

## The Mallia 'wasp' pendant reconsidered

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*Over the years the small, golden pendant from the Minoan settlement of Mallia, in Crete, has attracted continuing interest, not so long ago in our own pages (Richards, 1974; 1975, and Davenport, 1975, in the bibliography below). Professor Kenneth Kitchell, Department of Classical, Germanic and Slavic Languages, Louisiana State University, Baton Rouge, Louisiana 70803, offered us a note on this pendant some two years ago. It then became the basis of a paper read to the annual meeting of the AIA at Vancouver in 1979. This article has grown out of Professor Kitchell's research into the religion of Minoan times and we are glad to present it as an article for our readers, for whose convenience we have, for the second time, printed a photograph of this exquisite piece of insectile jewellery. Hornets? Wasps? Bees? Read on.*

The small, golden pendant from the Minoan settlement of Mallia on the island of Crete (PL. I) is one of the best known pieces of jewellery from Minoan, if not all, prehistoric times. First published in 1930 (Demargne, 1930), it was unearthed in the Chrysolakkos cemetery area of the palace at Mallia. Although dating is difficult, the piece is usually assigned a date in Middle Minoan times, generally to MM I, between roughly 2000 and 1700 BC (Demargne, 1930, 419; Evans, 1935, 75–6; Higgins, 1967, 47, 199).

While the pendant's beauty is indisputable, its artistic merits have often been accorded slight consideration in the flurry of interest generated by attempts to identify beyond doubt the type of insects depicted on it. These attempts have led to a multiplicity of identifications which, as I hope to show, are at fault, not due to some lack of entomological knowledge, but simply because they fail to treat the piece as a work of art, affected by artistic aims and traditions which, when properly understood, lead us finally to the truth of the matter.

The general scheme of the pendant is clear. We have two insects of the wasp, hornet, or bee type which face each other. Between their feet is a granulated ball and between their mouths a smaller, smooth ball that is generally overlooked when the piece is discussed. The artist has taken some pains to differentiate these items and their identification is crucial to a proper understanding of the pendant. To this I shall return below. First,

however, are the anatomical problems that have so vexed researchers.

While the normal, immediate reaction of one viewing the piece for the first time is to see the insects as bees, scholars have often pointed out anatomical irregularities that seem (to them) to preclude such an identification. Of major concern have been the long, tapering, pointed abdomens—far too pointed and elongated, we are told, to be those of bees. This has led to their identification as hornets (Marinatos, 1970, *ad* Pl. 13; Pendlebury, 1939, 120) or as wasps (Richards, 1974, 222; Davenport, 1975, 212; LaFleur, 1979, 212). By way of rejoinder it has been asserted that the abdomens may be this large if queen bees are meant, but to this rises the expected countercharge that queen bees are never seen together in such a fashion (Matz, 1962, 138).

The granulated ball between the insects' feet has suffered a similar fate, being identified variously to fit the initial idea conceived about the identity of the insects themselves. Thus, those who see bees generally identify the ball as a honeycomb (e.g. Evans, 1935, 75–6; Hood, 1971, 226), while those who see wasps suggest a ball of wood pulp (Richards, 1975, 213) or even call it a dung ball (Davenport, 1975, 212), although the latter is highly implausible. Most recently the ball has been identified as 'a miniature model of *Polistes*' single layer paper nest upon which the wasps walk' (LaFleur, 1979, 210). More on this below.

The end product of such a plethora of theories

has naturally been confusion, leading ultimately to a remarkable blurring of natural probability in such unlikely statements as, 'Two wasps sucking a drop of honey' (Warren, 1975, 41) or, 'Two hornets holding a granulated honeycomb' (Marinatos, 1970, *ad Pl.* 13; cf. Spanakis, n.d., 151). Such confusion is perhaps to be expected, the inevitable result of putting too great a weight upon a piece of art never intended to serve as a scientific rendering of the insects. We are dealing with art, not illustration. This becomes even more clear when we examine the work with a keener gaze, for there is more to trouble the anatomist than long abdomens, although these additional faults are rarely alluded to.

