The palaces allocated gold, silver, and imported semi-precious stones for the artists to use in making the highly ornamental metal rings and stone seals, many of which are further enhanced with gold mountings and set off by gold or crystal bead bracelets; the palaces also allotted the artists their workshop space, thereby incorporating them physically within the palace organization.⁵ In turn, nobles and bureaucrats paid tribute to the artistic merits of these sealstones when they collected them and wore them to the grave instead of handing them over to successors.⁶

In the Early Bronze Age both Mainlanders and Cretans combined the primary purpose of seal-stones as personal adornments and marks of status with their secondary sphragistic function; the Minoans developed this duality in the MM period, and bequeathed it to the Mycenaeans. There is noth enough evidence from the Mainland, however, to ascertain whether the Mycenaeans whole-heartedly endorsed this dual use; they certainly provided workshops, commissioned seals, imported not only the seals but, apparently, also their artists from Crete, wore these seals as jewelry, and collected them. There are, however, few sealings extant from the Mainland; except for those from Pylos, we have six archive sealings from Mycenae (I 19, 163, 165; V 594—596), and seven impressed stoppers for stirrup-jars from Mycenae (I 160—162, 164), Tiryns (AA 1979, 383—4, fig. 4), Thebes (V 669), and the Menelaion (BSA 16, 1909—1910, 4—11).

It seems possible to say, therefore, that, however much the Mycenaeans accepted the sphragistic function of seals, they had not been schooled by the Minoans for very long in this tradition when Knossos ceased functioning as an artistic center. This destruction not only resulted in the loss there of artistic studios, of a palatial supplier of precious and semi-precious materials, and of a sophisticated, powerful,

The act of sealing seems to have maintained its importance over the seal-form or seal-type throughout Hellenic history. Many Roman papyri from Egypt record in Greek the transference of plots of property (usually referred to as 'sphragides', interestingly enough); these transactions are always attested by an appropriate number of witnesses, each sealing the document with his signet ring, the motif of which is duly recorded for proper identification. One such papyrus (PTurner 16.12—14) from Mouchis in Egypt is dated ca. 220 B.C. The scribe records that the sender is summoning testimony from two witnesses in a trial and that he began to seal the document with his ring; but when the scribe apparently noticed that the sender had no ring, he crossed through the word 'ring' and instead dutifully recorded that the witness had impressed the document with a drinking cup ('kondylion') which had a (bas relief?) emblem or (incised?) design of a sun's face.

⁴ The apparently agate sealstone on the left wrist of the Cup-Bearer might imply that he was not only a bearer of rhyta in processions but perhaps also held some bureaucratic position, such as scribe.

A scalstone workshop is known for MM Mallia (II 2.86–198), and one each is implied for Knossos (BSA 74, 1979, 258–268) and Mycenae (ArchEph 1897, 121 n. 1); a stone-cutting workshop for lapis lacedaemonius is known at Knossos (PM III 368–371) and two stone workshops have been identified at Thebes (SIMA 35, 63–71 and AAA 7, 1979, 163–9).

⁶ Kadmos 6, 1977, 141-159.

⁴ KADMOS XXVI

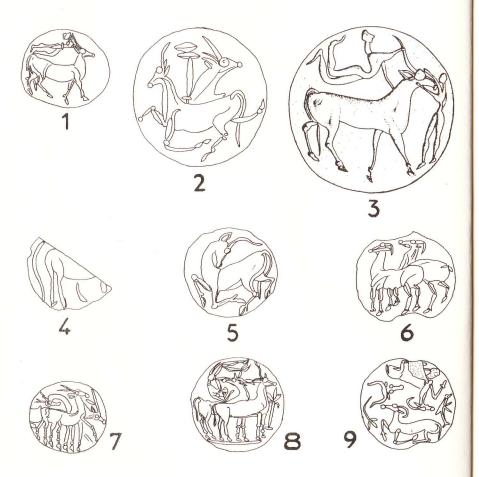


Fig. 1
1-5: Columbia Group
6-8: Group with Misplaced Forelegs
9: Group with Crossed Hocks

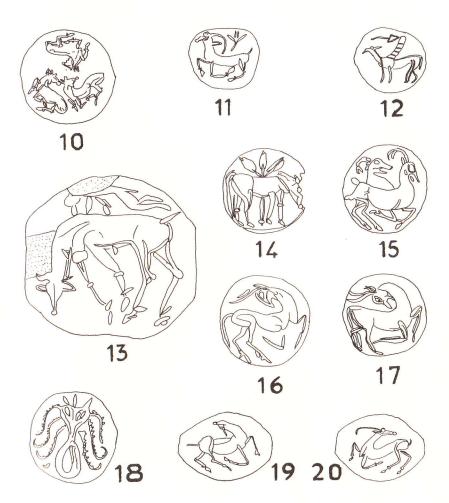


Fig. 2
10–14: Group with Crossed Hocks (cont.)
15–18: Group with Wicked Eyes
19, 20: Central Island Sanctuaries Group



Fig. 3 21—29: Central Island Sanctuaries Group (cont.) 30: Rhodian Hunt Group

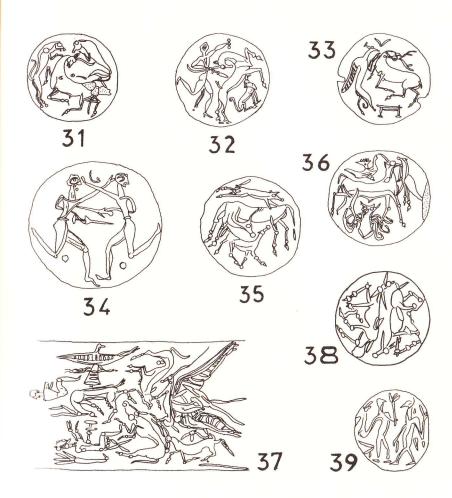


Fig. 4
31—38: Rhodian Hunt Group (cont.)
39: Mainland Popular Group

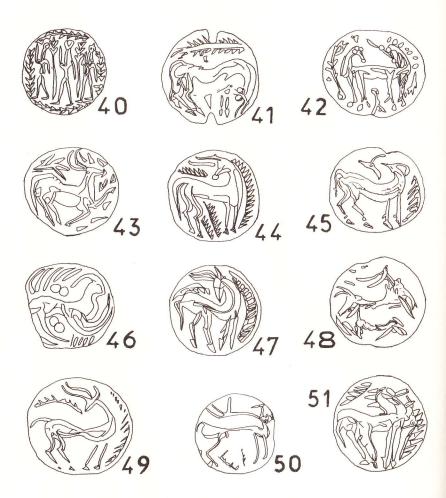


Fig. 5 40—51: Mainland Popular Group (cont.)

