# Perspectives on ancient Greece

Papers in celebration of the 60th anniversary of the Swedish Institute at Athens

Edited by Ann-Louise Schallin

### Kybebe on fire!

#### The significance of the Goddess in the Ionian Revolt

#### Abstract\*

The Kybebe sanctuary located by the Pactolus River at Sardis is suggested to be identical with the sanctuary that, according to Herodotus (5.102), was burned down during the Ionian Revolt in 498 BC. On the basis of a re-interpretation of the archaeological remains the author suggests that the sanctuary underwent several phases. An earlier altar of fieldstones was rebuilt, probably during the period of Croesus, into a more monumental one decorated with lions. This altar was desecrated during the Ionian Revolt and was therefore sealed and completely buried before a new altar was built on top. The Mother Goddess was connected with metalworking in the Greek literary sources from an early period onwards, and it is here suggested that Kybebe was the divine protector of the gold and silver industry by the Pactolus River, which produced the metals needed for the coinage. Kybebe was also the goddess who provided the king with sovereignty. The sanctuary was an important target in the Ionian destruction, because Kybebe symbolized the supreme power held by the Persian king. The sovereignty of Darius I was explicitly demonstrated when his image as a bowman was depicted on the coins shortly before the Ionian Revolt. The burning of the sanctuary was therefore apprehended as an attack on Darius and his sovereignty, which helps to explain why the Persians deliberately chose to burn and desecrate several Greek sanctuaries in their following invasion of Greece.

#### Introduction

When Cyrus the Great conquered the Lydian Empire in the mid-6th century BC the Ionian cities came under Persian sovereignty. To begin with the Persians more or less continued the earlier Lydian policy, but Darius I (522–485 BC) at the end of the sixth century began a Persian expansion that negatively affected the Greek city states of Asia Minor, an expansion which is generally believed to have caused the Ionian Revolt.<sup>1</sup>

Miletos began the Ionian Revolt in 499 BC and was soon followed by other Ionian cities. Sardis, the capital of the Persian satrap in Asia Minor, was burnt down in 498 by the Ionians, assisted by mainland Greeks (Athenians and Eretrians). The Revolt came to an end in 494 with the battle at Lade and the Persian sack of Miletos.

<sup>\*</sup> Several scholars have given valuable comments on earlier versions of this paper, although they do not necessarily agree with all the views expressed. I especially want to thank Geoffrey Summers, Nicholas Cahill, Gunnel Ekroth, Kerstin Silfwerbrand and Charlotte Scheffer. I also received a lot of valuable help and encouragement from the late Crawford H. Greenewalt Jr, who unfortunately never came to see this work come to fruition. I would also like to thank the Archaeological Exploration of Sardis for providing me with photographs and drawings of the excavated material and giving me permission to publish these.

Murray 1988.

In connection with the burning of Sardis Herodotus (5.101–102), who is our main source of the Ionian Revolt, mentioned one specific monument that was burnt down, namely the Sanctuary of Kybebe, and this event was, again according to Herodotus, the reason for why the Persians afterwards burned the Greek temples.

Why then did the Greeks burn the Kybebe sanctuary? Was it an accident, <sup>2</sup> as has been suggested by previous scholars or was it on the contrary a deliberate act? I claim the latter, and my aim is to explain why the sanctuary was of such importance that it became a target in the Revolt.

### Kybebe, the epichoric goddess at Sardis

Kybebe of Sardis is usually referred to as Kybele by modern scholars, but the name Kybele does not appear in any known inscriptions from Sardis or for that matter from Lydia,<sup>3</sup> either in the Lydian or in the later Greek inscriptions. Therefore I would like to suggest that the name Kybele was not used in Sardis. Instead we have two Lydian inscriptions where the deity *Kuvava/Kufava* is mentioned,<sup>4</sup> who is undoubtedly to be identified with the Kybebe mentioned by Herodotus. Kuvava is the Lydian form of the goddess Kubaba, known from both the Bronze Age and the later Iron Age in Anatolia and

Syria.<sup>5</sup> Hence, the Lydian goddess should be referred to as Kybebe rather than Kybele.

The Greek name Kybele is derived from the Phrygian epithet Kubileya of Matar, the Mother Goddess.<sup>6</sup> Mark Munn has recently explained how Kubileya may be derived from the name of Kubaba.7 Hence, in Phrygia and Greece the Mother Goddess was identified with and referred to as Kybele, while in Sardis there was a Goddess referred to as Kybebe/Kuvava. This explains why Herodotus (5.102.1-2) did not refer to her as Kybele, Meter or Mother of the Gods.8 The earliest written attestation of the name Meter in Sardis occurs in an inscription of 213 BC, when a Metroon is mentioned, but Meter also occurs in other Greek inscriptions of the Hellenistic period.9 Hence, at least from the Hellenistic period onwards Kybebe is also referred to as Meter in Sardis.

### Earlier attempts to locate the Kybebe sanctuary

It has been suggested that two temple models from Sardis, which had been reused as building material in the Synagogue, represent the temple that was burned down in the Ionian

<sup>&</sup>lt;sup>2</sup> That Sardis and particularly the Kybebe temple were accidentally set alight is suggested by Murray 1988, 483 and How & Wells 1949, 59. Cf. Munn 2006, 227 with n. 20 who argues that the burning was not an accident.

<sup>&</sup>lt;sup>3</sup> Paz de Hoz (1999) has collected deities mentioned in Greek inscriptions from Lydia and there are no references to Kybele in those, only to Meter, see also Heubeck 1959, 64. For a collection of the Lydian inscriptions, see Gusmani, 1975; 1980–1986.

<sup>&</sup>lt;sup>4</sup> Gusmani 1969; Gusmani 1975, 28–30, no. A II 5, figs. 12–13; Littman 1916, 41–44, no. Aa, line 4.

<sup>&</sup>lt;sup>5</sup> Roller 1999, 44–45 with n. 18.

<sup>&</sup>lt;sup>6</sup> Berndt-Ersöz 2006, 83–84.

<sup>&</sup>lt;sup>7</sup> Munn 2006, 120–125; Munn 2008.

<sup>&</sup>lt;sup>8</sup> We may note that in other contexts Herodotus refers to Meter or Mother of the Gods, such as Meter Dindymene (1.80) or Mother of the Gods at Cyzicus (4.76)

For Metroon see Hanfmann & Ramage 1978, 33 with n. 13; Rein 1993, 52 (see also note 14 below). For Greek inscriptions see Paz de Hoz 1999, 18. A sanctuary of Meter is also mentioned by Plutarch (*Them.* 31) in connection with Themistocles' visit to Sardis in *c.* 470 BC. Meter may here reflect how the goddess was addressed in Sardis during the time of Plutarch (1st–2nd century AD) rather than during the period of Themistocles.