Our creatures possess but two feet apiece, for example. Even if we allow for the side view, we are offered but four of the requisite six, and nature yields neither hornet, wasp, nor bee to fit this requirement. Likewise, the insects show only one wing apiece, whereas four are to be found in nature. The eye too is inaccurate, being too rounded (cf. LaFleur, 1979, Fig. 5), and the wings are decorated with a motif clearly more from the workshop than from nature. Finally, antennae would seem to be entirely lacking. It becomes obvious then, that there is more to be dealt with than overly elongated abdomens alone, and the student of the piece should be expected to account for *all* such anomalies, not just some. It is just as sure, I feel, that anatomical enquiry alone will not, cannot, clear away the confusion and will, in all probability, exacerbate it. Fortunately, there are sounder courses open to us, for the insects are obviously modelled on a prototype which effectively lays all dispute to rest. Yet, even if this were not true, we shall see that the artist has left ample clues to his subject in the often overlooked or misunderstood *actions* (not *shape*) of his subjects.

Many sources of evidence make it highly probable to us that the Minoans practised apiculture (Ransome, 1937, 61-4; Hood, 1971, 92; Davaras, 1976, 144, s.v. 'Honey'). While this is not, of course, enough to convince us that our insects are bees, it is evocative in the sense that the Minoans surely had more opportunity to observe a domesticated animal than a wild one. Of more immediate help is the hieroglyphic sign, number 86 in Evans's list, which clearly depicts the honeybee (FIG. 1). That the insect depicted is indeed a honeybee is unchallengeable, due to the clear borrowing of the sign from its Egyptian counterpart (FIG. 2), which

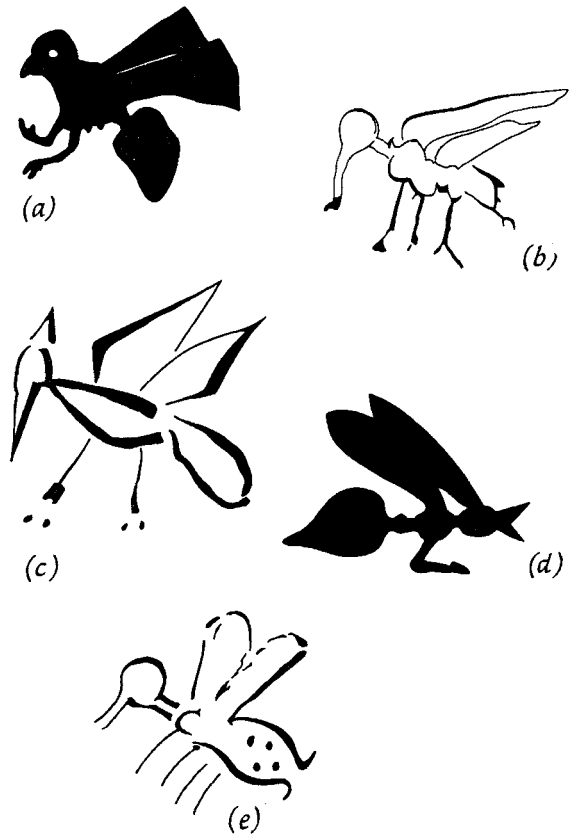


Fig. 1. Minoan bee hieroglyphs. For details see pp. 10-12 (after Evans, 1909, 212, No. 86)

it follows in form as well, perhaps, as in use (Evans, 1909, 212-3; Hood, 1976, 64-7).