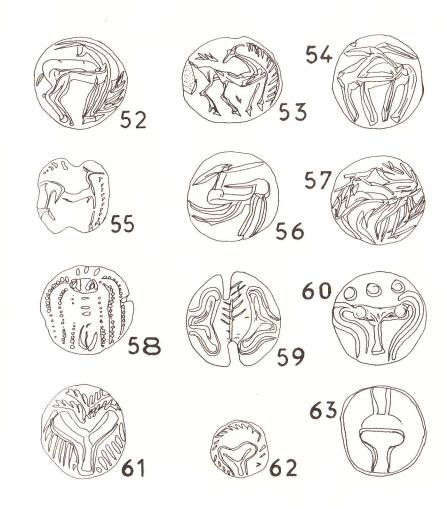


Fig. 6 52–63: Mainland Popular Group (cont.)



Fig. 7 64—74: Mainland Popular Group (cont.)

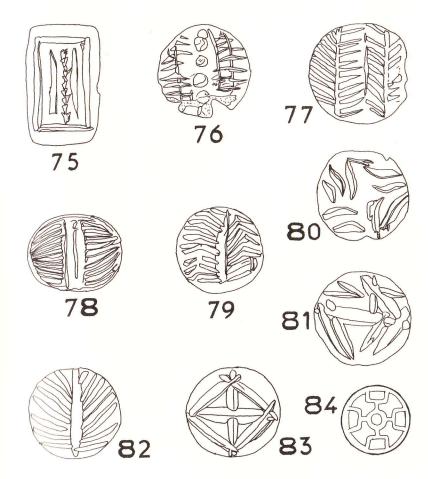


Fig. 8
75–80: Mainland Popular Group (cont.)
81–83: Fluorite Group
84: Stamped LH III C Pithos from Tiryns

and wealthy clientele, but it also stemmed the highly-developed Cretan impulse itself for making seals and other art-objects.

For one or two generations, seals continued to be made, but they were made exclusively for Mycenaeans whose bureaucratic need for new seals had not been confirmed by long habit; we might expect this need, therefore, to weaken without the support and impetus for that art-form, both of which traditionally came from Crete. The palatial Mycenaeans seem to have made do with the seals at hand, as the Pylos sealings demonstrate; the humbler folk decked themselves out with the cheap and easily-carved MP seals and dedicated the finer gems, most by then already antique, to their gods, as the late deposits of sealstones in sanctuaries demonstrate.⁷

Surely the demise of seal-engraving in the late fourteenth century B. C. was occasioned and accompanied by other phenomena. As other art-forms, like stone-vase carving and faience manufacture, may have ceased, we may imagine pictorial vase-painters striding quickly to assume the responsibility for representationalism; perhaps fresco-painters faltered for a while when they realized that their glyptic sources for new compositions and quickly-developing styles had faded away. Such relationships between the major pictorial art-forms in the Late Bronze Age, however, lie outside the scope of this series.

A. Late Almond-/Dot-Eyes

1. The Columbia Group

(the Argolid, ca. 1400–1375 B. C.) JGY, "A New Look at Bull-Leaping," Muse 17, 1983, 72–80.

This group continues the stocky body form, harsh shoulder, and doteyes of its predecessors, but also seems influenced by the more elongated forms adopted by the Spectacle-Eye Group at Knossos. The thin legs and somewhat self-conscious positioning of the bulls also seem to reflect the same tendencies seen in the Spectacle-Eye Group, and to foreshadow the more mannered approach of the IS Group.

I 79 (1) from Mycenae T. 44; AGDS II Berlin 48 (2) from Corinth; and University of Missouri at Columbia 57.8 (3) said to have been found at Phigaleia *Close*: I 82 from Mycenae T. 47

Near, a subgroup: I 300 (4) from Pylos (III Bii—Ci); and V 630 from Chalandritsa (III C)?

Contemporary: I 121 (5) from Mycenae T. 86

2. The Group with Misplaced Forelegs

(ca. 1400-1375 B.C.)

A stylistic kin to the Columbia Group, this group uses the same body type, bulky but elongated, and the harsh shoulder, but it also continues earlier traits like the thickened upper foreleg, the profile line on its most impressive seal V 597, and the divided upper hindleg on X 320. A Spectacle eye appears on the Perati seal I Supp. 56. The group's most distinctive trait is that the forelegs of the far animal are positioned too far forward.

I 262 (6) from Kambos; I Supp. 56 (7) from Perati T. 142 (III Ci); V 597 (8) from Mycenae, the House of the Idols (III Bii); X 320; XIII 18; and AGDS II Berlin 50 from Patisia, Athens

Close: IX 189

3. The Group with Crossed Hocks

(ca. 1375-1350 B.C.)

This group's most noticeable trait is the dash across the ankle, a vestigial reference to the lower end of the thickened upper foreleg as practised by its Almond-/Dot-Eye predecessors. The group also reflects the Spectacle-Eye Group's reduction of the head to a thick line supporting the eye and nose (especially on IX 195, and the Munich and Berlin scals). The Spectacle-Eye Group also seems to have developed the composition of two pairs of calves, each pair couchant antithetic but regardant, and the two pairs upside-down to each other (VIII 90 and Kn 11Ms 139 [CS 51S]) to form a whirligig pattern of three or four animals, noses into center in radial symmetry (see Kn HMs 255), a motif tried once before (I 194; Masters II: 122, Misc. L—J Lions). The present group takes up this resuscitated composition, along with its alightly Spectacle-Eye/Mumps flavor, in two ineptly-worked experiments (VII 107 and 112), before passing it on to be handled more expertly by IS artists (I 323 and XIII 12). These stylistic observations

J. Sakellarakis, "Kretisch-Mykenische Siegel in griechischen Heiligtümern," Neue Forschungen in griechischen Heiligtümern, Tübingen 1976, 283—308. The practice of dedicating sealstones in sanctuaries began in the late Mycenaean period: Renfrew 1985: 294—5.

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would then place Crossed Hocks between the Spectacle-Eye and IS Groups.

The find-spots of this group's seals also suggest that the shift away from either purely Mainland or purely Cretan production-centers to a more general, island focus begins immediately in III Aii, and may reflect the movements of itinerant artists.

