Scarabs, scaraboids, ovoids, plagues and other seal forms are distinguished by their back markings, but all are stamp seal forms. By far the most common form of stamp seal in ancient Egypt was the scarab, and this term often is used when referring to stamp seals, of whatever form, in Egypt. A very circumscribed variety of such 'scarab seals' were imported to Crete, whilst the Minoans produced a wide variety of 'stamp seal' forms on Crete itself. The definitions employed for the purposes of the present study are deliberately limited in scope to accommodate the material under consideration, and are not always the norm. Scarabs are distinguished here from scaraboids (i.e., 'scarab-like' seals) by their naturalistic appearance, with obvious head and clypeus, and distinction of elytra and, especially, legs specifically marked. 490 Scaraboids are provided with markings that only suggest but not depict the appearance of a scarab.⁴⁹¹ Considerable overlap can exist between scarabs and scaraboids; for the purposes of the present chapter, scaraboids are defined as such in problematic cases only if the side markings do not include diagonal lines to indicate legs but instead one or two horizontal grooves; those with diagonal leg markings are defined as scarabs. Ovoids are completely devoid of back or side markings, although they are generally rounded and sloping towards the base on the long sides. ⁴⁹² Oval plaques, like ovoids, are devoid of back markings but have vertical sides all around and flat or slightly convex backs. ⁴⁹³ All are normally drilled for attachment through the length, but exceptions do exist. 'Scarab seal' is employed in the present chapter when referring in general to *Egyptian* stamp seal types, of whatever form, and 'scarab' when only this seal form is intended. ⁴⁹⁴

In Egypt

Scarab seals are common finds in the excavation of virtually any post-Old Kingdom dynastic Egyptian site. They were amongst the first artefacts to draw the attention of collectors and forgers, due both to their small scale and portability, and their varied decorative and artistic qualities, as well as their sheer quantity.

Scholarly work was less forthcoming. 495 It was

⁴⁹⁰ See Fig. 13 for identification of terms used for individual scarab attributes.

⁴⁹¹ In Egypt, the term 'scaraboid' often but not universally is used for seals having a form other than the scarab beetle, usually in zoomorphic shapes including cats, ducks, hedgehogs, apes and frogs, although sometimes other non-zoomorphic forms also exist. Those depicting a human face are developed from the scarab type having cross-hatched elytra. Their purposes often parallel the scarab form, both as seals and as amulets. See, for example, Andrews 1994:53–54. The term also can be used to indicate summarily executed 'scarabs,' as it is employed here. Other chapters in the present study employ the term 'scaraboid' in its more common zoomorphic but non-scarab sense (see Chapters 12–16); only in the present chapter is the term employed for the schematic scarab type as defined in the main text above.

⁴⁹² The term 'ovoid' has a much wider definition than that employed in the present chapter, in both Egyptological and Aegeanist literature. The definition here is used to encompass only a specific and limited class of ovoid seal found both in Egypt and on Crete, as well as the Levant, entirely without back markings. In Egypt ovoids (in the wider definition) can be, and often are, carved on the back with predominantly abstracted motifs; for a typology, see Petrie 1917:pl. LXXI:Z; 1925b: pl. XXX:Z. Note his distinction between ovoids and button-seals, the latter having a high back drilled through the width of a narrow raised ridge run-

ning along its length. Many of his decorated, and occasionally also undecorated, 'ovoids' now are called 'cowroids' and sometimes 'conoids.' The three terms are not always clearly distinguished in Egyptological literature.

Note that Yule includes the Minoan ovoids as 'scaraboids' (Yule 1981:79 Class 30:a, d). They are distinguished in the present study from his 'half-ovoids' (*Ibid*.:58–59 Class 16) and scaraboids (*Ibid*.:79–80 Class 30:b–c), which characteristically have decorated backs. The face designs are related. Yule's scaraboids of Class 30:c are identified as "probably ringstones, not scaraboids" by Younger 1988b:206.

⁴⁹³ In Egypt, plaques also can be rectangular. Both oval and rectangular plaques can be inscribed with a face design on one or both flat surfaces. See HORNUNG and STAEHELIN 1976:37, 434 ('Platte'); NFA 1991:#107-108, 251-252, 287, 291: MARTIN forthcoming:ms. 268.

⁴⁹⁴ This is to be distinguished from 'scarab 'seal',' with the second word in single quotation marks, that refers to a scarab having a face design that does not appear to have been employed as a sealing device.

⁴⁹⁵ A much more detailed history of scarab seal research to 1994 can be found in Ward and Dever 1994:9–24. Note that bias is evident in their discussion of the most recent research, as much of it considers Ward's earlier research and is preliminary to their subsequent chapters. Much work has been accomplished since. Discussion of the relative merits of O'Connor 1985 and Ward and Dever (1994) is found in Ben-Tor 1997:161–166

not until 1889 that the first systematic attempt to study scarab seal development was published; not surprisingly it was the work of W.M.F. Petrie (1889). Although private and public collections occasionally continued to be published, P.E. NEW-BERRY (1905) first attempted a more thorough analysis. Scholarly focus centered on the face design rather than shape, especially those inscribed with names and titles. Again Petrie led the way, dealing first with inscribed scarab seals (1917) then those with designs (1925b); the back types now were classified and dated in Petrie's usual summary style. Whilst site reports and catalogues (e.g., Newberry 1907) continued publishing face designs almost exclusively, Hall (1913) introduced the concept of using side types as an additional means of dating and typing scarabs to the back (and head), a feature continued and expanded by Petrie, Rowe (1936) and then MARTIN (1971) for the Middle Kingdom to early Dynasty XVIII; Martin concentrated on administrative and private name scarab seals, rather than those having a design on the face, mostly from Egyptian sites. Others continued to concentrate on face design as a means of dating; STOCK (1942) in particular produced some observations regarding the validity of inscriptions originally understood to be 'contemporary' royal names. Hor-NUNG and STAEHELIN (1976) produced an overall examination of scarab seals and their variants, including common shapes and forms, motifs and decoration, and inscriptional formulae. Additionally, certain specific scarab seal types have been studied in detail, such as those of Thutmose III by JAEGER (1982).

Yet the first truly systematic study of scarab seal (and especially scarab and scaraboid) development and dating on the basis of detailed typological criteria was not published until WARD (1978), extended by TUFNELL (1984), who together considered only the periods up to the beginning of Dynasty XVIII. They examine relative scarab and scaraboid size, noting changes in height:width:length ratios and overall dimensions, as well as identify the different design classes. Whilst interesting average ranges and ratios are noted, the actual dimensions of most individual scarabs and scaraboids do not usefully delimit their individual dating parameters, nor (to a great extent) do the design classes, although patterns do emerge. These studies were updated and revised by WARD and

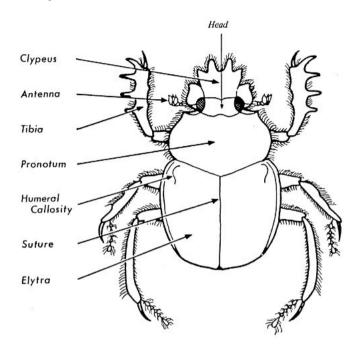


Fig. 13 Scarabaeus sacer beetle (WARD 1978:Frontispiece)

DEVER (1994). Yet it should be noted that the absolute dates in these studies generally have been questioned by Egyptologists, and their developmental typology has been questioned by scholars in several fields.

Subsequently O'CONNOR (1985) examined scarabs and scaraboids from Egyptian sites for the Middle Kingdom through to the reign of Thutmose III in Dynasty XVIII. His analysis was hampered by a lack of well-stratified contexts in Egypt, and his conclusions often differ from those of both Ward and Tufnell. It has been criticised both by them and others, but this was the first attempt to produce a detailed typological study using material exclusively from Egypt. Most recently, the work of Daphna Ben-Tor, James Weinstein and others has seriously questioned Ward and Tufnell's typological criteria and conclusions, especially when using material strictly from stratified Egyptian sites; Ben-Tor's thesis (2006, published 2007), provides a workable scarab typology for the pre-New Kingdom periods. More importantly, however, periods later than early Dynasty XVIII have not yet been investigated systematically and no typology is available, although Andrews⁴⁹⁶ has provided a short developmental overview mostly of face designs and their amuletic

⁴⁹⁶ Andrews 1994:50–59.

use, Hayes⁴⁹⁷ and most recently Keel⁴⁹⁸ provide general discussions, and Nir Lalkin (2006) has recently completed his Ph.D. dissertation on Canaanite scarabs in the Late Bronze Age.

This is an extremely specialised field, and the nonspecialist is often confronted either with entirely opposing opinions or rather nebulous conclusions by specialists regarding the same data; much of the recent literature presents arguments as much against the opinions of colleagues as validating that of the author. The most readily accessible typology and developmental terminology has been that of Ward and Tufnell, and thus most non-specialists employ these volumes for comparing and dating any new material. Thus, it is important to emphasise two points regarding their reliability. The basis of WARD'S (1978) entire discussion and dating is the large collection of scarab seals from the 'Montet Jar,' recovered at Byblos in the Lebanon, although the vast majority of his published scarabs and scaraboids are from excavated Egyptian sites. Tufnell's (1984) material is limited almost exclusively to excavated (as well as unprovenanced) scarabs and scaraboids recovered in Palestine, and occasionally Syria and Lebanon further north. Her very limited number of scarab seals recovered in Egypt mostly are inscribed with royal names and are dated on this basis. The 'Montet Jar' initially had been dated to the First Intermediate Period and Ward dated it to "closely follow[ing] the 'Herakleopolitan age'" (i.e., the very early Middle Kingdom, within later Dynasty XI). 499 It now is accepted as dating to early Dynasty XII. 500 Thus, re-dating the 'Jar' and its scarab seal contents also alters both the typological development and conclusions laid out by both Ward and Tufnell. 501 Whilst WARD's (1978) basic typology for the 'Pre-Twelfth Dynasty' material, employing material almost exclusively from Egyptian sites and in the 'Montet Jar,' is generally accepted, his dating is not, and many of these sites themselves have since been re-studied and re-dated to general acceptance by Seidlmayer (1990). The vast majority of Egyptian scarab seals come from tombs that often had been robbed, exposed, or reused, and sites with little or no stratification, so provide little confidence in limited dating parameters. Canaanite sites, on the other hand, have multi-layered stratigraphy and a better (internal) chronology that was, nonetheless, tied to Egyptian dynastic history and dating, and so with scarab seals found in Canaan having the same royal names inscribed on their face. Thus, the non-specialist is comparing their new material to Ward's incorrectly dated scarab seals from Egyptian sites whose context dating too has been re-analysed and re-dated. And then the non-specialist compares their material to Tufnell's 'Twelfth Dynasty and later' Canaanite, not Egyptian, scarabs and scaraboids, on the initially reasonable, never actually demonstrated and in fact incorrect assumption that these are of the same types, styles and dates as those found in Egypt. On this last point, Ward and Dever provided reassurance of their similarity only a few years ago. 502

The following discussion of scarab development in Egypt to Dynasty XX is intended only as an introductory synopsis, and highlights aspects pertinent to the present study within a general framework. As much as possible, bearing in mind the critiques of both Ward and Tufnell above, discussion is limited to Egyptian scarab development, and thus it employs in part Martin's back typology as the only detailed published study entirely relying on Egyptian scarabs for a shape (rather than face) development. It makes no pretense to innovation, but rather weaves together the work of other scholars into a general survey. 503 Although it is divided into chronological blocks for ease of reference, these are general observations of a developmental continuum often unaffected by the political changes that these blocks imply. Readers are referred to the far more detailed discussions of the authors mentioned above and elsewhere, that

⁴⁹⁷ Hayes 1953–1959:II: passim.

⁴⁹⁸ KEEL 1995b:19-61. This basically is a discussion of earlier studies, especially of Ward and Tufnell, and a brief overview of scarabseals through into the 1st millennium BC. The majority of sources again are Palestinian, and Egyptian development is hardly discussed. Nonetheless, this is the most detailed outline of New Kingdom scarabseals available.

WARD 1978:9. On the 'Herakleopolitan Age,' see discussion in Chapter 3.

As Ward himself later noted, in WARD 1987:512 and WARD and DEVER 1994:89–93; see also BEN-TOR 1998. Some scarabseals are noted to be earlier in date.

⁵⁰¹ See Martin 1971:4 (citing Tufnell); Ward 1978:4, 8–9; Tufnell 1984:1, 3. Ward and Dever 1994:5, 89–93 now accept an early Dynasty XII date; see also Ben-Tor 1998. Note that this date is terminus post quem for the jar contents as a whole, and some scarabseals are earlier.

⁵⁰² WARD and DEVER 1994:118–120. See, however, BEN-TOR 1997.

⁵⁰³ All sources cited above have been employed for the present discussion, but specific references will not be provided unless required.

they may draw their own conclusions. Terminology in the present chapter, as virtually all other scarab seal publications, follows that of Ward, Tufnell and Dever. 504

The scarab as amulet represented the god Khepri (*hpri*, 'He who came into being by himself'), the sungod at dawn who, as his name makes clear, was self-created. Early Egyptians observed the female *scarabeus sacer* beetle pushing a ball of dung ('feeding-ball'⁵⁰⁵) along the ground, which they then equated to a god pushing the sun across the sky. The dungball contained her fertilised eggs, which hatch within the dung to emerge as apparently self-created young beetles. The god therefore was doubly potent and a favourite amuletic device.⁵⁰⁶

Rough beetle-shaped amulets, without inscribed face design and apparently representing the buprestid (Steraspis squamosa, a wood-boring beetle), and less commonly the elaterid (Agriypnus notodonta, the 'click' beetle) and tenebrionid beetle, are common elements of jewellery and other objects from at least Dynasty I.⁵⁰⁷ Seals normally are cylindrical (to be rolled onto the clay surface) in the Early Dynastic and Old Kingdom periods, but become increasingly less common at about the time that stamp 'seals' (potentially but not actually employed as such) begin

to appear near the end of the Old Kingdom.⁵⁰⁸ The earliest stamp 'seals' having a carved design on the 'stamp' face are pyramidal shapes, the so-called 'button-seal' or 'design-amulet' in mid/late Dynasty VI, followed by other (often anthropomorphic and zoomorphic) forms of stamp 'seals' by its end. The pyramidal 'button' shapes soon lose popularity and do not survive the First Intermediate Period, but 'seals' in scarab, zoo- and anthropomorphic forms continue on.

Scarab amulets (as opposed to those of other beetle types) having a 'blank' (i.e., smooth, undecorated and uninscribed) face, recognisably related in form to the earliest scarab 'seals' having a face design, are frequent late Old Kingdom and early First Intermediate Period finds,⁵⁰⁹ but the scarab 'seal' with a design carved on its face does not actually appear until late in the First Intermediate Period, when it too is employed as an amulet.⁵¹⁰ Certain employment of the scarab 'seal' as a seal seems first attested in early Dynasty XII, already decades into the Middle Kingdom, when a seal impression recognisable by its ovoid shape is found on a clay sealing for the large tool chest of the model 'Carpenter Shop' found in the tomb of Meketra,⁵¹¹ but whether scarabs and other stamp 'seals' served any pur-

⁵⁰⁴ WARD 1978:23–33; TUFNELL 1984:28–38; WARD and DEVER 1994:161–169; see also p. 121 for period dating. These volumes essentially are the same typology, each modified and augmented by further research than the last.

 $^{^{505}}$ See Bishara in Ward 1978:95–96.

⁵⁰⁶ It should be noted, however, that the sacer is not the only beetle represented as scarabs and other representations. Apart from those mentioned in the following paragraph, a wide variety of other species have been recognised by entymologists. See the under-used contribution of Sadek Ibrahim BISHARA in WARD 1978:87–101, and KRITSKY 1993, with further references.

⁵⁰⁷ Kritsky 1993:35–36. A Badarian period example is Andrews 1981:37 #163.

Discussion of early seal use (and non-use) is found in WILLIAMS 1977:135–136, but note that some material discussed there has since been re-dated. Cylinder 'seals' never entirely die out, but occasionally are found in the Middle and New Kingdoms more likely in use as beads than seals; see, for example, BOURRIAU 1988:154 #172 and discussion there, also KEMP and MERRILLEES 1980:39–41.

ANDREWS 1994:51; she notes the earliest example of a scarab amulet is from Abydos, p. 11 fig. 5.i. A variety of First Intermediate Period scarab amulets are found in BRUNTON 1928:11–12 Class 40, pl. XCVII:40; compare with the scarab 'seals' from these same excavations, SEIDLMAYER 1990:186 fig. 79. On their dating, see SEIDLMAYER 1990:192 Tab. 52, 395 fig. 168, and further discussion in WIESE 1996:51.

⁵¹⁰ Much of this paragraph is based, especially, on the frequency of seal types in the Qau-Matmar series as studied by Seidlmayer (1990), as well as other sites in his study. See the development of 'seal' forms (actual use as such is not implied) found in the tombs of this area, in SEIDLMAY-ER 1990:195-198 figs. 81-84, and enumerated p. 192 Tab. 52; 'seal' types are illustrated p. 186 fig. 79 and discussed pp. 185-194. Period dates at his Qau-Matmar site-group range from the end of Dynasty V through to the early Dynasty XII reign of Senworret I, thus providing the longest unbroken chronological sequence for early 'seal' and scarab development; see SEIDLMAYER 1990:395 fig. 168. Note that, for the First Intermediate Period, this region is ruled from Thebes. Many of these scarabs also are illustrated by WARD 1978: passim, and the date range of both authors for these same scarabs can be compared.

