

## Foot-amulets: a possible amuletic value

Barbara Mordà

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**Abstract:** A number of foot-shaped objects have been found in Bronze Age graves in the region of Messará, Crete. Previous scholars have suggested they may be amulets or talismans. One hypothesis advanced in the late 1960s proposed that they gave protection from poisonous snakes bites and were connected to the Minoan Snake Goddess cult. This paper reports on a new interpretative hypothesis for these objects based on an analysis of ancient sources, and paleontological and herpetological research. It also draws attention to analogous findings from Egyptian contexts, contemporary to those of Minoan Crete, to search for possible origins and typological relationships for the so called foot-amulets.

A number of foot-shaped pendants, dated between the Early Minoan and Middle Minoan and thought to be amulets, have been found in south-east Crete, mostly in various *tholoi* of Messará. At the time of their discovery these objects were called ‘leg-amulets’ (Evans 1964: 45; Xanthoudides 1971: 129) because of the similarities they shared with some ancient Egyptian amulets, also found in funerary contexts (Naville 1909: 18; Andrews 1994: table 67). However, in the late 1960s, Branigan (1970) presented a hypothesis that related the amuletic value of these objects to protection from the bites of venomous snakes, and they subsequently became known as ‘foot-amulets’.

Branigan’s theory, which originated from a passage in Pliny’s *Naturalis Historia*, suggested that the serpentine stone from which the amulets were made protected the bearer because its colour resembled that of the snake’s skin (Pliny XXXVI: 11, 55). Furthermore, the presence of these objects between Early Minoan (3100-3000 BCE) and Middle Minoan II (1875/50-1750/00 BCE) and their subsequent disappearance from Middle Minoan III onward (1750/00-1700/1675 BCE)<sup>1</sup>, was interpreted as part of a passage from superstitious belief to religious cult, achieved by a specific and protective divinity who has been identified as the Minoan Snake Goddess. According to Branigan (1970: 20), her cult places could be connected with the so called ‘peak sanctuaries’ but this hypothesis has not really been demonstrated because there are no evidences that can confirm it. The evidence on which these hypotheses are based is examined below.

### Examination of classical sources

In *Naturalis Historia* book XXXVI, Pliny refers to other stones such as *ematite*, *gagate* and *schisto*, in addition to serpentine, as affording protection from snake bites. The Roman encyclopaedic writer described how these stones could be used against dangerous snakes:

Gagates lapidis nomen habet loci et amnis Gagis Lyciae. [...] Fictilia ex eo in scripta non delentur; cum uritur, odorem sulphureum reddit; mirumque, accenditur aqua, oleo restinguitur. Fugat serpentes

ita recreatque volvae strangulationes. Deprendit soticum morbum et virginitatem suffitus (Pliny, XXXVI, 141, 34).

*Gagates is a stone, so called from Gages, the name of a town and river in Lycia. [...] Marks made upon pottery with this stone cannot be effaced. When burnt, it gives out a sulphurous smell; and it is a singular fact, that the application of water ignites it, while that of oil quenches it. The fumes of it, burnt, keep serpents at a distance, and dispel hysterical affections: they detect a tendency also to epilepsy, and act as a test of virginity.*

Schistos et haematite cognationem habent. Haematites inventitur in metallis, ustus minii colorem imitatur, uritur ut Phrygius, sed non restinguitur vino. [...] Et in vesicae vitiis efficax bibitur et in vino contra serpentium ictus (Pliny, XXXVI, 144, 37).

*Schistos and Haematites have a certain affinity between them. The latter is found in mines, and, when burnt, has just the colour of minium. It is calcined in the same manner as Phrygian stone, but is not quenched in wine. [...] It is very efficacious also for affections of the bladder; and it is taken with wine for the cure of wounds inflicted by serpents.*

The ‘foot-amulets’ found in the region of Messará were not made exclusively from serpentine, therefore Branigan’s hypothesis based on the Pliny quote is questionable. In fact ‘foot-amulets’ known from Crete are also made from chlorite, diorite, ivory, limestone, middle hard stone and steatite, none of which are related to snake bite by Pliny (Mordà 2011). However, the nomenclature of stones catalogued by Pliny does not necessarily correspond to modern geological classification. The *Naturalis Historia* cannot be considered a reliable source for the study of ancient natural history without a validation by geological research involving a comparative study of materials confirming the ancient Roman taxonomy.