VII 107 from Melos, 111 (9) from Ialysos, and 112 (10); IX 195; AGDS I Munich 70 (11 and 12) from Melos, and II Berlin 57

Close:

The Veve Group: V 428 from the Veve Tholos; and AGDS II Berlin 38 (13) from "the Greek Islands"

The IX 157 Group: IX 157 (14); and HM 181 from Phaistos Close: I Supp. 91 from Crete

4. The Group with Wicked Eyes

(Crete, ca. 1375-1350 B.C.)

This Cretan group reflects the bulky bodies and almond-eyes of the fifteenth-century groups; the elegant and contorted poses, thin, slightly curved legs of fourteenth-century groups, and the type of octopus found on LH III Aii pottery, all suggest strongly, however, that these seals were participating in the stylistic development that culminates in the IS Group. The large almond eyes can be paralleled on a contemporary krater from Enkomi (Vermeule and Karageorghis, MycPictVP no. III.23 dated EP III = ca. 1375–1360 B.C.). This group's preference for steatite (IX 190 is of cornelian) may imply the lack of a market for hard-stone seals in Crete.

I 488 (15) and 511, both from Crete; II 3. 90 from Knossos (placed in CP Bulls D [Masters II: p. 125: HM 202] before its recent publication) and 3.197 from "Kato Vathia", Crete; IV 286 from Rotassi, Crete; V 243 (16) from Armenoi T. 13 (III Aii); VIII 127 perhaps from Crete; IX 168 and 190 (17); CMCG 309 from Knossos; CS 383 and 389; and HM 2126 from Knossos

Octopus (Close to MP Octopus, FM 21.14 Group, LH III Aii): II 3.92 from Knossos; and XII 205 (18) possibly from Crete

Close: VII 239

Dependent: IV 53D from Knossos Forerunner: I Supp. 79 from Crete

B. The Island Sanctuaries Group

(ca. 1350-1300 B.C.)

JGY, "The Island Sanctuaries Group: Date and Significance," CMS Beiheft 1 (1981) 263–272; "The Rhodian Hunt Group,"Papers in Cycladic Prehistory (Institute of Archaeology XIV, UCLA 1979) 97–105; and Renfrew 1985: 290–294.

The IS Group can be divided into three major subgroups: the central IS Group, the Rhodian Hunt Group, and the IS Circle. The general style of the entire group emphasizes the elongated forms of animals and the restrained and simple use of the drill, both of which have been encountered in the Spectacle-Eye Group; the animal bodies are tightly modelled, legs are single strokes, and dots made by the solid drill articulate eyes, noses, and joints. Poses tend to be mannered and artificially graceful.

The name of the group comes from the preponderance of its sealstones from the islands of the Cyclades and from Rhodes, and from five sanctuaries: the Temple at Ayia Irini in Keos, the Mycenaean Sanctuary at Phylakopi in Melos, the Artemisium in Delos, the House of the Idols at Mycenae, and the Apollo Maleatas Sanctuary at Epidauros. Since no preponderance of find-spots suggests a single location for a workshop, it is possible that the IS artists actually formed a circle of itinerant artists who worked through the towns from the Argolid to Rhodes and at the seasonal fairs at the various shrines.

The date for the group is clear. Elements of the style — the elongated animals, mannered poses, tight modelling, and clean technique - can be seen in many seals of the Spectacle-Eye Group (cf. the griffin wings on Rhodian Hunt seals (below) and on Specky seals (e.g., VII 173; a new drawing in JDI 95, 1980, 77-108 no. A2 fig. 2 and a new photograph of an impression in Relations between Cyprus and Crete pl. XV.1)). The earliest IS seals dated by their contexts include I 139 (III Bi) in the central group; the sealing I 165 (III Bi) associated with the Rhodian Hunt group; and two lentoids in the IS Circle: I Supp. 21 from Midea T. 2 (III Aii or Bi) and I Supp. 29 from Prosymna T. 33 (III Aii-Bi). These context-dates imply that the group was well established by III Aii – Bi, ca. 1320 – 1290 B.C. The date of manufacture, however, should therefore be raised slightly, to within the second half of the fourteenth century, in order to account for the context-dates being later than the dates of manufacture, for the group's close stylistic relations with the Spectacle-Eye Group, and for the stylistic influence

which the IS Group exerted on the MP Group (see below), whose earliest context-dates belong to III Aii.

From Knossos there come certainly one sealing (HMs 255), probably another (HMs 353+660, unpublished), and possibly a third (HMs 259), impressed by seals in the Rhodian Hunt Group, and possibly a fourth (HMs 297) impressed by a small cushion seal belonging to the central IS Group. Of these, HMs 255 and 259 depict thin, slender griffins accompanied by their fledglings. On HMs 255 a family of two adult and two baby griffins attacks a stag which runs right, head contorted as on CMS I Supp. 55 from Perati T. 128 and as should be restored on Melos Mus. 576. The lanky proportions of the Knossos griffins and the linear treatment of their wings find parallels on other seals in the Rhodian Hunt Group: I 171 and 324 (compare also the exaggerated curve of the griffin's body), and IX 200. In addition, the peaked chest of the stag on I Supp. 55 and the Melos seal, produced by a cut V-shaped in section, is also found on HMs 255 from Knossos.

The presence at Knossos of these three sealings impressed by Rhodian Hunt seals and of a fourth impressed by an IS seal raises once again the problem of dating the destruction of Knossos that fired both sealings and tablets. Apart from the sealings just cited from Knossos, the latest sealings there (and there are many) seem to belong to the Spectacle-Eye Group (see Masters/Groups V, Introduction), and would (again not including HMs 255 and its two possible companion pieces) support Popham's date of LM III Ai end for the final destruction of Knossos.⁸

Recently, Wolf-Dietrich Niemeier⁹ has re-opened the question, emphasizing, among other matters, the similarities between the Pylos and Knossos tablets and the presence of LM III B pottery, much of which was burnt. The presence at Knossos of at least one Rhodian Hunt seal-type and possibly others from the central IS Group and the Rhodian Hunt Subgroup supports a date later than LM III Ai end for a fire destruction at Knossos that destroyed the bureaucracy and the production of art objects.

5. The Central Island Sanctuaries Group

V 499 and 500, Melos Museum 571, and possibly XIII 126, were all probably carved from a single block of limestone, as the vein-patterns suggest; the Melos seal was also apprently intended as a twin study to V 500.

