

Archaic Greek colonies in Libya: historical vs. archaeological chronologies?

By Peter James *

Abstract

The presently accepted ceramic chronology places the earliest episodes of Greek colonisation in Libya some three to four decades earlier than the traditional historical dates. A similar offset between the archaeological and historical chronologies can be seen at Naukratis and other Archaic Greek sites. A review of 'fixed points' for Archaic dating shows that the balance of evidence now strongly favours a reduction of late seventh to early sixth century BC Greek ceramic chronology by three to four decades. Such a reduction would bring harmony between the archaeological and historical pictures for the founding of the Cyrenaican colonies, restoring confidence in the account given by Herodotus.

Introduction

Over the last two decades the traditional archaeological chronology for the Greek Archaic has been subject to increasing criticism and reappraisal. In a series of papers starting in the early 1980s, Francis and Vickers challenged the generally accepted model and suggested reductions of as much as 60–80 years.¹ The present author and colleagues raised similar doubts (James *et al.* 1987, 35–39, 58–59) and recommended a revision approximately halfway between the Francis and Vickers and conventional models (James *et al.* 1991, 96–98, 359, n. 11; 372, n. 65, see now James 2003). Independently, Bowden (1991; 1996) pointed out that Herodotus' narrative contains potential fixed points for dating Archaic pottery which are offset from the accepted chronology by some four decades.

As one example, Bowden briefly touched on Herodotus' account of the growth of Greek settlement in Cyrenaica in the late seventh to early sixth century BC. According to Herodotus, the population of the primary colony, Cyrene, remained stable for the first two generations, only increasing in the third, when a large number of new Greek settlers arrived to carve out new claims on Libyan soil. The expected historical date of this expansion, based on Herodotus, is *c.* 580–570 BC and Tocra (Taucheira), traditionally a daughter colony of Cyrene, would have been founded at this time. Yet the earliest Greek pottery from Tocra is Early Corinthian, conventionally dated *c.* 620–600 BC. How is this discrepancy to be explained? Bowden (1991) suggested that the problem may lie not with Herodotus, but with the conventional dating of Archaic pottery. On the basis of this and other Herodotean dates (the founding of Greek Naukratis and the fall of Old Smyrna) Bowden suggested lowering ceramic dates presently set around 600 BC by some forty years.

Tocra provides just one of many instances from Archaic Cyrenaica where there is an apparent tension between the historical and archaeological chronologies (see Gill *in press* which discusses some of the broader aspects of the problem). Here these tensions are explored in more detail, and a resolution suggested.

* Peter@pjames.freerve.co.uk

Historical Chronology

The fullest account of the early Greek settlement in Libya is that given by Herodotus. He relates how the inhabitants of Thera, beset by famine, were advised by the Delphic Oracle to send a colony to Libya under the leadership of one Battus (Herodotus 4.150–151). First they settled the island of Plataea for two years, where things went badly; they then moved to the coastal site of Aziris for six years and, in the following year, at the invitation of the indigenous Libyans, they resettled at Cyrene (Herodotus 4.168). Under its first two kings (Battus I and Arcesilaus I), “the inhabitants of Cyrene were no more in number than when they had first gone out to the colony” (Herodotus 4.169.1). Then, in the reign of Battus II (grandson of Battus I), the Delphic Oracle invoked all Greeks to join the colonists: “So a great multitude gathered at Cyrene, and cut out great tracts of land from the territory of the neighbouring Libyans” (Herodotus 4.169.4). In response, the Libyans called on the Egyptians for help, but when Pharaoh Apries led his army against Cyrene he was trounced—an event which led to the immediate usurpation of his throne by Amasis (Herodotus 2.161–162). Egyptian records date the accession of Amasis to 570 BC (Leahy 1988, 187) and thus the rapid expansion of settlement under Battus II (including the founding of sites such as Tocra) is usually placed, in terms of historical chronology, in the preceding decade.

