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Egyptian stelae from Malta

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Summary In 1829, four Egyptian stelae of Twelfth and Eighteenth Dynasty date were found, surprisingly, on Malta. Based on their far-flung findspot, some have suggested that the stelae were locally made by Egyptian colonists who had settled on the island during the second millennium BC. This contribution argues that the stelae offer no basis for such historical reconstructions. Style, content and petrology demonstrate that all four stelae were made in Egypt and that they originally stood in the necropolis of Abydos in Upper Egypt. Microfossils show that these stelae are made of Egyptian limestones, which are of a different geological age to limestones available on Malta. The examination of polished thin sections of samples from the stelae using scanning electron microscopy suggests that the limestones employed were quarried from four geological formations of different ages in the Nile Valley.

INTRODUCTION

The old Bighi Royal Naval Hospital on the Grand Harbour in Valletta, which is now home to the Malta Centre for Restoration, is one of Malta's finest examples of neo-classical architecture. The privately owned villa that has graced the site since the seventeenth century was integrated into the hospital when this was built in the early nineteenth century. During the excavations for the foundations of the hospital in 1829, four Egyptian stelae came to light from an undocumented context. They were recovered by the Clerk of Works, Mr J.B. Collings, who sent them to the British Museum in 1836, where they bear the registration numbers EA 218, EA 233, EA 287 and EA 299. Since their first publication by Murray [1], it has been suggested at various times, most recently in two independent studies by Testa [2] and Meza [3; pp. 312–313], that these stelae might have been made locally by Egyptians who had supposedly established a colony on the island. As EA 233 dates to the late Twelfth Dynasty, while the other three stelae come from two stages of the Eighteenth Dynasty, it is thus implied that the Egyptians established a presence on Malta for almost five centuries during the second millennium BC, well before its colonization by the Phoenicians in the following millennium. Here it will be argued, however, that the stelae originate from Egypt and were brought to Malta at a much later date. Evidence for this resides in their inscriptions and representations, as well as in the limestones from which these stelae were manufactured. The authors' renewed interest in the stelae was generated by an enquiry from Dr Charles Savona-Ventura, who kindly supplied samples of limestone encountered on Malta, allowing direct comparison with the limestones used for the stelae [4].

STYLE AND CONTENT

All four stelae exhibit styles well documented for stelae discovered in Egypt and can be connected with the oeuvres of specific sculpture workshops. The British Museum stelae also bear evidence to suggest that each was destined to be set up in Abydos, the cult centre of the god Osiris.

The evidence for both these points is clearest in stela EA 233, Figure 1. Its principal inscription addresses 'those living on earth, every *wab*-priest, every lector-priest, every scribe and every *ka*-servant who may pass by this eternal stela'. Those reading the inscription are told that, if they wish their king to be alive for them, their local gods to praise them and to pass their offices to their eldest children, they should recite an offering prayer for the benefit of all those commemorated on the monument. The version of the prayer inscribed on EA 233 invokes the king and 'Osiris, lord of Abydos'; it mentions no other deities or places. Osiris is also depicted in the lunette of the stela. His mummiform figure is accompanied by the epithets 'foremost of the westerners (i.e. the dead), the great god, lord of Abydos'. Facing him is a figure of the second most important deity of Abydos,

