### **BEADS: Journal of the Society of Bead Researchers**

Volume 12 Volume 12-13 (2000-2001)

Article 5

1-1-2000

# Stone Beads and Sealstones from the Mycenaean Tholos Tomb at Nichoria, Greece

Nancy C. Wilkie

Follow this and additional works at: https://surface.syr.edu/beads

Part of the Archaeological Anthropology Commons, History of Art, Architecture, and Archaeology Commons, Science and Technology Studies Commons, and the Social and Cultural Anthropology Commons

#### **Repository Citation**

Wilkie, Nancy C. (2000). "Stone Beads and Sealstones from the Mycenaean Tholos Tomb at Nichoria, Greece." *BEADS: Journal of the Society of Bead Researchers* 12: 7-16. Available at: https://surface.syr.edu/beads/vol12/iss1/5

This Article is brought to you for free and open access by SURFACE. It has been accepted for inclusion in BEADS: Journal of the Society of Bead Researchers by an authorized editor of SURFACE. For more information, please contact surface@syr.edu.

## STONE BEADS AND SEALSTONES FROM THE MYCENAEAN THOLOS TOMB AT NICHORIA, GREECE

#### Nancy C. Wilkie

Stone beads and engraved sealstones are among the most common grave goods that accompany Mycenaean burials. At Nichoria in the southwestern Peloponnese of Greece, a tholos tomb, presumably the burial place of the local elite at the site, had been plundered more than once in antiquity before being investigated by archaeologists. Nonetheless, it produced numerous stone beads of rock crystal, amethyst, carnelian, agate, and "steatite." Eleven sealstones, most of which were heirlooms when placed in the tomb, were also found among the disturbed burial offerings.

#### INTRODUCTION

Beads of all types are well known from a variety of Mycenaean (i.e., Late Bronze Age, ca. 1650-1100 B.C.) contexts on the mainland of Greece, although they most commonly appear as grave goods in chamber and tholos tombs. At the site known today as Nichoria (Fig. 1), a tholos tomb, whose beehive-shaped dome had collapsed in antiquity (Figs. 2-4), contained the remains of at least 16 individuals, presumably members of the ruling elite. Numerous grave goods accompanied the burials, including an assortment of stone beads and seals, most of which represent types found elsewhere on the Greek mainland and the island of Crete, although a few are unique.

As is the case with most Mycenaean tombs (Taylour 1990:81), the Nichoria tholos was repeatedly plundered in antiquity. This was done mainly by family members as they prepared the tomb for new burials at various times during its nearly 200-year history (ca. 1375-1200 B.C.), and finally by looters shortly after the last burial was put in place. Although the objects overlooked by the ancient looters provide only a glimpse of the wealth amassed by the local elite who were buried in the tomb, they demonstrate that even a

provincial site such as Nichoria was well within the mainstream of Mycenaean culture and had extensive contacts, either directly or indirectly, with sites elsewhere on the Greek mainland and in the wider Aegean area. The stone seals and beads, in particular, are likely to have been acquired through trade or "gift" exchange with centers on the Greek mainland or Crete where workshops for their manufacture have been identified. Some of the materials, however, such as the amethyst, carnelian, and agate, must have been imported from distant lands; e.g., Egypt and possibly even India (Hughes-Brock 1998:256-257).

#### **SEALSTONES**

Among the most impressive grave goods from the Nichoria tholos are 11 stone bead-seals of agate and carnelian. Either lentoid or amygdaloid in shape, they were pierced to be worn around the neck or wrist, and many, in fact, show signs of wear around their perforations. The seals can be dated on stylistic grounds, and it appears that the majority were engraved well before the tomb was constructed early in the Late Helladic IIIA2 period, ca. 1375 B.C. (Late Helladic is yet another name by which the Late Bronze Age on the Greek mainland is commonly known). Thus, as was often the case with sealstones, these items were already heirlooms by the time they were deposited in the tomb.

The earliest among them is the so-called "talismanic" seal (Pl. ID top) found with the remains of four secondary burials in a shallow cist at the north end of the tomb chamber (Fig. 3, Pit 4). This carnelian amygdaloid, like most talismanic seals, is simply engraved with circular elements made by a tubular