⁵¹¹ Winlock 1955:89–90, pls.28–29, 69.c. Meketra was the 'Chancellor' of Mentuhotep III (Sacnkhkara), late Dynasty XI, who survived into the reign of Amenemhat I (early Dynasty XII); Do. Arnold 1991. Note also the wooden model jars from a chamber of the temple of Mentuhotep II (Nebhepetra) at Deir el-Bahari, their necks painted black with small squared white marks suggestive of stamped seals although not necessarily scarabs; Di. Arnold 1972:pl. IX.lower left, upper row. Mentuhotep II (Nebhepetra) is the Dynasty XI king who united the two lands of Egypt and thus is the first king of the Middle Kingdom; Mentuhotep III is his successor.

pose(s) other than a muletic before this period is questionable. 512

Textual and archaeological evidence both attest to extensive employment of stamp seals including scarabs by late Dynasty XII⁵¹³ for confirming property ownership and deterring theft by sealing doors (individual rooms and entire buildings), individual portable commodities (by sealing their containers) and documents, as symbols of guarantee or authenticity and authority conferred upon the owner or user, and other related purposes. The noun and verb 'seal' remain in use for the same variety of functions today. Probably as a consequence of these functions, swivel-rings made by looping gold wire through the scarab also appear during later Dynasty XII, amongst the jewellery of the women at Dahshur and Lahun, inscribed with the name of Amenemhat III. $^{514}\,\mathrm{The}$ scarab is encased in a metal band at the face edge by the Hyksos period, for ease of attachment to thicker ring-bands (funda) at either end, producing a more substantial finger-ring. By mid-Dynasty XVIII the ring is a single moulded piece having the 'seal' face design on the outer surface, otherwise entirely divorced from the scarab form. Scarab seals in a variety of forms nonetheless continue to be made, and to be made into finger-rings.

However, the vast majority of scarabs and 'seals' in other zoomorphic forms actually are not intended for use as seals, but rather for amuletic and protective purposes to be used both by the living and the entombed dead. Nonetheless, the good number of sealings that have been recovered in oval shape from late Dynasty XII–XIII contexts testify that many stamp seals were used as seals, identifying the owner of the scarab or guarantor of the object sealed. Seals made specifically for employment as seals are found in different forms, most prominently large square or 'shield' basal shapes, and are recovered with oval counter-seal impressions in designs readily found on scarab seals. Scarabs, usually those in hard and precious to semi-precious stones, often are incorporated into multi-component jewellery pieces, such as pectorals and armbands, and as 'beads' on necklaces. Sometimes these have an inscribed face but sometimes it is left 'blank,' with a smooth, undecorated or uninscribed face.

The vast majority of scarab seals throughout the entire Dynastic period are made of soft materials, especially 'steatite' and faience and their related materials, almost inevitably glazed to protect the softer underlying material from wear. ⁵¹⁶ Various terms are used for similar if not identical materials, e.g., 'paste,' 'frit,' 'glass' and 'composition' for faience types. Various steatite material types also exist. Identification of these soft materials as published is blurred by earlier and current lack of serious investigation into scarab seal composition and technique, and this aspect urgently requires detailed research. ⁵¹⁷ Tufnell notes that mass-produced, mould-made scarab seals were not produced before Dynasty XVIII, ⁵¹⁸ and moulded glass also is

 $^{^{512}}$ Ward 1978:46, contra Andrews 1994:52. Illustrated as WARD 1978:42 fig. 7.3; see also p. 46. Two identical sealings. attached to two of the famous Hekanakht papyri by linen threads, have long dated to late Dynasty XI (as by JAMES 1968:51, pl. VI.3; WARD 1978:42 fig. 7.4), but the papyri (and therefore the seal impressions) recently have been redated to early in the reign of Senwosret I, early Dynasty XII (Do. Arnold 1991:37; Callender 2000:162). Two of the four sealings excavated in a pit at Lisht may have been impressed by scarab seals, but their early Dynasty XII dating is far from certain on contextual grounds (WARD 1971:117 fig. 26.3-4, but see n. 438) and, to judge from their designs, unlikely in any case. However, the collection of clay sealings recovered at Abu Ghalib are dated to early Dynasty XII on ceramic evidence; see discussion by Seidl-MAYER 1990:389 n. 174; BEN TOR 1998. Their number, compared to the few found elsewhere of this period, highlights the probable limitations of archaeological recovery.

Extensive evidence for the use of cylinder seals for these same purposes is evident by the beginning of the Dynastic period and throughout the Old Kingdom. At least some of the sealings just discussed above had a similar function; see n. 508, above. Types of sealings employed by late Dynasty XVIII are discussed in EL-Khouli et al. 1993:passim, pls. 38–50.

⁵¹⁴ WILKINSON 1971:76–78; BROVARSKI et al. 1982:244; BOUR-RIAU 1988:157–158 #179–180. See also ALDRED 1978:117 #32, pl. 32. Note that earlier scarabs also are drilled through the length, and the practice may have begun before this date, possibly employing other means of attachment.

⁵¹⁵ See, e.g., S.T. SMITH 1995:69–75 passim, fig. 3.14; A.L. Fos-TER 2000:90–94. The majority of counter-impressions are design-scarabs, not those inscribed with names or titles, and some inscribed with royal names are of an amuletic nature as they post-date the king named.

Fresently unglazed examples probably have lost their original glaze.

⁵¹⁷ See NFA 1991:materials. The question of identification, definition and composition of these materials is beyond the scope of the present study. See also below for material identification, including of imported scarabs, in Aegeanist research that is far in advance of the Egyptian sphere. See also Chapter 5 for similar problems in material identification elsewhere.

⁵¹⁸ TUFNELL 1984:42; see also NFA 1991:materials. Despite criticism above of this volume for Egyptian scarab development above, this statement does hold true.

attested from the time of Thutmose III. Earlier glazed scarab seals are produced and carved individually. Steatite, 'composition' and the 'white piece' material, 519 all with a glazed surface, are used almost exclusively for all forms of stamp seal (although scarabs were not amongst those used) until the late First Intermediate Period, when harder stones and metals first begin to appear. These become increasingly common (now also as scarabs), although they never reach anywhere near the popularity of the 'softer' materials. These mostly are carnelian and amethyst, but less common stones include green jasper (Middle Kingdom)⁵²⁰ and serpentine, and occasionally red jasper (New Kingdom), rock crystal (MK), quartz, lapis lazuli (NK), diorite, turquoise, schist, obsidian, green feldspar (MK) and haematite (MK).⁵²¹ Carnelian was in use from the First Intermediate Period, but reached its height of popularity during the New Kingdom. Ward and others have shown that amethyst almost certainly was not in use prior to Dynasty XII, 522 when the stone was mined extensively, and is uncommon by late Dynasty XIII when the mines had been played out. Martin⁵²³ comments on the lack of all more exotic stones during the Second Intermediate Period, when access to their sources dwindled and ceased. The general rarity of metal scarab seals, chiefly gold and electrum but also silver and very occasionally bronze, probably is more the result of survival than production.⁵²⁴ True bone, shell and ivory scarab seals are rare. 525

The following is a general overview of scarab development in Egypt, omitting the more specific discussion topics already mentioned above, and in general referring to those in steatite, faience and other soft materials that are the vast majority of examples.

Later/End First Intermediate Period: Dynasties (IX-)X and earlier Dynasty XI

The use of scarab 'seals' with an inscribed 'design' base begins sometime already within the later First Intermediate Period, apparently in Middle Egypt on present evidence in the region of the Qau/Badari cemeteries, that may reflect an origin in the Herakleopolitan court where little is known archaeologically. 526 The earliest engraved scarabs are small and summarily executed on a high base, often only with a single deep groove around the sides to indicate legs. As defined in the present chapter, they would be called 'scaraboids.' When legs are distinguished, they are thick and raise the scarab body high above the base. Almost inevitably the front and hind legs meet just below the pronotum, and the head either is of the 'lunate' (Ward's Type A) variety or shown only in an elementary fashion (Type X); both characteristics continue into later Dynasty XI. Suture markings ('T-lines') on the back are limited to distinguishing pronotum and elytra by single, double or triple lines. Face designs are mostly limited to geometric patterns, the vast majority asymmetrically linear. Some are symmetrical or nearly so, and recognisable anthropomorphic and zoomorphic images, usually symmetrical in arrangement, also appear. Insects, or what are described as 'insects,' are the most popular recognisable images. These are Ward's 'Period 1' scarabs.

The scarab itself becomes increasingly naturalistic in appearance in the later First Intermediate Period, with further elaborations and incised detail including leg notching and fringing ('feathering'), and generally are Ward's 'Period 2' scarabs. Some scarabs are 'open-cut' or 'pierced' (hollowed out completely) around the legs and between the body and

⁵¹⁹ Probably 'enstatite' or 'burnt steatite,' steatite heated to produce a harder stone. Although Egyptian scarabs have not been analysed to identify material, Pini has identified some recovered on Crete as made of 'white piece' material. For discussion on the components and technology of this material, see Pini in Marangou 1992:203–204; Pini 2000:112.

⁵²⁰ The periods noted are of the greatest popularity of each stone, but their use is not limited to the period cited; see NFA 1991:materials.

Dates given are period of more common usage, but seals in these materials also appear in other periods.

WARD 1978:84–86; see also NFA 1991:materials. The name of the last king of Dynasty XI, Mentuhotep IV (Nebtawyra), is recorded at least twice in the Wadi el-Hudi, so large-scale mining did occur earlier.

⁵²³ Martin 1971:5.

⁵²⁴ This can best be illustrated by the early Dynasty XII Theban tomb of a quite minor official, Wah, the estate manager of Meketra, that contained several scarabs including two beautiful and justly famous silver scarabs (Martin 1971:4, pl. 47A:4–6, 50:Type 1.a; Ward 1978:8, pl. X:272–273). On this tomb, see Porter and Moss 1960- II.2:667 #1102 and, on Meketra, see n. 511, above. An early gold (electrum) scarab is NFA 1991:#1, dated to the late First Intermediate Period.

⁵²⁵ They are often misidentified steatite; see also WARD 1971:86 n. 348.

⁵²⁶ See also Sedment/Harageh, cemeteries nearer the Herak-leopolitan court. The court cemeteries are not yet located. SEIDLMAYER 1990:186 fig. 79, 246 fig. 102, 301 fig. 139; QUIRKE and FITTON 1997:434, 437.

base, demonstrating a high level of technical virtuosity. Dimensions gradually increase, and the height correspondingly becomes lower in proportion to the length and width. More summarily executed forms appear by the end of the First Intermediate Period, chiefly in the harder and less easily workable materials, whilst those in the softer materials retain their naturalistic appearance. Linear face design patterns continue but quality decreases. Recognisable figurative images, initially stick figures in a variety of poses, increase proportionately both in quantity and complexity, often being paired in mirror image, and sometimes as more complex groups as face designs.

Early Middle Kingdom: later Dynasty XI

By this time, the use of scarabs had spread into much of the Nile Valley in both directions, where they are found mostly in graves of the period. Purely linear face designs of the earlier styles are rare by the beginning of the Middle Kingdom (mid-Dynasty XI), when the entire Nile valley was united again under Mentuhotep II (Nebhepetra). Figurative designs continue in popularity, sometimes also incorporating individual hieroglyphic signs in non-inscriptional arrangements of amuletic function and in têtebêche arrangements. The beginnings of the so-called nb-ty design, consisting of an individual hieroglyph or stylised plant flanked by bent lotus stems in a nbbasket (V 30) or two, can be seen at this time, often without the basket. A variety of simple spiral patterns are first attested, that become characteristic of the late Middle Kingdom.

Scarabs themselves generally continue the trend begun in the late First Intermediate Period, being fairly low for their height but increasingly larger in size, providing a flatter shape with larger face area. The scarab itself continues to be elaborately presented, sometimes with laddered 'T-lines,' and usually with a 'lunate' (Type A) head although other head types are found occasionally. This phase in scarab development corresponds to Ward's 'Period 3.'

Early Dynasty XII

Scarab dimensions continue to increase throughout Dynasty XII, due in no small measure to the increasing complexity and elaboration both of the face design and of the back and sides, and to the superior technical control of the artisans. Spiral patterns are

characteristic. Increasingly complex designs consisting of scrolls and spiral patterns, sometimes combined with hieroglyphic signs and symbols often amuletic in nature, are most popular. These usually consist of linked incised C-, S- and Z-scrolls in a variety of simple arrangements, often interspersed with individual hieroglyphic signs.⁵²⁷ Technical control often manifests itself as drilled concentric circles, a development of the spiral employing drilling tools, joined by incised lines, and partly as 'woven' or 'cord' motifs where single lines become doubled and 'woven' over and under others when they cross. Zoomorphic and anthropomorphic figures also flourish in more complex designs and, to a lesser extent, so do linear and floral motifs, generally appearing as individual hieroglyphic symbols included where they could be fitted in. Whilst a mirror image or balanced composition appears to be preferred, many designs (often with a zoomorphic element) are not. The nb-ty designs continue, but are less common. This generally is Ward's 'Period 4', to which the 'Montet Jar' group belongs.

The 'name-scarab' also is introduced as an occasional item in early Dynasty XII, being inscribed with the name or title(s) of individual officials. The earliest example is that of Wah, long considered to date to late Dynasty XI but recently re-dated to the reign of Amenemhat I (early Dynasty XII). His inscription actually is on the elytra whilst the face design consists of spirals and individual hieroglyphs. The sealings recovered in tombs at Abu Ghalib, some 80 kilometers north-west of Cairo on the Rosetta branch of the Nile Delta, consist almost solely of non-inscriptional designs that may or may not have sealed documents, like the two identical Hekanakht sealings of slightly later date.

Scarab backs and sides are given increasing detail, sometimes purely decorative and increasingly abstracted such as additional lines around the pronotum and outer elytra edges, but otherwise generally of naturalistic appearance. The 'lunate' (Type A) head still is most popular, often with the clypeus indicated, whilst the others are less common until the late Middle Kingdom. Side presentation undergoes a complete change, with the front to hind leg junction moving back to meet at the same point as the pronotum and elytrum, and the profile smoothing out with little undercutting. Notched and fringed legs are increasingly popular and unelaborated legs uncom-

⁵²⁷ The famous silver scarab of Wah is a good, well-dated example, as is the seal impression from the Meketra tomb; see nn. 511 and 524, above.

mon. Some hard-stone scarabs retain their simpler presentation, chiefly the result of the material being more difficult to work,⁵²⁸ but those in softer materials, including stones, are quite naturalistic in presentation.

Mid-Dynasty XII

Scarabs of all varieties become ubiquitous for the first time in the second half of Dynasty XII, probably as the direct result of an increasingly intricate administrative system initially introduced by Senwosret III and extended under Amenemhat III, the increase most noticeable with the latter's reign. This short period, at the beginning of this administrative development, is difficult to isolate stylistically as it merely stands as a part of a continuum between early and late Dynasty XII. Few new characteristics are introduced for the seals themselves, but this is the period in which scarabs begin to become relatively common.⁵²⁹ Increasing elaboration of face designs and scarab presentation continued. Scarabs inscribed with name and titles become more common, for funerary (not administrative) use, often with epithets such as m³^c-hrw ('justified'), almost always indicating the person named was deceased, and recovered in tombs. There is a distinct difference between Early and Late Middle Kingdom scarabs as a result of this increased administration and popularity of the scarab seal.

Late Middle Kingdom: late Dynasty XII/earlier XIII

'Royal name' scarabs are introduced late in Dynasty XII, the name usually being enclosed within a scroll or rope border and/or a cartouche (V 10), usually as an encircling line without the 'knot' indicated below. Numerous scarabs naming kings of the Old through earlier Middle Kingdoms have been recovered, *none* of which actually are produced before the reign of Amenemhat III and can be much later than this, on stylistic evidence. A point often not considered but bearing repeated emphasis is that royal name re-issues are quite common throughout the remaining dynastic period. A scarab inscribed with a royal name does not ensure its dating is contemporary with that king's reign, especially those naming kings whom the Egyp-

tians considered more important or who were the focus of a popular posthumous cult. In theory at least, all kings are deified and the focus of a posthumous cult in perpetuity, especially at their funerary temple which can continue to function for centuries. Nonetheless, the names of some rulers, such as Akhenaten (Dynasty XVIII), certainly would not be invoked after their death although those of others, such as Senwosret I (Dynasty XII) and Thutmose III (Dynasty XVIII), are repeatedly re-issued for centuries. 530

Spiral patterns often are continuously linked rather than entwined, and more complex in arrangement. If 'paired,' so that the head and tail end are a single line but the sides are scrolled, these generally are 'flattened.' Those with names in the centre, both royal and private, sometimes are surrounded by a series of hieroglyphs instead of the continuous scroll or rope border. 'Woven' patterns and scroll and rope borders steadily increase in popularity and complexity, but single line borders seem to be the most common. Symmetrical, usually confronted, designs are the most popular, including zoomorphic and anthropomorphic figures. Nb-ty designs are extremely rare. Designs incorporating apparently unrelated hieroglyphs, usually in mirror image along the length with a single central core and often without spirals or other linking features, also become increasingly intricate as more and more hieroglyphs are included. Each hieroglyph is an amulet in itself, and their combination multiplied the potency of the scarab object. Names and titles of officials are inscribed on the face by early Dynasty XIII, but still for funerary and amuletic, rather than administrative, purposes.