the jackal-god Wepwawet. It is important to note that stelae erected outside Egypt proper, be this in Nubia, the desert regions or Asia, have never been found to bear depictions of either deity. In contrast, and not surprisingly, their images feature frequently on stelae placed in Abydos, their principal centre of worship. It is only in the course of the Eighteenth Dynasty that depictions of these gods – chiefly Osiris – begin to appear on stelae set up at other locations. On EA 233, between the two deities, the living king is also represented – through a cartouche. This contains the throne-name of Amenemhat III, who is said to be 'beloved' of both gods; his mention dates the stela to *c.*1855–1808 BC. Similar half-figurative, half-inscriptional compositions are known from the lunettes of other late Middle Kingdom stelae, but by far the closest parallel occurs on stela Louvre C 6 (Figure 2) [5, 6],[1] which was undoubtedly made in the same workshop, if not designed by the same draughtsman. In both cases, Osiris and Wepwawet are positioned directly beside the cartouche, and only on these two stelae do both extend towards it the *ankh*-sign, symbol of life [7].[2] There is also complete agreement as regards the single epithet of the king ('the great god') and those of the gods.[3] The king involved is also the same, and the individual words in the lunette inscriptions are identically positioned. The only major difference is that on the Louvre stela, the outer corners of the lunette still offered space for naming, highly unusually, the sculptor who carved that piece. There is no documented provenance for the Louvre stela but, in common with the British Museum, most of the early collection of stelae in Paris was undoubtedly found in Abydos. The designs of the main panels of the two stelae are very different, but both are 26 cm wide, and while EA 233 has lost its lower part, it may well have been as tall and elongated as the Louvre piece. While the principal owner of EA 233 was a coppersmith, that of C 6 was a government official and accountant, but the latter also mentions a remarkable number of goldsmiths and an overseer of craftsmen. Thus, both pieces were not only commissioned at the same time and place, but name people from the same professional sphere. All in all, it is clear that EA 233 was made and set up in Egypt. As if to reinforce that point, its prayer states that among the offerings its owners seek is 'that which the Nile produces', i.e. the crops from Egypt's annually flooded fields. Little hope of that on Malta! The stela need not have been made where it was dedicated, having perhaps been produced near the capital of Lisht, but there cannot be any doubt that the necropolis of Abydos was its intended eternal environment.

Stelae EA 218 and EA 299 (Figures 3 and 4) are both stylistically datable to the early Eighteenth Dynasty, *c.*1500 BC, and both are from a single and highly productive workshop. The date is amply demonstrated, not only by palaeographic and orthographic features of the inscriptions, but also by the pictorial scenes, the latter carved in raised relief (including the symbolic eyes and *shen*-ring at the top). As is typical of stelae produced at this time, the principal owners are depicted seated on chairs with high backs curved at the top and supported by stiles [8].[4] On

FIGURE 1. Upper part of stela EA 233 from the Twelfth Dynasty, from the reign of Amenemhat III (*c.*1855–1808 BC)

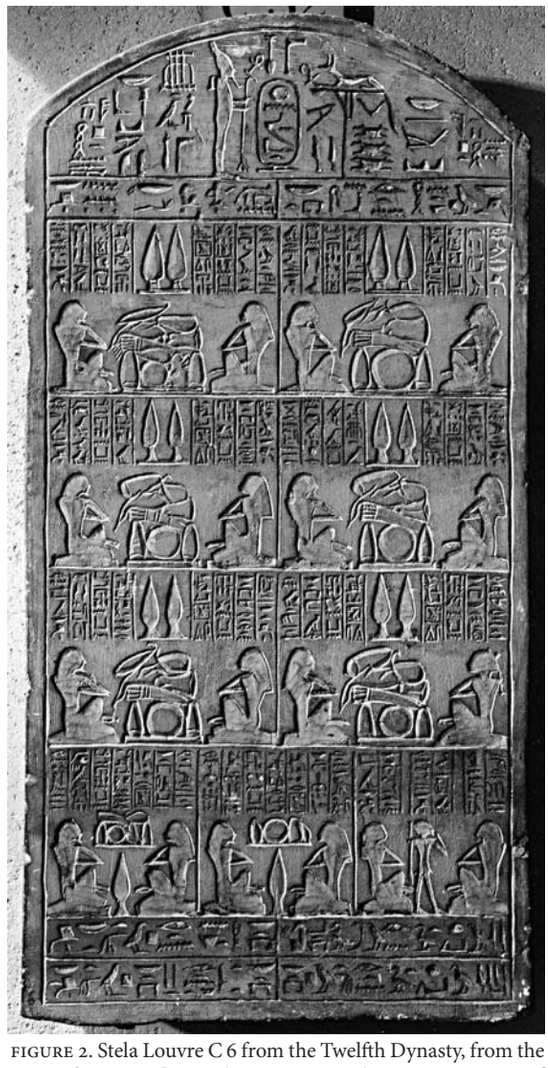

FIGURE 2. Stela Louvre C 6 from the Twelfth Dynasty, from the reign of Amenemhat III (*c.*1855–1808 BC). Image: Courtesy of the Musée du Louvre