Revolt.<sup>10</sup> Both models bear an image of a goddess standing in the porch, who is usually interpreted as the Lydian Kybele, i.e. Kybebe.<sup>11</sup> They have been dated stylistically to c. 560 BC and c. 530 BC, respectively.<sup>12</sup> On the basis of these models it has been suggested that an Archaic/ Classical temple of Kybebe was located in the area of the later Synagogue. However, neither these models nor any other material from the area that may have been displayed in the temple bear any trace of burning, as also noted by previous scholars.<sup>13</sup>

Also rebuilt into the Synagogue were inscribed architectural elements from a Metroon. <sup>14</sup> These must, however, have belonged to a Hellenistic building and cannot have been part of the burnt Kybebe shrine mentioned by Herodotus. We should further note that several sculptures from non-Kybebe contexts were also reused in the Synagogue, <sup>15</sup> and that the soundings undertaken in the Synagogue failed to confirm the existence of any foundations belonging to an Archaic or Classical building. <sup>16</sup> Hence, there is no evidence to support a location of the shrine mentioned by Herodotus in the area of the later Synagogue.

### Literary evidence

Let us now more closely examine what Herodotus writes.

"So Sardis was burnt, and therein the *hi(e)ron* of Kybebe, the epichoric goddess." (5.102.1–2)

Most scholars translate *hieron* in this passage as a temple.<sup>17</sup> However, *hieron* does not necessarily have to refer to a temple building but can just as well designate a place under divine protection, i.e. what we would refer to as a sacred place or a sanctuary.

Herodotus uses the word *hieron* in several cases where, apparently, he is not referring to an actual temple building, but rather to a sacred area.<sup>18</sup> In those passages where there are no doubt that Herodotus refers to the temple building itself he instead uses the word *naos*, as for example when he refers to the burning of the Didymaion, the Athena temple at Assesos, or the Apollo temple at Delphi.<sup>19</sup>

burning the crops, it so happened that the fire set to the

Hanfmann & Ramage 1978, 42–51, nos. 6–7; Dusinberre 2003, 67, 69, 104; Roosevelt 2009, 82. Cf. Ratté 1989a, 29.

<sup>&</sup>lt;sup>11</sup> Hanfmann & Ramage 1978, 43–51; Rein 1993, 75; Dusinberre 2003, 67–69, 104–106; Roosevelt 2009, 82.

<sup>&</sup>lt;sup>12</sup> Hanfmann & Ramage 1978, 42–51, nos. 6–7, figs. 16–50.

<sup>&</sup>lt;sup>13</sup> Hanfmann & Ramage 1978, 33.

<sup>&</sup>lt;sup>14</sup> A letter from Queen Laodike was inscribed "on the *parastades* of the Metroon" in 213 BC (Hanfmann & Ramage 1978, 33 with n. 13; Greenewalt 1991, 20–21; Rein 1993, 52; Greenewalt, Ratté & Rautman 1994, 22). Ratté (1989a, 26) writes that the inscription is Hellenistic but the blocks themselves may have belonged to a Classical building.

<sup>15</sup> Hanfmann & Ramage 1978, with n. 33.

Rein 1993, 70; Hanfmann 1966, 40–45; Seager & Kraabel 1983, 172.

See e.g. Pedley 1972, no. 272 and the translation by A.D. Godley in the Loeb series. Cf. Munn 2006, 138, who suggests that the hieron of Kybebe was a garden sanctuary based on Hdt. 7.8. Herodotus is here making a reference to a speech by Xerxes who reportedly said that the Greeks had burned the groves and the sanctuaries ("τά τε ἄλσεα καὶ τὰ ἱρά") at Sardis. Whether these groves were regarded as sacred parts of the Kybebe sanctuary is, however, uncertain. We may note that when Herodotus (5.119) in another context refers to a grove as being part of a sanctuary (Zeus' sanctuary at Labraunda) he explicitly mentioned the grove as being sacred. We may further note that Herodotus' account (5.101-102) of the destruction at Sardis gives the impression that the sanctuary was located among the houses consumed by the fire.

 $<sup>^{18}</sup>$  As for example when he refers to obelisks set up inside the *Hieron* of the Sun in Egypt (Hdt. 2.111). It is evident that these tall, described as being 100 cubits high (= c. 40 m), obelisks must have been set up outdoors and not inside a temple. Herodotus (6.105) likewise uses the word *hieron* when he refers to the cave sanctuary of Pan located below the Acropolis in Athens.  $^{19}$  "In the twelfth year, when the Lydian army was

On the basis of these examples I want to suggest that the *hieron* of Kybebe at Sardis may refer to a sacred area rather than a temple building.

### The archaeological evidence

In the late 1960s a Lydian gold and silver refinery was excavated north of the River Pactolus at Sardis (*Fig. 1*). A large altar was found in the middle of this area. On the basis of a potsherd inscribed with the word KUVAV[, the Lydian form of Kybebe, and the discovery of lion sculptures buried inside the altar, this altar was identified as one dedicated to Kybebe.<sup>20</sup> Kubaba is generally accompanied by lions on preserved Iron Age *stelae* from the Syro-Anatolian area, but the lion was also closely linked with the Royal Lydian House.<sup>21</sup>

I agree with earlier interpretations that the altar was associated with Kybebe, and I would

crops and blown by a strong wind caught the temple (naos) of Athene called Athene of Assesos: and the temple was burnt to the ground." (Hdt. 1.19, transl. by A.D. Godley, Loeb series). "When the temple [naos] of Delphi was burnt, this lion fell from the ingots which were the base whereon it stood;" (Hdt. 1.50, transl. by A.D. Godley, Loeb series). "... and the sanctuary [hieron] at Didyma with its temple [naos] and place of divination was plundered and burnt" (Hdt. 6.19.15).

<sup>20</sup> Gusmani 1975, 28; Ramage, Goldstein & Mierse 1983, 37.

For an example of Kubaba being accompanied with lions see one of the orthostates along the processional entry at Karkamiš where she is depicted seated on top of a crouching lion (*Carchemisch* II, pl. B19a). Cf. Collins 2004, 90, who suggests that the lion may not be so closely linked with Kubaba as usually assumed but that her accompanying lion should rather be interpreted as symbol of the city and its king. The lion can be found on the earliest Lydian coins and should be perceived as a powerful symbol of the Lydian royal family (Roller 1999, 131 with n. 46). Croesus for example dedicated a lion of gold to Apollo at Delphi (Hdt. 1.50). A rather large number of lion sculptures has been found at Sardis (Hanfmann & Ramage 1978, nos. 23–30, Ratté 1989b; Greenewalt, Ratté & Rautman 1995, 2–3, fig. 3).

like to suggest that this is in fact the *very* sanctuary that was burned down in the Ionian Revolt. Surprisingly enough no one has yet connected this Kybebe sanctuary with the one mentioned by Herodotus, in spite of traces of heavy burning of this Pactolus North sector. But if it was not, then more than one sanctuary of Kybebe must have existed at the time of the Revolt, which is of course possible although, as will be clear from the following discussion, it appears less likely that another Kybebe sanctuary was burned down.

## Examination of the archaeological remains—an attempt to reconstruct the various phases

The altar is located outside the Lydian walled city close to the River Pactolus in the middle of an industrial area where gold and silver were refined (Fig. 1). The gold came from Mt Tmolus and was washed down into the Hermus Valley by the River Pactolus. According to the published interpretation the altar had two phases (Fig. 2a, c). The first phase has been dated to the time of Croesus while the second one was thought to belong to the Persian period when, it is suggested, it was transformed into a fire altar.<sup>22</sup> On basis of the published material it may, however, be possible to distinguish more than two phases and I would like to argue that the altar probably went through four different phases. The first three phases are represented by three separate built altars, while the fourth phase was merely an enlargement of the third altar.