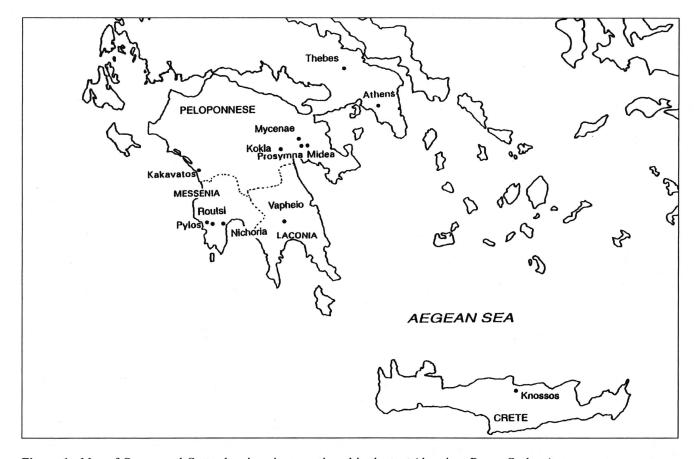


Figure 1. Map of Greece and Crete showing sites mentioned in the text (drawing: Bryan Carlson).

drill and straight lines cut by a saw or wheel. The main motif, one of the most popular on talismanic seals, is that called "foreparts of fish" (Kenna 1969:Plate 8). A cross-rosette pattern fills the central area. There is no iconographic parallel for this seal, which is to be expected since the exact repetition of talismanic motifs, especially specific combinations of them, is very rare.

Talismanic seals seem to have originated in Crete where they were made from Middle Minoan III (i.e., Middle Bronze III on Crete) until the time of the Late Minoan IB destructions, ca. 1750-1450 B.C. (Betts 1974:312; Onassoglou 1985:194). The seal from the Nichoria tholos is probably one of the latest to be engraved. Even more importantly, it comes from one of the latest Mycenaean contexts for seals with talismanic motifs.

Noting that few impressions are known from talismanic seals, Kenna (1969) suggested that their function was magical and that the motifs engraved on

them were responsible for their magical efficacy. Boardman (1970:43, 1972), however, has pointed out that the use of talismanic seals to make impressions was more common than Kenna either recognized or admitted, so that their use as talismans or amulets is open to question.

Another possibility is that talismanic seals carried meaning, either phonetically or in broad symbolic concepts due to the combination of motifs engraved on them (Onassoglou 1985); but this idea has not been widely accepted. In any event, the talismanic seal from the Nichoria tholos seems to have been highly valued since it, unlike most of the other seals from the tholos, was set in gold caps, adding to the seal's aesthetic appeal and serving to protect its perforation from wear.

Also among the remains of the secondary burials in Pit 4 were four large agate lentoids (Pls. ID bottom, IIA, IIB top) of similar size and material. Two depict a lion attacking a bull and two show a pair of recumbent



Figure 2. The Nichoria tholos after excavation, looking northeast (photo: Nancy Wilkie).

bulls, both common Mycenaean and Minoan motifs. Despite their similar motifs, these seals were probably not produced in the same workshop or, at any rate, not engraved by the same artist, since they exhibit different stylistic and technical qualities.

The earliest seal in this group (Pl. ID bottom) has been dated to the Late Helladic IIA period, ca. 1500 B.C. (Younger 1978:294, 1984:48), and so may have been engraved as much as a century before the tomb was constructed. It shows a bull in a seated position, with its legs drawn up beneath it and its head tilted back. The lion stands on the back of the bull, attacking its exposed throat from behind. A second seal (Pl. IIA top) displays the more common version of this motif, with the bull shown in a flying gallop and the lion attacking at the center of its back. The lion is depicted with large frontal eyes, made with a tubular drill, and an elongated tongue. It, like the other pair of agate lentoids from the cist, was probably made in the mid-15th century B.C. (Younger 1985a:66, 68).

Although similar to seals engraved with the common motif of recumbent bulls from tombs at Mycenae, Thebes, and Vapheio (Fig. 1), one of the seals from Nichoria with this motif is unusual in that it depicts the bull in the foreground in profile, yet its horns are full front (Pl. IIA bottom). The other (Pl. IIB top) shows the profiled bull in the more normal fashion with its horns also in profile. Technically, the former sealstone is also unusual in its "curious use of three dots for the front of the mouth" and in the outline around its circular eye socket (Younger 1985a:65).