Scarab size continues to increase, as these face designs become ever more intricate. 'Lunate' (Type A) heads dramatically decrease in popularity, being replaced by especially Ward's 'square' (Type C) but then, increasingly, 'trapezoidal' (Type D) heads until the latter predominate by the end of this period.⁵³¹ Side and back types do not change substantially but their slightly simpler presentation heralds a return to less elaboration. Fringing and other elaborations begin to decrease in popularity, although sometimes the elytra will be further elaborated. Decorative complexity of the face design and the scarab height rela-

⁵²⁸ These are MARTIN'S (1971:pl. 51) scarab Types 2–3, although he was working with Tufnell's early conclusion of a First Intermediate Period dating for the 'Montet Jar' collection; see p. 4.

 $^{^{529}}$ Martin 1971:3.

⁵³⁰ See, for example, discussion of scarab dating in WARD 1971: 127–136, fig. 29; JAEGER 1982:passim, esp. Chapters XII–XIV; NFA 1991:scarab methodology III:historic fig-

 $^{^{531}}$ See Martin's (1971:pls. 51–53) Types 4 and 6.

tive to length both also begin to decrease by the end of the period.

Second Intermediate Period: later Dynasty XIII/ Dynasty XIV

Again, this period is difficult to isolate, but overall scarab size begins to decrease at this time,⁵³² following the decrease in elaboration of both presentation and face design noted earlier. This scale reduction continues throughout the SIP and into early Dynasty XVIII. All this is relative, however, and scarab size is not an infallible guide to its date.

This is the period during which Canaanite scarabs first appear, if they had not already, 'well into' Dynasty XIII. A short overview of Canaanite scarabs is provided below.

An apparent innovation of late(?) Dynasty XIII⁵³³ is the excessively large 'heart-scarab.' It usually is made of hard stone that, as suggested by its name, was placed on the heart of the deceased. Scale has much to do with function, for it usually was inscribed with a spell protecting the heart. Rarely its head is in human form, although the body is that of a scarab. They are found throughout the New Kingdom.

Hyksos (Dynasty XV) (and Dynasties XVI–XVII)

It is important to keep in mind that scarabs of the 'Hyksos' period are virtually 'Canaanite' in their appearance and typology, and these are the result of a different (albeit related) developmental tradition that was extended into those regions of Egypt controlled by these 'foreign' kings. See further discussion of Canaanite scarabs below.

During Dynasty XV, in the Delta and Middle Egypt, the return to simplicity intensifies, and overall seal size continues to decrease. The characteristic scarab has a 'smooth' unembellished back, without 'T-lines,' or only a short 'tick' at the edges. This is not an infallible guide to Hyksos period scarabs, for others retain the full divisions in quite simplified form. Some scarabs would be defined as scaraboids in the present chapter,⁵³⁴ as only horizontal grooving around the sides indicates the 'legs.' Heads almost universally are 'trapezoidal' (Type D), but sometimes 'open' (Type B).⁵³⁵

Face designs, on the other hand, become less complex and less cohesive in arrangement. Scroll (but not, apparently, concentric circle) designs continue, although in general scroll and rope borders decline in use. These are replaced almost exclusively by 'paired' scrolls almost as side panels, where the line is discontinuous at the top end, and hieroglyphic sign-groups or short texts in mirror image, with the name and title(s) of a god, pharaoh or individual, fill the centre. The text has lengthened, and so the scarab face is divided into three panels, border, text and border, usually along its length. Occasionally only text appears, surrounded by a single line border, but these are not always intended to be coherent. One text, called the anra motif as several variations of these single-sound hieroglyphs, usually in this order, is particularly popular at this time. Zoomorphic and anthropomorphic figures are found in lieu of text, often in hollowed out in sunk relief rather than being defined by incised lines. These generally have a single line border although occasionally scroll and rope borders can be found. The *nb-ty* design has disappeared, although some elements are retained. The vast majority of scarabs still retain their amuletic function, and are intended chiefly for funerary use.

Scarabs datable to Dynasties XVI–XVII in Upper Egypt, contemporary with Dynasty XV in the north, are extremely few in quantity but mostly consist of royal-name inscriptions. Both 'Hyksos' and these other contemporary scarabs exhibit a continued decrease in overall size and complexity of back and side presentation, and fragmentation of face design.

New Kingdom: early Dynasty XVIII

Early Dynasty XVIII scarabs are very small in scale and, although they begin to increase in size with the reign of Amenhotep III in late Dynasty XVIII, New Kingdom scarabs in general remain comparatively small. ⁵³⁶ More naturalistic side and back types are reintroduced in conjunction with continued but less common schematised types, the latter chiefly in the harder stones. The early Middle Kingdom scarab style is revived, as in the other arts, for political as well as artistic reasons, and distinguishing scarabs of

MARTIN'S (1971:pl. 53) Type 8. Compare also the scale, finish and relative execution between the mid- and late Dynasty XIII scarabs in Bourriau 1988:159 #182 v.#83.

ANDREWS 1994:56 notes the earliest is dated to the reign of Sobekhotep IV, but the second dates to the reign of Sobekemsaf II (Dynasty XVII), some 150 years later. Thus

this one Dynasty XIII heart-scarab may been seen as an anomaly.

 $^{^{534}}$ See n. 491, above.

⁵³⁵ Martin's (1971:pl. 52–54) Types 5, 9 and 10.

⁵³⁶ Specific exceptions to this observation are the excessively large 'heart' and 'commemorative' scarabs.

the two periods sometimes is difficult. Single and plural 'T-lines' return, but leg fringing is rare. 'Humeral callosities' (V-notches on the upper outside corners of the elytra, just below the pronotum) most likely are introduced in the reign of Amenhotep I,⁵³⁷ but again this is not an infallible dating guide as many later scarabs still do not possess this feature. 'Lunate' (Type A) heads return to strong popularity, although 'trapezoidal' (Type D) and 'open' (Type B) head types continue. Mould-made scarabs, usually of faience, are produced for the first time, thus introducing the mass-production of scarabs.

The various design types of Dynasty XV cease production but only gradually decline in use in the north with the re-unification of the 'Two Lands,' in favour of Egyptian divine and royal (but rarely private) name-scarabs and amuletic text-scarabs. Larger scarabs include one or more protective deities around the name, and/or a variety of epithets. Other than these deities, the king himself usually is depicted on figural designs, either as a human figure or in zoomorphic shape, but animals (as animals) also are found in some quantity. The various elaborate border designs found earlier also decline in use, and only the single-line border is characteristic of Dynasty XVIII.

It might also be noted that the same or similar face designs and short texts often can be found from this period until the end of the New Kingdom (and beyond), although some designs and inscriptions are characteristic of certain limited date ranges within. The vertical format, for example, is unusual although not unknown in Dynasty XVIII. Whilst some physical presentations of the scarab also have a limited chronological range, many New Kingdom scarabs sometimes can be dated only by their quality; see further on this below.

Mid-Dynasty XVIII

The scarab itself continues to be naturalistic in presentation but, although leg fringing can be found, it is not very common. Hard stone scarabs also are quite naturalistic in presentation. Royal and divine name-scarabs are extremely common by the reign of Thutmose III, but private name-scarabs have become relatively rare. This trend becomes increasingly manifest throughout the remainder of the dynasty, probably indicating the rise in central pharaonic power, and extending also into Canaan where the earlier 'Hyksos' types virtually cease after its conquest by Thutmose III. Decorative hieroglyphic arrangements in meaningful combinations are common throughout. Figurative designs, both anthropomorphic and zoomorphic, also are common and have been interpreted as symbolic or cryptographic in meaning.⁵³⁸ Some spiral patterns also are known. Text-scarabs, chiefly amuletic in intent, are extremely popular in the latter half of Dynasty XVIII, although not numerous earlier.

Late Dynasty XVIII

The one-piece signet ring, in a wide variety of materials such as metal, stone and faience, largely replace scarabs by the reign of Amenhotep III, although scarabs still are made in some quantity. These usually display zoomorphic figures or non-figurative design elements often incorporating the spiral, or (especially) the name of the king or his wife, Ty, often with epithets of one form or another. Scarab production increases and, with it, the beginning of a decline in production standards. The actual incised lines of both face design and the scarab markings begin to be less regular and controlled, more 'slapdash' in execution. Scarabs have continued to increase in size, and generally are larger than 'usual' for the New Kingdom. The reign of Amenhotep III also produced the other form of excessively large naturalistic scarabs, usually in steatite and called 'commemorative,' that describe certain specific events in his life; they have been likened to broadsheet proclamations or propaganda.

Although still common in Amenhotep's reign and still produced in Akhenaten's early years, scarabs (with their 'self-creation' association) were not in

⁵³⁷ O'CONNOR 1985:9, 33 vs. ANDREWS 1994:52, who dates their appearance to the reign of Thutmose III. TUFNELL 1984:106 notes its first occurrence is on a human-headed 'scarab' (*Ibid*.:II:pl. LXII:3460) inscribed with the name of the Hyksos king Auserre (= Apopi I, late Dynasty XV), a king whose name is highly unlikely to have been inscribed after his death so the scarab should be contemporary with his reign. It was, however, recovered at Thebes in the tomb of Amenhotep I (HAYES 1953–1959:II:6–7, fig. 2:upper), and so may have been 'updated' as well as mounted as a ring during Amenhotep's reign. The heap in the south-west

corner of the Maket tomb at Kahun, thought to belong to the earliest interments later swept aside for the coffins, features four with, and only two scarabs without, the 'humeral callosities;' one with this feature bears the name of Thutmose I. On the tomb and its date range, within the reigns of Thutmose I to III, see HANKEY and TUFNELL 1973:108; WARREN and HANKEY 1989:145–146. Both circumstances suggest O'Connor's dating as the better option.

⁵³⁸ See Drioton 1957; Hornung and Staehelin 1976: passim. The interpretation and transliteration of cryptogrammes generally is no longer accepted by Egyptologists.

keeping with the Atenist doctrine. Thus, they are quite rare during the Amarna period and in the reign of Tutankhamun.⁵³⁹ Other stamp seal forms are produced, especially rings with design or inscribed bezel. Scarabs return again to popular favour with the reigns of Aye and Horemhab, with no real change, either as inscribed amulets or as elements in other forms of jewellery. These too are less controlled in execution, although the real change begins with Dynasty XIX. The scarab by this time also can be of a size considerably smaller than the base on which it sits and the face design is inscribed, a trait also found in Dynasty XIX.

Early Dynasty XIX

Scarabs continue in popularity, generally little changed from late Dynasty XVIII but, as already noted, sometimes of smaller scale than its base. Whilst many are mould-made, large quantities of individually carved steatite scarabs also are produced, with the consequence of a visibly 'production line' standardisation of design types and forms and slapdash approach to their actual execution. The popular use, beginning in the Amarna period but epitomised in the unprecedented building campaign of Ramesses II, of sunk rather than raised relief for large scale decoration of temples seems to have had the side-effect of carving scarab face designs ever deeper into the surface, with cross-hatching or surface-patterning added to the larger areas of sunk relief such as bodies of birds and animals, with little or no sense of reality. 540 Leg 'feathering' and 'notching' also is found, again rather badly executed. One major change is the re-introduction of the 'Hyksos' scarab style and face design, so that distinguishing between Dynasty XV and Dynasty XIX scarabs sometimes is difficult. The Dynasty XIX kings, who originated in the Delta, founded their capital of Pi-Ramesses virtually atop the earlier site of Avaris, so this revival is understandable. Two new scarab forms also are introduced, the first a small scarab with legs spreading out onto a large base, and another less naturalistic form with longer head, leg notching and 'stilted' legs. Virtually no inscribed private names or titles are found, being almost exclusively royal or divine names and figures, both in anthropomorphic and zoomorphic form. Often their titles or epithets are inscribed, but others are not identified by name or include any other inscription. Amun, and his compound forms (e.g., Amon-Re, Amun-Re-Harakhty) are most popular but the entire Egyptian pantheon can be found in this period, a continuation of the pre- and post-Amarna predilection for such representations. Animals, both real and imaginary, are found in various poses including heraldic, again with or without accompanying inscription. Most are amuletic in purpose. Short amuletic texts are popular, a symptom of the increasing emphasis on religion that also manifests itself in the imagery on tomb walls in this period.

Later Dynasty XIX-XX

No real change in scarab production occurs in Dynasty XIX. The later part of the dynasty sees scarabs produced in even greater numbers than before, but with a still rapidly declining quality of workmanship. The carving of both the scarab and its face design, whilst still in deep sunk relief, becomes ever more careless and less detailed. Whilst details continue to be added they often are no longer found, again a sign of the decline in standards. Whilst individually carved steatite scarabs are produced in some quantity, many scarabs are mould-made, often summarily and with a heavy glaze that makes any details even less clear. Sometimes the two halves of the mould are incorrectly aligned in production, leaving the face design incomplete, although this also can be found earlier. The outspread and fringed scarab legs on the wider base can take on the appearance of wings, sometimes actually becoming the winged scarab representation that is entirely in keeping with the ever-increasing religious emphasis of the period. Other, non-scarab, forms such as the rectangular plaque, the cartouche and other zoomorphic figures, increase in use. Larger scarabs with numerous amuletic symbols are produced, often in mirror image and with no extraneous unused surface. The so-called 'cryptographic' designs, never having disappeared entirely from the New Kingdom corpus, now are quite common. Zoomorphic and anthropomorphic representations of the deities still are common on face designs, as are re-issues of the more powerful

⁵³⁹ Although see the fine gold scarabs inscribed with the names of Akhenaten and Nefertiti, in Weinstein 1989:18–19 figs. 29–31.

 $^{^{540}\,\}mathrm{An}$ early example can be seen in the still well-controlled

^{&#}x27;feathering' lines of the 'ma'at' feather on the ovoid of Queen Ty at Aghia Triadha {18}. Later scarabs such as that from Zapher Papoura {265} are much cruder in execution.

earlier kings. Royal and divine name scarabs remain popular, as are the short amuletic texts or 'mottos.' All are used chiefly as protective devices.

Third Intermediate Period

This period, beyond the chronological range of the present study, continues the decline in scarab work-manship.

Scaraboids

Scaraboids, as defined in the present study with markings that suggest rather than depict the beetle or with one or more horizontal grooves around the sides rather than having defined legs, are confined almost entirely to periods in which scarabs themselves are predominantly abstracted. They appear most commonly in two periods – the later First Intermediate Period, and Dynasty XV through early Dynasty XVIII – but examples can be found in all periods, especially in hard stones. There is no hard and fast distinction between scarabs and scaraboids in Egypt; the latter (as employed here) merely cross a boundary drawn for the purposes of the present chapter.

Ovoids

Ovoids, also as defined in the present study with absolutely no back design and a single drill hole through the length, first appear late in the First Intermediate Period and become more common in the Second Intermediate Period, but are most popular during Dynasty XVIII. All shapes from lentoid to 'conoid' and 'ovoid' are found, and their very plainness discourages further attempts at dating. Their sole dating criterion, except their context, is the face design that is not entirely reliable.

Several other terms are applied to other forms of non-scarab seals, including 'ovoids,' (as defined here) in Egyptological literature. These include, amongst others, 'cowroid,' 'design amulet,' 'scaraboid,' 'conoid,' 'button seal,' and the more generic 'stamp seal.' These terms are more loosely employed, and the same form may be called several different names by different authors. Some are limited to use for 'seals' of specific periods. None are relevant for the present study.

Plaques

Oval plaques, also as defined in the present study, are datable only by means similar to ovoids, for similar reasons. The majority are made of glazed faience or steatite, but occasionally they are found in harder stones. Some, flat and inscribed on both faces, appear to be no earlier than Dynasty XVIII, but others have only one face decorated and the back rounded like a scarab. The 'smooth'- or plain-backed examples appear to be no earlier than the Third Intermediate Period.⁵⁴¹

Plaques more commonly are found in rectangular shape, and sometimes in the form of a cartouche. Rectangular and cartouche-shaped plaques are flat on both sides, each normally decorated with a 'face design' on both faces. They are made in materials similar to those of oval plaques. These appear to begin slightly earlier, sometime in the Second Intermediate Period and, like the oval form, continue throughout the New Kingdom and beyond. None are found on Crete.

'Bundle-backed' Seals

One other Egyptian form is relevant for the present study. Inevitably, it is mould-made of faience, essentially with an elongated oval face and a large stringhole through the width, having a triangular profile. Its upper surface appears as if loosely tied at the middle and spreading out to each end like two halves of a shell; Andrews suggests it is "two flower-heads joined or possibly a bundle of grain." Whilst not common, the type is found from late Dynasty XIX–XX through Dynasty XXII and beyond.