## Species of snakes in crete

The presence of poisonous snakes in Crete was generally taken for granted (Branigan 1970: 10-23; Sakellarakis & Sakellarakis 1997: 637-9). However, contemporary paleontological and herpetological studies on Crete have demonstrated the complete absence of any snakes dangerous to humans, both today and in the past. The geological history of the island demonstrates that it has always been completely isolated in the Mediterranean context, a situation which did not allow its colonisation by species of the *Viperidae* family (Szyndlar 1991: 123-266).

At present, there are four known species of snakes in Crete, none of which are harmful to humans,<sup>2</sup> and these were also the species present in Bronze Age Crete. It is therefore very unlikely that the foot-amulets were made to protect the Cretan people from venomous snake bites.

## The Snake Goddess cult and peak sanctuaries

The Cretan peak sanctuaries are amongst the most interesting phenomena of the Minoan civilisation. More than fifty sites are presently claimed as peak sanctuaries throughout Crete. First sites known as peak sanctuaries were Petsofas and Youkhtas but other important sanctuaries have been identified such as Karfi and Kophinas. The origin of peak sanctuaries has been debated by many scholars (Rutkowski 1972, 1986; Cherry 1978, 1986; Peatfield 1983, 1990; Watrous 1984, 1995; Marinatos 1993; Kyriakidis 2005). They are believed to have originated within farming societies between Middle Minoan IB (1925/00-1875/50 BCE) and Middle Minoan II (1875/50-1750/00 BCE; Rutkowski 1972), and were later taken up by the palatial élite (Kyriakidis 2005: 124-7). At present, it is problematic to determine what kind of divinity was worshipped in these places because no cult images have been found (Peatfield 2001: 51-5). Each peak sanctuary contains a variety of different archaeological remains (Marinatos 1993: 119-20), suggesting that there was not a cult related to a specific divinity.

A number of mostly ovine and bovine figurines have been found inside these sanctuaries (Peatfield 1983: 273-80), and also figurines representing parts of the human body. These reproductions of body parts have been interpreted by scholars as votive objects (*ex voto*), which may confirm that the divinity for whom they are intended has a healing aspect (Gheorghulake 1997: 188-296). It cannot, however, be specifically connected to a divinity associated with snake bites. It is also important to clarify that figurines of the Snake Goddess have not been found in peak sanctuaries.<sup>3</sup> At present, the meaning of Snake Goddess is still obscure; she probably represents a divinity connected with the concepts of regeneration and fertility. It is quite unlikely, however, that she was a divinity related to protection from snake bites, or connected with a specific snake cult (Marinatos 1993: 157; Jones 2001: 259-65; Lapatin 2002).

In many cultures several meanings have been assigned to the symbolism and concept of the snake (Balaji 1983), including regeneration (Gessel 2006). In the Minoan culture this animal was connected to the chthonic world apparently only during the Late Bronze Age (1700/1675-1625/00 to 1200/1100-1075/50 BCE) while in the Middle Minoan (2100/50-1925/00 to 1750/00-1700/1675 BCE) the snake was related to the seasonal cycle and to concepts of regeneration and fertility (Trčková-Flame 2003; 2006).

I therefore argue that the hypothesis of a connection between the peak sanctuaries and a Snake Goddess cult cannot be accepted, because the point above demonstrates that peak sanctuaries cannot be related to a specific cult and a specific divinity connected with snakes as Branigan (1970: 70) suggested.