It is the shape of this hieroglyph which is of most immediate application to the problem at hand. It is curious to note that the earliest Egyptian signs for the bee had shown, accurately enough, three legs in profile view, yielding the appropriate six (FIG. 2, *a-c*). In later dynasties the style changed (FIG. 2, *d-f*) and the insect was inexplicably drawn with four legs (Ransome, 1937, 24-6). The Minoans, borrowing from the Egyptians, will likewise show four legs (FIG. 1*e*), but often sensibly reduce this to two legs to accommodate the consistently used side view (FIG. 1*a, c*). At this point, a comparison of the pendant with the hieroglyph is enlightening. Here we see the origin of the deficient number of legs and wings and, in certain examples, the long, drooping abdomen (FIG. 1*a, c*; FIG. 5). Both depictions follow similar canons of showing the insect. As we can be sure

from the Egyptian parallel that the hieroglyph depicts bees, it becomes inescapable that the pendant also shows bees. If the abdomens are too large, what of it? It only matters that this is how the Minoans chose to depict their bees. Our problem in dealing with the pendant has been, in short, a failure to view the piece through sufficiently 'Minoan' eyes. We can be sure that those for whom the piece was created had no difficulty in identifying its component creatures.

The more cautious among us would welcome a thorough study of the chronological appearance of the hieroglyph. Does it begin with the four-legged version and then turn to the two? Which form (if any) was prevalent at the time of the manufacture of the pendant? Can the hieroglyphs, in fact, shed any light on the date of the pendant? While these questions are of interest, they are secondary at present. Whether hieroglyph preceded pendant or vice versa, or whether they appeared simultaneously, is not as important as the obvious fact that both belong to a common tradition in which bees were depicted in this manner.

I am pleased to find support for this comparison of the basic shapes of the hieroglyphs and the pendant in the work of Sinclair Hood, whose excellent article on the piece (Hood, 1976) was brought to my attention only after I had arrived independently at the importance of the Minoan signs. To this evidence, I would add also the importance of the dots seen adhering to the bodies and feet of certain of the bees in the hieroglyphs (FIG. 1c, e; FIGS. 4, 5) which are described below.

The evidence offered by the hieroglyphs is, I feel, conclusive, but had we not this evidence, the identification would still be secured from clues the artist has built into his work. As I have indicated, these clues are to be found not through reference to anatomy, but by proper interpretation of the actions of the insects.

The larger ball held between the bees' legs, as mentioned above, has been variously identified, with most versions (even some which call the animals wasps) deeming it a honeycomb. This is unlikely, however. Not only does it lack the distinctive hexagonal cells of a honeycomb, but the effusive use of granulation would have no meaning on a honeycomb. Each dot can hardly represent a cell, as a sense of perspective demands that the object between the bees' legs be smaller than themselves. We should expect, that is, to see but a few

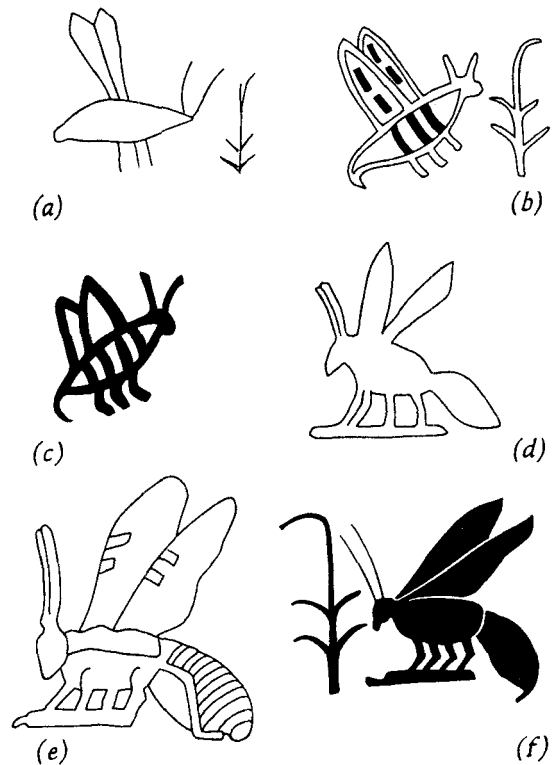


Fig. 2. Egyptian hieroglyphs. a, b: First Dynasty, King Qa; c: First Dynasty, King Den-Setui; d: Second Dynasty, Khasekhemui; e: Old Kingdom; f: Sixth Dynasty (all after Ransome, 1937, 25, Fig. 3).