Canaanite Scarabs

It appears, from a review of the imported scarabs on Crete, that the vast majority are Egyptian but some originate elsewhere, in the Levant. An introductory discussion of Canaanite scarabs also is necessary for the present chapter.

Distinguishing between Egyptian and Canaanite scarabs has long been fraught with much difficulty, but recent research by, amongst others, Daphna Ben-Tor and Othmar Keel, has been able to clarify the situation to some extent. According to this research, employing in part Egyptian ceramic development especially at Tell el-Dab'a where stratigraphical sequencing of artefact types has been stressed in excavation, it seems that *Canaanite* scarabs were not produced before the late MB IIA or transitional MB IIA/B period, i.e., not earlier than mid-Dynasty XIII in Egyptian terms or roughly MM IIB in Minoan terms. Thus scarabs in contexts earlier than

 $^{^{541}}$ Keel 1995b:85–86 $\S 208–209.$

 $^{^{542}}$ Andrews 1994:44.

this period, whether in Egypt or Canaan – or imported onto Crete – must be Egyptian products.

Research in this field is ongoing, and future conclusions will clarify even farther the distinctions between Egyptian and early Canaanite scarab presentation and iconography. In general, however, Ben-Tor and others have realised that not only is the face design 'imitated' by Canaanite artisans who were uncertain of the original inscription or design and thus capable of developing errors in its presentation, but that the means of depicting the scarab itself and its details were not entirely understood either. This is rote copying in many cases, but generally with less detail and in a more simplified arrangement than the original, by artisans who do not always have the ideological or iconographic understanding to recognise scarab forms and designs in full. Canaanite scarabs of later manufacture have not yet been fully studied, and a detailed developmental history of the type has vet to be ascertained. Nonetheless, an initial general overview is attempted and certain aspects highlighted here, the majority of the present section being summarised from other sources.⁵⁴³

Many early Canaanite scarabs generally are adaptations, and indeed even deliberate imitations, of the Egyptian, in that a serious attempt was made to directly copy the forms and face designs of genuine Egyptian products, but have some qualities and details not found on the 'originals.' This includes especially the hieroglyphic details of the designs or inscriptions, with peculiar renderings or details not found in Egypt itself, with misrendered 'copies' of Egyptian details, or with particular motifs of indigenous or other origin.⁵⁴⁴ Details are not discussed in the present study as many are irrelevant for it, but these include certain motifs such as figures in 'Syrian toga' costume, the 'donkey rider' and 'naked goddess between branches' figures, illegible texts and peculiarities of individual signs. One to be noted is the apparent absence of recognisable images of the Egyptian deities and many of their zoomorphic representations, including the squatting ape and Taweret figures, on Canaanite seals.⁵⁴⁵ The anra motif actually a Canaanite type - continues far later in Canaan than in Egypt, until the transition to LB I when much of the region came under Egyptian rule in the reign of Thutmose III. Yet it also is important to realise that Egyptian scarabs too were imported into Canaan, to be recovered together with the products of local workshops.

Two recognised exceptions to this general rule can be noted, both isolated by Othmar Keel and both roughly contemporary with the rise and earliest use of locally produced scarabs in the Levant. A Palestinian workshop produced the 'Omega' group of seal-amulets and scarabs from the mid-18th c. BC, influenced by a south Anatolian motif. 546 These are few in number, and none are found on Crete. A second and slightly later workshop, called the 'Jasper' group from their usual but not exclusive use of 'green jasper' stone, appears to have been produced by a coastal workshop in the Lebanon or possibly at Megiddo.⁵⁴⁷ Both workshops seem to have survived until about 1600 BC. Additionally, a considerable number of unfinished scarabs have been recovered in the Levant that provide some evidence for local production, although an identifiable workshop has yet to be excavated.

From the time of Thutmose III to the end of Dynasty XIX, when the region was part of the Egyptian empire and its influence predominated, the situation becomes even more problematic as Egyptian and Canaanite scarabs as yet cannot be distinguished either iconographically or stylistically. Thus, it is possible that an 'Egyptian' scarab of this long period actually was made in, or at least exported from, Canaan rather than Egypt itself. These may more correctly be called 'Aegypto-Canaanite' rather than simply 'Egyptian' scarabs. Nonetheless, the Canaanite tradition of scarab production must have continued in some form. Some other seal forms and motifs can be distinguished, especially rectangular plaques in a blackish-green stone and bearing entirely non-Egyptian motifs that must be indigenous. Other plaques, of different materials, do have Egyptian motifs and their origin is obscure. Both are found throughout the majority of the LB period, but oval plaques are more popular in LB IIA and rectangular forms in LB IIB.

The period of Dynasty XX, when Egypt steadily

⁵⁴³ See, especially, Keel 1995a (in German, Keel 1994); Ben-Tor 1997; Phillips 2005b; see now also Ben-Tor 2006, 2007; Lalkin 2006.

 $^{^{544}}$ Keel 1995a:104–121; Ben-Tor 1997.

 $^{^{545}}$ Or, at least, their complete absence in Tufnell 1984.

⁵⁴⁶ KEEL 1989a; 1995a:99–101; BEN-TOR 1997:185, 186 fig. 13, with further references.

 $^{^{547}}$ Keel and Kyriakides (in Karetsou et~al.~2000;323~#334)

consider one scaraboid {270} from Knossos to be from this workshop on the basis of its face design, but all other features are different and it is highly unlikely to have originated here. The 'Jasper' workshop group also produced cylinder seals, one of which also was recovered at Poros {488}. See Collon 1986; Keel 1989b; 1995a:101 for further discussion and references to this workshop.

continued to lose its hold on the Near East, follows a pattern of decreasing Egyptian influence, as one would expect. Certain scarab and even scaraboid types, with deeply cut designs recognisably of 'egyptianising' type but in a more schematic and un-Egyptian style, are found. These designs and figures gradually become less recognisable, and by the $10^{\rm th}$ c. had disappeared almost entirely.

Individual features on some scarabs recovered on Crete (without context or in contexts of MM IIB or later) are problematic if they are seen as having been made by Egyptian artisans, in Egypt itself. I have suggested a Levantine or Canaanite origin for a non-Minoan (non-Aegean?) scarab seal when a feature seems not to have been properly understood by the artisan who produced it, when I expect he should have done so had he been an Egyptian, and I could find no good comparison for the 'variation' on a scarab seal recovered in Egypt. Such attributions are made with varying degrees of confidence, especially when comparanda for the odd feature also are not forthcoming in the Levant, but most are not absolute. It seems more likely to me that the 'odd' feature would have been produced beyond Egyptian borders, but it may well be that the artisan was an Egyptian, working in Egypt, producing an 'odd' feature without really understanding it or perhaps even covering up a mistake by altering the detail. Scarabs and other stamp seals of the later Second Intermediate Period especially as easily may be Canaanite as made in Egypt, but by an Egyptian working in the Canaanite tradition prevalent in the 'Hyksos' sphere of influence. Likewise, scarab seals made between the reigns of Thutmose III until Dynasty XX (LB I-IIB) often cannot be distinguished, although some discrepancies can be noted.

On Crete

Both imported Egyptian and indigenous Minoan scarabs and ovoids have been reported and recovered

on Crete, some even before the pioneering excavations at Knossos were able to place them in relative context. Attempts to correlate the imported scarab and its Minoan context always has been difficult, especially for the early periods when most were recovered in tholos tombs without definable stratigraphy but in use for generations, and the Egyptian dates of the scarabs themselves already were disputed or wide-ranging. Recent research in the past decade or so on both these problematic fields has allowed much to be clarified.

Material identification in the present study is as described in the CMS, Kenna (1960), Xenaki-Sakel-LARIOU (1958) and other literature, unless later research has shown otherwise. Recent studies, especially by I. Pini and O. Krzyszkowska, have shown the published material identification of many seals and scarabs to be incorrect, but specific material reidentification of objects not cited by them is beyond the scope of the present study.⁵⁴⁹ Unless re-identified or obviously incorrect, the CMS or other major source identification is quoted in the present study. This lack of precision is not a detrimental factor in distinguishing Egyptian imports and Minoan versions of scarab and ovoid forms, for both Egyptian and Minoan artisans employed many similar materials, but re-identification has helped establish some useful patterns. Even the recently recognised 'white piece' material is found in both Minoan seals (including non-scarabs) and irrefutably Egyptian seals on Crete. 550

Relevant Minoan seals having no find context are included, as they are datable stylistically in Minoan terms.⁵⁵¹ Egyptian imports without known context are either incorporated within the general discussion or are mentioned at the end of the discussion of the earliest period they *might* have been imported on the basis of their Egyptian dating, although in reality they could have been imported at any time thereafter. The presence of numerous scarab seals having wide-ranging and far earlier dates of manufacture

Note that HM Σ-K 3658 and Σ-K 1309 (KARETSOU et al. 2000:326 #341, 330 #349) from Panagia Aphrati and Arkades, dated to Dynasty XXI-XXII and Dynasty XXI respectively in that volume, actually are Canaanite scarabs of Iron Age II date. Thus, they lie just outside the dating parameters of the present study, but they illustrate two distinctively Canaanite scarab types that develop in the region once the Egyptian empire of Dynasties XVIII-XIX had collapsed. See also n. 1169, below.

⁵⁴⁹ Both scholars have been extremely generous with their subsequent identifications and corrections to the *CMS* and other citations.

 $^{^{550}}$ A clearly imported Egyptian example is the ovoid bearing

the name of Queen Ty {18}. See Krzyszkowska 1989:116 and Pini 1989; 1992:203–204 for discussion of Minoan scarabs and 'white piece' material.

⁵⁵¹ For the purposes of the present discussion, the imported scarabs {38–40; 42} in the Aghios Onouphrios 'deposit' are considered not to have a find context, as the wide-ranging dates of their associated material (EM I–LM I) is insufficient to provide a date of importation between their date of manufacture and that of the latest associated object of local origin. The association problems of the Aspripetra deposit and its scarab {66} is warning also that the scarabs may not have been part of the Aghios Onouphrios deposit, itself possibly not a single unit.

found in the 'closed' or 'single date' shipwreck contexts of the Cape Gelidonia (late 13th c. BC) and Uluburun (dated to sometime in the last quarter of the 14th century BC) shipwrecks are clear illustration that scarab seals continued to be imported abroad long after their period of manufacture in Egypt.⁵⁵² Amarna (Akhetaten) also produced scarab seals in some number dating earlier than the reign of it's founder Akhenaten and its foundation 'on virgin soil' in his Year 6.

Pre-Palatial

Pini notes that seals made of 'white piece' material appear sometime in MM IA,⁵⁵³ whilst Sbonias recently has concluded that the use of 'white piece' material and faience in the production of Minoan seals is characteristic of the latest (late MM IA–B) of his three seal groupings, and was not used earlier. ⁵⁵⁴ If this MM IA dating is correct, and there is no reason to doubt it, indigenous scarab and ovoid seal ⁵⁵⁵ manufacture on Crete does not begin until sometime in MM IA, near the end of the Pre-Palatial period, as virtually all known examples are made in 'white piece' material. The only exception to 'white piece' material is an unusual Minoan ovoid from Platanos {479}.

Some technical differences may be noted that help to identify scarabs on Crete either as imports or as Minoan products. Pini has distinguished Egyptian and Minoan scarabs by the carving of the line bordering the face design. The border line on Egyptian scarabs is square-cut in section, whilst on Minoan examples it is diagonally cut from the outer edge. 556 Characteristically also, the incised 'T-lines' on the

backs of Minoan scarabs are both very deep and wide, whilst imported scarabs are only lightly incised on the back even though often the face design can be deeply cut. They also can be distinguished either by typically Minoan or atypically Egyptian face designs, although some visually are ambiguous. More than a third of all Pre-Palatial Minoan scarabs have an 'open' (Type B) head, some with eyes indicated, although this type is rare in Egypt itself until the New Kingdom. Only half of the imported scarabs have a Type A ('lunate') head, a percentage well below those in Egypt, strongly suggesting that the non-'lunate' head was a Minoan preference that differed significantly from Egyptian aesthetics.⁵⁵⁷

Little correlation can be cited between the imported and Minoan scarabs from either site where both are recovered;558 their multiplication is the result of communal burial practice. The design and shape of early Minoan scarabs reflects that found in Egypt, being generally oval in shape with head, pronotum, elytra and legs indicated. The vast majority of face designs are decorative, and none of the imports are inscribed with the names of private or royal persons, although this practice begins in early Dynasty XII. Yet these Minoan scarabs employ a face design that is characteristically Minoan and could not be mistaken for an Egyptian design. The Minoans also clearly did not choose to illustrate the horned variety of scarab beetle indigenous to the island⁵⁵⁹ but instead consciously depicted the scarab as it is represented on imported pieces when the scarab form was adopted from Egypt.

All scarabs and ovoids, both imported and local, from Pre-Palatial contexts are found in tombs,

⁵⁵² See Schulman 1967:143-147; Weinstein 1989:20-23. Dates of manufacture range from the SIP through Dynasty XIX. The date of the Cape Gelidonia wreck, however, would not be earlier than the beginning of Dynasty XIX in any event, thus not overlapping the Uluburun material. The Point Iria wreck, of about the same date as that at Cape Gelidonia, contained no scarabs; see volume text with Phelps, Lolos and Vichos 1999.

⁵⁵³ Pini, in Marangou 1992:203; Pini 2000:112 considers the use of 'white piece' material (including for the scarabs) to be a short-lived phenomenon within MM IA, a statement with which I concur.

⁵⁵⁴ SBONIAS 2000:279 and passim. These conclusions should be employed with caution, as the rather simplified chronological divisions he employs for seal materials are not entirely accurate. A rather obvious example is that he limits use of ivory to EM III-early MM IA, but at least two ivory objects {138; 402} were recovered in EM IIA contexts.

No scaraboids, as defined for the present chapter, are found in Pre-Palatial contexts.

⁵⁵⁶ PINI 2000:111 fig. 4a. An exception may be {478}, from Platanos.

 $^{^{557}}$ See Phillips 2004.

⁵⁵⁸ E.g., Gournes {72} & {71}, Platanos {476–477} & {479}. In each case, they are found in the same communal tomb. Platanos {478}, if Minoan, would be the only example where the imports directly affected the presentation of the indigenous scarab, in that the artisan carved a lunate head.

⁵⁵⁹ The horned beetle later is found as model figurines as votive offerings at peak sanctuaries and also decorated clay vessels. See DAVARAS 1988 and further discussion below. An important exception to this early absence of horns is the presence of a possible horn on a bowl from Platanos {468}. If so, it may be an early precursor to the distinction between scarabs (without horns) and figurines (with horns).

chiefly tholoi in the Mesara area.⁵⁶⁰ Mesara tholoi with imports are Aghia Triadha {28}, Lebena {366–368}, Marathokephalo {392} and Platanos {476-477; 478!}, whilst Odigitrias {419-420} is the only known tholos with Minoan scarabs. The Kaloi Limenes **{81–83}**, Odigitrias **{421–423}** and Moires {413} scarabs and ovoids are from less certain or assumed tomb contexts; all but the Moires scarab are Minoan products. The Minoan scarab said to be from Andiskari {522} also is likely to be from a plundered tomb. Beyond the Mesara region, imported scarabs are found in square 'house tombs' at Archanes **{50**; **52**} and Gournes **{72**}, and a Minoan scarab also is from the Gournes tomb {71}. The only possible exception to tomb deposition is the imported scarab from the Trapeza cave {510}, unless it was interred with a burial in MM IA.⁵⁶¹ One Minoan scarab {547} and imported ovoid {553} of 'white piece' material are entirely without provenance on the island, but the first is dated to this period by both material and style; the latter, on the other hand, may be either an early Middle Kingdom Egyptian type or a later Canaanite version of it.

The earliest imports on Crete, in terms of their Egyptian manufacture, could date as early as the beginning of the Middle Kingdom and certainly encompass late Dynasty XI. None, however, can be paralleled in the earliest scarab presentation in Egypt. These are not the small beetles summarily executed on a high base, but rather are proportionately low in height and large in face area characteristic of the early MK. Therefore no evidence exists for exportation of any scarabs to Crete until a good while after their initial use in Egypt and some internal development there, nor before Egypt had been united under a single king. Those from Lebena {366-368} are in contexts limited to MM IA, from Archanes {52} to early MM IA and {50} (late?) EM III-MM IA, from Aghia Triadha {28} to EM III-MM IA, and from Marathokephalo {392} to MM IA (-early B?). Therefore, they clearly are of late Pre-Palatial deposition and presumably importation, certainly by early MM IA. They are found both in the Mesara and farther north/north-east in the same general period, MM IA.

The imports can be grouped into three collections,

those dated to late Dynasty XI ({50; 52; 367; 392; **476**}), those of early Dynasty XII date (**{28**; **72**; **366**; **368**; **413**; **477**: **553**}⁵⁶²), and a small group datable only within the 'early Middle Kingdom' ({478?; 510}⁵⁶³). All must perforce be Egyptian rather than Canaanite in origin. In terms of cross-chronology, then, this would suggest that early MM IA is contemporary with the earliest part of the Middle Kingdom, late Dynasty XI, due to the date and context of scarab {52} at Archanes. 564 The general contemporaneity of the indigenous MM IA scarabs would suggest that they all were produced within a short space of time, in response to the arrival of the imports. These imports would have arrived either earlier in MM IA or perhaps at about the same time as the first indigenous scarabs. MM IA on Crete must also encompass at least part of early Dynasty XII in Egypt, since many of the imports date within this period. In particular, the contexts of two different tholos tombs at Lebena with an early Dynasty XII scarab {366; 368} do not extend beyond MM IA as currently known, indicating that MM IA continues beyond late Dynasty XI and into this latter part of the early Middle Kingdom.