The similarities in size, shape, material, and motif among these four seals suggest that they were acquired by a single individual who may have valued them as gems rather than as seals. The collecting of sealstones seems to have been a peculiarly Mycenaean—as opposed to Minoan—habit, as evidence from other mainland tombs suggests. The largest group of sealstones accompanying a single burial was uncovered in the tholos tomb at Vapheio in Laconia (Fig. 1) where 12 sealstones were found beside each

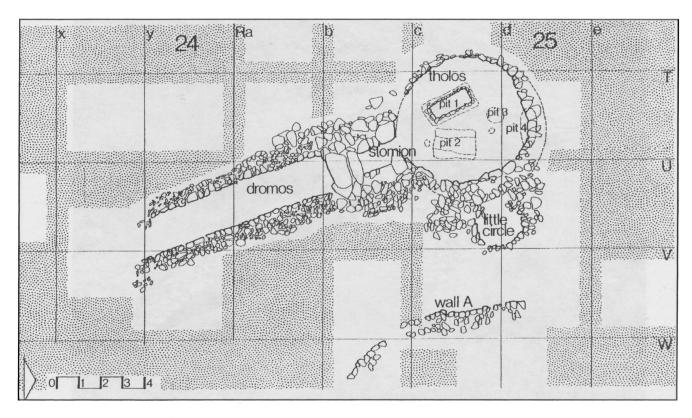


Figure 3. Plan view of the tholos (drawing: Bryan Carlson).

hand (Tsountas 1889:147; Younger 1973b). Likewise, the deceased in Tholos Tomb 2 at Routsi in Messenia (Fig. 1) held 12 sealstones in his hands (Marinatos 1957a, 1957b), and a silver cup on the breast of the individual in the Midea tholos (Fig. 1) contained six lentoid seals and four bronze rings (Persson 1931:32-33). Although Boardman (1970:56) sees such collecting as a matter of display more than of connoisseurship among the Mycenaeans, Ingo Pini (1990:pers. comm.) does not agree, suggesting instead that an individual may have owned, and presumably used, more than one sealstone during his or her lifetime.

The final seal from Pit 4 is a carnelian amygdaloid that depicts two water birds (Pl. IIB bottom) and has a faceted back. It is engraved in what has been called the developed Cut Style (Betts and Younger 1982; Boardman 1970:48; Younger 1985b:283-284) in which only straight cuts or grooves are utilized, so that curved lines and rounded edges result simply from the convex shape of the stone. Seals of this style were made in Crete in the period prior to the Late Minoan IIIA destruction of the palace at Knossos, ca. 1375 B.C. (Younger 1985b:283).

Also in the Cut Style are a small carnelian lentoid (Pl. IIC top) and a somewhat larger agate lentoid (Pl. IIC bottom), both of which depict a griffin with outstretched wing. Despite their similar motifs, the two seals may not have belonged to the same individual since one came from the fill of one of the shaft graves cut into the floor of the tomb chamber (Fig. 3, Pit 1), while the other was among the disturbed deposits strewn across the floor of the tomb. Furthermore, the two seals exhibit differences in workmanship. On the larger seal, tubular drill marks depict the eye and hooves of the griffin. They also decorate the wing of the griffin and the plant fill in the foreground. The seal from Pit 1, on the other hand, shows only limited use of the drill on the griffin's eye.

A common Mycenaean and Minoan motif, the griffin is thought to have functioned as a protective genius due to its association with thrones, columns, and altars (Dessenne 1957; Tamvaki 1974). A similar function has been attributed to the so-called Minoan genius depicted on the agate amygdaloid (Pl. IID top) found in the disturbed fill of the other shaft grave (Fig. 3, Pit 2) cut into the tomb chamber's floor. Younger (1986:131) has assigned this seal to his "Spectacle-

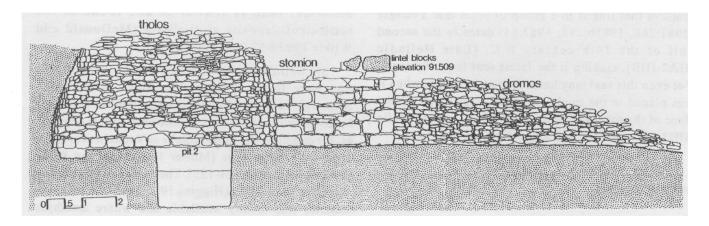


Figure 4. Section through the tholos (drawing: Bryan Carlson).

Eye Group" which he dates to Late Minoan/Late Helladic IIIA1.

The genius is depicted in the usual fashion with the head of an ass, a pinched-in "wasp" waist and fringe along its back. It stands upright, holding a single-handled libation jug in its paws. The column before which it stands may represent the deity for whom the libation was intended. Unlike many of the motifs on Mycenaean and Minoan sealstones, depictions of the Minoan genius do not have a standard form (Crouwel 1970; Gill 1964, 1970; Stürmer 1985; Van Straten 1969). The combination of genius, jug, and pillar as depicted on this seal thus has no exact parallel.