Sealstones of average size: I 26 (19) and 175, both from Mycenae, 411 from Amorgos, and 491 from Crete; I Supp. 58 (20) from Perati T. 118? (III Bii-Ci); V 221 (21) from the Apollo Maleatas Sanctuary, and 499 (22) and 500 (23) both from the Temple at Ayia Irini (both, III A—B); VII 250, and 251; IX 191 (24), and 14D; X 136, 158, and 299; XII 241 from Crete?; XIII 12 (25) from Boiotia, 59 from Mycenae? (JHS 96, 1976, 255), 126, and 3D; Melos Museum 571 (26) and 576 (27), both from the Mycenaean Sanctuary at Phylakopi (III C developed); and two unpublished lentoids, one from Asine now in the Nafplion Museum and one from Aigina now in a private collection

Associated sealings: I 317, 323, 330, 355, 366, all from Pylos (III Bii-Ci)

Small scalstones: I 139 (28) from Mycenae T. 513 (III Bi), and 489 from Crete; and V 600 (29) from Mycenae, the House of the Idols (III Bii). Soft stone seals: V 528 from Midea (III B); and Melos Museum 572 from the Mycenaean Sanctuary at Phylakopi (III C developed)

Associated sealing: HMs 297 (KSPI K5) from Knossos

6. The Rhodian Hunt Group

The Rhodian Hunt Group exaggerates the IS Group's elongated bodies and tight modelling, often to such an extreme that they appear unnaturally svelte (e.g., the griffins on I 171 and 324, and IX 20D) and in contorted poses (e. g., I 199, IX 20D, NMA 8794). Most of this group's seals are confidently executed in a dry style like those in the central IS Group, though they exhibit some oddities that may be Idlosyncratic to this subgroup: the man's bull-head on I 171, the 'barbells' on V 656, the attack pose on VIII 150, the bird on IX 20D, the mistress of stags on I 379. Another group of seals exhibits a rougher modelling and even odder compositions, the two most bizarre being the bull with octopus, bird, and jug-less genius on VII 177, and the Unkomi cylinder's disturbingly chaotic and violent arrangement of figures. The two groups are linked not only stylistically but also through the use of the same gaudy blue and brown agate for both IX 20D and VII 177. Compare the similarly chaotic compositions of the contemporary Painter 28 of Vermeule and Karageorghis (MycPictVP s. n. VIII.8 and In. 3: "stylcless painting").

⁸ Popham, "The Destruction of the Palace at Knossos," SIMA 12, Göteborg 1970.

⁹ Niemeier "Mycengean Knossos and the age of Linear P." SAVEA 33 (1992)

⁹ Niemeier, "Mycenaean Knossos and the age of Linear B," SMEA 23 (1982) 219-288, basically a translation of "Das Mykenische Knossos und das Alter von Linear B," Beiträge zur ägäischen Bronzezeit 11, 1982, 29-126.

While only V 656 definitely comes from Ialysos in Rhodes, the article "The Rhodian Hunt Group" cited above explores the possibility that four other seals also originated there.

Early: I 171 (30) from Mycenae (III B), and 199 from Asine; I Supp. 55 from Perati T. 128 (III Ci); V 313 (31) from Delos, the Artemisium deposit, 656 (32) from Ialysos T. 21 (III Ci), and 664 from Thebes, Megalo Kastelli ChT 1; VIII 150; IX 20D (33); AGDS II Berlin 25 (34); Naples Museum 1404 (GGFR pl. 139: Boardman links this seal with VII 250, placed above in the IS Group); Pierpont Morgan Library 1077 (Pini, JDI 95, 1980, 77–108, no. A5, fig. 4); a lentoid in the Bari Museum; and a cylinder in the Pierpont Morgan Library no. 1077 (JDI 95, 1980, 77–108, no. A5) Associated sealings: I 165 from Mycenae, House of the Shields (III Bi), and 324, 329, and 379, all from Pylos (III Bii-Ci); and two fragments of one sealing from Knossos (HMs 255 and another)¹⁰, and possibly HMs 259 (KSPI C 15) also from Knossos Close: HMs 259/KSPI C15, and 353/660, both from Knossos
Late: VII 160 (35) said to come from Calabria, 175, 176, and 177 (36), all perhaps originally from Rhodes; and BM 97.4–1.4 (37) from Enkomi OT.2 (JDI 95, 1980,

7. The Island Sanctuaries Group: Miscellaneous Seals

A. Forerunners:

77 - 108, no. C3)

a, a close group: V 184, 602 from Mycenae (III B), and 649; VIII 81; and CS 1P b. miscellaneous: V 441 from Nichoria (LH III A2-B), and 649 from Crete; and a lentoid in a private collection in Rome. Soft Stone: VIII 81

B. IS Circle, High Quality: I 23 from Mycenae; I Supp 21 from Midea T. 2 (III Bi (III Aii: BSA 69, 1974, 254)), 39 from Perachora, and 118; AGDS I Munich 45; a cylinder in the Nicosia Museum from Phlamoudi; a cylinder in the Istanbul Archaeological Museum no. 12 807 (JDI 95, 1980, 77–108 no. A3); and a fluorite lentoid from Tiryns

Soft stone: V 249 from Armenoi T. 19 (III Bi), possibly in the Main IS Group Associated sealing: I Supp. 204 from Pylos (III Bii-C1)

C. IS Circle, Mediocre Quality: IV 264 from Sokarras, Crete; VII 184, and 252 Small seals: V 676 from Thebes, Kolonaki T. 3; and IX 192

Subgroup 1 (The Chania Mus. Sigma 5 Group): II 3.210 from "Lyttos"; and Chania Mus. Sigma 5 from Ayios Ioannes ChT, Chania (III B)¹¹

Close: 1 30 from Mycenae, and 484 from Crete Near: I Supp. 22 from Midea T. 3 (III Bi) Associated Sealing: I 337 from Pylos (III Bii—Ci)

D. IS Circle, Poor Quality: Lamia Mus. BE 949; and a lentoid from Varkiza Subgroup 2 (The Papoulia Group): I Supp. 29 (38) from Prosymna T. 33 (III Aii—B); V 311 from Papoulia; and CS 24P *Miscellaneous*: V 659 from Ialysos

C. The Mainland Popular Group

JGY in Renfrew 1985: 282-3, 290, and Chapter 7 passim, publishing the sealstones mentioned here in the Melos Museum.

Like the CP Group, the Mainland Popular Group (hereafter, the MP Group) consists of seals made of soft stones carved in simple styles, and deposited in humble tombs.

There are, however, major differences between the two groups. While the CP Group uses serpentine, the MP Group prefers the softer and shinier steatite, especially in the dark colors (brown, red-brown, black, and occasionally green, rarely pale green).