No Minoan scarabs in ivory are known, and all are identified as of 'white piece' material. Thus, if Pini's (and Sbonias's) conclusions are accepted, none were either produced or interred before sometime in MM IA, and (with one exception) only in the Mesara region, at Kaloi Limenes {83}, Odigitrias {419-423} and Andiskari(?) {522}, although two Odigitrias scarabs {419-420} have the only known excavated context dates, 'late MM IA.' The sole exception farther north is Gournes {71}, again MM IA (and possibly the beginning of MM IB) in context date. Additionally, Minoan ovoids are known from Kaloi Limenes {81–82}, also in 'white piece' material. Context and stylistic dating combine to indicate they should not pre-date the MM IA, possibly the later MM IA, period as a group. Imports are more widespread on the island, as well as being found in earlier contexts, strongly suggesting that, although the scarab was *imported* beyond the Mesara possibly even before Minoan production began, initial Minoan production itself is limited to the Mesara region, possibly around Odigitrias and Kaloi Limenes where most

⁵⁶⁰ See Distribution Map 15.

⁵⁶¹ This scenario is feasible. Alternatively, it may have been deposited in Proto-Palatial times.

⁵⁶² Also **{382}**, found in a later habitation fill context at Malia.

 $^{^{563}}$ Also $\{483\},$ found in a later habitation context at Poros.

Although one could argue that this might be contemporary with the late EM III instead, as some tomb contexts do extend back this far. It seems unlikely, however.

have been said to be recovered, in late MM IA. Although imports are found at several sites farther north/north-east, the artisans there did not produce their own versions of the type; the Gournes scarab {71} likely also was made in the Mesara. The scarab without provenance on the island {547} also most likely also is from the Mesara region; it too is of 'white piece' material.

Two Minoan scarabs from the Mesara area represent an apparently more obvious 'egyptianising' style, but unfortunately both are from uncertain tholos deposits, at Aghios Onouphrios {41} and Aspripetra **(66)**. They are of 'white piece' material and, although neither has a secure context, should date no later than MM IA, about the same time as the other indigenous 'white piece' scarabs. These two are characterised by open heads and cross-hatched elytra, with the dividing line between elytra indicated. 565 The cross-hatched back is found occasionally on Egyptian and Canaanite scarabs, but it does not appear prior to sometime in Dynasty XII in Egypt, and even later in Canaan. ⁵⁶⁶ The line separating the elytra is a specific distinction between Egyptian scarabs and these two Minoan 'cross-hatched' scarabs: it is not found on Egyptian scarabs with cross-hatched backs, as they are thought to represent the hedgehog⁵⁶⁷ and so it would be unnecessary to divide the back into two scarab wings. In terms of internal development, the Aspripetra scarab **(66)** appears to be somewhat more advanced, both in general appearance and face design, but both still date no later than MM IA. Thus the cross-hatched back seems to have appeared as an isolated phenomenon earlier on Crete, before its appearance in Egypt, and thus should at least be seen as an indigenous Minoan innovation, if only short-lived on the island. However, it is highly unlikely to have been the source for the feature in Egypt; the cross-chronological dates are incompatible.

Ovoids are found in smaller quantity both as imports at Aghia Triadha {28}, Marathokephalo {392} and without provenance {553}, and as Minoan seals at Kaloi Limenes {81–82}. All are of 'white piece' material, with the exception of one {28} that may be bone or ivory. They are limited geographically only within the Mesara region and in date to sometime in MM IA, and are discussed above together with the scarabs. They do not continue beyond the early Proto-Palatial period, although they are found in Egypt well into the New Kingdom. Egyptian ovoids all are oval in shape, whilst the Minoan examples are less uniformly presented. One at least {81} is of nearly identical shape to Egyptian ovoids, whilst the other two are more conoid in form with a more gabled back profile.

All this suggests that the Minoan scarab derives directly from the imported Egyptian type. The latter appear on the island in contexts only slightly earlier than indigenous seals. The Minoans adopted the scarab into an already existing repertoire of zoomorphic seal forms, at a time when zoomorphic shapes already enjoyed increasing popularity and variation on Crete, and its appearance therefore fits quite comfortably into indigenous iconographic development. As the stamp seal format was already typical on Crete, long before the Egyptians employed it, adoption of this foreign type merely added another zoomorphic image to an already impressive repertoire, but its inclusion was symptomatic of internal typological development in Minoan seal design.

But why was the *scarab* form adopted into the Minoan repertoire? Mere exposure to the Egyptian scarab is insufficient explanation. Other zoomorphic (and even non-zoomorphic) seal shapes are known in First Intermediate Period and early Middle Kingdom Egypt, when stamp seal typology was in its formative stages and the next most popular shape was the frog, ⁵⁶⁹ but none of these other shapes are

⁵⁶⁵ One other scaraboid {549} with a partially cross-hatched back more properly belongs with the Proto-Palatial period, and is discussed below.

⁵⁶⁶ The cross-hatched back is a rare feature, and "appears so seldom that it has no value for dating" (WARD and DEVER 1994:121). Nonetheless, they limit its use to Dynasty XII—XIII (WARD and DEVER 1994:175 Table 2; see also p. 143 n.
5). WARD 1978:29 Table V notes a single example from "early Dynasty XII," but in general they are not found until later in that dynasty. See also TUFNELL 1984:35. Canaanite scarabs would not begin until later, in late MB IIA/early IIB, and the cross-hatched back is found amongst this early group.

 $^{^{567}}$ Later developments using the cross-hatched back actually

depict the seal as a hedgehog in Dynasty XV and, during the New Kingdom and later, feature a human face in lieu of the head and pronotum of the scarab beetle; e.g., MARTIN 1971:5 Back Type 11, pls. 54 Type 11.f, 56 Type 6.t; Tufnell 1984:II:pl. LII:3035; NFA 1991:#214; Ward and Dever 1994:143 n. 5. A human face with cross-hatched back inscribed with the name of Amenemhat IV (Dynasty XII) also is known; see Martin 1971:5.

⁵⁶⁸ The sole exceptions on Crete are the late Dynasty XVIII ovoid of Queen Ty {18} from Aghia Triadha and possibly the ovoid from Platanos {479}. The latter is further discussed below.

⁵⁶⁹ Also, by the way, a common creature considered by the Egyptians to have the ability to self-generate.

found on Crete either as imports or as Minoan seals, only the scarab. One possible factor may have been its shape. The scarab appears at a time when Minoan seal forms in general develop from tall relatively narrow shapes elaborately carved, to short wide forms having few protrusions.⁵⁷⁰ The scarab is an ideal short flattish shape, unlike other Egyptian seal types. This logical development allows for less object bulk together with larger surface available for the face design, and may have had something to do with actual transport and general breakage problems on Crete. Unlike other Egyptian seal forms, the scarab is little if at all undercut. There are few possible breakage points, a consideration when the material is soft and therefore can be damaged easily. The scarab may have become the most popular form in Egypt for similar reasons.

The presence of these seals in Pre-Palatial tombs strongly implies offerings for, or possession by, the dead, although they also are likely to have been used during their lifetime. In this or any other interpretation they do not differ from other tomb furniture, including jewellery, weaponry and tools, and especially other seal types from which they cannot be isolated.

A small rough stone 'beetle' was found on Pseira {499}, possibly in the cemetery excavations, and a much larger and better-finished example is from the burial cave at Gerontomouri {68}; they do not seem to have possessed horns. ⁵⁷¹ Neither is oval in shape, but rather taper towards the head, as do the model figurines and rhyta of horned beetles found in the later peak sanctuaries of Eastern Crete. ⁵⁷² Their dating is uncertain, but should lie within the Pre- and Proto-Palatial periods although most likely to be around MM I, and they are mentioned in this section due to their lack of horn and their association with burials rather than sanctuaries. Their relationship to scarabs and the sanctuary material is discussed below.

The two hard stone scarabs **{40; 541}** are completely different from any others found on Crete, both imported and Minoan. They are taller, wider and shorter in length with an upturned head in profile, and emphasise the diagonal hind leg and side framing line of the elytra. Their nearest relatives

are early Dynasty XVIII in date, and they might be contemporary although earlier dates are equally possible, and they are mentioned here as they might be as early as early Dynasty XII when hard stone came into more common use. They are unusual, and unlikely to have been component jewellery pieces due to their side decoration and overall height. Their face designs clearly are un-Minoan in character, and may be considered nominally within the Egyptian repertoire.⁵⁷³

Proto-Palatial

Egyptian imports continue to appear during the Proto-Palatial period, and are found in closed MM IB {103; 483} and MM IIA {197} contexts. 574 A small uncertainty remains at some sites, for those found at Platanos {476; 477; 478?} and Trapeza {510} discussed above may have been deposited in this time rather than earlier as their context dates bridge both periods, but more likely both were Pre-Palatial depositions. Nonetheless, several new and quite different specifically Minoan scarab types emerge and the scarab now is employed elsewhere than in tombs, perhaps indicating a change in use but more likely only a change in the context types excavated: very few non-funerary Pre-Palatial contexts are found, especially in the Mesara. Distinct 'minoanisation' of the adopted form, without parallel in Egypt, is clear. Minoan scarabs and scaraboids are interred in tombs at Koumasa {364} in the Mesara region and Pezoules Kephales {444} near Zakros, but now also are recovered in occupation contexts at Poros {484}, and possibly Malia {384}, 575 in the north-central region, whilst others are without provenance on the island {548; 549; 550?; 551}.

Imported scarabs are recovered in the questionable 'tholos deposit' at Aghios Onouphrios {40?; 42} in the Mesara, and in occupation contexts at Kastelli {103}, Knossos {197}, Poros {483} and possibly Malia {382} in the north-central region. One from Psychro {502} arrived no later than sometime in the Proto-Palatial period, judging from its Minoan face design, but others without provenance at Malia {388} and elsewhere on the island {520; 541?; 542} likely also arrived at

⁵⁷⁰ See Yule 1981, pl. 35, showing seal shape development.

⁵⁷¹ The small zoomorphic bowl **{468}** found at Platanos is horned, and therefore represents the indigenous horned scarab type (*Copris hispanis*).

⁵⁷² See Davaras 1988.

⁵⁷³ Especially scarab **{40}**, depicting a 'lotus in a *nb*-basket'

motif. The other **{541}** is more problematic. They may be 'egyptianising' scarabs imported from elsewhere, but parallels are difficult to identify due to their hard stone material and consequent engraving technique.

 $^{^{574}}$ See Distribution Map 16.

⁵⁷⁵ **{384}** actually is a surface find.

this time.⁵⁷⁶ Additionally, two were recovered in a much later Final Palatial (LM IIIA1) tomb at Gypsades (Knossos) {275–276}. One {418}, from Nipidhitos, is of Dynasty XIII date and so was imported not earlier an MM IB or II; it has no context.

At least two 'Minoan' scarabs in fact are Egyptian imports having face designs carved by Minoan artisans **{42; 502}**. A likely third example is said to be from Malia **{388}**, although without further provenance and of unknown origin. Although the face design is Minoan, these scarabs themselves are not. They are discussed elsewhere in more detail, as are the Gypsades scaraboids. Staraboids.

After MM IA and the 'white piece' scarabs, any correlation between Minoan and Egyptian scarabs seems to disappear entirely, in both form and face design.⁵⁷⁹ Until this time, it was not the scarab itself but the concept of the scarab that seems to have attracted the artisan. From MM IB at least until MM III, the artisan no longer attempted to adapt the specific details on the imported examples, but adapted the image as a whole for his own by using only some scarab-like details that were employed in a different. and wholly Minoan, manner. The last apparent 'egyptianising' scarab seems to be {484} at Poros. with its ovoid shape, similar back markings and line border on the face design, although its steatite material is a precurser to the Proto-Palatial types and its diagonally laddered 'T-lines' are unique.

Minoan scarab forms have become more elaborate and distinctive. Rather than the simplistic arrangement of deeply engraved single dividing lines and open heads, different details emerge and at least one and possibly two distinct new 'styles' become recognisable amongst the indigenous scarabs — all now actually to be classed as scaraboids, as defined for the present chapter. All Minoan scaraboids of the Proto-Palatial and later periods are found in a variety of indigenous steatite and hard stones, and the 'white piece' material is no longer employed.

Style 1 clearly is Minoan in development {384; 485;

487; 548; 549; 551). This is a very uniform group, characterised by a body strongly tapering towards the head end, use of a single wide groove around the side, deep wide back markings, and string-hole drilled through the width rather than the length. All but one have a face design incorporating drilled concentric circles. The odd one out {548} depicts a ship with sail and oars instead. Its different cutting methodology on the face probably reflects a late date within the type, probably MM III or perhaps even early LM IA, i.e., the Neo-Palatial period when such techniques were employed on stone seals instead of the circular drills and straight-line gouges typical of the Proto-Palatial period. The Style 1 scaraboids are found in a variety of green, as well as brown and black, Cretan steatite. On stylistic grounds as a group they date to MM IB-III, and hence overlap into the Neo-Palatial period, but the only excavated examples have been recovered at Poros from a domestic pit fill {485} of wide-ranging MM II(?)-LM IIIB(-C?) date and a Neo-Palatial (MM IIIB/LM IA transitional) house deposit {487}. That from Malia {384} is a surface find directly above an EM III-MM II house. The others have no provenance on the island, but in general they seem to be a north/north-east Cretan type and, unusually but tellingly, those having a good provenance are recovered only in occupation contexts. In appearance they are not unlike the earliest Egyptian scarabs of the later First Intermediate Period⁵⁸⁰ but are unrelated and certainly of later date.

One Style 1 scaraboid **{549}** intergrades with the earlier scarabs having a cross-hatched back **{41; 66}**. Half its back also is cross-hatched and it too has a prominent dividing line between the 'elytra.' It may be early in the Proto-Palatial sequence, perhaps MM IB in date, for it least resembles the others of Style 1. Two carnelian scaraboids **{275–276}**, lacking the string-hole position and some other features characterising Style 1, nonetheless possess a body distinctly tapering towards the head end. ⁵⁸¹ This must be viewed as a characteristic Minoan feature in the Proto-Pala-

⁵⁷⁶ Scarabs {40; 541} may be either late Middle Kingdom or early New Kingdom and {520} may be either late Middle Kingdom or Second Intermediate Period in date; the latter is more likely, and they are discussed in the Neo-Palatial section, below.

⁵⁷⁷ It is much lower in height than the others and the elaboration of the side profile would tend to negate its original containment within a jewellery setting.

⁵⁷⁸ See Appendix, Type I. Another may be {542}. The Gyp-sades scarabs also are discussed below; see the Final Palatial section, below.

by, if not copied from, an Canaanite (not Egyptian) design; compare, for example, with the imported scarab **{510}** at Trapeza. Note, however, that the seal itself is a Minoan type, is not a scarab, and is in fact earlier in date that the design type in the Levant; see PHILLIPS 2004:164, 165 fig. 3.

WARD 1978:31 fig. 6:a1-a2.
 These were found in a tomb context, but of much later LM IIIA1 date. The employment of horizontal back lines gives a possibly erroneous suggestion of a 'horn' from the side profile. See further discussion in the Final Palatial section, below.

tial period, probably related to the clay and stone model figures of the horned beetle found at peak sanctuary sites. Other than their material (carnelian) and the string-hole position, they would fit reasonably well within Style 1. They were recovered in the LM IIIA1 tomb at Gypsades, probably as heirlooms when interred. They appear to be relatives of the 'Style 1' Proto-Palatial scaraboids with string-hole through the width, but these are drilled through the length.

Style 2 is found in hard stone, and generally is characterised by shape, minimalist back marking, and simple face design. The shape is wide at the centre but curves and can taper towards both ends, which are blunted, mostly following the outline of an amygdaloid. The string-hole is through the length, and they are otherwise characterised by simple cross-hatching on the face. The back markings are the bare minimum needed to define a scaraboid. Two examples can be cited, from Koumasa {364} and Pezoules Kephales **{444}**, but the back markings differ considerably, as also do their comparable size and the material employed. A third, more 'egyptianising' piece is from Poros {484}, with unique markings that seemingly refer back to the Pre-Palatial types and a face design that is a late example of the 'Border/Leaf Complex.' The limited number and wide 'distribution' of this style do not encourage comment, and the 'style' in reality is only a general but probably meaningless grouping, similar due to the nature of the harder stone employed and the consequent mechanical means employed for cutting both the face design and the scarab itself – straight line gouges. The Koumasa example also is unique in that it later was cut into three pieces, of which only the central portion survives. That from Poros was recovered in a stratified MM IB habitation context, whilst the others are from communal tombs continuing MM IIA (Koumasa) and MM III (Pezoules Kephales), and so suggestively later products. The simple technology of their production is continued in the early Neo-Palatial period, when the last of the indigenous scarab and scaraboid products on Minoan Crete are made. The last and latest Style 2 scarab is found in the MM III tomb at Ailias {270}, and is discussed in the Neo-Palatial section below.