The most unusual sealstone from the Nichoria tholos is the carnelian lentoid that depicts the full-face portrait of a beardless male (Pl. IID bottom). It has been claimed to be "so different from any Bronze Age seal hitherto known that, had it appeared in a private collection or come onto the market without authentic provenience or history, it would most certainly have been widely condemned as a forgery" (Betts 1981:17, see also 1980:23).

Only one other portrait gem has been recovered from a mainland Mycenaean context: the much earlier miniature amethyst lentoid from Grave Gamma of Grave Circle B at Mycenae (Mylonas 1972:Plate 60b; Sakellariou 1965:Number 5). It depicts a bearded man in profile, with long hair hanging over the back of his neck and onto his forehead. Opinions vary as to whether or not this seal should be regarded as a

portrait, although Boardman's (1973:117) view that the concept of true portraiture was a late development in Greek art, and one that was unknown to artists of the Late Bronze Age, seems to prevail.

The portrait seal is the only one from the tholos that shows a great deal of wear, with one large and several small chips along the edge. Because it is pierced along the horizontal axis of the design rather than vertically as is most common, this seal may have been worn around the neck of its owner rather than on the wrist in the more usual fashion (Younger 1977:146-149). Perhaps it was strung in a necklace with the unusual rock crystal ring and "beetle" beads (Pl. IIIA top) that were found in close proximity to it among the disturbed deposits in the northwestern quadrant of the tomb chamber's floor (see below). Necklaces incorporating sealstones along with other types of beads are not unknown from Mycenaean contexts. For example, according to Tsountas (1889:146), the cist in the Vapheio tholos contained a necklace made up of 80 amethyst beads and two sealstones.

Due to the lack of parallels, the date of manufacture of the portrait seal from Nichoria is uncertain. However, the simple bold lines of the hair and the lack of elaboration with the tubular drill suggest that it should be associated with seals like those made in the Cut Style described above.

The final sealstone from the Nichoria tholos is a small carnelian lentoid depicting two goats (Pl. IIIA top) that was found in the disturbed fill of Pit 2 (Fig. 3).

The petite size and dainty style of this seal are notable features that link it to a group of seals that Younger (1981:268, 1985b:288, 1987:64) dates to the second half of the 14th century B.C. (Late Helladic IIIA2-IIIB), making it the latest seal from the tomb. Yet even this seal may have been an heirloom when it was placed in the tomb, since the final burial on the floor of the tomb chamber was made in Late Helladic IIIB2 (i.e., near the end of the 13th century B.C.).

#### STONE BEADS

Although beads of rock crystal are well known from Mycenaean and Minoan contexts, the shapes of those from the Nichoria tholos are unusual (Pl. IIIA bottom). There are no known parallels for the ring-shaped beads, and "beetle-shaped" beads only occur in glass with gold foil coverings (Haussoullier 1878:221-222). Although unworked pieces of rock crystal have been found in workshops at Thebes (Demacopoulou 1974:169, 173, Fig. 7; Keramopoullos 1930:35-36, Figs. 3-4), the material is more common in Crete. This, combined with the Minoan penchant for creating unusual pieces of jewelry (Hughes-Brock 1989:pers. comm.), makes it likely that both the ring and "beetle" beads are of Cretan manufacture. Because all of the rock-crystal beads were found lying near one another among the disturbed deposits on the tomb chamber's floor, it is likely that they were originally strung together in a single necklace.

Of the 38 roughly cut, spherical beads made of carnelian (Pl. IIIB top), all but one were recovered from the disturbed fill of Pit 2. They too probably thus once formed a single strand. The poor workmanship exhibited by these beads is most noticeable in the ridges that remain around their equators. In addition, the quality of the stone is poor, unlike that of the considerably smaller, well-cut spherical carnelian bead found in Pit 4. This difference in workmanship may reflect a difference in date, since Blegen (1937:288) observed that at Prosymna, the more roughly cut spherical carnelian beads are typical of Late Helladic III, while the better-worked beads are somewhat earlier.

Two additional carnelian beads were also recovered: a biconical specimen from the tomb chamber's floor, and a well-carved amygdaloid from

Pit 2. Both shapes are well known, and in fact the biconical bead is similar to one found in the settlement deposits at Nichoria (McDonald and Wilkie 1992:652, No. 2017).

Six well-carved spherical amethyst beads (Pl. IIIB top) were found at various locations in the tomb. Although common in Mycenaean tombs, amethyst beads normally derive from somewhat earlier contexts as, for example, the tholos tombs at Vapheio (Tsountas 1889:144), Kakovatos (Müller 1909:295), and Pylos (Blegen et al. 1973:124-125). The source of these beads may have been Egypt (Higgins 1980:36), where the raw material was locally available and where amethyst beads were popular during Middle and New Kingdoms.