The dating of earlier events in Cyrenaean history is far less certain. As our basic narrative comes from Herodotus, his reliability here is a fundamental issue. Whether Herodotus visited Cyrene is a moot point (Chamoux 1953, 153–156; Giangiulio 2001, 135, n. 65; Malkin 2003, 157), but he stated that he interviewed Cyrenaean on aspects of Libyan geography (Herodotus 2.32.1, 2.33.1) as well as their early history (4.154.1, 4.155.1). Despite folkloric elements in the foundation stories,² the care Herodotus took in relating both the Cyrenaean and Thera versions is encouraging and, for our purposes here, the differences are insignificant. For essential elements of the story (Battus, Thera, Delphi, etc) we also have the testimony of Pindar (*Pythian* IV, 6, 110–111, 280; V, 57–63), writing a generation before Herodotus, and the extraordinary fourth-century ‘Stele of the Founders’ from the sanctuary of Apollo in Cyrene, which quotes what is presented as the original agreement sworn by the Therans with Battus I when the expedition to Libya set off (*Supplementum Epigraphicum Graecum* IX.3; Meiggs and Lewis 1988, No.5). Views differ as to how much this should be treated as a genuine Archaic document (Chamoux 1953, 104–111; Graham 1960; Graham 1964, 224–226; Graham 1982, 135; Osborne 1996, 13–14). Nevertheless it provides an independent confirmation of the Thera tradition reported by Herodotus (Malkin 2003, 166–169). By the third generation of the Battiad dynasty his narrative is firmly anchored to recorded history, as Cyrenaean events become intimately involved with Egyptian. Herodotus’ accounts of the usurpation of Apries’ throne by Amasis and the latter’s alliance with Cyrene are supported by Egyptian and cuneiform evidence respectively (Leahy 1988, esp. 192–93; Edel 1978; James 2003, 247–248). Finally, Herodotus’ description of the involvement of Therans, Cretans and Samians in the founding of the colony is strongly supported by the provenance of the earliest Greek pottery from Cyrenaica (see below).

There are thus many good reasons to accept the basic narrative as given by Herodotus (Malkin 2003). As to the dating, the defeat of Apries in 570 BC provides a firm chronological

benchmark from which we can back-calculate a notional minimum chronology for earlier events, by using the figures in Herodotus. He gave the reign of Battus I as 40 years, that of Arcesilaus I as 16 years, leaving an unknown number of years (x) between the beginning of the reign of Battus II and the fall of Apries. The resulting dates would be *c.* 626 + x BC for the beginning of the reign of Battus I (and the landing on Plataea) and *c.* 617 + x BC for the founding of Cyrene. Within the x years occurred the renewed (oracle inspired) settlement, troubles with the Libyans and the aborted campaign of Apries. The usual understanding that this chain of events took up to a decade is reasonable and would result in a rough date of *c.* 627 BC for the founding of Cyrene.

This estimate is close to the absolute date for the foundation of Cyrene offered by the chronographic tradition transmitted by Eusebius, which is commonly cited in the archaeological literature as 631 BC.³ Yet it needs to be noted that its pedigree, in chronographic terms, is unknown. It is certainly synthetic, in that it is not based on a genuine Olympiad reference (impossible at such an early date) or known synchronism.⁴

After Herodotus the earliest authority on the date of Cyrene's founding was the fourth century BC scientist Theophrastus. In a discussion of silphium (the main cash crop of Cyrenaica) he wrote: "The people of Cyrene say that the silphium appeared seven years before they founded their city; now they had lived there for about three hundred years before the archonship at Athens of Simonides" (*Enquiry into Plants* 6.3.3).⁵ As Simonides was archon in 311/310 BC, the foundation date suggested would be 611/610 BC. This date (expressed in Roman terms as year 143 *ab urbe condita*) was cited approvingly by Pliny (*Natural History* 19.15), on the authority of "the most trustworthy of Greek writers" (evidently Theophrastus). Nevertheless, the figure of three hundred years, as Theophrastus himself admits, is a round one. Another date was offered by Solinus (*De Mirabilibus Mundi* 27.44) and expressed in three ways: in the 45th Olympiad (600–597 BC), 586 years after the fall of Troy, and in the reign of the Roman king Ancus Marcius. Of these the first two statements are consistent, as 586 years from the traditional Eratosthenian date for the fall of Troy (1184 BC) would bring us to the 45th Olympiad. However, the reference to Ancus Marcius creates a problem, as Solinus himself elsewhere (*De Mirabilibus Mundi* 1.23) dated that king to 639–615 BC.⁶

Despite uncertainties,⁷ the 'Eusebian' date of *c.* 631 BC does not conflict with the picture we can draw from Herodotus. With the caveat that it may err on the high side, a date of *c.* 631 BC is followed here for convenience, as it is this date that is generally accepted.