The two stone hornless beetle model figurines recovered amongst the burials at Gerontomouri {68}

(Late Neolithic–MM II context) and probably also on Pseira {499} (presumed EM III–MM I cemetery association) having a distinct taper towards the head end have already been mentioned in the Pre-Palatial section above. Their 'distribution,' although extremely limited in number, nonetheless is within north-eastern Crete. Neither figurine can be more closely dated than by their context, but probably they are earlier than the Style 1 steatite scaraboids they strongly resemble. Some religious association with the scarab form may have developed in this area and soon been transferred to the indigenous horned variety of beetle.

The Minoans employed horned scarab beetle appliqués to clay vessels in the Proto-Palatial period. 582 Their appearance coincides with the introduction of vessels with moulded appliqué attachments of enormous variety, 583 and is not a unique phenomenon. In all cases the beetle represented is of the horned variety, and its presence at the peak sanctuaries of Kophinas (MM I-LM III context) and Traostalos (MM-MM III/LM I) suggests a religious association by that time. This is underlined by the presence of numerous clay model horned beetles at the peak sanctuaries of Juktas (MM I-III), Profitias Elias (Malia) (MM I), Petsofas (EM III/MM I-LM I), Prinias Siteias (MM I-II), Traostalos, and Xykephalo (MM III), 584 the sacred enclosure of Piskokephalo (MM II-LM I) and domestic shrines(?) at Malia, Quartiers E (MM III) and M (MM II), and Kato Zakro (LM I). Additionally, horned beetle rhyta have been found at Palaikastro (LM I), Prinias Siteias and Piskokephalo. With the sole exceptions of Juktas and a pitharaki from Knossos,585 which seem to be the westernmost examples, all are from north-eastern Crete, and indicate a religious usage peculiar to that area at least in the Proto-Palatial and Neo-Palatial periods.⁵⁸⁶ Noticeably, the imported and 'hornless' scarabs seem to play no role in it, as none have been recovered at these sacred sites or (in the case of the domestic shrines[?]) contexts, and very few imports are recovered in Proto-Palatial contexts in north/north-eastern Crete. Nonetheless, some conflation of the earlier imported scarabs, the hornless stone figurines, the horned clay figurines and appliqués, and the Style 1 scaraboids is apparent for north/north-eastern Crete.

 $^{^{582}}$ See Davaras 1988.

 $^{^{583}}$ See Foster 1982.

 $^{^{584}}$ See also Jones 1999:45–46 Table 3.

 $^{^{585}}$ HM 2686; see Evans *PM* I:240, fig. 180; IV.1:74, fig. 46bis:b;

DAVARAS 1988 fig. 6. Note that the beetles are much cruder in execution than the highly regular illustration suggests.

 $^{^{586}}$ See Davaras 1988: passim.

No ovoids are identified as exclusively Proto-Palatial in date, although one from Platanos {479} discussed in the Pre-Palatial section might have been made or deposited in MM IB; it differs in shape and material from the others in any case. The later Minoan seals classified by Yule as 'ovoids' certainly are not related to the Egyptian ovoid type.

Neo-Palatial

Scarabs continue to be imported during the Neo-Palatial period but, although some Minoan examples at least of MM III date or context are known, Minoan scarab production itself seems to cease. ⁵⁸⁸ This is due in part to the general decline in representational shapes and concurrent rise in popularity of simple seal forms, especially the lentoid, cushion and amygdaloid, ⁵⁸⁹ by the end of MM III. ⁵⁹⁰ The few Minoan examples are in hard stones, in contrast to the imports that continue to be made of softer materials such as white steatite, enstatite ('white piece'), faience and their related materials typical of Egyptian scarabs.

Those few indigenous scaraboids having datable Neo-Palatial contexts are found only the general Knossos region, and are the tail end of the 'Style 1' group already discussed above in the Proto-Palatial section. The actual find contexts of those in occupation contexts extend into MM III or even later, both at Poros {485; 487}, one from a pit fill of wide-ranging date.

Two others, both continuations of the 'Style 2' type, are recovered from tomb contexts. One is from an MM IIB-LM IB Poros tomb {491} and may be similar to another without provenance on Crete {550}. This second scaraboid has a large X-cross with added lines that seems to be a simplified and probably later development of the face design on MM I ovoid {479} from Platanos, that itself strongly resembles but antedates a typical Canaanite design.

The back and sides of the last 'Style 2' scarab from the MM III Ailias (Knossos) tomb {270} are not very different from these last one or two scaraboids, being quite tall and with similar back cutting. How-

ever, it has a 'tectonic ornament' face design that is quite different, and the legs are indicated more 'properly' by short diagonal lines.⁵⁹¹ Yet the artisan did not understand the origin of these diagonal lines, for on one side the leg markings slant in the proper direction, and on the other in the opposite direction. The Minoan 'scarab' thus is reduced to its simplest, angular form, with only an open 'T'-shaped head and pronotum, and similar 'T'-shaped markings to indicate the elytra. Those assignable to this period on stylistic grounds continue to be naturalistic but the elaboration – and attempts at naturalism – in the Minoan scarabs also betray the artisans' lack of understanding of what the back and side markings were intended to represent, and thus probably either they had no imported models to follow, or they did not realise a connection between their products and the imported scarabs, or possibly they did not care.

A similar presentation is indicated on the scarab from the Gerontomouri cave of wide-ranging date **{69}** that also likely was not interred before MM III. Although its origin is problematic, it clearly is not Minoan. Even simpler is the possibly Minoan ovoid from Piskokephalo **{458}**, with its pseudo-hieroglyphic inscription on the face reflecting the lack of comprehension of the artisan who carved it and a date likely not before LM IB. ⁵⁹²

Imports rarely are recovered in stratigraphical or datable contexts in the Neo-Palatial period, as most imports of Second Intermediate Period or later date unhelpfully are without provenance on Crete. They follow the trends in Egyptian production, with their face designs becoming increasingly hieroglyphic rather than decorative in character from the later SIP into Dynasty XVIII. Decorative face designs become less fashionable, and their influence on Minoan face design was negligible, if indeed non-existent, in a period of almost universal Minoan pictorial scenes and designs. Nonetheless, apart from scarab {382} at Malia (an antique in its context), at least one scarab

⁵⁸⁷ YULE 1981:80 Class 30:c, all with string-hole through the width. These are related to the popular Neo-Palatial lentoid, conoid and amygdaloid shapes, and like them are made of hard stone; see n. 492, above. They are distinct from the ovoids discussed in the present chapter and are not included in the present catalogue.

 $^{^{588}}$ See Distribution Map 17.

See Younger 1973:II:148-178 for LM seal forms. Virtually all do nothing more than provide a flat or curvilinear surface for the engraved design, in contrast to the enormous variety of Proto-Palatial seal shapes in YULE 1981.

⁵⁹⁰ See YULE 1981:pl. 35.

⁵⁹¹ It would be defined as a scaraboid, except for its diagonal leg markings.

⁵⁹² The existence of a Minoan rectangular plate seal **{564}** may also be noted, its shape and string-hole position similar to those from Egypt that likely are later in date. There seems to be no relation to Egyptian rectangular plaques, as the Minoan type has an indigenous history; see YULE 1981:172–173 Class 26, 113 n. 191.

 $^{^{593}}$ Younger 1973 devotes over 300 pages to pictorial motifs and filling designs, and only 24 pages to geometric types.

{215}, of very late Dynasty XIII–XV or MB IIB–C date, was recovered on the wall of an LM IB basement room at Knossos, in a context generally contemporary or possibly later than the scarab, depending on whether it was imported from northern Egypt or from Canaan. Another scarab {48}, of Dynasty XV or late MB IIB–C date, recovered in a storage room of the 'palace' at Archanes, poses a similar problem.

Other scarabs without context may have been imported during this period or later. Either of the two possible Thutmose III scarabs **{521}** purchased at Axos may have been imported as early as LM IB. A scarab depicting a Hathor-sistrum **{455}**, said to be from Phaestos, again might be as early as the reign of Thutmose III and so may have been imported as early as LM IB but instead might be of Final Palatial date. Three others, without context on the island, may have been imported this early. They are **{539}**, probably Dynasty XV/MB IIB—C and so imported not before sometime in MM IIIA, a Dynasty XVIII scarab **{546}** possibly imported as early as LM IA, and a scarab **{541}** of problematic but possibly early Dynasty XVIII date.

Final Palatial

The number of scarabs, scaraboids and ovoids in Final Palatial contexts is extremely limited.⁵⁹⁴ A scarab bearing the name of Amenhotep III was one of the 'beads' of a necklace worn by a woman buried in an LM IIIA1 tomb at Sellopoulo (Knossos) {262}. 595 Two almost identical Minoan scaraboids of MM (IB?-)II date also were found in an unplundered but virtually empty LM IIIA1 tomb at Gypsades (Knossos) $\{ 275 \text{--} 276 \}.^{596}$ These too were strung onto one or more necklaces, together with a variety of other beads, and may not have been recognised as indigenous; they are the latest and the only Minoan examples recovered in this period. The ovoid bearing the name of Amenhotep III's queen Ty {18} was found in a mixed context at Aghia Triadha that cannot be earlier than LM IIIA in date. The Amenhotep III scarab {125} recovered in a pit at Khania may have been dumped there at any time between LM IIIA1 and LM IIIB, when the pit was sealed, so might be an End Palatial import instead.⁵⁹⁷

Other than the two heirloom Minoan scaraboids, all not only have a hieroglyphic text on the face, but also specifically name either Amenhotep III or his wife, Ty. They might have, in other words, a suggestively political overtone, although scarabs naming Amenhotep III and Tv are extremely numerous in Egypt itself and these 'seals' are amuletic rather than administrative in function. Also, those earlier scarabs mentioned above might also have arrived in this period, so the limited repertoire may be misleading. Nonetheless, the impressive number of scarabs now recovered in context, in comparison to the one example in a Neo-Palatial context, strongly implies a resurgence of interest in these 'beads.' They are the only object type recovered over a lengthy period of time for which the Neo-Palatial period has the least exemplars, and it stands in stark contrast the Minoan adoption of most other 'egyptianising' objects and iconography.

Additionally a single impression {317} on a nodule that itself dates within LM II–IIIA, unfortunately without (recorded) context at Knossos, suggests that the scarabs themselves actually were employed as seals on Crete in the Final Palatial period. By the general style of the surviving impression design, the original seal (a scarab?) could have been produced at virtually any time within this period, either in Egypt or Canaan. Nonetheless, its full design is problematic, from the surviving impression. Although the original scarab may or may not have been an Egyptian import, the preserved portion of the sealing strongly suggests at least major Egyptian influence in its design. It is the only example of its type on the island.⁵⁹⁸

End Palatial⁵⁹⁹

No End Palatial Minoan scarabs, scaraboids or ovoids have been recovered.⁶⁰⁰ Imported End Palatial finds again are almost entirely confined to the Knossos

 $^{^{594}}$ See Distribution Map 18.

 $^{^{595}}$ See Appendix, Type II.

⁵⁹⁶ See Appendix, Type II.

Mention should also be made here, for completion's sake, of the Minoan Proto-Palatial Style 1 scaraboid {485} in a context with Proto-Palatial through End Palatial material, and the possibility that the Knossos anra scarab {215} may be of Final Palatial deposition.

⁵⁹⁸ Impressions of seals originating elsewhere beyond the island also have been recovered on Crete, e.g., CMS II.6:#144, found at Aghia Triadha, impressed by an Akkadian cylinder seal.

⁵⁹⁹ See Distribution Map 19. Note that Post-Palatial finds also are indicated on this map.

⁶⁰⁰ An elusive reference to a "bead with scaraboid markings," suggestively Minoan, from an LM IIIA—B occupation context at Palaikastro {424} must remain questionable, but on present evidence is more likely to be Neo-Palatial at the very latest, if it is a scaraboid, and if it is Minoan. The Proto-Palatial Style 1 scaraboid {485} might have been deposited at this late date from the published date range of its associated material, although this is quite unlikely.

region, with one possible exception. The imported oval plaque, *perhaps* found in an LM IIIA2 tomb at Kalo Chorio {79}, may have been used as a bead. Its lack of face design suggests it had been dismantled from composite jewellery or was never finished. It is a unique import, and there is no evidence for influence on Minoan Crete, if indeed it was imported in the Bronze Age.

Two scarabs were recovered in LM IIIB occupation contexts of wealthy houses. One {482} is from a wealthy LM IIIB house at Poros, generally contemporary with the date of the scarab itself. The other {125}, actually in an unstratified occupation context not later than LM IIIB at Khania, is inscribed with the name of Amenhotep III, thus itself is not earlier than LM IIIA1 and perhaps is another Final Palatial import instead. Whilst they could have been of practical use in the household, they may not have been anything more that casual souvenirs and possibly were strung onto necklaces like those found in the Final and End Palatial tombs nearby. Their living owners at least must have been employed them for some function or another. Unfortunately, neither has any cross-chronological value, although parallels for the Poros scarab are recovered in contexts of generally contemporary date elsewhere.

One imported early Dynasty XIX scarab was found around a man's neck in an LM IIIA2-B (early) tomb at Zapher Papoura (Knossos) {265}, employed simply as one of a variety of beads including two engraved Minoan seals, for a necklace in much the same manner as the scarab {262} and Minoan scaraboids {275–176} interred in the previous period. 601 It can only be generally contemporary with its burial context, and as such a rare phenomenon at this time. Its transitional to very early LM IIIB dating provides a very limited cross-cultural overlap, strongly suggesting that the transition from LM IIIA2 to IIIB occurred contemporary with early Dynasty XIX in Egypt and thus early in the 13th rather than late 14th c. BC, somewhat later than usually calculated. The badly preserved 'Egyptian blue' scarab from Aghia Pelagia {1}, if from Evans's LM IIIA-B tomb there, may also have been strung onto a necklace together with the simple round beads of the same material acquired with it.⁶⁰² They have no certain context, however.

In contrast, the number of scarabs without context but not imported before the End Palatial period is surprisingly large. The scarab identifying Amon-Ra found at Knossos (314) is of early Dynasty XIX date, generally contemporary with or slightly later than the Zapher Papoura scarab {265}, but unlike it has no published context. Scarab {544} is a Levantine product, of 13th c. BC or LB IIB date, and thus would not have been imported earlier than LM IIIB, like the Poros scarab {482}, that was recovered in context. A few more scarabs could have been imported during this period, including two inscribed with the name of Amon {39; 44} that clearly are unrelated to the Minoan material of the Aghios Onouphrios 'deposit,' although only the first has been associated with it. A Dynasty XIX-XX or possibly later scarab **(260)** was recovered in a disturbed Iron Age tomb on the Kephala Ridge at Knossos, that might have been imported as early as the End Palatial period, but more likely was not.

Post-Palatial

No scarab seals can be associated with late LM IIIB-C contexts. 603 Two scarabs {315; 320}, surface finds at Knossos, are dated after the reign of Ramesses II and thus late Dynasty XIX-XX, and so could not have been imported before the latter part of LM IIIB. The scarab from Tsoutsouros {512} also dates to this period, whilst one made of amethyst without context on the island {537} might be as late as the Third Intermediate Period and thus beyond the chronological scope of the present study. The latest possible Bronze Age import is a Levantine scarab {38}, obviously not from the Aghios Onouphrios 'deposit' collection, dated to the end of the Bronze Age or beginning of the Iron Age.

Post-Minoan

One Ramesside scarab **{260}** is from a disturbed Protogeometric to Early Orientalising tomb on the Kephala Ridge at Knossos. Others formerly assigned to similar contexts include the late Dynasty XII–early

 $^{^{601}}$ See Appendix, Type II.

⁶⁰² Possibly also to be considered Final Palatial, as the cemetery from which they may have come is dated to LM

 $^{^{603}}$ See Distribution Map 19. Note that Post-Palatial finds also are indicated on this map. Other scarabs not included in the present catalogue and discussion are HM 2142 (from Ape-

sokari), and HM 524 (the last cat. no. is uncertain), as they are unpublished; probably others lie undetected and unpublished in the HM and other museum storerooms. The two mentioned were seen very briefly by myself in the HM storeroom but are inaccessible for study. No identification or dating is provided here, but these two at least will be published in a future *CMS* II *Suppl.* volume of HM seals.