The large, carefully carved and polished prismatic agate (Pl. IIIB bottom) found in Pit 4 is unusual in that none of its three circular faces, set off by shallow grooves, is engraved. Three-sided agate prisms are normally found as bead-seals in Mycenaean contexts where they have been dated as late as Late Helladic IIIA1, ca. 1400 B.C. (Younger 1973a:172). The bead is mounted on a hollow bronze shaft which has a gold cap with gold granules surrounding the perforation at its preserved end. Remains of plant fiber were found in the perforation.

#### STEATITE "CONULI"

Also among the grave goods from the Nichoria tholos are three stone objects that may or may not have served as beads. In the literature, these objects are often said to be made of steatite and/or serpentine, yet the two materials are quite different in composition and hardness. Since the conuli from the tholos were not examined by a geologist, they, like all of the other stone conuli from the settlement, have been labeled "steatite" as a matter of convenience.

Suggestions for the use to which such conuli might have been put range from loomweights, spindle whorls, buttons, and beads to dress weights (Iakovidis 1977). While those from the Nichoria tholos are typical of the shanked variety, which began in Late Helladic IIIA2 and was common from Late Helladic IIIB on (Iakovidis 1977:113), nothing can be said about the way in which these particular objects were used since they come from disturbed contexts within the tomb.

Their use as spindle whorls has been rejected by Carington Smith (1992:685) because their holes are too small to have accommodated a spindle. In fact, of the approximately 90 steatite conuli from the settlement deposits at Nichoria, only 10 or 11 have large enough holes and sufficient weight to have functioned as spindle whorls.

Evidence from tombs elsewhere in Greece provides suggestions as to how the steatite conuli may have been used. For example, Tsountas (1897:174) proposed that the 160 conuli found in a single tomb at Mycenae might have been buttons, yet there is no evidence that Mycenaeans wore clothing suitable for such large and heavy buttons. Instead, it has been pointed out that similar objects were used as beads at Tell el Amarna, an Egyptian site contemporary with the Late Bronze Age of Greece and Crete (Pendlebury 1937-38:54). Carington Smith (1992:686), however, points out that the sheer weight of such beads makes this suggestion improbable, at least for the group of 160 conuli from Mycenae. Furthermore, no Mycenaean burials have been found with a mass of steatite conuli arranged in such a way as to imply that they once formed a necklace.

Instead, Carington Smith agrees with Iakovidis' (1977) suggestion that at least some of these objects were used as hem weights for dresses. This idea is supported by the discovery of 11 conuli around the legs of the deceased in Tomb 16 at Perati near Athens (Iakovidis 1980:78), and their depiction around the hem of the dress of one of the women on the fresco from Room 31 of the Cult Center at Mycenae (Rehak 1992:Plate XIIa).

A single conulus, on the other hand, might have had many uses. For example, steatite conuli found in association with bronze points in tombs on Crete may have belonged to hairpins (Hood, Huxley, and Sandars 1958-59: 246, 251), a use also proposed for glass-paste conuli found in conjunction with glass-paste pins (Dimopoulou-Rethemiotaki and Rethemiotakis 1978:104-106).

Finally, conuli may have been attached as weights to the ends of belts, in the manner depicted in a fresco from Akrotiri on Santorini (Marinatos 1972:40). Such an interpretation is supported by evidence from two burials in the Athenian Agora where a single conulus in one instance and three in another were found near the waists of the skeletons (Immerwahr 1971: 220-221).

#### **CONCLUSION**

Because all of the burials in the Nichoria tholos were disturbed in antiquity, it has not been possible to determine exactly how particular beads or sealstones were used. Nor can they be associated with particular individuals. Both males and females, ranging in age from young adults to those 50-60 years of age, are represented among the various skeletal remains (Wilkie 1992:256, Table 5-9), and stone beads similar to those from the Nichoria tholos are found with both male and female burials elsewhere in Mycenaean Greece and Minoan Crete.

In Mycenaean and Minoan art, it is women more often than men who are shown wearing bracelets and necklaces, some of which incorporate sealstones along with other types of beads (Younger 1977:147-149, 1992:272-273). Because the women who wear sealstones often appear to be involved in some sort of ritual, Younger (1992:276) has proposed that they were priestesses. Although this suggestion is intriguing, the disturbed state of the burials in the Nichoria tholos makes such an interpretation for any of the remains found there mere conjecture. (For a recent summary of the evidence concerning the use of Mycenaean beads, see Hughes-Brock 1998.)