Archaeological Expectations

Prima facie, the history of Cyrene's early settlement should be helpful in controlling our chronology for Archaic Greek pottery. In the absence of coins or certainly dated epigraphic evidence, there are presently two means for dating early Archaic material—cross-dating through finds from Near Eastern contexts (see below) and utilising the fixed points offered by historical events (notably colonial foundations). Compared to the dating of many other Archaic colonies, for example those in the Black Sea (Burn 1935, 132–136; Graham 1958; Tsetskhladze 1994), Cyrene's foundation can be dated with relative confidence. Further, rather than providing just one fixed point, the sources describe the early settlement of Cyrenaica as a process involving

three stages, the pattern of which should hopefully be discernable in the archaeological record. The dates are notional and calculated back, using inclusive reckoning, from the traditional foundation date of 631 BC:

- A. Proto-colonisation: Plataea, c. 638–637 BC and Aziris, c. 637–631 BC.
- B. Primary colonisation: Cyrene, c. 631 BC.
- C. Secondary colonisation: Cyrene plus new sites, c. 580–570 BC onwards.

This picture looks highly plausible for the first faltering steps and eventual expansion of a colony on the edges of the Greek world. Indeed, historians had no reason to doubt its basic veracity until conflicts with archaeological dating arose. These conflicts will become apparent in the following review of the archaeological evidence from the sites involved.

Aziris

Aziris has been reasonably identified as a site at the mouth of the Wadi el Chalig, where in 1964 John Boardman and John Hayes collected surface finds (see Boardman 1966). Their survey remains the only published account.⁸ Boardman demonstrated that the finds fall into two distinct groups: 1. Archaic of the seventh century BC, and 2. Hellenistic, with a few fourth-century BC pieces. The summary of the Archaic finds below follows Boardman's categories and includes all his chronological remarks:

- Protocorinthian.* Fragments of two cups: "Neither is likely to have been made later than the mid-seventh century" (Boardman 1966, 150–151, Pl. 29:1, 2). Five other PC fragments are given (Boardman 1966, 151, Pl. 29:3–8) plus an unspecified number of "fragments of coarse gritty grey amphorae".
- Rhodian Bird Bowls.* Six fragments (Boardman 1966, 151, Pl. 29: 26–31): "These are from bowls of a type readily placed in the third quarter of the seventh century, not the latest in the series".⁹
- Cretan.* Fragment of "a spherical flask of Cypriot type, with concentric circles on the sides, such as were commonly made in Crete in the Late Geometric and Early Orientalizing period" (Boardman 1966, 151, Pl. 29:13).
- Banded cups.* "Fragments of lips, one with several stripes on the outside—a seventh century feature—bodies and shallow conical feet. This is the general type of Well G on Samos, for which a terminus of 640/630 is suggested." (Boardman 1966, 151, Pl. 29:16–25).
- Kraters, cups and bowls.* Krater fragment of red fabric, with brown paint inside and over a cream slip outside. As restored by Boardman, the "pattern... seems likely to be of the type seen on 'Linear Island' vases and the fabric matches" (Boardman 1966, 151 and Fig. 2). Linear Island is a Geometric style known from Thera and elsewhere in the Cyclades. As its origin has been disputed it has been given various classifications (see Cook 1997, 340 for a concordance). Its distribution is not decisive, but Thera was the most prominent consumer, if not manufacturer of this ware.¹⁰ Regarding its date, Boardman (1966, 151, n. 8) remarked: "That it was current still in the 630s, as these finds show, may contribute to a downdating of the series...".
- Many other fragments of the same fabric (Boardman 1966, 151, Pl. 29: 10, 12, 34, 37, 45, 46, 49, 50). Two (Pl. 29: 34, 37) plus a grey fragment, Pl. 29:38) are rims from cups of a "subgeometric shape... current in East Greece into the second half of the seventh century". Boardman also includes in this category a rim of Aeolic bucchero.¹¹
- Closed vases.* A shoulder fragment whose "decoration again recalls Samos Well G" (Boardman 1966, 151, Pl. 29: 32). With it Boardman (1966, 151, Pl. 29: 33–41) groups a number of other fragments including a decorated handle (Pl. 29: 36), together with a few coarse and fine ware fragments. Of these Pl. 29: 14 is