Like the CP seals, almost all the MP seals are lentoids, but many, if not most, have a conical reverse (e. g., V 337–347 whose profiles are drawn on V pp. 616–7), a trait that may have first occurred as a attrengthening device for glass seals (e. g., V 348–360, etc., in the Group of the Gold Box) before characterizing a few stone seals, beginning in the fifteenth century (e. g., I 66, 215, 386, etc.), and continuing on to become common in the Spectacle-Eye Group (e. g., IV 259 and V 255 whose conical reverses are illustrated, V 188, and X 125, etc.). The conical reverse on stone seals may have been intended to facilitate steady and firm impressing; such a purpose seems plausible for the Spectacle-Eye seals, but it is unlikely that MP seals were ever intended to function sphragistically (in spite of the fact that a few MP meals were used to impress sealings: e. g., I 354), in which case the conical reverse may be only an evocative affectation.

The overwhelming majority of the MP seals come from chamber tombs on the Mainland, especially in the late cemeteries like Medeon and those in Aitolia and Thessaly, occasionally also in the islands, especially Kephallenia and the Cyclades, but rarely from Crete (except for the late Armenoi cemetery) or from the Dodecanese.

Though a few MP seals carry fairly naturalistic animals (placed in subgroups labelled Good Quality), most display animals schematically rendered, occasionally to the point of reducing their body and neck to a single line (e. g., I 169, V 323, VII 205), or they display geometric designs.

The MP Group presents several problems to the modern scholar. The soft material (steatite is the softest material used for seals in the Aegean Bronze Age, 2.5 on the Mohs scale) wears rapidly and in a about time reduces even the most carefully executed animal to an illegible stick figure. Therefore, only the barest attempt is made here

¹⁰ Pini, "Ein Siegelabdruck in Archäologischen Museum Iraklion," CretCongIII, 221-230.

¹¹ I am grateful to E. Karantzale for allowing me to see a drawing of this seal and to mention it here in advance of its publication.

to subgroup MP seals stylistically; most instead are grouped iconographically, the animals first by the presence or absence of triangular notches for their feet, then by Pose Type (PT; defined at the first occurrence of the pose) and, where warranted, subdivided into Good Quality (often also meaning Well Preserved) and Miscellaneous.

The schematic style has also led many scholars to date these seals to various periods, mostly very late. Kenna, for example, often considered the MP seal at least IIIB in date, if not IIIC (e. g., VII 200) or IIIC-Geometric (VII 204 and 205), as does Boardman (GGFR p. 62, figs. 144—148), though the latter also includes at least eight CP and two MP seals (pls. 195 and 197) in his category "End of the Bronze Age". This tendency is understandable since it is obvious from the late context dates that the MP seals survived in use, probably as jewelry and charms, amongst the humble for a long time, long enough to have been a major influence on Geometric seals (GGFR ch. III).

The date for the group, however, is fairly clear from the earliest contexts: III Aii – I 138, 157, and 211, and V 33, 746, 748, and 749; III A – I Supp. 48, and V 255, 394, 395, 575 (I–IIIA), 618 (II–IIIA), 628, and 679; III Aii? - V 445; III Aii-Bi - V 249, 261, 277, 278, 731, and 734. The group, therefore, is contemporary with the IS Group, on whose linear but elegant style the MP's schematic but crude style depends. In addition, there are internal indications that the MP Group evolved, like the IS Group, soon after the destruction of Knossos. MP seals which are stylistically early are placed in a separate subgroup (MP Animal Group 1): the lentoid from Prosymna T. 8 carries a fairly realistic bull; V 280 reflects the Dot-Eye bulls and VIII 84 reflects those with Mumps; and the two common types of branches on MP seals both find immediate prototypes amongst the Knossos sealings: one, looking like a ladder (e.g., on I 31 and V 417), can be found on the Almond-Eye HMs 253 (KSPI N1), and the other, looking like a vertical row of V-shaped notches, can be found on the sealing HMs 298 (KSPI K9) in the Armenoi Group.

I. Men

Group: I 195 (39) from Midea; and V 11 from Aigina Miscellaneous: I 42 (40) from Mycenae; V 189 from Salamis; and CS 40P Associated sealings: I 356 and 369, both from Pylos (III Bii—C1)

II. Women
II 4, 121 from Knossos, the Kephala Tholos
Associated sealing: I 321 from Pylos (III Bii—Ci)

III. Animals

A. Groups

1. Early types: V 280 (41) from Armenoi T. 6 (III Bii); VIII 84 (42) from Crete?; and a lentoid from Prosymna T. 8 (III Aii—B; Prosymna fig. 587)

2. The Korakou Group: V 150 (43) from Kokkolata (III B [-C]), 172 from Kephallenia, 315 from Delos, 379 from Medeon T. 29a, and 512 (44) from Korakou; and X 173 and 314

3. Dot Groups

a. V 337 from Medeon T. 29; and X 177 (45)

b. V 403 from Medeon T. 239 (III C)

c. V 255 (46) from Armenoi T. 27 (III A), and 321 from Krissa T. 3 (III C)

4. V 377 from Medeon T. 29 a, and 417 (47) from Medeon T. 264 (III C)

5. V 726 (48) from Mega Monastiri T. Gamma (III A-B); and X 182

B. Bulls

i. With hooves

In PT 1A (standing, head normal)

a. Good Quality: I Supp. 48 from Eleusis T. Theta-pi 4 (III A), and 157; V 3 from Aigina, 159 from Kokkolata (III B [-C]), 227 from Oxylithos, Euboia (III Aii-B), 683 from Tanagra T. 13 (III A-B); and X 186, and 263

b. Miscellaneous: IX 201; and X 175

In PT 1C (standing, head up): I 25 from Mycenae; and I Supp. 23 from the Argive Heraeum

In PT 2 (standing, regardant):

a. Good Quality: VII 204 (49) from Kalymnos (III C1 or later; Walters, Catalogue of Greek Vases in the British Museum No. A1015 (FM 21.28, FS 176.1) contained this seal)

b. Miscellaneous: I 138 from Mycenae T 505 (III Aii); I Supp. 142; V 8 from Aigina, 219 from Brauron T. 19 (III B?), 442 from Nichoria; VIII 99; IX 203 and 204; X 175, 180, and 244; and AGDS I Munich 89 from Athens, the Olympicion

In PT 6 (running, regardant): V 575 from Tiryns, Profitis Elias T. 19 (I-III A)

In PT 13 (standing, head under belly): V 153 from Kokkolata (III B (-C))

In PT 14A (standing, head under belly facing the hooves): V 23 from Sklavi T. 2 (III B)

In PT 28B (two antithetic, regardant): V 151 from Kokkolata (III B (-C))

In PT 39A (lion attacks bull from above): V 361 from Medeon 29

ii. Without hooves

In PT 1A: V 186, 258 from Armenoi T. 32 (III Aii—Bi), and 746 from Metaphio (III Aii); X 176; Melos Museum 569 and 573, both from the Mycenaean Sanctuary at Phylakopi (III C developed); and BSA Cast 189

In PT 1B (standing, head down): XII 303 (published upside down) from Crete?