The inclusion of grave goods among the skeletal remains of the four secondary burials in Pit 4 is a peculiarity of the Nichoria tholos that is worth noting. Because all the items are quite small, their incorporation in the pit fill was probably unintentional. They easily could have been overlooked by those responsible for reburying the fragmentary remains of the four individuals found in Pit 4.

A slightly different situation pertained in the Kokla tholos (Fig. 1), where a few objects of gold, silver, ivory, bronze, glass paste, and stone were recovered, but there was no trace of human skeletal material (Demacopoulou 1990). Perhaps the relatives of the deceased overlooked some of the smaller grave goods while clearing the tomb for a new burial, which was subsequently never interred. Years later, these reclaimed objects may have found their way into another tomb, this time as heirlooms, as happened with most—if not all—of the sealstones and at least some of the other beads from the Nichoria tholos.

#### **ACKNOWLEDGEMENTS**

The Nichoria tholos was excavated by the Minnesota Messenia Expedition (W.A. McDonald, Director) during the years 1971-1973. Excavation was supervised by the author in collaboration with T. Karageorga (1972) and S. Parlama (1973) of the Greek Archaeological Service. Helen Hughes-Brock undertook the initial study of the beads from the Nichoria tholos and gave me invaluable advice as I prepared their final publication.

#### REFERENCES CITED

#### Betts, J.H.

1974 Review of The Cretan Talismanic Stone in the Late Minoan Age, by V.E.G. Kenna. Bibliotheca Orientalis 31:311-314.

#### Betts, J.H. (ed.)

- 1980 Corpus der minoischen und mykenischen Siegel. Vol.
   10. Die Schweizer Sammlungen. Akademie der Wissenschaften und der Literatur (Mainz), Berlin.
- 1981 Some Early Forgeries: The Sangiorgi Group. In Studien zur minoischen und helladischen Glyptik, edited by W.D. Niemeier, pp. 17-35. Corpus der minoischen und mykenischen Siegel. Beiheft 1. Mann, Berlin.

#### Betts, J.H. and J.G. Younger

1982 Aegean Seals of the Late Bronze Age: Masters and Workshops. Introduction. *Kadmos* 21:104-121.

#### Blegen, C.W.

1937 Prosymna: The Helladic Settlement Preceding the Argive Heraeum. Vol. I. Cambridge University Press, Cambridge.

## Blegen, C.W., M. Rawson, Lord W. Taylour, and W.P. Donovan

1973 The Palace of Nestor at Pylos in Western Messenia.
Vol. III. Princeton University Press, Princeton.

#### Boardman, J.

- 1970 Greek Gems and Finger Rings. Thames and Hudson, London.
- 1972 Review of The Cretan Talismanic Stone in the Late Minoan Age, by V.E.G. Kenna. Journal of Hellenic Studies 22:139.
- 1973 The de Jong Gems. Antichità Cretesi. Studi in Onore de Doro Levi. Vol. I. Cronache di Archeologia 12. Catania.

#### Carington Smith, J.

1992 Spinning and Weaving Equipment. In Excavations at Nichoria in Southwest Greece. Vol. II: The Bronze Age Occupation, edited by W.A. McDonald and N.C. Wilkie, pp. 674-711. University of Minnesota, Minneapolis.

#### Crouwel, J.H.

1970 The Minoan Genius in Mycenaean Greece: A Review. *Talanta* (Leiden) 2:23-31.

#### Demacopoulou, K.

- 1974 A Mycenaean Jewellery Workshop in Thebes. Athens Annals of Archaeology 7:162-173.
- 1990 The Burial Ritual in the Tholos Tomb at Kokla, Argolis. In Celebrations of Death and Divinity in the Bronze Age Argolid, edited by R. Hägg and G.C. Nordquist, pp. 113-123. Svenska Institutet i Athen, Stockholm.

#### Dessenne, A.

1957 Le griffon crétomycénien: Inventaire et remarques.

Bulletin de correspondance hellénique
81:203-215.

#### Dimopoulou-Rethemiotaki, N. and G. Rethemiotakis

1978 A Late Minoan Cemetery at Metochi Kalou of Heraklion. Archaiologikon Deltion 33A:40-109.

#### Gill, M.A.V.

- 1964 The Minoan Genius. Mitteilungen des Deutschen Archäologischen Instituts: Athenische Abteilung 79:1-21.
- 1970 Apropos the Minoan "Genius." American Journal of Archaeology 74:404-406.

#### Haussoullier, B.

1878 Catalogue descriptif. Des objets découverts à Spata. Bulletin de correspondance hellénique 2:185-228.

#### Higgins, R.A.

1980 Greek and Roman Jewellery. 2nd ed. University of California Press, Berkeley.

#### Hood, M.S.F., G. Huxley, and N. Sandars

1958-59 A Minoan Cemetery on Upper Gypsades. Annual of the British School of Archaeology at Athens 53-54:194-262.