ARCHAIC GREEK COLONIES IN LIBYA

a sherd with ϵ incised before firing; Pl. 29:15 a grey sherd with fabric and decoration recalling “Samian seventh-century bowls”; and Pl. 29: 42 is “from a finely slipped Rhodian jug”.

As identified by Boardman, the provenance or influence of many pieces (Theran, Cretan, Samian, Rhodian) matches well with the literary accounts of the earliest colonists to Cyrenaica. Our sources (principally Herodotus) describe the involvement, not only of Therans but Cretans, Samians and Rhodians.¹²

As to the overall dating of the finds, Boardman (1966, 150) remarked “none need be later than 631 BC”. But this statement tends to overlook the problem that the pottery (where diagnostic, as allowed by size or decoration) either should or could be much earlier than that date. The Protocorinthian by Boardman’s own admission, is from the first half of the seventh century, which can only mean they are MPC (conventionally 690–650 BC), as understood by Gill (in press). Regarding the Bird Bowls, Boardman allowed that they were “not the latest in the series”, placing them in the third quarter of the seventh century, the equivalent of Coldstream’s Group II. Boardman wrote shortly before the publication of Coldstream’s opus on Geometric pottery where the date for this group is slightly higher (675–640 BC), based on contexts with associated PC finds—with one possible exception, all MPC (Coldstream 1968, 299–300).¹³ The Cretan flask with Late Geometric or Early Orientalizing decoration is certainly earlier than the 630s BC, with Cretan EO normally dated *c.* 700–650 BC (Boardman 1998, 112, 271). The apparent fragment of Linear Island also posed a problem, clear from Boardman’s remark that the Aziris finds might argue for a “downdating of the series” (usually early seventh century BC). Yet such a downdating has not occurred. Boardman (1998, 271) still places Linear Island in the first quarter of the seventh century BC. Likewise Cook (1997, 101): “On style and the contexts of Theran graves the date of the Linear Island group should be the early part of the seventh century, though what looks like a fragment of this ware has turned up at Aziris in Cyrenaica in a context not earlier than the 630s.”

All these cases should surely have raised an eyebrow about the dating of the Aziris finds to the 630s BC. Osborne (1996, 15) has noticed the problem and, perceiving a discrepancy between the archaeological and historical dates, remarked that the pottery is “almost certainly to be dated *c.* 650 BC”. The problem is actually more acute, as the above examples show. Osborne was reliant on Boardman’s analysis, where the tendency is to stress only the *terminal* dates of the ranges allowed for particular styles from Aegean contexts. Thus, with respect to some cup rims (see *Kraters, cups and bowls* above), Boardman (1966, 151) noted that their “subgeometric shape is current in East Greece into the second half of the seventh century”. Yet subgeometric shapes were naturally more common in the first half of that century. For two of Boardman’s groups, the *Banded cups* and the *Closed vases*, the comparanda are from Well G on Samos, where “the *terminus* is 640/630 BC”. However, it should be noted that the overall range of material from Well G is weighted much earlier, with the starting date given by the excavators as 710 BC (Walter and Vierneisel, 1959, 18). The comparisons to which Boardman refers were all dated by the excavators to the early seventh century BC.¹⁴