In published reports the altar that was embellished with lions on top was assigned to the earliest phase (Fig. 2a, d). I would like to sug-

<sup>&</sup>lt;sup>22</sup> Ramage & Craddock 2000, 72-80, 96.

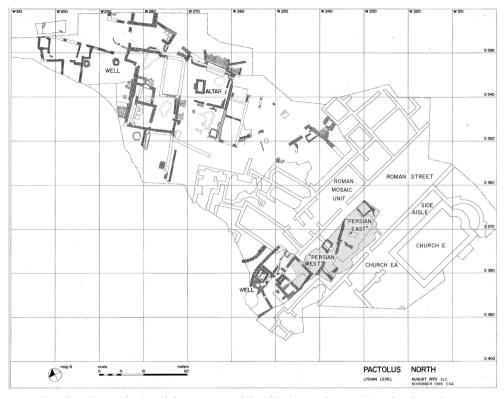


Fig. 1. Plan of Pactolus North. The Kybebe sanctuary and the goldworking industry are located in the north-western area. © Archaeological Exploration of Sardis, Harvard University, drawing no. PN-081A.

gest, however, that the first altar (Altar 1) was in fact smaller and less significant. A second altar (Altar 2), the one with lions, measured c.  $3 \times 2.5$  m, had c. 1 m high walls of roughly trimmed schist stones and was provided with a cobbled floor. It was built around and completely covered what I interpret as the remains of the first altar, which was constructed of field-stones (*Figs. 2b, 3*).

These fieldstones are described in the published report as comprising a carefully built lining around the four interior sides of the schist walls with which they were thought to be contemporary.<sup>23</sup> However, the fieldstone walls serve no purpose, and if they were contempo-

rary with the schist walls they would have been completely covered by these, the cobbled floor and the fill. I therefore suggest that the field-stone walls are remains of an earlier altar, left *in situ* when the altar was enlarged and made more monumental in a second, later phase (*Fig. 3*).

The excavated interior fill of the altar below the cobbled floor was reported as comprising earth containing disintegrated burnt bricks and sherds ( $Figs.\ 2b,\ 3$ ). <sup>24</sup> The character of the fill perhaps resembles debris from the industrial activities rather than remains of sacrificial activities. As far as can be discerned from the preliminary reports the interior of the first altar was clean when the fill was deposited. Be that

<sup>&</sup>lt;sup>23</sup> Ramage & Craddock 2000, 72–74.

<sup>&</sup>lt;sup>24</sup> Hanfmann & Waldbaum 1970, 16–17.

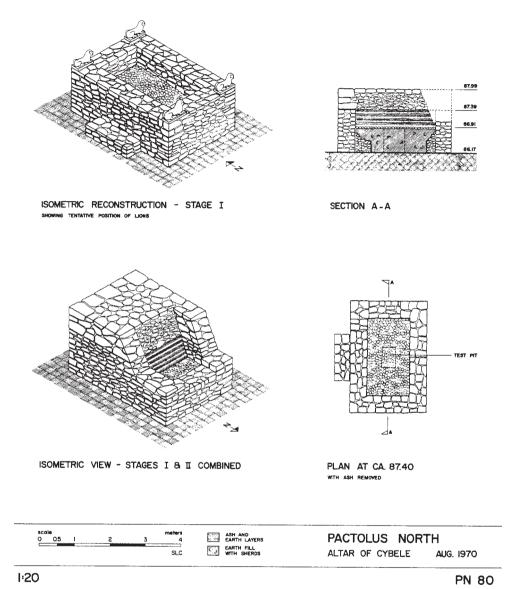


Fig. 2a–d. Published drawings of the Kybebe altar: (a) isometric reconstruction; (b) section A–A; (c) isometric view; (d)

plan. © Archaeological Exploration of Sardis, Harvard University, drawing no. PN-080.

– a. Reconstruction of the altar with lions, which is suggested by the excavator to represent the first altar, while in the present study it is suggested to be the second altar.

– b. Section of excavated altars.

- d. Plan of the altar, in the present study labelled as the second altar (Altar 2).

 <sup>-</sup> c. Isometric view of the altar. Suggested by the excavator to represent the altar after its rebuilding into a (fire) altar. In the present study the lower part is suggested to be the second altar (Altar 2) and the upper part the third altar (Altar 3). The northern part of the altars is incompletely preserved, probably due to the later Roman tomb built on top.

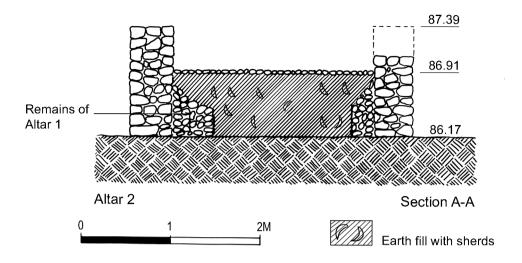


Fig. 3. Section of the second altar (Altar 2) with remains of suggested earlier altar in the interior (based on Ramage & Craddock 2000, fig. 4.4).

as it may, the pottery sherds recovered from the fill have been dated to between *c*. 600 and 575/550 BC.<sup>25</sup> Thus a date after 575/550 may be suggested for the second phase of the altar.<sup>26</sup>

My second phase (Altar 2) is marked by a monumentalization of the altar, when the earlier altar (Altar 1) of fieldstones was surrounded by new higher built walls of trimmed schist stones. The exterior face of the new walls was probably also covered with white clay and may have been painted.<sup>27</sup> The top of Altar 2 was probably provided with sculptures of four lions (*Fig. 2a*), one on each corner. Of these lion sculptures two entire and one half were hidden in the interior fill of a later phase.<sup>28</sup> Stylistically the lions have been dated to about mid-sixth

century, with a suggested date of c. 570–560.<sup>29</sup> Hence, the lions probably belong to the time of Croesus or his father Alyattes.

Either in connection with the building of Altar 2, or shortly thereafter, the sanctuary was covered with a *c*. 10 cm thick layer of clay. At the same time the cupels used for the silver and gold industry were covered, probably because the area was no longer used for the cupellation of precious metals.<sup>30</sup> The refining activity probably moved to another location along the Pactolus River, but the altar continued in use and it is possible that the area was covered with a layer of clay as part of a landscaping programme when the industry shifted and the sanctuary was enhanced.

Some time later a destruction event appeared to have taken place during which the stone lions were severely damaged by fire, but it also appears that they were deliberately de-

Ramage & Craddock 2000, 75; Hanfmann 1968,
 12, fig. 12; Hanfmann & Ramage 1978, 66.

<sup>&</sup>lt;sup>26</sup> This dating of the second phase assumes that the cobbled floor that sealed the first fill is correctly assigned to the second phase.

<sup>&</sup>lt;sup>27</sup> Hanfmann 1968, 11.

<sup>&</sup>lt;sup>28</sup> The lions found inside the altar were reconstructed by the excavator as originally have been part of the altar, see *Fig. 2a*.

<sup>&</sup>lt;sup>29</sup> Ratté 1989b, 386, 392, nos. A48–50; Hanfmann & Ramage 1978, 32–33, 66; Ramage & Craddock 2000, 75.