XIII scarab without context from Nipodhitos {418} and another {282} mistakenly assigned a Dynasty XVIII date but actually generally contemporary with the Protocorinthian to Late Orientalising tomb at Fortetsa (Knossos) in which it was found. A number of other scarabs, formerly dated to within the Bronze Age and the parameters of the present study, also in fact belong within the Iron Age and even later. 604 They have been included in the catalogue as they earlier had been identified in publication as of 2nd millennium date. Scarabs {538} and {545} are two such, as is the 'bundle-backed' seal from Lastros {365}. The oval plaque from Kalo Chorio {79}, if not from Marinatos's tomb, would more likely be an Iron Age piece. The scarab perhaps from Aghios Onouphrios {43} also post-dates the Third Intermediate Period, and clearly has nothing to do with the 'deposit' of Minoan artefacts. Many more Iron Age scarabs have been recovered on Crete, both with and without provenance, and with and without context. 605

Other scarabs more likely are of 'modern' date, possibly forgeries or fakes, that have been acquired by a variety of means and published as Bronze Age pieces. These have been included within the present catalogue to draw attention to their existence within the literature. Mostly, they have no provenance beyond the island or sometimes said to be from a specific site or region, but generally are purchased by private collectors. Scaraboid {540}, if not a modern product, should be no earlier than Dynasty XXII in date, whilst {513} is sufficiently elusive that several dates are possible, including modern. Both scarabs {543} and {552} most likely are modern pieces, or at least fit within no known Bronze Age or Iron Age Mediterranean scarab typologies. The two visually similar scarabs from Knossos {283; 316} are highly problematic, and should be either of Iron Age or modern date; they certainly are not Minoan and Neo-Palatial.

Commentary

Stamp seals were produced on Crete by early EM II and in the earliest period are datable by their simple shapes and face designs in addition to some early contexts.⁶⁰⁶ Whilst a chronology is not possible due to

As with the early stone vessels, the view of Pre-Palatial contexts as exclusively funerary is distorted by the predominance of tomb contexts for the period. Nonetheless, their concentration in the Mesara area cannot be fortuitous. A shift in concentration north to the area around Knossos and Malia during the Proto-Palatial is indicative of a shift in initial arrival destination, a point later concentrated more exclusively at Knossos as Malia declined in the Neo-Palatial.⁶⁰⁷

There are no Egyptian scaraboids found on Crete. The Pre-Palatial Minoan scaraboids may be regarded either as experimental or lacklustre, schematic attempts to follow description of the shape and details of the imported type. Proto-Palatial and later scaraboids are wholly indigenous products, only the former possibly derived but far removed from the scarab form.

Minoan ovoids clearly are completely disassociated from the Egyptian form. The imported examples, both from Aghia Triadha {18; 28}, exerted no influence on Minoan seal development, nor did the imported oval plaque from Kalo Chorio {79}.

The comparatively few imported scarabs found in closely datable contexts, or in any context at all, becomes noticable from the Neo-Palatial period, and the question must be raised of just how many of these objects in fact actually were imported contemporary with, or only slightly later than, their date of manufacture in Egypt or the Near East. They exerted little if any influence on Minoan seal manufacture,

their communal funerary contexts, face design types can be limited within certain periods. Thus we can say with certainty that the earliest Minoan scarabs and scaraboids were not made earlier than sometime after the appearance of the forms in Egypt and the importation of Egyptian examples to Crete, however this was effected, and thus do not appear before sometime in MM IA. Minoan scarabs did not depict the indigenous (horned) beetle variety but instead the hornless type indicated on Egyptian scarabs. Clearly, they were modeled after the imported objects, doing so after the imports had arrived, and certainly their area of concentration may be considered the initial centre of their importation.

⁶⁰⁴ See Distribution Map 39. Other scarabs have long been known as of post-Bronze Age date and are not included in the present catalogue; these are CMS II.2:#28 (from Knossos) and II.3:#158 (from Phaestos?) and 285 (from Phaestos)

 $^{^{605}}$ See Skon-Jedele 1994:III:1665–1953 passim; also Karetsou $et\,al.:\#341,\,347,\,349–353,\,355,$ for those not discussed in the present catalogue.

 $^{^{606}\ {\}rm Yule}\ 1981;229.$

⁶⁰⁷ Kato Zakro remains questionable, as the Neo-Palatial remains are incompletely published, although now underway by L. Platon. Scarabs may well have been recovered here, but N. Platon (1971) mentions none either here or elsewhere. Nonetheless, it could not have surpassed Knossos. L. Platon 1999 discusses earlier underlying levels, and again no scarabs are mentioned.

although some at least were employed as exotica in funerary contexts. Those without context need not necessarily even have been brought to Crete during the Late Bronze Age, but rather may have been 'souvenirs' transported during the post-Minoan periods or later. A considerable number of Egyptian, Phoenician and other scarabs are known from later periods, many in contexts associated with temples or in offertory deposits in the Iron Age. A number of other Egyptian objects of Bronze Age date have been recovered in Iron Age contexts.

Degrees of 'Influence'

The Minoan scarab can be said to 'copy' the Egyptian only in the earliest periods, almost exclusively the MM IA examples. Pre-Palatial scarabs clearly but less elaborately copy the form, details and even (apparently) material of Egyptian imports. Face designs remain in their own Minoan style, unlike the Canaanite scarabs of later date, and so it is clear that the Minoans were not 'imitating' the Egyptian models but rather using their form as another zoomorphic image. Correlations between Egyptian and Minoan scarabs disappear almost entirely by early Proto-Palatial times. The Minoans have developed their own scarab imagery, and one could argue successfully that these steatite Minoan scarabs stylistically are entirely indigenous products, as they have no visual relation to the few imported pieces of the period. Clear chronological distinctions in Minoan back types⁶¹⁰ and hints of variant ateliers or geographical styles can be noted, but so few examples are known that little constructive observation can be attempted. We can say only that the Pre-Palatial 'white pieces' are centred in the Mesara, whilst the two later 'styles' are both chronologically and geographically separated from them in the north-eastern areas of the island, with only some tentatively visible individual 'bridges' between the three groups. The decline in production and use of the scarab stamp seal form on Crete, together with other zoomorphic and elaborate seal shapes, is in strong contemporary contrast with the dramatic increase of scarab production and use in Egypt itself.

Use

In common with Minoan seals in other forms, the Minoan scarabs (and almost certainly the imports) must have been practically employed during the lifetime of their owners. The use of seals as seals in general from their earliest appearance on Crete is confirmed by several examples of sealings from Pre-Palatial contexts. 611 although perhaps not enough to argue for general practice. Hood considered most of the stamp seals from very late EH II Lerna (on the Mainland) could have been imports from Crete, and suggested the sealings found there may also have been impressed with imported Cretan seals, but glyptic specialists have since rejected this idea. 612 In any case, it remains uncertain if all Minoan 'seals' (as presently termed) in fact were employed as such prior to the Proto-Palatial period. 613 Certainly by that time, when scarabs are found in inhabited areas, their practical employment as seals also should be understood to follow the same employment as other seal types, confirmed later by the seal impression from Knossos {317}.614 Seal use on Crete generally duplicated its function in Egypt and elsewhere, evidenced best in the meticulous research of FIANDRA (1968) for the Phaestos sealings, although the actual system of attaching sealings to the objects sealed reflected internal methodology. $^{615}\,$

Weingarten strongly suggests an Egyptian or Near Eastern origin for the early administrative sys-

 $^{^{608}}$ See Skon-Jedele 1994:passim, Karetsou et al. 2000:passim.

 $^{^{609}}$ See Chapter 18, where these are listed.

 $^{^{610}}$ Based on both find contexts and stylistic dating of face designs.

⁶¹¹ Known sites are discussed by Vlasaki and Hallager 1995, and listed p. 253 Table 1. They suggest that the majority were used to identify ownership rather than secure objects. Hue and Pelon 1992:31–33, figs. 33–34 and Hallager 2000:97–99 each add a further example. Earlier discussion can be found in Weingarten 1986:279, 295 n. 1 (from Myrtos and Palaikastro only). The latter context has since been re-dated from EM II to EM III/MM I, as stated by Warren 1970:33.

⁶¹² Hood 1978:214; Weincke 1981.

⁶¹³ The rarity of non-funerary contexts in Pre-Palatial Crete might explain the severe lack of early seal impressions, as sealings most often are found at habitation sites. Nonetheless, examples are not numerous; see n. 611, above. The major site of Vasiliki is devoid of sealings, despite its destruction by fire which presumably would have fired and thus preserved any that would have been there.

⁶¹⁴ Note that, contra Buchholz and Karageorghis 1973:114 #1371, the seal impression on a vessel handle from EM III/ MM I Palaikastro is not made by a "scarab." The sealing design is not an Egyptian type. See *Ibid.*:113 fig. 38:1371; also Sackett and Warren 1965:304 #21, fig. 18:21.

⁶¹⁵ See also discussions by Weingarten 1986:280–281 and, although concentrating on later periods, A.L. Foster 2000.

tems indicated by the use of the early seal impressions, including those at MM II Malia and Phaestos, where the seal was pressed against the object to be sealed. 616 The later and locally developed methods of sealing, attaching a sealing around a single strand of string and the use of stamped nodules and roundels. were not employed by the Egyptians, 617 although their method of sealing papyrus documents is similar. Evidence of known contact between Crete and the Mainland sites as early as early EM IIA⁶¹⁸ strongly suggests that the idea of stamp seals as seals on Crete must have had a source of inspiration both geographically closer and chronologically earlier than Egypt, perhaps even an indigenous 're-invention.' The Egyptians themselves regularly employed cylinder seals for that purpose until the very late Old Kingdom, whereas the Minoans and Mainlanders already had, and had employed, stamp seals as seals by this time. The administrative system of the early Proto-Palatial period employed or, rather, utilised the already existing practice of stamp-sealing that did not originate in Egypt.

The early seals probably were worn around the neck on a string and later, flatter, seals around the wrist. 619 Such a change may have been either the cause or the result of seals becoming flatter in form. Evidence for a stone seal inset into a metal ring is limited to one example. 620 Normally signet rings are made of metal, with the seal design engraved directly onto the bezel itself.

Amuletic use of the scarabs and other gems can be inferred but not confirmed by their burial with the dead, but scarabs themselves do not seem to have been regarded with any particular religious veneration. However, the apotropaic use of the horned beetle as either an object of worship or, more likely, a substitute offering for the real insect at peak sanctuaries and other Proto- and Neo-Palatial religious contexts in Eastern Crete calls for comment. ⁶²¹ Rutkows-

ki has identified the Minoan horned beetle of the clay models and rhyta as Copris hispanus L., belonging to the same scaraboid species as the Egyptian Scarabeus sacer L., 622 and has suggested an origin for the cult in its beneficial association with sheep and sheep herding. He associated the models with clay balls also found at these sites, and noted the beetle's habit of burying sheep droppings for housing and food. 623 Faure believed that, amongst other insects, the beetle was considered representative of Minoan deities. 624 The Egyptian mythology of the sun being pushed across the sky by the scarab, based on the dung-beetle rolling dung-balls along the ground positively leaps to mind, and one might speculate on the probability that this mythology reached the island together with the imported scarabs. In his overview of the beetle as sacred insect, Davaras concludes that "it seems...plausible that the Egyptian conceptions about the scarabeus sacer played a major role in the formation of the Minoan conceptions about its Cretan counterpart."625

Thus it is an apparent contradiction that the scarab (both imported and indigenous) was not itself considered a religious object nor regularly found in cultic contexts, even in eastern Crete during the Proto- and Neo-Palatial periods, 626 whereas the Minoan beetle models and rhyta almost exclusively are. Although the idea of the 'horned' beetle having a religious function over a period of several centuries and certainly in the Proto-Palatial and Neo-Palatial is clear, it is equally apparent that the East Cretan Minoans themselves disassociated the scarab from any connection with it. In no case does a scarab include a projecting 'horn' and (with the exception of the two early stone examples, notably not from cultic but rather funerary contexts) in no case was a model or rhyton 'hornless.' The importation and influence of Egyptian scarabs declined considerably from the beginning of the Proto-Palatial period, and even the

 $^{^{616}}$ Weingarten 1986:280–281.

⁶¹⁷ See HALLAGER 1973b; WEINGARTEN 1986:280; 1988:2–3 and passim for discussion of these methods. See NEWBER-RY 1905:12–28 for Egyptian methods of attachment. Sealing {317}, it might be noted, is on a nodule of clearly Minoan type.

⁶¹⁸ E.g., the numerous EH II 'sauceboats' found in early EM IIA levels at Knossos; see Knossos D.

⁶¹⁹ See, for example, those around the wrist of the 'Cup-bear-er' at Knossos (EVANS PM II.2:pl. XII) and of a 'Bull-leaper' from Tell el-Dab'a (DAVIES and SCHOFIELD 1995:cover; BIETAK 1996:pl. IIIB).

 $^{^{620}}$ See Yule 1981:78 Class 28:e. See also Evans PM IV.2:511

fig. 455. Note however that a number of Minoan seals have survived with gold mounts and caps; see Younger 1973:II:179–183.

⁶²¹ The situation is paralleled in the models, protome and rhyton in the form of a cat's head, also geographically limited to Eastern Crete and almost certainly of cultic significance; see Chapter 15.

 $^{^{622}}$ Not the $Oryctes\ nasicornis,$ as previously thought.

 $^{^{623}}$ Rutkowski 1986:89–91, 246 n. 90, fig. 118:a–b.

 $^{^{624}}$ Faure 1973:304. See also Davaras 1988: passim.

 $^{^{625}}$ Davaras 1988:54.

⁶²⁶ Although possibly having amuletic qualities distinct from the cultic associations of the horned beetle.

indigenous Proto-Palatial scaraboids are markedly different from the clay models and are not associated with any religious function.

A general pattern seems to be emerging for the development of both type and use of the Minoan scarabs and others under discussion. Thus, communal funerary interment, derivative scarab presentation and the use of 'white piece' material typical of the late Pre-Palatial do not survive into the Proto-Palatial. Rather, this period is characterised by the use of hard coloured stones and two distinctively different 'styles' of Minoan scaraboid that apparently extend in manufacture into MM III, and in use until the early Neo-Palatial, before both disappear altogether with the general fashion for shaped seal forms. The clear reduction in imported seals actually found in an archaeological context after the Proto-Palatial period - only one {215} in a Neo-Palatial context – also, it seems, reflects the change in preferred seal forms from elaborate to simple shapes in hard stone in Minoan culture. Even before the Final Palatial period, indigenous scarab shapes are no longer produced and the imports are restricted almost entirely to the rôle of exotic jewellery element rather than as a functional seal. Those imports recovered as surface finds or without provenance on the island cannot be considered empirical evidence for importation at the earliest period they may have been imported. The presence of some Bronze Age jewellery elements in Iron Age contexts, on the other hand, allows for the at least equally strong possibility that these scarabs were in fact imported at that time. We have large numbers of Neo-Palatial to Post-Palatial contexts, but few scarabs found in them, in contrast to the large numbers of other Egyptian imports in these contexts.

At Knossos at least, a fashion for including engraved seals as gems and necklace beads developed in Final Palatial and continued into early End Palatial times; they are virtually the only contexts of these dates. 627 These must have been regarded not as practical objects of use but rather as decorative adornments, possibly with some amuletic function but more probably in some way a visual display of wealth or just possibly status. 628 Such necklaces 629 do

not have any particular or 'formal' arrangement, and the scarabs/scaraboids were employed more as another type of bead of some rarity and therefore value. 630 The Minoans may have viewed the scarabs as pictorial rather than inscribed. This practice probably extended beyond Knossos, but is most clearly seen here.

Virtually all imports are 'design' scarabs, and extremely few have any form of inscribed text, until the New Kingdom when this was the standard face 'design'. The Minoans are importing the types of scarabs with the types of face designs that they themselves preferred, and rejecting the rest. They were uninterested in scarabs or other objects having Egyptian texts. Compare the multitude of 'royal name,' private name and administrative scarabs that appeared in Egypt from late Dynasty XI, and in quantity from late Dynasty XII: not one inscribed scarab appears on contemporary Crete during MM IB-LM IA. The nearest import is the anra scarab (215), that actually appears in an LM IB or even LM II context, and the dubious Piskokephalo ovoid {458}, also likely not before LM IB if it is a misunderstood inscription. Other inscribed objects that, like the anra scarab, themselves predate early Dynasty XVIII (or beginning of LM IB), the Weser statuette {158}, Khyan lid {163} and scarab {542}, all are from wide-ranging contexts or none at all. None need have been imported prior to LM IB and possibly later, like the Katsamba amphora {114} and (Axos) scarab {521}, both naming Thutmose III and thus again certainly not imported before the later LM IB period. By this time, design scarabs were rarely being produced, so contemporary imported scarabs would almost inevitably be inscribed, but even these probably were not valued for their inscriptions. The vast majority, if not all, Minoans would not have been literate in Egyptian hieroglyphs, so these texts whether an amuletic formula or the name of a king or god – would mean nothing to them as texts. These too probably were seen as face designs, just as those of us not literate in Arabic or Chinese would view short design-texts in these scripts merely as intricate designs.

⁶²⁷ Tombs at Sellopoulo (Knossos NN), Zapher Papoura (Knossos OO), Gypsades (Knossos RR) and perhaps Aghia Pelagia include a scarab or scaraboid on a necklace. All were unplundered when excavated.

⁶²⁸ The lack of indigenous scarabs in these periods suggests otherwise, however.

⁶²⁹ As preserved and strung. The practice may have begun earlier and continued later, perhaps even in early communal tholoi, but evidence is difficult to ascertain as the scarabs were found loose.

 $^{^{630}}$ See Appendix, Type II.