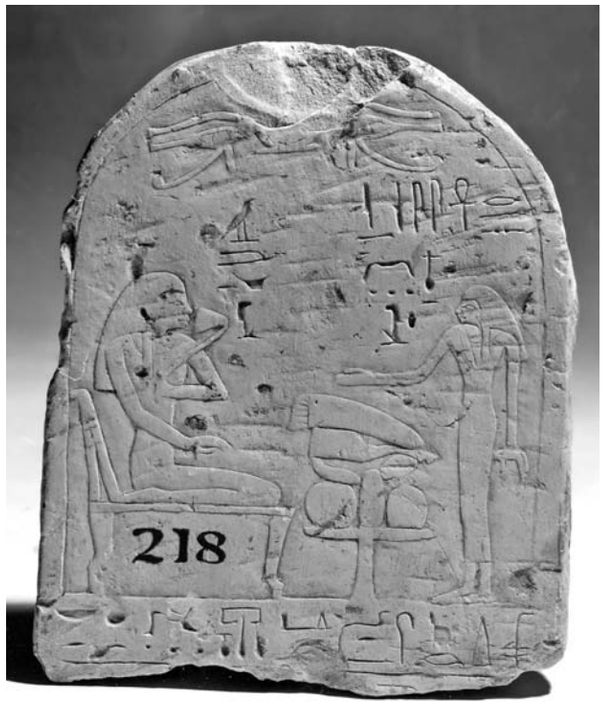

FIGURE 3. Stela EA 218 from the early Eighteenth Dynasty, *c.*1500 BC

FIGURE 4. Stela EA 299 from the early Eighteenth Dynasty, *c.*1500 BC. After Murray, M.A., 'Egyptian objects found in Malta', *Ancient Egypt* (1928) Figure 2 (p. 46); the stela has since suffered from salt efflorescence

stela EA 218, the woman to the left sniffs a lotus with an oddly convoluted stem that is often encountered in early Eighteenth Dynasty representations. The woman on EA 299 pours a libation over an unusually minute table bedecked with elongated offering loaves, the latter reduced to a single block. Closely matching libation scenes with similarly tiny tables appear on stelae that seem to be of the same artistic origin, perhaps even by the same hand, and those whose provenance is recorded have been found in Abydos [9].[5] On both EA 218 and EA 299, the offering formula invokes 'Osiris, ruler of eternity'. Mention of the Abydene god is not in itself conclusive, but again no other deity is named. More importantly, numerous stelae that are known or believed to have been found in Abydos so closely resemble EA 218 and 299 in style and execution that both were undoubtedly also found at that site – *before* they were taken to Malta.

Even in its present fragmentary state, it is clear that the same can be said for EA 287, Figure 5. The stela includes a large representation of Osiris himself, seated on a throne and holding a long *was*-sceptre. The principal owner of the stela was shown kneeling before him, no doubt with his hands raised in prayer. Scenes of worship featuring a prominent, seated Osiris became common during the reign of Amenhotep III (*c.*1390–1352 BC) [10–12].[6] It is then that EA 287 was most probably made, at least a century after EA 218 and 299. Another detail often noted from the mid-Eighteenth Dynasty, although only partly preserved on EA 287, is the narrow stand that carries libation paraphernalia: a broad cup and, here no longer preserved, a spouted water-jar and lotus flower(s). The epigraphy of the inscription is wholly in keeping with the suggested date and provenance of the stela. Again, Osiris is the only god named in the offering formula (with the epithet 'foremost of the westerners'). In conclusion, this stela can hardly have been erected other than in Abydos. Based on their style and content, it is there that all four stelae recovered on Malta must once have stood.

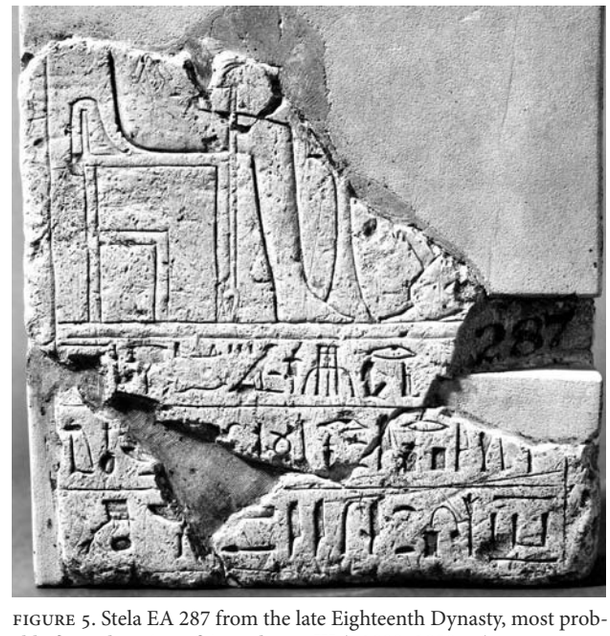

FIGURE 5. Stela EA 287 from the late Eighteenth Dynasty, most probably from the reign of Amenhotep III (*c.*1390–1352 BC)