<sup>&</sup>lt;sup>30</sup> Ramage & Craddock 2000, 74, 78.



Fig. 4. Rear half of burnt lion from north-west corner of altar. © Archaeological Exploration of Sardis, Harvard University, photo no. 67.078:19.

faced, since the heads are more or less broken off (Figs. 4-5). We should further note that the front of one of the preserved lions is completely missing. This lion has intentionally been sawn in half with only the rear part left buried inside the altar (Fig. 4).<sup>31</sup>

The measures that followed this destruction indicate that the sanctuary had been descrated. The damaged remains of three sculpted lions were placed in three separate corners and carefully buried inside the old altar (of the second phase),<sup>32</sup> and the previous sacrificial layers

of ash and burnt from bones, alternating with layers of earth were left intact beneath the filling and rebuilding of the altar (Fig. 2b).<sup>33</sup> The sacred area surrounding the altar was covered with a 1 m thick deposit, i.e. the old altar of phase two was completely buried and sealed before a new one (Altar 3) was built on top (Figs. 6-7). This deposit is, however, reported

damaged to be buried or got lost because of later disturbances caused by the foundations of a Roman mausoleum above the northern part of the altar, it is not possible to say. We may, however, note that the fourth "missing" lion presumably would have been placed in the northeastern corner, below the mausoleum (Ramage & Craddock 2000, 74; Hanfmann 1968, 10–11).

<sup>&</sup>lt;sup>31</sup> Hanfmann & Ramage 1978, 66–67, nos. 27–29, figs. 107–117.

<sup>&</sup>lt;sup>32°</sup> Ramage, Goldstein & Mierse 1983, 37; Hanfmann 1968, 11–12; Hanfmann & Ramage 1978, 66. Most certainly a fourth lion was originally displayed on the altar in its second phase. Whether this lion was too

<sup>&</sup>lt;sup>33</sup> At least eleven alternating layers were discerned. Fragments of calcined bones and horn were found at the bottom (Ramage & Craddock 2000, 74; Hanfmann 1968, 11).



Fig. 5. Partly burnt lion with destroyed head from south-east corner of altar. © Archaeological Exploration of Sardis, Harvard University, photo no. 76.032:29.

to have been caused by an inundation of the River Pactolus.<sup>34</sup> I found such an interpretation unlikely for several reasons. To begin with, the deposit did not cover the entire area next to the river, as would be expected if the deposit was actually caused by flooding.<sup>35</sup> Further, the alternating layers of ashes and earth inside the altar were not affected by the suggested flooding,<sup>36</sup> and finally it is hard to believe that a deposit

caused by flooding would have its upper surface at exactly in line with the same level as the upper part of the altar (*Figs.* 6-7).<sup>37</sup> These circumstances more probably indicate that the area was intentionally filled up because the sanctuary had been desecrated. As an explanation for why the deposit consisted of material from the river, <sup>38</sup> I would like to suggest that the panning

Ramage & Craddock 2000, 74; Hanfmann 1968,
 Hanfmann & Ramage 1978, 33; Ramage, Goldstein & Mierse 1983, 36.

<sup>35</sup> The deposit has at least in the preliminary reports only been reported in the area surrounding the altar.

These layers would not have been preserved in a possible flood and furthermore they were not covered with the 1 m thick deposit suggested to have been caused by a flood.

<sup>&</sup>lt;sup>37</sup> There is no reason to believe that the altar of phase two was originally higher, since the coping of the altar is preserved (as clearly seen on the published photograph, here *Fig. 6*), i.e. the 1 m thick deposit and the altar are not equal in height because the suggested flooding washed away the upper part of the altar.

<sup>&</sup>lt;sup>38</sup> It is not clearly stated in the preliminary reports whether the 1 m thick deposit consisted of silt from the river or not, but plausibly it was, since it is suggested to be the deposit of a flood.



Fig. 6. The south face of the altar. The second altar (Altar 2) at bottom with the fill on its left side. The new third altar (Altar 3) with its later enlargement (phase four) is seen above. © Archaeological Exploration of Sardis, Harvard University, photo no. 67.053:06.

of Pactolus as part of the gold industry could have resulted in the accumulation of substantial amounts of silt and gravel that may now conveniently have been used for the fill.<sup>39</sup> The destruction of the altar in its second phase cannot be dated archaeologically but the 1 m thick silty deposit is suggested to date to the later 6th century BC.<sup>40</sup> I would like to suggest that the sanctuary was destroyed and desecrated during the Ionian Revolt, for reasons that will be discussed below.

The desecrated altar (Altar 2) was completely buried in the deposit, and a new 60 cm high altar (Altar 3), was built on top of the earlier one (*Figs.* 6-7).<sup>41</sup> The new altar was rebuilt

as a solid construction using a mixture of fieldstones and roughly cut, partly reused, schist stones. This altar was not as neat-looking as its predecessor, but it may also have been covered with plaster.

We may note that the altar remained about the same height throughout all of its phases. The earliest fieldstone structure stood at least *c*. 60–65 cm high, while the second rose *c*. 75 cm from the ground to the cobbled floor. Although the exterior walls of this second altar stood *c*. 115 cm high, there was a 10 cm thick layer of clay around the altar in addition to a rectangu-

Goldstein & Mierse 1983, 36–37. In the published reports my suggested third phase of the altar (Altar 3) is reported as being the second stage of the altar. However, in the published reports (see *Fig. 2c*) it appears as the second stage of the altar is only considered as an additional part on top of the earlier altar.

<sup>&</sup>lt;sup>39</sup> I am indebted to Geoffrey Summers who pointed out this possibility to me.

<sup>40</sup> Ramage & Craddock 2000, 74.

<sup>&</sup>lt;sup>41</sup> Ramage & Craddock 2000, 74, fig. 4.5; Ramage,

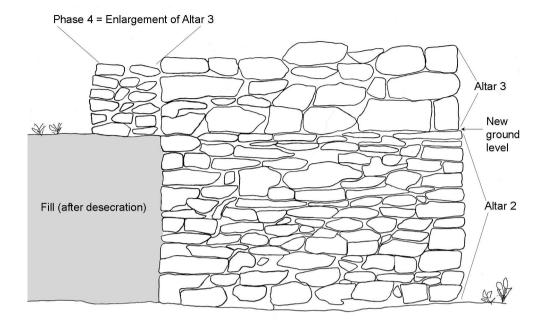


Fig. 7. Drawing of the south face of the altar illustrating phases two, three and four. The drawing is based on the photograph of the southern face, here Fig. 6.

lar step on its western side, measuring 33 cm in height with an 8 cm thick layer of clay on top it. Thus, the external wall of this second altar did not stand more than c. 75 cm above the step. The third altar measured c. 60 cm in height.<sup>42</sup>

The fourth phase of the altar simply comprised a c. 50 cm wide enlargement along its western side built on top of the 1 m thick deposit (*Figs.* 6-7).<sup>43</sup> For some reason a larger altar was preferred. This additional part documented on a photograph before it was removed by the excavators appears to have been built of more neatly cut schist stones (*Fig.* 6).