In PT IC: I Supp. 24 from the Argive Heraeum; and VII 200

In PT 1D (standing, head back): I 169 (50) from Mycenae

In PT 2: 1 27 from Mycenae; V 322 from Krissa T. 3, and 626 from Aitolia; and VII 205

In PT 6: X 311

In PT 12 (standing, head down between forelegs): X 187

In PT 13: AGDS I Munich 88

C. Agrimia/Goats

With hooves

In PT 1A

a. Good Quality: V 339 and 340, both from Medeon T. 29, 401 (51) from Medeon

T. 239 (III C), and 625 from Marathia Tholos 2 (III B-C)

b. Miscellaneous: V 29 from Argos, 158 from Kokkolata (III B [-C]), and 338, 341, and 344, all three from Medeon T. 29; IX 202; X 163; and AGDS I Munich 78 In PT 1B: V 160 from Kokkolata (IIIB [-C])

In PT 1C: X 178; and AGDS II Berlin 60 said to be from Athens

In PT 1D: V 402 from Medeon T. 239 (III C)

In PT 2

a. Good Quality: V 378 (52) from Medeon T. 29 a

b. Miscellaneous: I 295 from Kokevi, Pylos (III C); I Supp. 14 from Mycenae, and 155; V 9 from Aigina, and V 309? from Pylos (III Bii—Ci); VIII 98 (53) from Crete?; and X 174, 179, and 181

In PT 6: I 31 from Mycenae

In PT 25C (standing regardant with regardant protome above): X 174

In PT 28A (two antithetic): V 747 from Metaphio (III Aii)

Two conjoined: I 403 from Athens

ii. Without hooves

In PT 1A

a. Good Quality: V 394 (54) from Medeon T. 99 (III A)

b. The Maleatas-Phylakopi Group (see Alerions, below): I Supp 70 from Hydra?; Melos Museum 578 a from the Mycenaean Sanctuary at Phylakopi (III C developed); and a lentoid from the Apollo Maleatas Sanctuary (AR 1977–8, fig. 49 left)

c. Miscellaneous: I 210 (55) from Prosymna T. 6 (III Bi), and 399 from Athens; V 169 and 170, both from Metaxata T. B (III B [-C]), and 342 from Medeon T. 29; VII 263; X 234; and Melos Museum 570 from the Mycenaean Sanctuary at Phylakopi (III C developed)

In PT 1B: V 687 from Tanagra T. 34 (III A-B)

In PT 2: I 33 from Mycenae

In PT 5A (running, head normal): I Supp. 164 b; V 741 (56) from Gritsa; X 185; and AGDS I Munich 84, and 85 from Lappa

In PT 6: X 183

In PT 28B (two antithetic, regardant): I 297 from Pylos (III Bii-Ci)

D. Horse? in PT 1A: Melos Museum 574 from the Mycenaean Sanctuary at Phylakopi (III C developed)

E. Quadrupeds

In PT 1: I 32, 38, 39, and 178 all four from Mycenae, and 400 from Athens; I Supp. 4 from Mycenae T. 1–52, 40, 154, and 156; V 30 from Argos, 324 from Krissa T. 1 (III B) and 325 also from Krissa, 425 from Lefkandi, 510 (57) from Zygouries T. 33 (III B), 615 from Olympia T. A (III B–C), 670 from Thebes (III B), 734 and 740 from Mega Monastiri Ts. Delta and Epsilon, respectively (both III Aii–B); CS 42P; HM 56 from Knossos (ArchEph 1907 pl. 7.70; CS p. 66, fig. 141); and a lentoid in Tübingen

In PT 2: I 22, 174 and 178, all three from Mycenae; I Supp. 15 from Mycenae; V 4 from Aigina, 42 from Lerna, 161 from Kokkolata (III B [-C]), 187, 261 from Armenoi T. 34 (III Aii-Bi), 310 from Pylos T. E9 (III B?), 323 from Krissa T. 2 (III C), 345 from Medeon T. 29, 443 from Nichoria, 606 from Naxos T. 3 (III C), 610 from Olympia T. Sigma-tau (III B), 622 from Seremeti (III C), and 631; AGDS I Munich 77, and 83 from Crete; Melos Museum 575 from the Mycenaean Sanctuary

at Phylakopi (III C developed); a lentoid from the Mycenaean Fountain on the Athens Acropolis (III C1; Hesperia 8, 1939, 414, fig. 99 a); a lentoid from Ayios Stephanos; and a lentoid in Tübingen

In PT 5A: V 33 from Argos, Deiras T. 24 (III Aii), and 228 from Chalkis

In PT 6: I 29 from Mycenae; and 162 from Kokkolata (LH III B[-C])

PT 28B: I 398 from Athens; and V 5 from Aigina

In PT 34B (two, with bodies parallel, belly to belly): I 157 from Mycenae T. 523 (III Aii)

In PT 37B (three quadrupeds in radial symmetry): I 47 from Mycenae T. 8

In PT 39A: X 184

Unknown PT: I 296 from Pylos (III Bii—Ci); I Supp. 1 from Mycenae, the Cyclopean Tholos, and 51 from Glyphada, Alyki T. Delta; V 168 from Kokkolata (III B [—C]), 223 from Medeon?, and 416 from Medeon T. 239 (III C)

F. Octopus

The FM 21.4 (LH III Aii—B) Group (Close to Wicked Eyes, Octopus): IX 184 (58) from Ligortyno; XIII 67; and CS 382

Miscellaneous: V 386 from Medeon T. 29 a, and 749 from Metaphio (III Aii)

G. Animal heads

Goats: I 21 from Mycenae, and 166 from Mycenae, the House of Lead (III Bi)

The Krissa T. 3 Group: V 326, 327 (59), and 328, all three from Krissa T. 3 (III C), 346 and 347 (60), both from Medeon T. 29, and 513 from Korakou; X 198; CS 104 from "the Greek Islands," and 105 from central Crete; and Bodrum no. unknown, a lentoid from the Kaş wreck (AJA 90, 1986,283—4 fig. 20, pl. 17.2). Close: V 31 from Argos, and 682 from Tanagra T. 27 (III B—Ci); IX 198, and 199; and XII 310 from Crete?