SCIENTIFIC EXAMINATION OF THE LIMESTONE SAMPLES

Geological background

The Maltese islands are formed of marine Oligocene and Miocene sediments; see Figure 6 for the geological periods referred to in this section. The main units are the Upper Coralline Limestone from the Middle to Late Miocene, Blue Clay from the Middle Miocene (clay with abundant planktonic microfossils), *Globigerina* Limestone from the Early to Middle Miocene (soft limestone with abundant planktonic microfossils, globigerinid foraminifera and calcareous nannofossils) and the Lower Coralline Limestone from the Oligocene. The coralline limestones are predominantly hard, shallow marine limestones, composed of coralline algae, which is not a facies (rock type) seen in any of the four stelae. This leaves the *Globigerina* Limestone as the only rock source on Malta that is superficially similar to at least some of the stelae and from which they could, theoretically, have been made.

Various igneous, metamorphic and sedimentary rocks were used in ancient Egypt to make objects ranging from small beads to vessels, large sculptural pieces and architectural elements [13–15]. Relatively few sedimentary rocks were used, mainly Nubian sandstone from the Cretaceous age and limestones from the Nile Valley and Alexandria areas. The limestones from Alexandria are typically porous calcarenites with ooliths and sand grains that derive from shallow marine environments and date, geologically, to the Pleistocene age. This is not a facies shown by any of the stelae, making these Pleistocene limestones an improbable source. The Nile Valley limestones date to the Late Palaeocene and Middle Eocene and are shallow marine shelf limestones. They exhibit diverse facies but typically contain micrites, wackestones and packestones, with common nummulitid foraminifera, together with lesser amounts of other invertebrates, especially echinoids, bivalves and alveolinid foraminifera. Calcareous nannofossils are widespread in the Egyptian Palaeogene, especially in the marlier facies, and they have been extensively used for biostratigraphy [16].

To summarize, the two alternatives of a Maltese or an Egyptian origin for the stelae lead to distinctly different predictions as to the environment of deposition and geological age of the rock used. If the stelae are from Egypt, they should be either Pleistocene (Alexandria Limestone) or, more probably, Palaeocene to Eocene (Nile Valley limestones). In either case, they would have been deposited under shallow marine conditions. In contrast, the only potential rock source in Malta would be the *Globigerina* Limestone, which although superficially similar to the rock of at least some of the stelae, is a deep marine limestone of Miocene age.

Fortunately, these hypothetical possibilities could be tested directly by examining the microfossil content of the rock and by comparing the mineral composition of the stelae with rock samples from quarries in Egypt.

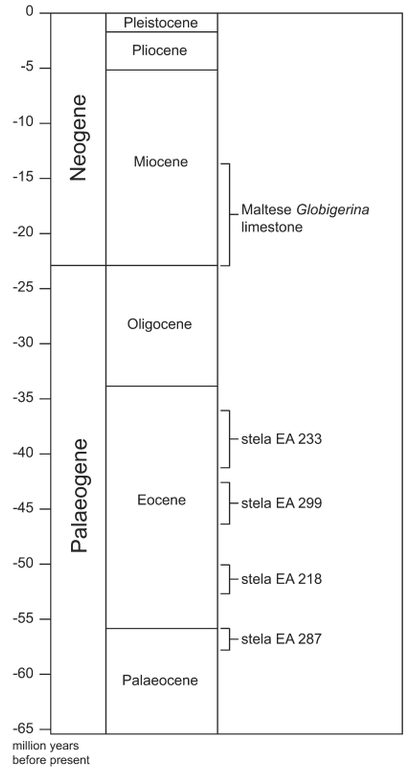

FIGURE 6. Diagram showing the relationship of the geological periods referred to in the text and the approximate ages of the stones of the stelae deduced from fossil identification and mineralogical examination