For how long the altar was in use is not clear, but the entire area of Pactolus North was

destroyed by Antiochus III in 214/3 BC after which the area was more or less abandoned, except for some industrial operations.<sup>44</sup> In the Roman period the area was used as a necropolis and the foundations of a Late Roman mausoleum destroyed the northern part of the altar.<sup>45</sup> It is unclear whether the sacred precinct was in use until the time of Antiochus III. We may suggest that the sanctuary was in use as long as there was a gold industry at Sardis, but it is uncertain for how long the gold production continued.<sup>46</sup> By the time of Strabo (13.4.5) at the end of first century BC the gold in Pactolus was exhausted, but the gold production may have ceased well before that time.

<sup>&</sup>lt;sup>42</sup> The measurements are taken from figures given in published reports or based on the published drawing. See here *Fig. 2b*, and figures given by Ramage & Craddock 2000, 97, 72–81, with nn. 3–6.

<sup>&</sup>lt;sup>43</sup> Ramage & Craddock 2000, 74, fig. 4.5; Hanfmann 1968, 11.

<sup>&</sup>lt;sup>44</sup> Hanfmann 1966, 24–25; Hanfmann 1983, 69; Hanfmann, Robert & Mierse 1983, 122–123.

<sup>&</sup>lt;sup>45</sup> Ramage & Craddock 2000, 74; Hanfmann 1968, 10–11; Hanfmann & Buchwald 1983, 206–207. See also n. 32.

<sup>46</sup> Waldbaum 1983, 3-4.

### The sanctuary in its historical context

I have suggested that the Kybebe sanctuary destroyed in the Ionian Revolt is to be identified with the one excavated by the Pactolus River. Further support can be found in the area immediately east of the Kybebe sanctuary where the excavated buildings showed extensive traces of burning with fragments of burned thatch imprinted in the debris.<sup>47</sup> Of interest here is to note that Herodotus (5.101) says that the fire spread quickly because the houses had roofs of reeds. The buildings along the Pactolus, archaeologically confirmed as being burned, were also connected with the Ionian Revolt in the preliminary reports.<sup>48</sup>

As mentioned above, it may have been a deliberate act to burn the Kybebe sanctuary rather than an accident. An explanation to why the sanctuary itself was a target could be sought by asking what sort of goddess Kybebe by the Pactolus was, or rather what she represented from a Greek point of view. M. Munn has recently convincingly argued that Kybebe was closely associated with sovereignty and symbolized the supreme power held by first the Lydians and then later by the Persians.<sup>49</sup> Munn has thoroughly examined the subject and I will therefore restrict myself to analyse those aspects which may threw new light on the association of Kybebe with sovereignty, based on my reinterpretation of the excavated shrine.

On the basis of the location of the Kybebe altar in the middle of the gold refinery, we may suggest that she was the divine protector of the gold and silver industry. Admittedly we do not know which came first, the establishment of the shrine or the silver and gold production

of this area. However, that may be of less significance as the goddess due to the location of her shrine in the midst of the industrial area, most probably came to be associated with the production.<sup>50</sup> Indeed early literary sources connected the goddess with metal working. Metallurgists, traditionally described as daimones in various sources, were attendants of the Great Mother. They were known by different names, such as Daktyloi, Telchines, Kouretes, Korybantes and Kabeiroi, and of these the Daktyloi and the Telchines were especially closely associated with metallurgy.<sup>51</sup> The Idaean Daktyloi were said to be the inventors of ironworking (Strabo 10.3.22) or to have learned their skill from the Mother Goddess (Diod. Sic. 17.7.5).52 They lived around the mountain Ida variously located in the Troad (Phrygia) or on Crete. The tradition of the metalworking Daktyloi dates back to early periods, as already Hesiod wrote about the Idaean Daktyloi (Plin. HN 7.197).53

<sup>&</sup>lt;sup>50</sup> Ramage also thought that the altar was located there because there was a relationship between the refinery and the goddess (Ramage, Goldstein & Mierse 1983, 37).

<sup>&</sup>lt;sup>51</sup> Blakely 2006, 13; Forbes 1971, 80–82; Hemberg 1950, 346–351; Caduff 1997; Ambühl 2002, Berndt-Ersöz 2006, 167–169.

<sup>&</sup>lt;sup>52</sup> The *Telchines* were said to be the native inhabitants of Rhodes, and several names are preserved but we may here note such names as Gold (*Chrysos*), Silver (*Argyros*) and Copper (*Chalkos*) (Eust. *Il.* p. 772).

In the epos Phoronis (EGF, frg. 2=Schol. Apoll. Rhod. 1.1126-1131b), dated to around 600 BC, the Daktyloi besides being the inventors of blacksmith's work, are also described as Phrygian sorcerers (γόητες) who served Adresteia (sic) of the mountain, i.e. the local Mountain goddess in the Troad. The Daktyloi are named as Kelmis, Akmon and Damnameneus; the latter name occurs as one of the six words of the so-called Ephesia Grammata (Kotansky 1991, 110-112, 121-122; Graf 1997). These were magical words uttered for protection and said to have been inscribed on the statue of Artemis Ephesia. Croesus was told to have saved himself from the funeral pyre by uttering these words (Suda, s.v. Ἐφέσια γράμματα). We may here note a possible link between Kybebe and the Ephesia Grammata at Lokroi Epizephyrioi, where a cult of Kybebe/Kybele is attested in two Archaic inscriptions, on a sherd and

<sup>47</sup> Hanfmann 1962, 22-23.

<sup>&</sup>lt;sup>48</sup> Hanfmann 1961, 26–28; Hanfmann 1962, 22.

<sup>&</sup>lt;sup>49</sup> Munn 2006, see esp. 242–248 regarding the significance of Kybebe in the Ionian Revolt.

The *daimones* were also closely connected with magic and said to have invented music (Plut. *Mor. De mus.* 1132F). We may here note that the 6th century BC sculpture group of the Mother Goddess Kybele from Boğazköy is flanked by two small musicians, who have tentatively been interpreted as the *Daktyloi.*<sup>54</sup>

Since the literary evidence support an early association between metallurgy and the supreme female goddess, often identified as the Mother Goddess, I would like to suggest that Kybebe probably was part of the gold and silver refinery from the very beginning. That the Goddess who provided the gold of Pactolus was the Lydian Kybebe is further supported by Sophocles in his tragedy *Philoctetes* (391–401) written in 409 BC:

"O Earth, you who dwell in the mountains and feed all men, mother of Zeus himself, you who supply great Pactolus rich in gold, to you, my Mother and Sovereign [Mater Potnia], I call ... O blessed one, who sits on bull-slaying lions"

(translation from Pedley 1972, no. 253 and Hanfmann & Ramage 1978, 31, no. 13).

lead tablet respectively (Jordan 2000a, 95–96; Guarducci 1970; de la Genière 1985). From the same area (Centocamere) came also another fragmented text (4th century BC), likewise inscribed on a lead tablet, which contained the beginning words of the *Ephesia Grammata* (Jordan 2000a, 96–101. See also Jordan 2000b for an earlier inscription from Himera containing parts of the *Ephesia Grammata*). Possibly the Kybebe/Kybele cult had spread from Sardis, via Sparta to Lokroi Epizephyrioi, as suggested by other scholars (Jordan 2000a, 96; de la Genière 1985). We may further note that the word *kelmis* occurs in a Palaeo-Phrygian inscription, on the so-called Vezirhan stele, although it is uncertain whether it refers to one of the *Daktyloi* (Berndt-Ersöz 2006, 169).