The Clover Leaf Group: V 748 from Metaphio (III Aii); X 236 (61); and AGDS I Munich 24 (62)

The Tiryns Bucrania Group: X 200 (63); a lentoid from Tiryns (AA 1979, 405 fn. 75, fig. 30 right bottom; III C early); and a lentoid once in the Younger Collection (Durham, NC)

Miscellaneous: V 398 from Medeon T. 162 (III C late), 623 from Seremeti (III C), and 661 from Salamis; VII 264; and XII 294 from Crete?

11. Monsters

Griffins: 1 472 (64) from Crete; and VII 187. Genii: V 367 from Medeon T. 29

The Maleatas-Phylakopi Group (see Agrimi B, PT 1A, b, above): X 192 b (65; a, placed in Centered Circles, Cretan Group, below); Melos Museum 578 b from the Mycenacan Sanctuary at Phylakopi (III C developed), and another rectangular plate acal (66) from the Apollo Maleatas Sanctuary (AR 1977—8 fig. 49 right)

Miscellaneous: I 211 from Prosymna T. 11 (III Aii)

IV. Decorative

A. Figure 8 shields: V 155 from Kokkolata (III B [-C]), 574 from Tiryns; VII 203; and XIII 38 from Rhodes

II. Centered Circles

MP (see V 408 in Rosette, Misc.; V 376 in Hatched Periphery, Border Group, both helow; and X 187 in Bulls B, PT 13; and V 574 and XIII 38 in Figure-8 Shields, all three above)

Branch Group: V 152 from Kokkolata (III B [-C]); X 193 (67); and CS 194 Background lines

S-Division Group: I Supp. 46 from Perachora; II 3.127 from Tylissos; X 196 (68); and CS 397 from Athens

Miscellaneous: I 34 and 173, both from Mycenae, 354 from Pylos (III B ii—(i) and 402 from Athens; I Supp. 45 from Perachora; V 13 from Aigina, 154 from Kokkolata (III B [—C]), 225 from Medeon, 245 from Armenoi T. 15, 330 from Krissa T. 2 (III B), 387 from Medeon T. 29 a, 414 from Medeon T. 239 (III C), 419 from Medeon T. 264 (III C), 429 from the Veve tholos (III Aii—B), 445 from Nichoria (III Aii?), and 612 from Olympia, New Museum T. Eta (III B); X 190, 195, 197, and 237; and HM 922 from Tylissos (ArchEph 1912, pl. 15 a)

Miscellaneous: V 175 from Athens Agora T. 7 (LH III [B-] Ci)

Cretan MP? Group (many circles placed randomly): V 175 from Athens Agora T. 7 (III [B-] C), 259 from Armenoi T. 32 (III Aii-Bi); X 192 a (b, placed in Alerions, Maleatas-Phylakopi Group, above); XII 269 from Crete?; CS 392 from the Diktaian cave; and II 4.109 from Tylissos

MP or CP

Rectangular Prism Group

a. V 270 from Armenoi T. 54; and X 188, and 189

b. I Supp. 10 from Mycenae acropolis, and 60 from Brauron, Lapoutsi T. 2; and V 420 from Medeon T. 264 (III C), 448 from Nichoria (III Aii–B)

Miscellaneous (cf. Kn HMs 309I (KSPI R83)): I 177 from Mycenae; I Supp. 50 from Glyphada, Alyki T. Gamma; II 3.323 from Palaikastro; V 226 from Medeon?, and 413 from Medeon T. 239 (III C); X 191 and 194; II 4.134 from Knossos; and HMs 309I (KSPI R83) from Knossos

C. Rosettes

Leaf Group: V 165 (69) and 166, both from Kokkolata (III B [-C]), and 395 from Medeon T. 99 (III A); IX 197; AGDS IV Hannover 9 from Crete; and a lentoid from Tirvns (III C early; AA 1979, 405, fn. 75, fig. 30 right top)

Boss Group: I Supp. 59 from Brauron, Lapoutsi T. 2; V 167 from Kokkolata (III B [-C]), 369 from Medeon T. 29, 406 and 407 (70), both from Medeon T. 239 (III C), and 736 from Mega Monastiri T. Delta (III Aii-B)

Miscellaneous: V 370 from Medeon T. 29, and 408 from Medeon T. 239 (III C)

D. Spirals

Vierpass: V 611 from Olympia, New Museum T. Zeta (III B), and 618 (71) from Panavia Ch. T. (II-III A)

Double: V 685 from Tanagra T. 18 (III A—B), and 738 from Mega Monastiri T. Delta (III Aii—B); X 203 and 235; and two lentoids from Tiryns (III C early — AA 1979, 405, fn. 75, fig. 30 right middle; and Protogeometric — AAA 7, 1974, 24 fig. 22 right)

E. Paisley

Group: I Supp. 166 from Salamis; V 329 from Krissa, and 371 (72) from Medeon T. 29, and 627 from Aitolia

Miscellaneous: CS 394 from Arkhanes, and 395

Meander: V 332 from Krissa, and 616 from Olympia

Hatched Periphery (see Centered Circles, above)

Bordered Group: V 376 from Medeon T. 29; and X 209 (73), and 210. Close: X 202 Related?: II 3.93 from Knossos. Notched Group: V 224 (74) from Medeon, 409 from

Medeon T. 239 (IIIC), and 628 from Kato Goumenitsa (III Ai-ii) Close: X 204

F. Branches

Bordered Group: V 397 (75) from Medeon T. 131 (III C late), and 679 from Thebes, Kolonaki T. 17 (III Ai—ii, or III Ai only); and X 238

Two Parallel

MP: V 156 (76) from Kokkolata (III B [-C]), and 731 from Mega Monastiri T. Gamma (III Ai-Bi)

CP?:
1 Supp. 47 Group: I Supp. 47, and 159. Miscellaneous: V 593 from Mycenae; VII 194 (77) from Ialysos; HM 2178 from Olous; and Kn HMs 229 (KSPI R36), and 322

G. Lines

Parallel Group: V 164 (78) from Kokkolata (III B [-C]), 368 and 372 (79), both from Medeon T. 29, 396 from Medeon T. 99 (III A), and 613 from Olympia, New Museum T. Theta (III B); and X 205

Dash Group: V 331 from Krissa, T. 1 (III B), 410 (80) and 411, both from Medeon T. 239 (III C); and a lentoid from Knossos, MUM (Popham, et al., Minoan Unexplored Mansion pl. 190 b and c)

Close: X 199

Miscellaneous: I Supp. 12 from Mycenae

Very Worn: I 392 from Perati T. 1 (III Bii—Ci); I Supp. 9 from Mycenae; and V 624 from Seremeti (III C)

D. The Fluorite Group

(Mainland?, ca. 1350-1300 B.C.)