Examination of the microfossils and nannofossils

Initial examination of the stelae and samples of *Globigerina* Limestone bore out a similarity in general appearance, especially with stelae EA 233 and 218. A more detailed examination was therefore undertaken to identify the nannofossils and microfossils in the stelae. Foraminifera are common in the samples from EA 299 and 287, being clearly visible on the rock surfaces. Extracting these microfossils would have required significant destructive sampling of the specimens, so they were imaged *in situ* using a binocular microscope. The specimens are clearly shallow benthic rotaliids that, although they cannot be identified to provide useful biostratigraphic data, indicate a shallow marine environment.

Calcareous nannofossils (size range 2–20 μm) are much smaller than foraminifera and can be adequately sampled from minute scrapings of limestone. To allow their study, a small amount of material was removed with a scalpel from the rear of each stela. Only sparse, poorly preserved assemblages were recovered, but in each case they contained sufficient age-diagnostic taxa to confirm a Palaeogene age; for details see [17, 18].

- *Stela EA 233 (brown weathered, fine creamy limestone)*: No visible fossils (macrofossils) were seen, but the nannofossils included small *Reticulofenestra* sp.,

Cribrocentrum reticulatum and *Micrantholithus* sp. There are no good marker species in this assemblage, but the presence of common *Cribrocentrum reticulatum* is indicative of a Late Eocene to Early Oligocene age.

- *Stela EA 218 (chalky limestone)*: Visible fossils are present, including some shell fragments, probably of bivalves, but there is nothing age-diagnostic. Nannofossils are rare; there is an overgrown assemblage including *Prinsius* sp., *Toweius pertusus*, *Micrantholithus* sp., *Discoaster* cf. *keupperi* and *Coccolithus pelagicus*. There are no good marker species in this assemblage, but the presence of common *Toweius* and *Prinsius* species is indicative of a Late Palaeocene or Early Eocene age.
- *Stela EA 299 (chalky limestone)*: Visible fossils include medium-sized (3–4 mm) rotaliid benthic foraminifera, which are best seen on the reverse of the stela. A few etched nannofossils are visible, with much recrystallized calcite. The former included *Sphenolithus radians*, *Coccolithus pelagicus*, *Zygrhablithus bijugatus* and *Micrantholithus* sp. Although very poorly characterized, the general assemblage and presence of *Z. bijugatus* suggests an Eocene to Oligocene age.
- *Stela EA 287 (pinkish limestone)*: Visible fossils again include medium-sized (3–4 mm) rotaliid benthic foraminifera, which are best seen on the reverse of the stela. Nannofossils, which are very rare, include etched *Coccolithus pelagicus*, *Toweius* and small *Heliolithus* sp. This is a very poor assemblage, but the presence of *Toweius* and *Heliolithus* sp. suggests a late Palaeocene age.

None of these limestones contains a diverse or well-preserved nannofossil assemblage, probably due to a combination of deposition in shallow marine environments and recrystallization. However, all the assemblages are indicative of Palaeogene age and each sample has a somewhat different assemblage, suggesting that they come from different beds rather than a single source. A Maltese *Globigerina* Limestone sample was also examined and contains a poorly preserved but abundant and diverse assemblage including *Discoaster deflandrei*, *Helicosphaera perchnielseniae*, *H. carteri*, *H. intermedia*, *Coccolithus pelagicus*, *Clausicoccus fenestratus*, *Cyclicargolithus floridanus*, *Pontosphaera* sp., *Umbilicosphaera jafari*, *Rhabdosphaera clavigera* and *Sphenolithus moriformis*. This is an Early Miocene assemblage indicative of nannofossil zone NN1–2 [19].

These observations strongly support a Late Paleocene or Eocene shallow marine facies for the rocks of the stelae and indicate, therefore, an Egyptian rather than Maltese origin.