Given the frequent subgeometric and even Geometric elements at Aziris, it would seem that the assemblage as a whole should date fairly early in the seventh century BC, on the

conventional chronology. To take the ranges of the most closely datable styles (Middle Protocorinthian, Bird Bowl, Cretan Early Orientalising and Linear Island), they actually only overlap at one point in time, *c.* 675 BC. Interestingly, this coincides in time with the midpoint (675/670 BC) of the overall range for Samos Well G. Granted that stylistic date ranges are extremely approximate, this convergence around such a narrow window of time may be significant—if we allow that Herodotus was correct in describing Aziris as a short-lived site, occupied for only six years before its abandonment. On the present chronology it is difficult to make such a link with Herodotus, as the pottery would suggest a floruit *c.* 675/670 BC. This in fact was the understanding of Stucchi. The pottery from Wadi Chalig provided the template for his statement that various coastal sites have produced evidence of Archaic pre-colonial activity, “about four decades before the traditional date for the foundation of Cyrene in 631 BC” (Stucchi 1989, 73).

A closer, first-hand re-examination of the collections from Aziris—or, in an ideal world, a new survey—is essential. Still, from the above review, it would seem that the conventional date of the Archaic pottery from Aziris should be *considerably earlier* than *c.* 635 BC, the presumed historical dates for the settlement. However, the impact of this evidence has been blunted by generalised statements, such as Boardman’s surely over optimistic conclusion (1966, 156; cf. Boardman 1994, 143): “The pottery found there appears to support both the conventional dating for some Archaic wares and the literary tradition”. Similarly, in his survey of the fixed points for the Geometric and Archaic, Cook (1997, 253) wrote:

For another colony, Aziris in Cyrenaica, dates can be obtained by a combination of statements of Herodotus and Eusebius. This puts its beginning in 637 and its end in 631 B.C. If the site has been identified correctly, the Archaic objects found there should be of, or not much before, that time. The very few finds include fragments of Protocorinthian pots and examples of East Greek Bird bowls and banded cups.

In the accompanying table (Cook 1997, 256, Fig. 42) Aziris is placed squarely next to Late Protocorinthian (conventionally 650–630 BC), the style we would indeed expect to have been current at, “or not much before”, the time Aziris was inhabited. Yet were any LPC pieces identified by Boardman he would surely have reported such a convergence between the historical and archaeological chronologies. In contrast to Boardman and Cook’s statements that all is well for the relationship between the historical and conventional archaeological chronologies at Aziris, the assessments of Stucchi and Osborne reflect the situation more accurately.

Cyrene

“The material evidence about the early Greek cities in Cyrenaica is rather scrappy. . .” (Boardman 1999, 156). The comment applies particularly well to Cyrene itself, where the vast quantity of hellenistic, Roman and later building activity has hampered the chance of ever finding the humble remains of the first colonists. For their pottery we are dependent on residual pieces turned up from later contexts.

The earliest pottery reported is a skyphos of Late Geometric style, of either Attic or Laconian manufacture. If the piece is Attic it belongs to a style which conventionally ended *c.*

700 BC, if Laconian to a style which continued somewhat after that date, “perhaps to *c.* 650 BC” (Snodgrass 1971, 130). This early date prompted Boardman to question its origin: “The earliest piece alleged to be from Cyrene is an eighth-century cup in Berlin, made in Athens or perhaps Sparta; but it is difficult to believe its provenance and nothing else so early has been found in controlled excavations” (Boardman 1999, 157; cf. Boardman 1966, 152, n. 12). Yet this ‘early’ find is not quite as isolated as Boardman’s words might suggest. From the Agora Stucchi (1984, 162, Tav. I:2) reports fragments of Rhodian Late Geometric, a style usually dated *c.* 745–680 BC (Cook and Dupont 1998, 25). Next comes a fragment of Laconian I which Stucchi (1984, 162) dates before 650 BC, others to between 650 and 620 BC (Schaus 1985a, 100), plus fragments of Bird Bowls “of a type close to those of Aziris” (Boardman 1966, 152), hence apparently Coldstream’s Type II (675–640 BC—see above). These pieces can either be seen as ‘heirlooms’ or, more likely (with Stucchi), they represent a phase of activity at the site which began, on the present ceramic chronology, in the early seventh century BC.