Neumann 1959, 104–105; Berndt-Ersöz 2006, 167–69, 172.

The Goddess is addressed as Meter Potnia, and Potnia may be translated as Pedley did here with Sovereign, but it is more usually translated as Lady, Queen or Mistress. A direct comparison can be made with the titles of Kubaba. In texts from Ras Shamra she is called upon as the Lady Kubaba of the land of Karkamiš, in Hieroglyphic Luwian texts she is entitled as the Queen of Karkamiš but also as "my Sovereign Kubaba". Hence, the Goddess addressed by Sophocles is most certainly the deity referred to as Kuvava in Lydian.

Since Kybebe provided the gold and silver, she also contributed to the wealth of the Lydian kings; a role which probably further contributed to her being the provider of sovereignty. Electrum from Pactolus was used for the coinage, which the Lydians invented at some point during the 7th century.<sup>56</sup> The bimetallic coinage, i.e. separate silver and gold coins, was probably introduced during the time of Croesus.<sup>57</sup> The coins apart from being used in economic transactions, also took on the role of being symbols of royal authority and power, through their imagery. The so-called croeseid type of coin is a perfect example of royal propaganda. These were issued during the period of Croesus but also during the later Achaemenian period and carried an image of a lion fighting a bull (Fig. 8).58 The lion is the aggressor, depicted with open mouth and with his paw on top of the leg of the bull, i.e. the lion is depicted as a bull-slayer but in a less explicit manner than

Hawkins 1980–1983, 258. Ras Shamra texts: Nougayrol 1956, 157; Hieroglyphic Luwian texts: Hawkins 2000, 119, 122, 142, nos. II.17, II.20, II. 26, II.57.

<sup>&</sup>lt;sup>56</sup> Cook 1958, 261; Kagan 1982; Browne 2000; Ramage & Craddock 2000, 18.

<sup>&</sup>lt;sup>57</sup> The archaeological excavations in Sardis have now definitely settled the matter that the introduction of the "croeseids" cannot be later than Croesus himself, as several example were found in the destruction connected with the capture of Sardis by Cyrus the Great in the 540s (Cahill & Kroll 2005).

<sup>&</sup>lt;sup>58</sup> Kraay 1976, 30–31; Naster 1965.



Fig. 8. Drawing of a croeseid type of coin.

usual, probably because it had to be adjusted to fit the small size of a coin.<sup>59</sup> This motif of bull-slaying lions represented royal power and authority in Lydia as well as throughout the Near East. 60 The motif was also enhanced in Achaemenian iconography, such as the prominently located reliefs at the central staircase of the Persepolis Apadana; a building project initiated by Darius I around the time of the Ionian Revolt or somewhat earlier. 61 The croeseids are not the only coins with this motif; in fact, an adjusted version appeared during the period of the Peisistratids in Athens. 62 The motif became popular in Greece during the 7th century, but it was abandoned during the 5th century, plausibly, as suggested by G.E. Markoe, because it was too closely associated with Persian royal power.63

<sup>59</sup> Markoe 1989, 103 with n. 68 also interpreted the motif as an abbreviated version of bull-slaying lions.

Let us now consider the aforementioned passage by Sophocles, and what he may have meant by his reference to the Goddess (of Sovereignty) who sits on bull-slaying lions. It has previously been suggested that this passage refers to cult images of the Mother Goddess, and especially to the one made by Agorakritos for the Athenian Bouleuterion. 64 Such an interpretation is possible, but considering that the reference is made in connection with the Goddess dwelling by the Pactolus, it may rather refer to her. Indeed, it may perhaps be a reference to the lions once positioned on top of the Kybebe altar. However, these lions were no longer visible at the time of Sophocles, and he further described the lions as bull-slayers; indirectly implying a motif where the lion is attacking a bull, but none of the preserved lion sculptures found inside the altar was attacking a bull. We should here also take into account that no such motif can actually be found as part of any known image of the Mother Goddess. I would therefore rather suggest that the bull-slaying lions do not refer to an image of the Mother Goddess, but rather to the symbol of royal power, which was expressed on the croeseids, and as such both connected with the gold of Pactolus and the Goddess. Hence, the croeseid may be interpreted as a symbol of royal authority and of the sovereignty provided to the King by the Goddess.

The croeseid type of coin continued to be issued by the Persians probably until the very end of the sixth century, i.e. around the time of the Ionian Revolt when the croeseids were at least partially replaced by Persian ones, but also these were produced at Sardis.<sup>65</sup> Darius I introduced a new type of coin, with the image of the royal archer, generally interpreted as the Great

Hofsten 2007.

<sup>60</sup> Markoe 1989, 88, 103.

<sup>61</sup> Stronach 1989, 263 with n. 34. Several various dates have been proposed for the Apadana, see Vargyas 2000, 40 with n. 28 for references. For the reliefs, see *Persepolis* I, pls. 16–20. We may further note that in the two foundations deposits of the Apadana, were eight gold coins of the croeseid type buried together with Darius' foundation record written on two silver and two gold plaques (*Persepolis* I, 79; *Persepolis* II, 114, nos. 28–35).

<sup>62</sup> Markoe 1989, 108, pl. 22a-c.

Markoe 1989, 92, 109. On this motif, see also von

<sup>&</sup>lt;sup>64</sup> Hanfmann & Ramage 1978, 31; Borgeaud 2004, 22; Soph. *Phil.*, T.B.L. Webster, ed. Cambridge 1970, Commentary 400f. p. 97.

<sup>65</sup> Kraay 1976, 30-31.

King himself.66 These coins known as darics (of gold) and sigloi (of silver) must have come into circulation some time before 500 BC.67 in other words, shortly before the Kybebe Sanctuary was desecrated in the Ionian Revolt, which may have some significance. The daries and sigloi were particularly used in Western Anatolia but probably also for the Persian contacts with the Greeks. 68 These coins had a strong propaganda function where the king's supreme power is explicitly expressed and beyond doubt.<sup>69</sup> That the Greeks were well aware of the implication of this image is exemplified by Aeschylus, who in his play The Persians (472 BC) described Darius as the First bowman of his people.<sup>70</sup> Furthermore, Herodotus (5.105) made a point of Darius' reaction when he learned that Sardis had been taken and burnt. He reportedly took his bow and shot an arrow into the sky while promising to revenge the Athenians. This passage, is in my opinion, a good indication of that Herodotus was well aware that the Kybebe sanctuary had been targeted in the Ionian Revolt because it was the symbol of Persian sovereignty, which was explicitly expressed on the darics and sigloi.

Besides the symbolic and propagandistic function of the coins, we should also take the economic aspect into consideration. It has been suggested that coinage was contrived as a

solution for Alyattes (c. 610-560 BC) to pay the army used against the Medes and later for Croesus to pay the mercenary soldiers in the Lydian armies.<sup>71</sup> During the Achaemenian period the minted coins probably continued to be used for payment and provisioning of the troops.72 Hence, the gold from Pactolus provided at least to some extent the economic resources, which made first the Lydian and later the Persian sovereignty of Asia Minor possible. Whether this economic aspect played any role in the desecration of the Kybebe shrine is, however, uncertain. The main objective for the desecration of the altar was rather that Kybebe, at least from a Greek point of view, was the deity who provided the Persian king with sovereignty.