Mineralogical examination of the stelae

Having established from the nannofossil and microfossil analysis that the limestones were most likely to have come from Egyptian limestone quarries, an obvious next step was to try to determine where in Egypt those quarries were located. This was achieved by comparing polished thin sections of samples from the four stelae with reference samples collected from Egyptian limestone quarries by Dietrich and Rosemarie Klemm that are now held in the Department of Ancient Egypt and Sudan at the British Museum. Comparisons were also made with the large corpus of Egyptian limestone stelae [20], which is currently undergoing scientific analysis at the British Museum [21, 22]. Small samples were removed from the stelae, made into polished thin sections and examined in the Hitachi S-3700N variable pressure scanning electron microscope (VP-SEM) and Hitachi S-4800 field emission scanning electron microscope (FE-SEM). In each case the samples from the stela were compared with Egyptian limestone quarry reference specimens from the Klemm Collection that corresponded roughly to the date suggested by microfossil and nannofossil identification.

- *Stela EA 233*: The polished thin section shows a sandy limestone with fossil fragments replaced by the recrystallization of the limestone, Figure 7a. This matches mostly closely with reference specimens from the Upper Eocene Qasr el-Sagha Formation, found in the Fayum Oasis area at Qasr el-Sagha on the west bank of the Nile, Figure 8.
- *Stela EA 218*: The polished thin section shows a fine-grained limestone with fossil fragments that have undergone partial recrystallization, which severely hinders accurate identification, Figure 7b. The sample matches most closely with reference specimens from the limestone quarries on the east bank of the Nile south of Asiut at el-Hammamiya (Figure 8), which lie within part of the Drunka Formation of the Thebes Group (Eocene).
- *Stela EA 299*: The polished thin section shows a fine-grained limestone containing bioclastic material, well-rounded quartz grains and mostly medium-sized (3–4 mm) foraminifera (nummulites), Figure 7c. In some of the fossil cavities and in parts of the matrix, sparite recrystallization is occasionally present. This sample matches most closely with limestone from the upper layers at the Mokattam quarry. Within the Mokattam Formation on the east bank of the Nile (Figure 8), three very similar limestones can be distinguished: Mokattam, Tura and Maasara. Klemm and Klemm assign the stratigraphic position of the Eocene Mokattam, Tura and Maasara limestones to the Observatory Formation of the Mokattam Group of the Helwan facies [13].
- *Stela EA 287*: The polished thin section shows a fine-grained limestone with a dense micrite matrix, much of which comprises small foraminifera whose cavities are often filled with fine sparite carbonate, Figure 7d. About 15–20% dolomite is present and this limestone matches most closely with the limestones of el-Dababiya and Moalla, Figure 8. According to Klemm and Klemm these quarries belong to the Esna Forma-