The excavations from the Agora also produced pieces of Early Corinthian (625–600 BC) and some “Rhodian of the latest seventh century” (Boardman 1966, 152). But the best Archaic deposits so far discovered at Cyrene are from the Sanctuary of Demeter and Persephone which lies in the Wadi Bel Gadir to the east of the town. A date of *c.* 600 BC is given to the earliest pottery of the Middle Corinthian horizon (Schaus 1985a, 100; Kocybala 1999, 97). The location of the sanctuary away from the centre has led to the hypothesis that it is a secondary foundation. In the opinion of White (1984, 23): “... it is conceivable that the rites were performed at an even earlier time in the more protected setting of her agora shrine”.

There is, as yet, no firm archaeological evidence for an earlier intramural Demeter sanctuary (White 1984, 24, n. 2; White pers. comm. 2004). Nevertheless, and with the caveat that we lack certain knowledge of the extent of the Archaic city, the idea that the extramural cult was a secondary foundation remains a viable explanation for its location. Schaus (1985a, 94) reviewed possible reasons for a relocation of the cult outside the town, including water supply, privacy and space, and concluded that the latter was the most likely spur to relocation (Schaus 1985b, 401): “... the fact that the Demeter cult seems to be established outside the city at this date may indicate a need for more space for the cult, thus reflecting the growth of the city”. Yet, as Schaus notes, if the relocation was due to the growth of the city around 600 BC, we would appear to be faced with another contradiction of Herodotus’ statement that the population of Cyrene remained stable until the reign of Battus II (in the decade 580–570 BC).

The relocation hypothesis may also have some bearing on the enigma of the earliest sculptures (terracottas) retrieved from the extramural sanctuary, described by White (1984, 23, n. 10) as from an “unexpectedly early pre-colonial date”. He cites a preliminary report by Uhlenbrock:

possibly as many as ten seventh-century B.C. figurines are said to have a Cretan origin; at least two may date as early as 670 B.C. Five Rhodian figurines appear to date to the first quarter of the seventh century, while a Samian torso dates to *ca.* 680–70 B.C.¹⁵

Thus some eight terracottas from the sanctuary are stylistically dated to 670 BC or earlier. (For the early Archaic, the dating of sculpture is ultimately based on the ceramic chronology,

through associated finds and epigraphy.) The presence of these important ritual objects in a temple constructed *c.* 600 BC outside the main centre of Cyrene requires explanation.¹⁶

Regarding the Rhodian terracottas, Uhlenbrock (1992, 18) noted the claim of the *Lindian Temple Chronicle* (see above n. 12) that Rhodes played a part in the earliest colonisation and remarked: “it is tempting to see in these early figurines precious documentation for a Rhodian presence among the original colonists”. She is strongly supported here by the occurrence of the Rhodian LG sherds from Cyrene, and the ‘Rhodian’ Bird Bowls at Aziris and Cyrene. While it is no longer thought that all the Bird Bowls originated on Rhodes itself, some did and they were certainly popular on the island.

As to the dating, Uhlenbrock continued:

Alternative explanations can be found for the appearance of these Rhodian figurines at Cyrene but none is satisfactory. One might argue that the figurines arrived via the normal avenues of trade, were it not for the fact that there is no evidence for the circulation of Rhodian figurines, aside from those Cyrenean examples, at this early date. That they were carried as ‘heirlooms’ by colonists who arrived in the second wave of colonization also seems possible. But they would have been over a hundred years old, and the likelihood of terracottas surviving in a domestic context for that period of time is not very strong. Instead, one could postulate that these objects, only several generations old, were brought from a sanctuary on Rhodes by Rhodians participating in the founding of Cyrene, so that cultic continuity could be established. Such was the case, in fact, with the statues of Pallas and Heracles mentioned in the *Lindian Temple Chronicle* that were brought from Rhodes and dedicated by the Rhodians in the Temple of Pallas Athena at Cyrene.