#### Hughes-Brock, H.

1998 Greek Beads of the Mycenaean Period (ca. 1650-1100 BC): The Age of the Heroines of Greek Tradition and Mythology. In Beads and Bead Makers: Gender, Material Culture, and Meaning, edited by L.D. Sciama and J.B. Eicher, pp. 247-271. Berg, New York.

#### Iakovidis, S.E.

- 1977 On the Use of Mycenaean "Buttons." Annual of the British School of Archaeology at Athens 72:113-119.
- 1980 Excavation of the Necropolis at Perati. University of California, Institute of Archaeology, *Occasional Paper* 8. Los Angeles.

#### Immerwahr, S.A.

1971 The Neolithic and Bronze Ages. The Athenian Agora, Vol. XIII. American School of Classical Studies at Athens. Princeton.

#### Kenna, V.E.G.

1969 The Cretan Talismanic Stone in the Late Minoan Age. Studies in Mediterranean Archaeology 24. P. Aström, Lund.

#### Keramopoullos, A.D.

1930 The Industries and Trade of Kadmos. Archaiologiki Ephimeris: 29-58. In Greek.

#### Marinatos, S.

1957a Excavations near Pylos. Antiquity 122:97-100.

- 1957b A Magnificent Find of Homeric Gold and Gems from an Unplundered Tomb at Nestor's Palace Including Superb Inlaid Daggers. Illustrated London News 6:540-543.
- 1972 Excavations at Thera. Vol. V. Archaiologiki Hetaireia, Athens.

#### McDonald, W.A. and N.C. Wilkie (eds.)

1992 Excavations at Nichoria in Southwest Greece. Vol. II: The Bronze Age Occupation. University of Minnesota, Minneapolis.

#### Müller, K.

1909 Alt-Pylos II: Die Funde aus den Kuppelgräbern von Kakovatos. Mitteilungen des Deutschen Archäologischen Instituts: Athenische Abteilung 34:269-328.

#### Mylonas, G.E.

1972 O Tafikos Kiklos B ton Mikinon. Vol. 2. Bibliothiki tis en Athinais Archaiologikis Hetaireias 73. Athens.

#### Onassoglou, A.

1985 Die "talismanischen" Siegel. Corpus der minoischen und mykenischen Siegel. Beiheft 2. Mann, Berlin.

#### Pendlebury, H.

1937-38 Miscellaneous. In Exploration of the Lasithi Plain, by J.D.S. Pendlebury and M.B. Money-Coutts. Annual of the British School at Athens 38, Part 1:53-56.

#### Persson, A.W.

1931 The Royal Tombs at Dendra Near Midea. C.W.K. Gleerup, Lund, Sweden.

#### Rehak, P.

1992 Tradition and Innovation in the Fresco from Room 31 in the "Cult Center" at Mycenae. *In* Eikon. Aegean Bronze Age Iconography: Shaping a Methodology, edited by R. Laffineur and J. L. Crowley, pp. 39-62. *Aegaeum* 8. Université de Liège, Liège.

#### Sakellariou, A.

 Corpus der minoischen und mykenischen Siegel. Vol.
 Die minoischen und mykenischen Siegel des Nationalmuseums in Athen. Akademie der Wissenschaften und der Literatur (Mainz), Berlin.

#### Stürmer, V.

1985 Schnabelkannen: Eine Studie zur darstellenden Kunst in der minoisch-mykenischen Kultur. In L'Iconographie Minoenne, edited by P. Darcque and J.-C. Poursat. Bulletin de correspondance hellénique, Supplément XI:119-134. Boccard, Paris.

#### Tamvaki, A.

1974 The Seals and Sealings from the Citadel House Area: A Study in Mycenaean Glyptic and Iconography. Annual of the British School at Athens 69:259-293.

#### Taylour, Lord William

1990 The Mycenaeans. Thames and Hudson, London.

#### Tsountas, C.

1889 Excavation of the Tomb at Vapheio. Archaeologiki Ephimeris: 136-172. In Greek.

#### Tsountas, C. (transl. by J.I. Manatt)

1897 The Mycenaean Age. Reprinted in 1969. Argonaut, Chicago.

#### Van Straten, F.T.

1969 The Minoan "Genius" in Mycenaean Greece. Bulletin anticke beschaving 44:110-121.

#### Wilkie, N.C.

1992 The MME Tholos Tomb. In Excavations at Nichoria in Southwest Greece. Vol. II: The Bronze Age Occupation, edited by W.A. McDonald and N.C. Wilkie, pp. 231-344. University of Minnesota, Minneapolis.