The Persian reaction to the Ionian Revolt was severe, but the theory proposed here may help to explain why the Persians responded by not only crushing the Greek rebellions, but also by burning their temples, such as those at Eretria and Athens (Hdt. 6.101, 8.53). When Darius I figuratively expressed his sovereign power by putting his image on the coins, the attack of the Kybebe sanctuary, regardless of whether it was an accident or not, inevitably came to be apprehended as an attack against the Persian king and his supreme power. Herodotus (7.8) confirms that the Ionian Revolt was received as such by Xerxes, who justified his punishment of the Greeks because of what they had done to his father Darius and Persia. Herodotus mentioned the burning of the groves and sanctuaries as one of the wrongs done against Darius, and elsewhere (5.102.1) he notes that it was the particular burning of the Kybebe sanctuary, which "justified" the Persians' burning of

<sup>66</sup> Stronach 1989, 268–278, fig. 1; Kraay 1976, 32; Root 1991, 16; Mildenberg 1993, 57; Nimchuk 2002, 63.

<sup>&</sup>lt;sup>67</sup> A daric has been impressed on Tablet 1495, dated to the 22nd year of Darius, i.e. 500 BC, from the Fortification Archive at Persepolis (Root 1988, 10–12. pl. 1.4). See also Alram 1996; Mildenberg 1993, 56 and Vargyas 2000 (with references to earlier scholars) for a discussion of the date.

<sup>&</sup>lt;sup>68</sup> There is no consensus among scholars why and for whom these new coins were intended, see for example Root 1991, 16; Nimchuk 2002; Vargyas 2000, with further references in nn. 6–8.

<sup>&</sup>lt;sup>69</sup> Root 1991, 15–17; Briant 2002, 409; Nimchuk 2002, esp. 63–66.

<sup>&</sup>lt;sup>70</sup> Aesch. Pers. 554-555.

<sup>&</sup>lt;sup>71</sup> Ramage & Craddock 2000, 18. A croescid type of coin has also been found in the possession of a Lydian soldier in the excavations at Sardis (Cahill & Kroll 2005, 591).

Album, Bates & Floor 1993, 15. See also Xen. An. 1.3.21. Cf. Nimchuk 2002, 66–70.

the Greek sanctuaries. Why the burning of this particular sanctuary was regarded as an almost personal attack on Darius himself may be explained with that Kybebe was both the divine protector of coinage and the one who provided the King with sovereignty, explicitly expressed on the newly issued coins carrying his image.

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### **Bibliography**

- Album, S., M.L. Bates & W. Floor 1993. 'Coins and coinage', in *Encyclopaedia Iranica* 6, Costa Mesa, 14–41.
- Alram, M. 1996. 'Daric', in *Encyclopaedia Iranica* 7, Costa Mesa, 36–40.
- Ambühl, A. 2002. 'Telchines', in *Der neue Pauly* 12/1, Stuttgart, 86–87.
- Berndt-Ersöz, S. 2006. Phrygian rock-cut shrines: structure, function and cult practice (Culture and history of the Ancient Near East, 25), Leiden & Boston.
- Blakely, S. 2006. Myth, ritual and metallurgy in ancient Greece and recent Africa, Cambridge.
- Borgeaud, P. 2004. *Mother of the Gods: from Cybele to the Virgin Mary* [originally published in French 1996], Baltimore.
- Briant, P. 2002. From Cyrus to Alexander: A history of the Persian Empire [originally published in French 1996], Winona Lake.
- Browne, G.M. 2000. 'A new Lydian text', *Kadmos* 39, 177–178.

- Caduff, G.A. 1997. 'Daktyloi Idaioi', in *Der neue Pauly* 3, Stuttgart, 280–281.
- Cahill, N. & J.H. Kroll 2005, 'New Archaic coin finds at Sardis', *AJA* 109, 589–617.
- Carchemish II = Woolley, C.L. 1921. Carchemish II. Report on the excavations at Jerablus on behalf of the British Museum, London.
- Collins, B.J. 2004. 'The politics of Hittite religious iconography', in Offizielle Religion, lokale Kulte und individuelle Religiosität: Akten des religionsgeschichtlichen Symposiums "Kleinasien und angrenzende Gebiete vom Beginn des 2. bis zur Mitte des 1. Jahrtausends v.Chr." (Bonn, 20.–22. Februar 2003) (Alter Orient und Altes Testament, 318), eds. M. Hutter & S. Hutter-Braunsar, Münster, 83–115.
- Cook, R.M. 1958. 'Speculations on the origins of coinage', *Historia* 7, 257–262.
- Dusinberre, E.R.M. 2003. Aspects of Empire in Achaemenid Sardis, Cambridge.
- Forbes, R.J. 1971. Studies in Ancient technology 8, Leiden.
- Gabriel, A. 1965. *Phrygie, explorations archéologique* 4. *La cité de Midas: architecture,* Paris.
- de la Genière, J. 1985. 'De la Phrygie à Locres Épizéphyrienne: Les chemins de Cybèle', *MÉFRA* 97, 693–718.
- Graf, F. 1997. 'Ephesia Grammata', in *Der neue Pauly* 3, Stuttgart, 1076–1078.
- Greenewalt Jr, C.H. 1991. 'The Sardis campaign of 1987', *BASOR*. Supplementary Studies 27, 1–28.
- Greenewalt Jr, C.H., C. Ratté & M.L. Rautman 1994. 'The Sardis campaigns of 1990 and 1991', *AASOR* 52, 1–36.

- Greenewalt Jr, C.H., C. Ratté & M.L. Rautman 1995. 'The Sardis campaigns of 1992 and 1993', *AASOR* 53, 1–36.
- Guarducci, M. 1970. 'Cibele in un' epigrafe arcaica di Locri Epizefiri', *Klio* 52, 133–138.
- Gusmani, M.R. 1964. Lydisches Wörterbuch: Mit grammatischer Skizze und Inscriftensammlung, Heidelberg.
- Gusmani, M.R. 1969. 'Der lydische Name der Kybele', *Kadmos* 8, 158–161.
- Gusmani, M.R. 1975. Neue epichorische Schriftzeugnisse aus Sardis (1958–1971)
  (Archaeological exploration of Sardis, Monograph, 3), Cambridge, Mass.
- Gusmani, M.R. 1980–1986. *Lydischer Wörter*buch. *Ergänzungsband* I–III, Heidelberg.
- Hanfmann, G.M.A. 1961. 'The third campaign at Sardis (1960)', *BASOR* 162, 8–49.
- Hanfmann, G.M.A. 1962. 'The fourth campaign at Sardis (1961)', *BASOR* 166, 1–57.
- Hanfmann, G.M.A. 1966. 'The eighth campaign at Sardis (1965)', *BASOR* 182, 2–54.
- Hanfmann, G.M.A. 1968. 'The tenth campaign at Sardis (1967)', *BASOR* 191, 2–41.
- Hanfmann, G.M.A. 1983. 'Lydian society and culture', in *Sardis from Prehistoric to Roman times. Results of the archaeological exploration of Sardis 1958–1975*, ed. G.M.A. Hanfmann, Cambridge, Mass., 67–99.
- Hanfmann, G.M.A. & H. Buchwald 1983.