cells in a piece of honeycomb this size. In any event, bees simply do not carry about pieces of their home as a regular habit. Likewise, identifications of the object with mud balls, wads of pulp or even dung balls are to be rejected out of hand. These would not be carried between legs (LaFleur, 1979, 210) and would be poorly represented by regular and even stippling. A recent attempt to view the ball as a wasps' nest (LaFleur, quoted above) is highly improbable. It would be grossly out of proportion to the insects (as well as of unusual shape) if a whole nest is intended and, if a part of a nest is meant, the dots of granulation would be too numerous to represent individual cells. What is required is a substance of granular appearance, carried in roughly globular shape between the legs of hymenoptera.

When consulted, professional bee breeders immediately identified the object as a pollen ball, commonly seen when bees (not wasps or hornets)

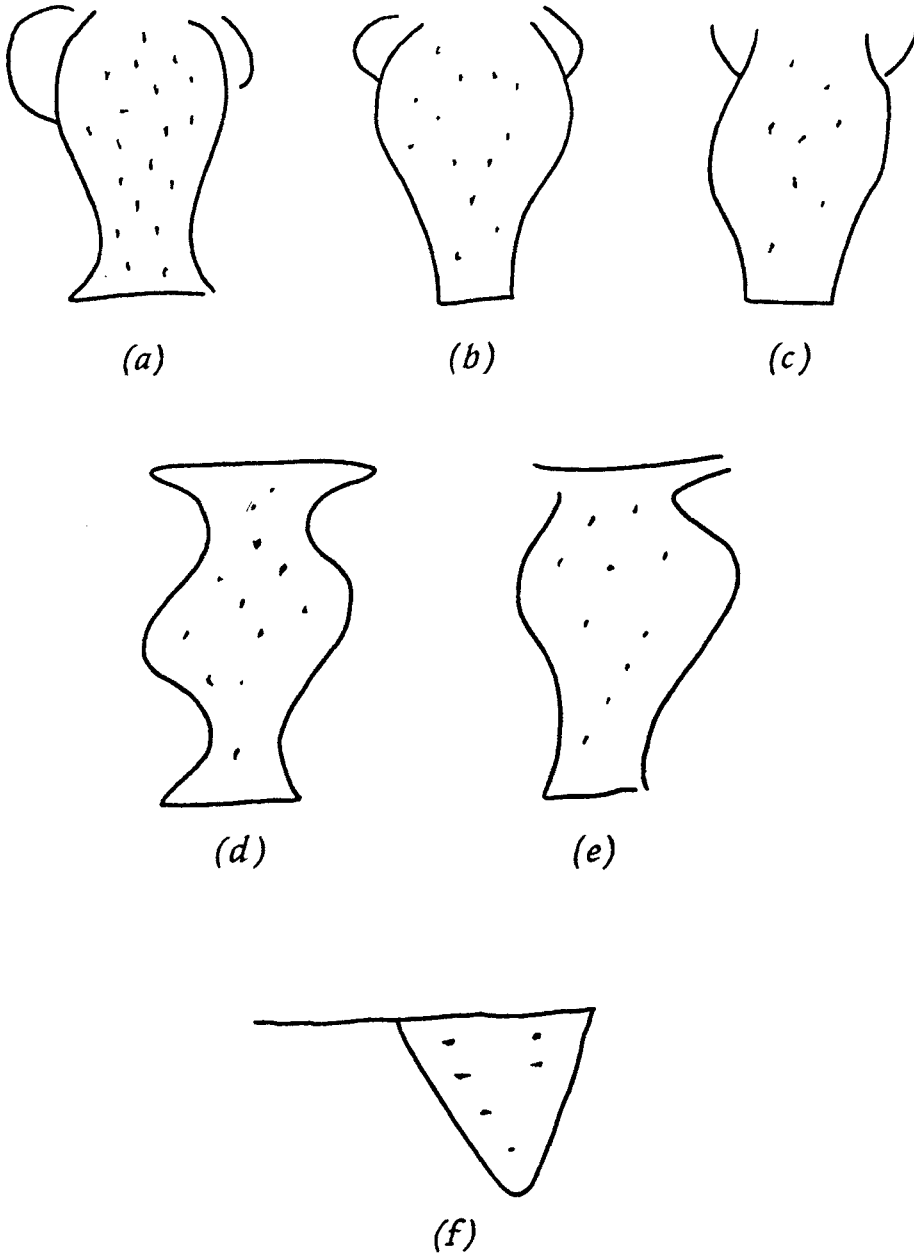


Fig. 3. Minoan jar hieroglyphs. For details see p. 13. (a-e, after Evans, 1909, 201, No. 50; f, 201, No. 51)

return from an outing with large amounts of pollen rolled into a ball and stored in pouches on their hind legs. This characteristic phenomenon would surely have been well known to Minoan bee breeders or to interested observers of nature and the hieroglyphs may even show hints of the pouches

(FIG. 1 a-d). I would also note in passing a curious bit of bee lore held throughout antiquity. It was reported in a number of authors, and without detectable scepticism, that bees would take on small stones with their feet to act as ballast to help them manoeuvre in high winds (Aelian, *De Natura*

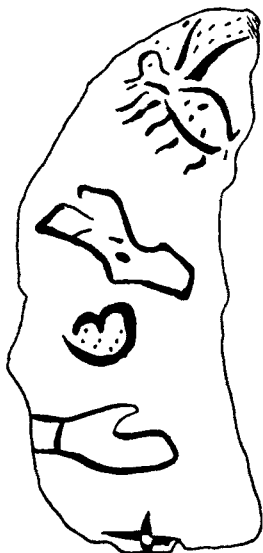


Fig. 4. Minoan sealing (after Evans, 1909, 165, No. 76a)