This group accounts for most of the seals carved from fluorite (CaF₂), a mineral which is softer (hardness 4 on the Mohs scale) than rock crystal (hardness 7), for which it has often been mistaken (CMS X p. 19 and fn. 16). The stone is also brittle and breaks easily along the veins (1 300 near the Columbia Group, and Melos Museum 576 in the IS Group).

The date for the Group is fairly sure; the earliest context-dates are LH III Aii—B (the Mega Monastiri seals V 735, 737, and 739) or LM III Aii—Bi (V 277 and 278 from Armenoi T. 59). The Group is therefore contemporary with both the IS and the MP Groups.

On the other hand, it is difficult to be certain where the group's primary workshop was located, even assuming that there was a primary workshop. There are 39 seals in the group of which nineteen come from the Mainland or Kephallenia, thirteen from Crete, and seven are of unknown provenience, though CS 360 probably also comes from Crete. Of the thirteen or fourteen seals from Crete, eleven belong to one iconographic sub-group, and consequently were either made there

or, less likely, imported as a group; the seals from the Mainland are iconographically more diverse, and it is therefore more likely for most of these fluorite seals to have been made there. The geographical spread of the seals and the fact that, of the 29 with specific find-spots known, 27 come from tombs and only two from the Diktaian cave (the seal II 4.215 from Palaikastro may also have come from a burial (BSA 1939–40, p. 43)) make it likely, therefore, that the Fluorite Group was made specifically for burial and may simply have been peddled from place to place for that purpose; none was used to impress any of the LH III B and C clay sealings.

While the Fluorite Group accounts for most of the fluorite seals known, there are several other sealstones of fluorite which do not belong to the Group, but are Minoan and earlier; e. g., II 1.432 comes from an EM III—MM II context at Trapeza, II 2.65 and 68 from the MM cemetery on Profitis Elias above Knossos, V 620 belongs to a MM group though from Aitolia, HM 2505, a Cut-Style piece, comes from the LM II Unexplored Mansion, 12 and V 591 and 592 from Nafplion give the name to the Spectacle-Eye sub-group Nafplion Bucrania. There are also four other fluorite seals belonging to late four-teenth-century groups: I 300 and V 630, both near the Columbia Group, I Supp. 29 in the Papoulia Group, and Melos Museum 576 in the IS Group.

Conversely, thirteen seals in the Fluorite Group are not of fluorite: V 389 and 390 of a white stone; 343, 388, 735, and 744 of white stones spotted variously brown, yellow, and olive green; IV 222 and CS 362 of blue glass; AM 1971.1138 and 1971.1147 of serpentine; II 4.59 of green steatite; and two lentoids of serpentine from the Unexplored Mansion at Knossos.

A. Animal: V 343 (81) from Medeon T. 29

B. One Branch

Group: V 390 (82) from Medeon T. 29 a, 742 and 743, both from the Lemoni tholos, X 206, and 207; HM 2181 from Olous

Miscellaneous: V 617 from Olympia; and Florence Museum 82530 (SMEA 40, 1969, 7–18, no. 15)

C. Two Branches: V 163 from Kokkolata (III B [-C]), 217 from Brauron T. 13 (III B), 229 from Euboia, 373 from Medeon T. 29; and a lentoid in Tübingen

D. Geometric Designs

Rosette: V 737 from Mega Monastiri T. Delta (III Aii-B)

Diamond: V 388 (83) and 389, both from Medeon T. 29 a, and 744 from Pteleon Hatched Cross

Group (some very small: IV 222, D. 0.67; and HM 2067, D. 0.7)

From the Mainland: V 375 from Medeon T. 29, and 739 from Mega Monastiri T. Epsilon (III Aii-B)

From Crete: IV 221 from Mallia, and 222 from Tsoutsouros (Pini, JRGZM 28, 1981, 52, nos. 17 and 18, respectively); XII 147 from Crete?; CS 360?, 361 from the Diktaian cave, and 362 from the Ayia Pelegia Tholos (Pini, JRGZM 28, 1981, 58 no. 61); II 4.59 from the Diktaian cave, 217 from Palaikastro; HM 2067 from Galia T. B (III B; Pini, JRGZM 28, 1981, 62, no. 79), 2179, 2180, and 2182, all three from Olous; and two lentoids from Knossos, the Minoan Unexplored Mansion (Popham et al., Minoan Unexplored Mansion pls. 188 a and b)

Miscellaneous: I 28 from Mycenae; V 271 from Armenoi T. 54, 277 from Armenoi T. 59 (III Aii-Bi), 374 from Medeon T. 29, 412 from Medeon T. 239 (III C), and 735 from Mega Monastiri T. Delta (III Aii-B); and X 208

Related: I Supp. 140 b (140 a is grouped in Spectacle-Eye A. Subgroup 1, Close c) E. Miscellaneous Designs: V 171 from Kephallenia, Lakkithra T. Gamma (III C), and 278 from Armenoi T. 59 (III Aii—Bi); VII 256; and AM 1971.1138 and 1971.1147, both from Crete? (Boardman, Festschrift Levi I, p. 121 nos. 17 and 18)

E. The Stamped LH III C Pithoi from Tiryns, and Class

The stamped LH III C pithoi V 572 demonstrate how artifacts not originally created as seals could be used to stamp pottery for decorative purpose. The class of artifact that stamped the pithoi is here presented in its various materials, bronze, lead, and ivory. In other periods artifacts other than seals were similarly used: e. g., the metal? pendants? that stamped the EC II hearth rims V 462 and 476 from Ayia Irini in Keos.

Stamped pithoi: V 572 from Tiryns (III C)

The 'stamps': V 34 (84) of bronze from Argos, Deiras T. 22 (III C1); NMA 1412 and 1413 of lead from Mycenae (Schliemann, Mycenae 112, fig. 120); and NMA 2646 of ivory from Mycenae Ch. T. 1—52 (Poursat, Catalogue des ivoires mycéniens du Musée d'Athènes, p. 79, no. 262, pl. 23)

¹² Betts, in M. R. Popham, et al., The Minoan Unexplored Mansion, 191, no. M35.