  'Christianity: Churches and cemeteries', in Sardis from Prehistoric to Roman times. Results of the archaeological exploration of Sardis 1958–1975, ed. G.M.A. Hanfmann, Cambridge, Mass., 191–210.

- Hanfmann, G.M.A. & N.H. Ramage 1978.

  Sculpture from Sardis: The finds through
  1975 (Archaeological Exploration of
  Sardis, Report, 2), Cambridge, Mass.
- Hanfmann, G.M.A., L. Robert & W.E. Mierse 1983. 'The Hellenistic period', in Sardis from Prehistoric to Roman times. Results of the archaeological exploration of Sardis 1958–1975, ed. G.M.A. Hanfmann, Cambridge, Mass., 109–138.
- Hanfmann G.M.A. & J.C. Waldbaum1970. 'The eleventh and twelfth campaigns at Sardis (1968, 1969)', *BASOR* 199, 7–58.
- Hawkins, J.D. 1980–1983. 'Kubaba', in *RA* 6, 257–261.
- Hawkins, J.D. 2000. Corpus of hieroglyphic Luwian inscriptions I.1–3. Inscriptions of the Iron Age (Untersuchungen zur indogermanischen Sprach- und Kulturwissenschaft n. F., 8.1 = Studies in Indo-European language and culture NS., 8.1), Berlin & New York.
- Hemberg, B. 1950. Die Kabiren, Uppsala.
- Heubeck, A. 1959. Lydiaka. Untersuchungen zu Schrift, Sprache und Götternamen der Lyder (Erlanger Forschungen, 9), Erlangen.
- von Hofsten, S. 2007. The feline-prey theme in Archaic Greek art: Classification-distribution-origin-iconographical context (Acta Universitatis Stockholmiensis, Stockholm Studies in Classical Archaeology, 13), Stockholm.
- How, W.W. & J. Wells 1949. *A commentary on Herodotus*, 2 vols., Oxford.
- Jordan, D. 2000a. 'Three texts from Lokroi Epizephyrioi', *ZPE* 130, 95–103.

- Jordan, D. 2000b. 'Ephesia Grammata at Himera', *ZPE* 130, 104–107.
- Kagan, D. 1982. The dates of the earliest coins', *AJA* 86, 1982, 343–360.
- Kotansky, R. 1991. 'Incantations and prayers for salvation on inscribed Greek amulets', in *Magika Hiera: Ancient Greek magic and religion*, eds. C.A. Faraone & D. Obbink, New York, 107–137.
- Kraay, C.M. 1976. Archaic and Classical Greek coins, New York.
- Littman, E. 1916. Sardis VI. Lydian inscriptions Part I, Leyden.
- Markoe, G.E. 1989. 'The "Lion attack" in Archaic Greek art: Heroic triumph', ClAnt 8, 86–115.
- Mellink, M.J. 1987. 'Lydia and Sardis in Anatolian context', in *Sardis: twenty-seven years of discovery*, ed. E. Guralnick, Chicago, 16–25.
- Mildenberg, L. 1993. 'Über das Münzwesen im Reich der Achämeniden', *AMIran* 26, 55–79.
- Munn, M. 2006. The Mother of the Gods, Athens and the tyranny of Asia: A study of sover-eignty in Ancient religion, Berkeley.
- Munn, M. 2008. 'Kybele as Kubaba in a Lydo-Phrygian context', in *Anatolian* interfaces: Hittites, Greeks and their neighbours. Proceedings of an International conference on cross-cultural interaction, September 17–19, 2004, Emory University, Atlanta, GA, eds. B.J. Collins, M.R. Bachvarova & I.C. Rutherford, Oxford, 159–164.
- Murray, O. 1988. 'The Ionian Revolt', in *CAH* IV<sup>2</sup>, Cambridge, 461–490.
- Naster, P. 1965. 'Remarques charactéroscopiques et technologiques au sujet des créseides', in *Congresso internazionale di*

- *Numismatica, Roma 1961, Atti*, Roma, 25–36.
- Neumann, G. 1959. 'Die Begleiter der phrygischen Muttergöttin von Boğazköy', *NakG Philologisch-Historische Klasse*, 101–105.
- Nimchuk, C.L. 2002. 'The "Archers" of Darius: Coinage or tokens of royal esteem?', *Ars Orientalis* 32, 55–79.
- Nougayrol, J. 1956. *Le Palais royal d' Ugarit* IV. *Textes accadiens des archives sud* (Mission de Ras Shamra, 9), Paris.
- Paz de Hoz, M. 1999. *Die lydischen Kulte im Lichte der griechischen Inschriften* (Asia Minor Studien, 36), Bonn.
- Pedley, J.G. 1972. Ancient literary sources on Sardis (Archaeological exploration of Sardis, Monograph, 2), Cambridge, Mass.
- Persepolis I = E.F. Schmidt, Persepolis I.

  Structures, reliefs, inscriptions, Chicago
  1953.
- Persepolis II = E.F. Schmidt, Persepolis II. Contents of the treasury and other discoveries, Chicago 1957.
- Ramage, A. & P. Craddock 2000. King Croesus' gold: Excavations at Sardis and the history of gold refining, London.
- Ramage, A., S.M. Goldstein & W.E. Mierse 1983. 'Lydian excavation sectors', in Sardis from Prehistoric to Roman times. Results of the archaeological exploration of Sardis 1958–1975, ed. G.M.A. Hanfmann, Cambridge, Mass., 26–52.
- Ratté, C. 1989a. *Lydian masonry and monumental architecture at Sardis*, diss., University of California, Berkeley.
- Ratté, C. 1989b. 'Five Lydian felines', *AJA* 93, 379–393.

- Rein, M.J. 1993. *The cult and iconography of Lydian Kybele*, PhD thesis, Harvard
  University.
- Roller, L.E. 1999. *In search of God the Mother: The cult of Anatolian Cybele*, Berkeley.
- Roosevelt, C.H. 2009. *The archaeology of Lydia from Gyges to Alexander*, Cambridge.
- Root, M.C. 1988. 'Evidence from Persepolis for the dating of Persian and Archaic Greek coinage', NC 148, 1–12.
- Root, M.C. 1991. 'From the heart: Powerful Persianisms in the art of the Western Empire', in *Achaemenid History 6*, eds. H. Sancisi-Weerdenburg & A. Kuhrt, Leiden, 1–29.

- Seager, A.R. & A.T. Kraabel 1983. 'The synagogue and the Jewish community', in *Sardis from Prehistoric to Roman times. Results of the archaeological exploration of Sardis 1958–1975*, ed. G.M.A. Hanfmann, Cambridge, Mass., 168–190.
- Stronach, D. 1989. 'Early Achaemenid coinage: perspectives from the homeland', *Iranica Antiqua* 24, 255–284.
- Vargyas, P. 2000. 'Darius I and the Daric reconsidered', *IrAnt* 35, 33–46.
- Waldbaum, J.C. 1983. *Metalwork from Sardis: The finds through 1974*, Cambridge,
  Mass.