#### Younger, J.G.

1973a Towards the Chronology of Aegean Glyptic in the Late Bronze Age. Unpublished Ph.D. dissertation. University of Cincinnati.

- 1973b The Vapheio Gems: A Reconsideration of the Find-spots. American Journal of Archaeology 77:338-340.
- 1977 Non-Sphragistic Uses of Minoan-Mycenaean Sealstones and Rings. *Kadmos* 16:141-159.
- 1978 The Mycenae-Vaphéio Lion Group. American Journal of Archaeology 82:285-289.
- 1981 The Island Sanctuaries Group: Date and Significance. In Studien zur minoischen und helladischen Glyptik, edited by W.D. Niemeier, pp. 263-272. Corpus der minoischen und mykenischen Siegel. Beiheft 1. Mann, Berlin.
- 1984 Aegean Seals of the Late Bronze Age: Masters and Workshops. III: The First Generation Mycenaean Masters. Kadmos 23:38-64.
- 1985a Aegean Seals of the Late Bronze Age: Stylistic Groups. Almond- and Dot-Eye Groups of the Fifteenth Century B.C. Kadmos 24:34-73.
- 1985b The Sealstones. In The Archaeology of Cult, edited by C. Renfrew, pp. 281-297. Annual of the British

- School of Archaeology at Athens, Supplementary Volume 18. Thames and Hudson, London.
- 1986 Aegean Seals of the Late Bronze Age: Stylistic Groups. Minoan Groups Contemporary with LMIIIA1. Kadmos 25:119-140.
- 1987 Aegean Seals of the Late Bronze Age: Stylistic Groups. Fourteenth-century Mainland and Later Fourteenth-century Cretan Workshops. *Kadmos* 26:44-73.
- 1992 Representations of Minoan-Mycenaean Jewelry. In Eikon. Aegean Bronze Age Iconography: Shaping a Methodology, edited by R. Laffineur and J.L. Crowley, pp. 275-293. Aegaeum 8. Université de Liège, Liège.

Nancy C. Wilkie Classics Department Carleton College Northfield, Minnesota 55057

**Plate ID.** Nichoria: **Top:** Carnelian amygdaloid sealstone with talismanic design; length: 27 mm. **Bottom:** Agate lentoid sealstone-lion attacking a bull; diameter: 26-28 mm (all Nichoria photos by Duane Bingham).







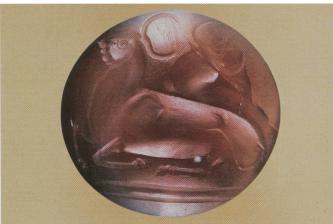


Plate IIA. Nichoria: Top: Agate lentoid sealstone depicting a lion attacking a bull; diameter: 26.5 mm. Bottom: Agate lentoid sealstone portraying recumbent bulls; diameter: 28-30 mm.

Plate IIC. Nichoria: A carnelian (top) and an agate (bottom) lentoid sealstone showing a winged griffin. Diameter of upper specimen: 15-16 mm.; diameter of lower specimen: 20-23 mm.









Plate IIB. Nichoria: Top: Agate lentoid sealstone displaying recumbent bulls; diameter: 26-28 mm. Bottom: Carnelian amygdaloid sealstone with faceted back depicting two water birds; length: 24 mm; width: 14mm; thickness: 8mm.

Plate IID. Nichoria: Top: Agate amygdaloid sealstone depicting a Minoan genius; length: 24 mm; width: 11mm; thickness: 7.5 mm.

Bottom: Carnelian lentoid sealstone exhibiting a full-face male "portrait;" diameter: 17 mm; thickness: 7 mm.

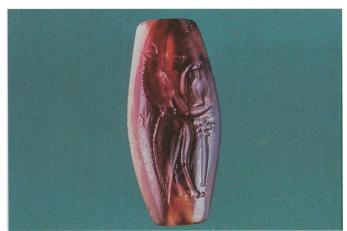








Plate IIIA. Nichoria: Top: Carnelian lentoid sealstone depicting two goats in a heraldic composition; diameter: 12-12.5 mm; thickness: 5mm. Bottom: Rock crystal "beetle" and ring beads; ring bead diameter: 12-16 mm; beetle-bead length: 15-17 mm.





Plate IIIB. Nichoria: Top: Carnelian and amethyst beads; diameter: 3.5-13 mm. Bottom: Prismatic agate bead; width of each side: 18 mm; length: 18 mm.