*Animalium*, 5.13; Pliny, *N.H.*, 11.24; Dio Chrysostom, 44.7). It is of especial interest, although conceivably entirely accidental, that this trait is specifically said by Plutarch in his *De Sollertia Animalium (Moralia, 967B)* to belong to Cretan bees and is never ascribed to other bees by any authors. Was the carrying of pollen balls the origin of this blatant impossibility? Is there some special connexion with Crete?

To return to the matter in hand (and to the hieroglyphs) we have additional, corroborative evidence for the identification of the larger ball as a pollen ball. Many of the Minoan bee hieroglyphs show tiny specks adhering to the creatures' feet and bodies (FIGS. 1.c, e; FIGS. 4, 5). These specks are a Minoan addition to the Egyptian prototype and are also found inside certain jars (FIG. 3.a-e) which Evans called grain or honey jars, theorizing that the specks seen on the pots were the same as those on the bees and linked the two, the specks indicating 'honey' (Evans, 1909, 201, 212). That specks were chosen to denote honey is unlikely. Honey is ill-portrayed by specks or dots and, if shown on bees at all, it would be near the mouth where it is regurgitated after its manufacture. We are in need of a granular substance that is seen adhering to bees' feet and bodies and only pollen will do. What then of the pots? If indeed the specks are meant to link the bees with the contents of the pots (a logical

but by no means absolute assumption), are we to see them as 'pollen pots'? This is surely to ask too much of the hieroglyph. The combined form simply indicates 'bee product'—as sensible a manner as any in which to sign for 'honey'. In a similar way I would ask whether a funnel-shaped object showing the same dots (FIG. 3.f) might not be a honey strainer, a common tool of the beekeeper (Evans, 1909, 201 no. 51, 168 P.91a). In any event, it is a fact that the ball between the insects' legs is much more suggestive of a pollen ball than of any other suggested material.