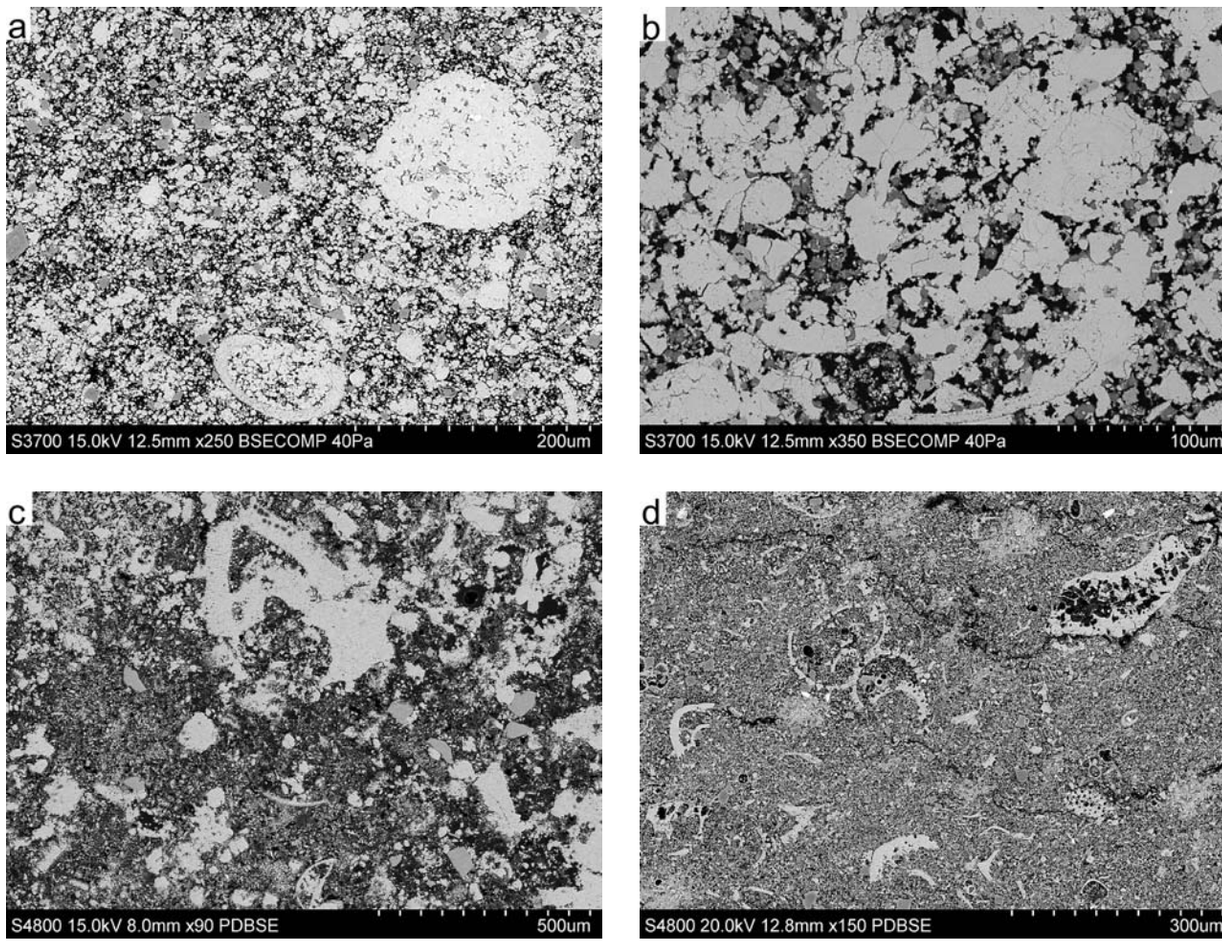

FIGURE 7. Backscattered electron images of polished thin sections of limestone samples from the four British Museum stelae: (a) EA 233; (b) EA 218; (c) EA 299; and (d) EA 287. Images: Hitachi S-3700N VP-SEM (a) and (b); Hitachi S-4800 (c) and (d)

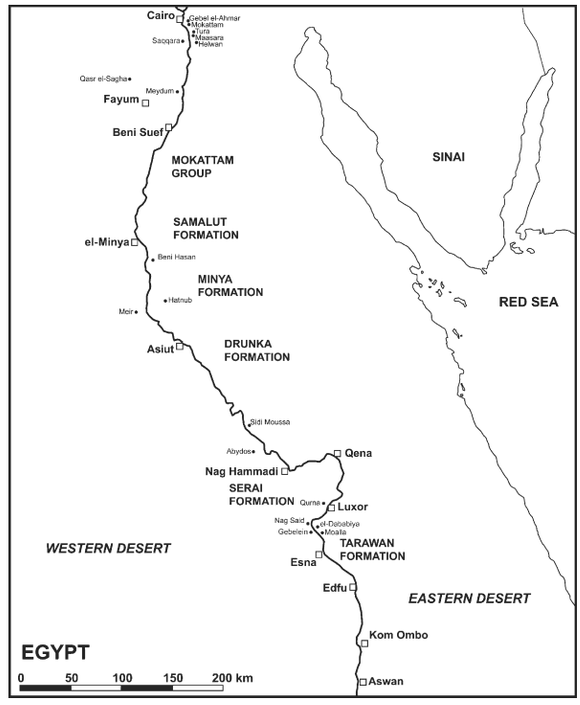

FIGURE 8. Map of Egyptian limestone formations (after [23])

tion in the Upper Palaeocene [13], although Harrell places them in the Tarawan Formation [23].