## Trade and cultural diffusion

It is well-known that during the Bronze Age Minoan people began to trade intensively with both the Near East and Egypt (Branigan 1967; Carinci 2000: 31-7; Hood 2000: 21-3; Knapp 1988: 198; Merillees 1998: 149-55; Warren 2000: 24-8; Watrous 1998: 19-28). These activities generated remarkable interest from the Minoan élite about foreign items; the foot-amulets probably represent one of these interests.

At Egyptian sites, leg-amulets found in funerary contexts have been defined as 'amulets of assimilation' and were believed to ensure that the mummy's body would continue to function in the afterlife (Andrews 1994: 69-73; Petrie 1972: 9, 11). Although the similarity of Minoan foot-amulets with the Egyptian leg-amulets is unmistakable, it is very difficult to attribute the same meaning to them, because we still do not have any interpretation of Cretan written sources.

Most foot-amulets have been found in graves in south-east Crete; however, for a number of them, the place of origin is unfortunately unknown. At present, it seems that there are no similar finds in other parts of the island. Other items such as stone vases, hippopotamus-shaped amulets and scarabs have also been found in the *tholoi* of Messará. This evidence confirms the presence of a rich élite interested in the acquisition of foreign and prestigious items; however, it does not necessarily mean that there was also a correspondence of religious ideas connected with the same objects. It is a matter of fact that the Minoan culture has had independent religious iconographic developments and different political organisation.

Moreover, two foot-amulets have been found at mainland sites: at Ziguries, located in Attica, and at Haghios Kosmàs, in Argolide. In Zigouries the object comes from a house while in Haghios Kosmàs from a grave (Myloans 1959). It is interesting to note that the finding from Zigouries is, at present, the only evidence of a non-funerary context for this class of objects (Blegen 1928: 43-7). At the moment it is not clear whether these items were used

both in daily life and in the graves, or whether these particular objects were connected with beliefs about the afterlife and subsequently used as protective amulets only in funerary contexts.

### From Middle Minoan II to Middle Minoan III

The period between Middle Minoan II (1875/50-1750/00 BCE) and Middle Minoan III (1750/00-1700/1675 BCE) saw great change. Crete was devastated by a number of earthquakes while at the same time the archaeological evidence testifies to various cultural changes such as the beginning of monumental architecture, the introduction of new pottery styles and an interest in precious materials (De Martino 2008). The new palatial élite must have influenced productive activities during this period when foot-amulets disappeared from Crete, however from Middle Minoan III the so-called talismanic seals were produced (Kenna 1969). This may reflect a different system of control which could have influenced the production of objects, but this has not yet been agreed by scholars.

### Conclusion

As a result of trade with foreign societies, the Minoan culture acquired various objects, probably with different meanings from those originally assigned to the items. At present, these objects can only be interpreted as a fashion of Minoan society; it is impossible to assign a specific protective value to them. According to the data collected it can be argued that this new élite influenced both the previous élite and the production of objects. The passage between Middle Minoan II and Middle Minoan III is known as the New Palatial period, a time of great transformations and this probably had a strong impact on previous Cretan societies, most likely in connection with superstitious and independent religious ideas, for example in the region of Messará, where many amulets have been found.

Only extensive research in Crete and on the mainland will be able to clarify the many open questions about these interesting artefacts.

Barbara Mordà  
University of Venice

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## Endnotes

- 1 The Cretan chronology is still being debated; however, I have used the chronology updated by S.W. Manning (2010).
- 2 These four snakes are named as Hierophis gemonensis, Natrix tessellata, Telescopus fallax and Zamenis situlus (Corti et al. 1999). Although Telescopus fallax possesses venomous teeth, its bite is not dangerous to humans because the amount of venom injected is minimal and its toxicity is moderate. No Telescopus species is listed as a poisonous species by the World Health Organisation (Lumsden et al. 2004).
- 3 Faience figurines identified as Snake Goddesses have not been found in the Peak Sanctuaries, but were discovered in the so called 'Temple Repositories' on the site of the Palace of Knossos.