Our identification of the specks as pollen seems, moreover, confirmed by a sealing (FIG. 5) in which Evans saw a bee, with specks adhering to its wings, flying beneath a flower or leaf which also bears identical specks (Evans, 1909, 167). In fact, the sealing becomes much clearer if viewed upside down from the position in which it is printed in Evans's text where the commentary makes it clear his orientation is not a printing error. I have printed the seal upside down (FIG. 5), and when thus inverted, the 'bee' is much clearer. The specks adhere now to its feet where (by comparison with other hieroglyphs) they belong, the legs are reduced to the normal two, and the wings become more wing-like. The reader can make the comparison for himself. It seems hard to take the scene for anything but a bee leaving its source of pollen and duly covered with it.



Fig. 5. Minoan sealing (after Evans, 1909, 167, No. 86b)

With the specks on the hieroglyphs properly identified as pollen, the further identification of the speckled, large ball between the feet of the bees on the pendant seems sure. It is a pollen ball and the bits of granulated gold are meant to approximate the uneven, speckled surface of a real pollen ball (surely not that of a wood pulp ball or a dung ball) and do so in the same 'language' as the hieroglyphs used to depict pollen, namely, specks and dots. Once we see the ball as a pollen ball, of course, the identification of the insects themselves as honeybees is inescapable.

A brief word needs to be added on the special place the bee held in Cretan lore. The most recent defence of a wasp identification has laid considerable stress on the fact that wasps are prevalent in Greek literature (LaFleur, 1979, 209). Yet the ancient authors cited reflect later attitudes toward the insect and Homer, for example, is as fond of bee allusions as he is of wasp (*Il.* 2.87–93, 16.259–65; *Od.* 13.105–6), and epithets such as 'honey-toned' or 'honey-sweet' are very prevalent, especially when wine is mentioned (Cunliffe, 1924, 261). The only wasp-affiliated word I can find is *sphēkeō*, 'to make as slender as a wasp's waist' and that but once (*Il.* 17.52).

While such evidence may be of doubtful value, we do have a long and lively history of the special connexion of the honeybee and the island of Crete, a connexion that seems to go back to Minoan roots. This is not the forum for a full study, but a sampling will suffice (Cf. Robert-Tornow, 1893, 89–96, 146–51; Cook, 1895, *passim*; Ransome, 1937, 90–6; Fraser, 1951, 7–8; Hood, 1976, 68–9). Bees fed the infant Zeus on Crete and guarded his cave, being rewarded for their services with a coppery-golden coat. I have argued elsewhere (Kitchell, 1978) that these were the same golden bees we later hear of as forcing the evacuation of the first location of the City of Rhaukos. This affiliation of bees with Zeus Kretagenes, undoubtedly a Minoan god in origin (Willetts, 1962, 199–220), is also found in the myth of Glaukos, Minos and the bees, in the Kouryantes and in Britomartis whose name probably is to be derived from the pre-Greek verb *blittein*, 'to draw honey out of the hive'. There is more, but the pattern is clear. The honey bee held an important claim on the mythology, lore, and probably religion of ancient Crete, with many elements undoubtedly extending back to Minoan times. This claim is held only by the bee, not by hornets or wasps which are quite absent in Cretan lore.