APPENDIX TO CHAPTER 7 THE MINOISATION OF EGYPTIAN SCARABS⁶³¹

As with certain stone vessels, 632 some imported scarabs were physically reworked and reused by Minoan artisans, resulting in clearly Minoan products. Nonetheless, their Egyptian origin remains recognisable in whole or in part. Two types of 'conversion' can be noted: 'reworked' by the Minoan artisan, and 'reused' without actual alteration of the scarab itself. They are identified in the present work as Type I and Type II 'conversions.'633

Type I. Conversion by reworking involves some physical carving of the scarab itself, specifically on its face. The scarabs are Egyptian, but the face designs are not. At least two examples, from Aghios Onouphrios **{42}** and Psychro **{502}**, can be recognised. Both are amethyst, with lightly engraved features and a worn surface on the back. In contrast, the scarab faces are not worn, and their face designs are deeply drilled circles of Minoan design. They clearly must have been reused imports, each probably part of a composite piece of jewellery (perhaps a necklace, bracelet, pectoral or ring) that had been disassembled for reuse of its component parts, not necessarily by Minoan artisans. A possible third piece {388}, in 'agate' and said to be from Malia, has a deeply cut face typical of MM II-III but the scarab itself is not Minoan. It also is not Egyptian or Canaanite, and its origin is unknown.

Such composite jewellery pieces are well known in Egypt, ⁶³⁴ and are set in mounts of gold or other metal. The scarabs made for use in this manner inevitably are

in some hard stone and most often are not engraved on the face. Materials include carnelian, glass, green feldspar, green and red jasper, lapis lazuli, obsidian and rock crystal, although amethyst is the most popular. The inscription, if any and usually on rings, would be included on a base plate of precious metal, usually gold, in which the scarab was set and which covered its face. Side markings are non-existent or only summary, as the setting normally covers this surface area completely. A string-hole is not added if it is not required, such as for pectorals or bracelets where the scarab is attached by other means.

Probably the blank face was a perfect opportunity for the Minoan artisan, who then added his own face design, and possibly also the string-hole if one was lacking. Most likely, however, these scarabs already had string-holes and were strung as a bead on an Egyptian necklace, as a swivel ring, or other jewellery item. Despite a lack of context for all three scarabs, their reworking can be dated by their face design to the Proto-Palatial period, which generally is contemporary with later Dynasty XII—early XIII when the use of amethyst and other hard stones for scarabs and other jewellery was extremely popular in Egypt.

This 'minoanisation' of an imported Egyptian object apparently is a feature unique to Crete at this time, ⁶³⁷ and even the direct 'minoanisation' of Egyptian stone vessels seems not to have begun until the later LM IA period, on present evidence. ⁶³⁸ Nonethe-

An earlier expanded version of the present appendix, incorporating scarabs and other amuletic jewellery recovered throughout the Aegean and Cyprus and placing the present material in its wider context, was presented at the Sixth International Congress of Egyptology in Turin in September 1991; see PHILLIPS 1991b. See now also PHILLIPS 2004:166 fig. 6, 167.

⁶³² See Chapter 4, Appendix B.

⁶³³ See Annexe and Distribution Map 20 for the specific scarabs and scaraboids identified.

⁶³⁴ See, for example, ALDRED 1978:pl. 19, 24 (pectorals of Princesses Sit-Hathor and Sit-Hathor-Yunet, Dynasty XII), 66, 69.upper, 76, 79:upper, 80, 82 (pectoral of Tutankhamun, Dynasty XVIII), 69 (bracelets of Tutankhamun); MARTIN forthcoming:ms. 225–226 #409–410 (necklaces), 226–227 #412 (bracelet), 228 #415 (ring). For examples of scarabs used as beads in Egypt, see BOURRIAU 1988:150–153 #164:a, 167–168, 170; ANDREWS 1990:96 fig. 74.b. Most are uninscribed.

⁶³⁵ A selection of uninscribed mainly amethyst Egyptian scarabs is provided by Tufnell 1984:38, 40–41 fig. 15; Martin forthcoming:ms. 225–228 #408–416. Also see MMA 13.180.9–10, 19.3.102–104, .132, .156–157, 49.159.3. Scarabs of 'steatite' and other softer materials would also be set as swivel rings, but with a carved face that is the owner's seal.

⁶³⁶ 'Blank' scarabs in less valuable and softer materials such as 'steatite' and related materials probably were the unused stock of funerary and temple workshops (MARTIN forthcoming:ms. 224), never inscribed as they were never sold.

Oaphna Ben-Tor (personal communication 19 December 2001) informs me that some amethyst scarabs recovered on Canaanite sites also are Egyptian but with a Canaanite face design, citing Tufnell 1984:II:40 fig. 15.2, 7, 9, 12.

⁶³⁸ See Phillips 2001; also Chapter 4, Appendix B.

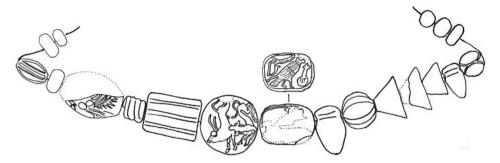


Fig. 14 Necklace as reconstructed around neck of 'man' interred in Zapher Papoura chamber tomb 99, including scarab **{265}** (Evans 1905:pl. XC/fig. 101)

less, some amethyst scarabs/scaraboids recovered suggest the practice continued on, or was transferred to, the mainland in the Neo-Palatial period. 639

The overly large blue-glazed 'white steatite' scarab trimmed with inlaid gold {542}, of late Dynasty XII date, may be another example. Some of its features are unusual for an Egyptian scarab, including the use of gold trim on a scarab of this material at this date, 640 and the overly-elaborate S-scroll border that apparently is without parallel, 641 but its high quality and late Dynasty XII date mark it as Egyptian, and might be another of the very limited group of imported scarabs later inscribed on the face by another artisan, possibly Minoan. Such a proposition is dependent on the questionable identification of whether its script is related to Linear A; if so, its alteration would fall within MM II–III.

This form of conversion seems limited to the Proto-Palatial and Neo-Palatial period(s). As all recognised examples are without definable context, it is difficult to be more precise.

One further scaraboid should be mentioned although, as a Minoan product, it is not a converted import. This is the hard stone scaraboid from

Koumasa {364} that, presumably at some point after its manufacture but before its deposition in the tholos, was reduced from an ovoid to a rhomboidal shape by deliberate removal of its head and tail.

Type II. 'Conversion' by reuse, in contrast, involves imported scarabs not physically reworked by Minoan artisans but merely reused in Minoan jewellery arrangements. Such reuse can only be surmised, unless the scarab itself is recovered in the original arrangement, which by implication is limited to burial contexts. Unfortunately, due to plundering and other disturbances, the possibility of recovery in this condition is minimal. Two such recovered arrangements, however, were found during excavation of unplundered Knossian tombs at Sellopoulo **(262)** and Zapher Papoura **(265)**. In each case, a single imported scarab was incorporated onto a necklace simply as one of a variety of disparate objects including a number of Minoan engraved seals and bead types, as recovered. The Sellopoulo scarab **{262}** is engraved with the name of Amenhotep III, and was found around the neck of the interred woman, and the Zapher Papoura scarab {265} around the neck of a man (reconstructed by the exca-

⁶³⁹ Another amethyst scarab, likely from Aidonia, has a tethered griffin engraved on its face, and on its sides the figures of a woman and a 'swallow.' Betts 1993:26–27 #5 suggests the entire scarab may be Minoan work, whilst Demakopoulou 1998:73 #B5 provides a "16th c. BC" (= LM IA) dating, but this is unlikely due to its only slightly tapering body and its material, otherwise virtually unknown for Minoan scarabs after MM IB but typical of Egyptian scarabs. Betts notes the frontal notching is wheel-cut, as are the engraved figures, and this feature is highly unusual in Egyptian scarabs. The face and side engravings undoubtedly are Aegean work. This piece bears little relationship to any Minoan scarabs, and more likely is a Mycenaean product; compare with Demakopoulou 1998:100

[#]C28. However, it remains an open question whether it was made from raw stone or an imported scarab.

Further Dynasty XII–early XIII amethyst scarabs, without face design, were recovered in the Vaphio tholos tomb, dated to LH IIA (= LM IB; Demakopoulou 1998:100 #C28) and Tomb I at Peristeria near Pylos, also dated to LH IIA (Korres 1976:476, pl. 266: β – γ). They may be other examples of jewellery components broken up for reuse, but have not been reworked and not found on Crete, so are not included in the present catalogue. The Vaphio example is described as "unfinished."

⁶⁴⁰ Although it is found on hard stone scarabs in cloisonné work, e.g., ALDRED 1978:pl. 32:upper right, 45, 69:lower, 74, 76.

⁶⁴¹ Including in Martin's (1971) base typology.

vator, see Fig. 14). Notably, both are generally contemporary with their tomb context, a point that may or may not be coincidental since only two datable examples of this phenomenon are known. It is clear that neither could have been employed as a seal of any kind as recovered, as each collection (as strung) is quite short. Whilst it is possible that the string was longer than the quantity of beads allows, all contemporary depictions suggest otherwise. Contemporary illustrations do not depict 'informal' necklace arrangements consisting of disparate elements, but rather show repeated patterns of similar beads in formal arrangements. Dickinson has noted problems in correlating funerary jewellery as depicted on frescoes and actual finds, 642 so this is not an entirely confident observation, but reconstructable necklaces of informal arrangement have been recovered from enough in situ burials and from disparate loose beads in graves to be confident that such arrangements did exist. 643 Nonetheless, they must not have been considered ideal since are not depicted in Minoan art, so it seems that they would not have been chosen and worn for their collective decorative quality.

It is possible that the scarabs, and at least some of the other beads found with then, may have had some other intrinsic value to their owner, either some apotropaic or amuletic significance (although this is speculative), or some inherent social significance due to their perceived (and probably quite real) value as recognisable imported goods. The scarabs themselves have little or no other particular inherent value, being of common glazed materials unlike the re-carved semi-precious stones of Type I.

Two almost identical scaraboids also were found in an unplundered but virtually empty LM IIIA1 tomb at Gypsades (Knossos) {275–276}, apparently that of a child. In themselves, they clearly relate to neither of the two imported scarabs found in similar circumstances, but it is worth noting that they too had been strung onto one (or more?) necklaces

together with a disparate collection of other beads. They probably were heirlooms when deposited, as the scaraboids themselves date to MM (IB-)II.⁶⁴⁴ These also are of carnelian, a hard stone and not the 'soft' materials of the imported scarabs. It may be that, by this time, their indigenous origin either was not recognised or was immaterial to the owner. Whether or not this situation contradicts the general contemporeinity of scarab and context for the two imported examples, or whether the two antique carnelian scarabs were used for other and possibly personal reasons, is unknown.

Type II reuse of the scarabs is limited in date to the Final Palatial and End Palatial periods, specifically LM IIIA-B. They also are limited geographically to Knossos and contextually to tombs. This last statement is based on the available and recognised examples and may or may not reflect reality, but its proscribed geographical limits also reflect the vast majority of scarabs on Crete during these periods. 645 Nonetheless, it does fit in quite well with the reuse of a very limited number of Egyptian quasi-amuletic bead forms that is a wider phenomenon in the Aegean in, essentially, the same date range.646 Published descriptions of the recovery of scarabs at Mainland sites rarely specify their find spots and conditions, but it is likely that at least some also may have been incorporated onto necklaces. 647 It is not impossible that the scarabs in earlier burial contexts might also have been strung onto necklaces, although there is no evidence to support this suggestion beyond speculation and the possible inclusion of an Egyptian fly amulet on a presumed necklace in an MM III tomb at Ailias (Knossos) {272}. It is also possible that the pendant/amulets from Isopata (Knossos) depicting 'apes' {245; 256} and perhaps also the frog {246}, interred in the Final Palatial period, were taken from disassembled jewellery pieces, if Evans's presumption of their inclusion on necklace(s) is accepted. Imported cornflower beads also seem to have been

⁶⁴² Dickinson 1994:180.

⁶⁴³ E.g., Sakellarakis and Sapouna-Sakellaraki 1997:II: 621 fig. 664; Karetsou *et al.* 2000:#94, 96.

Radiating Motif,' see Yule 1981:148–149 Motif 26, pl. 18 Motif 26:16. Yule also notes that "subsequent to MM II, [this motif is] undocumented and does not appear to play an important role in the glyptic of the Neo-Palatial age." Similar designs noted by Younger 1973:387 are much more elaborate, and quite rare. An early (EM III–MM IA) example is CMS II.1:#448.

⁶⁴⁵ See Chapter 4.

 $^{^{646}}$ See Phillips 1991b.

⁶⁴⁷ The most apparent are two recovered in Chamber Tomb 526 at Mycenae, of a single woman, which contained only jewellery and is dated to 'LH III.' The two scarabs recovered may have been part of one or possibly two necklace(s). Although not reconstructed as such by the excavator, the scarabs were recovered in a small discrete heap together with a disparate variety of beads of 'stone,' amber, bronze, glass and faience; see Wace 1932:92–94, 92 fig. 38, pl. IX. These were not mentioned in Phillips 1991b. Both scarabs date to Dynasty XIX, and thus the single burial should date no earlier than LH IIIB.

disassembled from Egyptian arrangements and incorporated into Aegean-style jewellery on Crete and elsewhere. 648

The evidence for such non-decorative, and possibly amuletic use of the scarabs, probably with some additional social significance inherent in their inclusion, on Crete (and elsewhere) is scanty. Nonetheless, it does exist, and probably was a more common phenomenon than we can tell in LM IIIA-B Crete and elsewhere in the Aegean. Each individual component bead clearly was chosen for its own perceived value, rather than what we would perceive as the collective visual aesthetics of the necklace as a unit. Other beads included on these necklaces consist of rare, imported and expensive materials such as amber, ivory, carnelian, bronze and gold, as well as locally available rock crystal, faience, glass(?) and steatite. Presumably, these necklaces also were worn during their owner's lifetime, the choice and arrangement of the component pieces of significance only to the wearer or perhaps also the mourners – possibly the reason why they were actually placed on the body itself when it was interred. Their appearance and use on Crete clearly was not derivative of Egyptian fashion.

The only scarab having any chronological value is that from the Sellopoulo tomb {262}, as it is dated to early LM IIIA1, and the scarab is inscribed with the name of Amenhotep III. The tomb also contained a 'developed' LH IIIA1 spouted jar associated with one of the two earlier male interments as an added chronological bonus. This tomb and its limited contents has been a coherent cross-chronological marker since its excavation, and not much more can be said concerning it. Clearly LM IIIA1 (and LH IIIA1) cannot antedate the reign of this pharaoh by much.

It should be noted, however, that the absolute dates of 1417–1379 BC quoted by Popham and Catling for Amenhotep III's reign have since been revised; his regnal dates currently are accepted at about 1390–1352. This is based on the year of his son Akhenaten's death, currently considered to be about 1335 BC. This is 27 years later than the dates quoted by Popham and Catling a quarter-century ago, ⁶⁴⁹ and the alteration affects all other absolute dates they use for events in the Aegean world.

⁶⁴⁸ See Chapter 8. If imported, other beads also probably were treated in the same manner in some cases; see Chapter 9. The imported blue frit scarab {1} and round beads {2} from Aghia Pelagia could also have been used in like manner; their present stringing is modern. Note that most cornflower beads also are from LM IIIA-B tomb contexts, generally contemporary with the Type II reused scarabs. Other Egyptian jewellery components and amulets found on Crete and in the Aegean generally also may have been

 $^{^{649}}$ The dates they quote are those of I.E.S. Edwards, Keeper

of Egyptian Antiquities at the British Museum, and were generally accepted at the time of writing in 1974. Later research has since revised and lowered the regnal dates in what undoubtedly will be an ongoing process. 'Absolute dates' of any individual's reign are, and probably always will remain, approximate to varying extents. The 1335 BC date of Akhenaten's death is one of several 'absolute dates' now generally accepted, which range between 1336 and 1324, but these are unlikely to be lowered much farther in the future. See discussion in {262} and Chapter 3.

ANNEX TO APPENDIX TO CHAPTER 7 REWORKED AND REUSED EGYPTIAN SCARABS

\mathbf{Type}	cat.#	provenance	date	context	reused on
I Reworked by Mino	an artisans:				
	42	Aghios Onouphrios	MM IB?-II	(MM IB?/II-LM I)	
	388*?	Malia	MM IB?-II	none	
	502	Psychro	MM II–III	none	
	542?	Crete NFC	MM II–III?	none	
see also:					
	364	Koumasa	$_{ m MM}~({ m IB?-}){ m IIA}$	EM III-MM IIA	reduced
II Reused in Minoan	arrangements	:			
	1 ?	Aghia Pelagia	NK or later	none (LM IIIA-B?)	necklace?
	262	Sellopoulo	Amenhotep III	LM IIIA1 early	necklace
	265	Zapher Papoura	v. early Dyn. XIX	LM IIIB early	necklace
	275 +	Gypsades	MM (IB?)–II	LM IIIA1	necklace
	276+	Gypsades	MM (IB?)–II	LM IIIA1	necklace

^{*} neither Egyptian nor Minoan piece

Note

See also discussion in Chapters 8–9 and 14; amulet $\{272\}$, pendant/amulets $\{245; 246; 256; 436\}$, amuletic bead $\{529\}$, and 'pendant' $\{576\}$.

⁺ Minoan scaraboid, but used in the same manner

[?] uncertain attribution