Discussion

The nannofossil evidence indicates that all the limestone samples date from the Palaeogene, but with each sample exhibiting a somewhat different assemblage, suggesting that they come from different beds rather than a single source. This is substantiated by the VP-SEM examination: EA 233 is of Eocene limestone from the Qasr el-Sagha Formation; EA 218 Eocene limestone from el-Hammamiya; EA 299 Eocene limestone from the upper layers of the Mokattam quarry; and EA 287 Upper Palaeocene limestone from el-Dababiya. It is not surprising that over the course of so many centuries the Abydos workshops acquired limestone supplies from a variety of quarries, but it is more difficult to know why these stones should be from different formations across Egypt. As noted above, the stelae originate from different workshops, and not all of these need necessarily have been located in Abydos itself, as many stelae found in Abydos were brought by their owners from other parts

of Egypt, wherever they lived. It is conceivable, on stylistic grounds, that stela EA 233 in particular has a northern artistic origin. The remaining stelae are, however, most likely to have been produced at Abydos itself, apparently using stone supplies from various parts of Egypt. There could be many mundane, practical reasons for the wide range of origins. A major factor, no doubt, was simply which limestone quarries in Egypt were being most actively exploited at a given point in time. As stone was often reused from earlier monuments, the routes from quarry to final stela could be very convoluted indeed.

CONCLUSIONS

The observations reported here allow us to conclude with confidence that the four stelae found on Malta in 1829 were neither produced on the island, nor left there by the Egyptians they commemorate. The styles and content of these pieces point consistently to the necropolis of Abydos in Upper Egypt as their original location. None of the stelae is made of Maltese *Globigerina* Limestone. Comparison with reference material from Egyptian limestone quarries by VP-SEM and FE-SEM, and with stelae of stones attributed to certain formations, confirms that all four were made of Egyptian limestones; this is consistent with the evidence that the limestones date from the Palaeogene age. The suggestion that the stelae were made on Malta by Egyptian colonists is, therefore, unfounded.

It has alternatively been suggested that the stelae came to Malta in Roman times [3; p. 313], having been taken there as ship's ballast. However, no other Egyptian monuments are known to have been taken abroad as 'ballast'. More importantly, it is hard to see why ballast would have been obtained, not from a Nile Delta site on the Mediterranean coast, but all the way from Abydos in Upper Egypt, having first been carried from the cemeteries to a river vessel and later re-employed on a seafaring ship that docked in Malta. As this reconstruction is implausible, it is difficult to avoid the conclusion that the stelae left Egypt at a much more recent date than has been considered heretofore. It must be recalled that there is no documentation on the context from which the stelae were lifted in 1829, and there is no compelling reason to think that they had lain there since antiquity. A possibility not previously suggested is that they reached Malta at the time of Napoleon I, shortly after he conquered the islands in 1798 en route to Egypt. Perhaps the stelae had been collected by his savants when they rediscovered Abydos at the very end of the eighteenth century. The stelae may have been on their way to France when they were abandoned in Valletta's harbour, perhaps amid the chaos of the Maltese insurrection that ended in September 1800, when Malta came under British control.

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NOTES

1. This stela is yet to be published. A brief mention appears in Pierret [5], and concise notes and an unreliable drawing are given in Gayet [6; p. 3; Plate 10 and corrigenda].
2. A systematic study of lunette decoration on Middle Kingdom stelae has been made by Hölzl [7]. However, her drawings omit the *ankh*-signs with Wepwawet on EA 233 [7; p. 140], and with Osiris on Louvre C 6 [7; Plate 17:2], the latter clearly based on a mistake made by Gayet [6; Plate 10].
3. On the British Museum stela, Wepwawet's epithet 'lord of the sacred land (i.e. the necropolis)' is written defectively as *nb <t3> ḏsr*. The different reading offered by Meza [3; p. 310] (**nb ḫrp R-stꜣw*) is impossible.
4. For surviving examples of such chairs see, notably, a study by H.G. Fischer [8].
5. See, for instance, two stelae from the Cairo Museum (CG 34109 and 34110). A similarly small table, but with the loaves shown larger and distinguished from each other, appears in the libation scene on CG 34105, which was also found in Abydos. All three stelae are illustrated in their principal publication [9; Plates 51–52].
6. It may also be noted that praying individuals shown kneeling, rather than standing, seldom appear on stelae before Thutmose IV–Amenhotep III (c.1400–1352 BC), one example being BM EA 932 [10; Plate 22]. Examples from the reign of Thutmose IV include BM EA 1515 [11; Plate 45] and probably BM EA 345 [12; Plate 46 (2)], although the latter has been misdated to the Nineteenth Dynasty [12; p. 345]. Examples from the time of Amenhotep III include BM EA 358 [10; p. 962 and Plate 43] and BM EA 1743 [11; Plate 42].