Nor does this even mark the end of our evidence, for the artist has provided still one more clue to the identity of the insects when he created the often overlooked clear drop that lies between the insects' mouths. Why did the artist, so adept at and so fond of granulation, withhold its use here? Clearly, he wished to differentiate the upper drop from the lower, to show the one as smooth and the other rough. Professional bee breeders easily recognized the upper ball as a droplet of honey which bees regurgitate from a special honey stomach for the purposes of mutual feeding. The ancients, such as Aristotle, knew of the practice (Fraser, 1951, 109) and we can be sure the Minoans did also. To be fair, it should be pointed out that certain wasps do regurgitate drops of liquid (LaFleur, 1979, 211). In light of the indisputable hieroglyphic parallel to bees, of the carrying of the pollen ball (a non-wasp activity), and of the special place accorded the bee on Crete, it becomes clear again that we are dealing with bees and that the drop is honey, and it is not impossible that these bees might even be the very golden ones we are told nourished the infant god with their honey (nectar).

Finally, mention must be made of the small, cage-like structure above the bees' heads and within which is a small golden bead. It is usually not identified, merely described. The most recent article on the piece claims that the cage may be 'meant to suggest the wasps' antennae, in motion, through a kind of multiple, three-dimensional image (the free hanging golden bead . . . would contribute to the suggestion of motion)' (LaFleur, 1979, 211). This is highly unlikely and puts too great a burden on both the piece and those who would view it. It first violates the canon of artistic simplicity of the piece as a whole wherein wings and legs are reduced in number, not multiplied. Secondly, the author's parallel of a butterfly is from a Mycenaean context and of later date. If the 'cage' is more than an ornamental device (a proposition not immediately demonstrable) there is, perhaps, a more credible explanation of it at hand. An entomologist friend queried whether a crown might be meant, indicating the 'king' bee (for so queens were called by the ancients). This is unlikely and unparalleled. But we do know that the art of beekeeping was said by some to have originated on Crete when the Korybantes attracted bees to the island by the noise of their bronze arms or cymbals which they shook to drown out the cries of the infant Zeus (Vergil, *Georg.* 4.159–52; Harris,

1913, 350-53). In later times, of course, this procedure came to be called tanging and was believed to attract and control swarming bees (Vergil *Georg.* 4.62-4; Ransome, 1937, 94-5, 225-6). Whatever the possible ritual overtones, it may be that the cage and its bead are meant to represent some sort of rattle or sistrum used in the tanging process. The one such instrument known to me, on the Harvester Vase, is of different shape.

Whether the cage can be identified or not, we can be sure now, from many sources, that the insects on the Mallia pendant are bees. Each point in the argument above is, even if taken by itself, probably sufficient to establish this fact. Taken to-

gether, the evidence is overwhelming and leads me, by way of conclusion, to offer a word of defence for the unknown artist who has been taken to task, as it were, for not creating a piece that slavishly followed nature (for this is the tacit complaint one senses when the piece has been discussed with an eye for anatomical anomalies). Far from being too free with his work, the artist has managed to give us all the information needed to correctly interpret the work, while still creating a pleasing whole, avoiding the precision of a text book illustration in the process. We thus come once again to what many have known all along, that herein lies one of the masterpieces of Minoan art.

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## Book Chronicle *continued from p. 8*

**Ephesus after Antiquity: a late antique, Byzantine and Turkish City** by Clive Foss. *Cambridge, London, New York, New Rochelle, Melbourne, Sydney: Cambridge University Press, 1979. 228 pp., 46 figs. £15.00.*

**The Palermo Stone and the archaic kings of Egypt** by Patrick F. O'Mara. *La Canada, Calif.: Paulette Publishing Co, 1979. Studies in the Structural Archaeology of Ancient Egypt. 224 pp., 48 figs. \$22.00.*

**Studies in West Patricia archaeology. No. 1: 1978-1979** edited by C. S. 'Paddy' Reid. West Patricia Heritage Resource Report 1. Archaeological Research Report 15. *Toronto: Historical Planning & Research Branch Ontario Ministry of Culture & Recreation, 1980. 269 pp., 88 figs., 68 tables. \$8.50. available from Ontario Government Bookstore, 880 Bay Street at Grosvenor Street, Toronto, Ontario M7A 1N8.*

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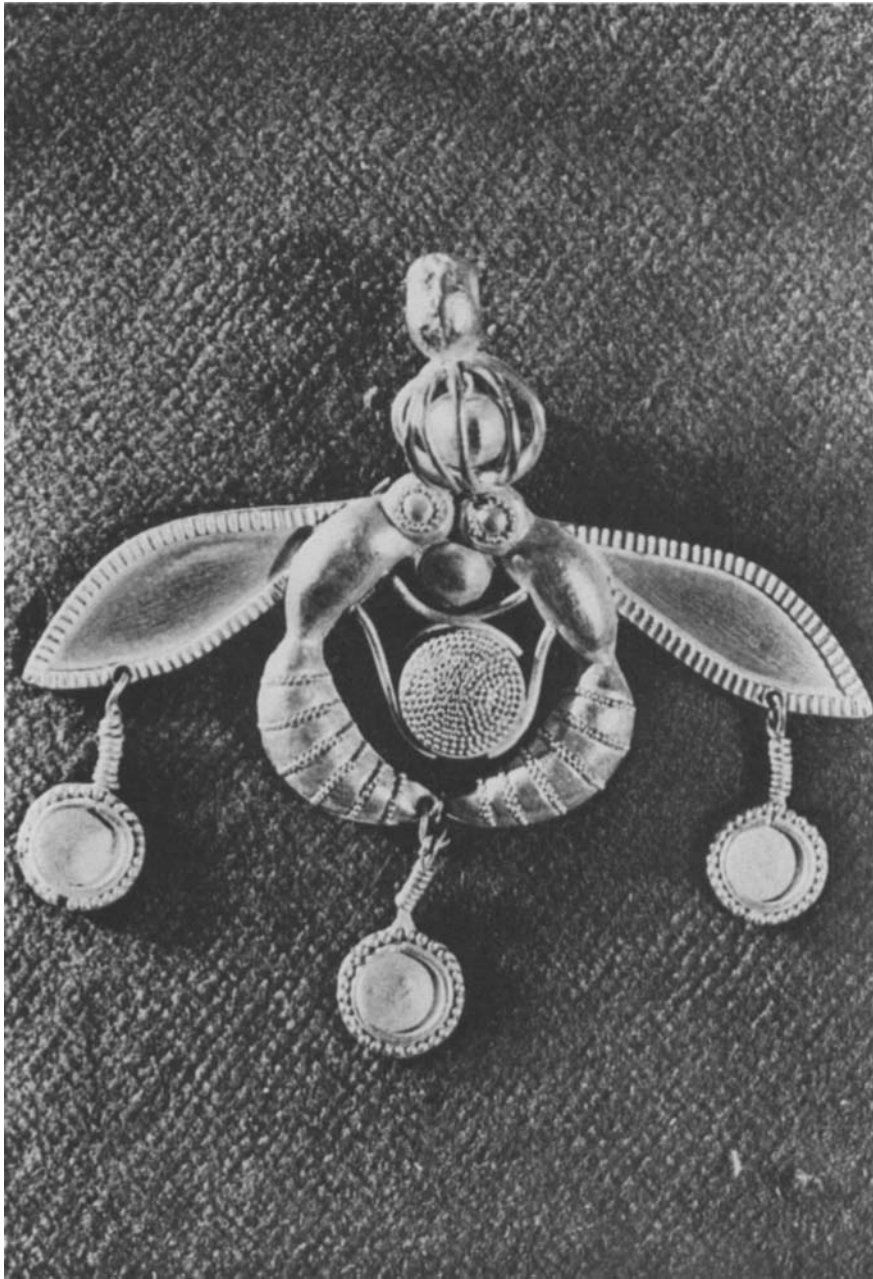


PLATE I: THE MALLIA 'WASP' PENDANT RECONSIDERED

*The gold pendant from the cemetery at Mallia, on the island of Crete, preserved in the Museum at Heraklion*

*See pp. 9–15*

*Photo: Heraklion Museum*