Uhlenbrock’s understanding that the figurines were brought by Rhodians participating in the founding of Cyrene surely provides the most logical explanation. Given the hypothesis that cult was transferred from inside the town to the periphery, perhaps the “unexpectedly early” sculptures were originally dedicated at an intramural shrine. Yet they still remain difficult to explain on the presently held chronology. Significantly the dates for the sculptures defined by Uhlenbrock, *c.* 680–670 BC, compare closely to those for the pottery finds from Aziris, estimated above at *c.* 675/670 BC. Thus a horizon, of both ceramic vessels and sculpture, would seem to date the material culture of the very first colonists in Cyrenaica to *c.* 675 BC on the conventional Archaic chronology.

Tocra, Euesperides, Ptolemais and Apollonia

According to the scholiast on Pindar, Taucheira and Apollonia were daughter colonies of Cyrene (Schaus 1985a, 100). Taucheira, modern Tocra, a coastal site to the west of Cyrene, was excavated during the 1960s (Boardman and Hayes 1966). Producing a good sequence, it effectively became the type-site for the Archaic in Cyrenaica. The earliest horizon of pottery here (Tocra Deposit I) is characterised by EC and hence dated *c.* 620 BC onwards—“The main series of Corinthian scarcely begins before the Early Corinthian period. There are only one or two pieces which might be called transitional” (Boardman in Boardman and Hayes 1966, 21; cf. Boardman 1966, 153). There was one earlier find, an MPC oinochoe (Boardman 1966, 153; Stucchi 1984, 162), but this is clearly atypical as there is no LPC from the site. Boardman reasonably described it as an heirloom.¹⁷

It was the evidence from Tocra, of settlement apparently some three to four decades before the historically expected date of 580/570 BC, that drew Bowden's attention to the apparent conflict between the Herodotean and archaeological chronologies (see Introduction, above). The chronological problem is compounded by a second, concerning the provenance of the earliest pottery at Tocra. Schaus (1985b) argues that the significant amount of Laconian pottery from Tocra Deposit I represents a Laconian element among the colonists. It is estimated that Laconian ware made up some 3–4 per cent of the total in this deposit, while a number of objects of "possible Laconian type (pins, fibulae, pendants) may also belong to the late 7th century" (Schaus 1985b, 398; Schaus 1985a, 100). The quantity of Laconian ware for the total Archaic at Tocra is 7 per cent, "an extraordinary amount for an overseas site as Laconian pottery was no match for the fine ware products of Athens and Corinth... But the quantity as well as the variety at Tocra is very unusual... This certainly points towards a Laconian presence in the town on the hypothesis that only settlers from Laconia would support such a trade in otherwise not very popular wares". (Schaus 1985b, 396; see Gill in press for further analysis of the statistics.)

In the view of Schaus (1985b, 400) the Laconian material from Tocra Deposit I "strongly argues a date for the possible arrival of Laconians in Libya earlier than that normally assumed from the literary evidence, *c.* 580 BC". As Schaus (1985b, 395) notes, there is no literary evidence for a major involvement of Laconians in the first wave of settlers to Libya,¹⁸ but they seem to be prominent after the second, Delphi-inspired wave of settlement. In the reign of the mid-sixth century BC ruler Battus III, the mediator Demonax of Mantinea called in to resolve the political turmoil between the various groups of colonists, divided them into three tribes, the second being "Peloponnesians and Cretans" (Herodotus 4.161). As Schaus notes "The Peloponnesians of the second 'moira' have long been thought to include a large number of Laconians". A dilemma is hence created: "... the archaeological evidence suggests that there may have been Laconian and possibly other settlers even earlier" (Schaus 1985b, 400). Taking this together with the evidence from the extramural sanctuary of Demeter suggesting an expansion of Cyrene by *c.* 600 BC, Schaus (1985b, 401) concluded that "there is reason to suspect that Herodotus is either wrong or exaggerating when he says 'the dwellers in Cyrene were no more in number than when they had first gone forth to the colony...'".

The earliest pottery at Euesperides, in the far west of Cyrenaica, was once thought to be MC and equivalent to Tocra Deposit II (Vickers and Gill 1986, 106). However, subsequent research has identified EC pottery, of the same horizon as Tocra Deposit I, *i.e.* 620–590 BC (for discussion and references see Gill 2004, 404–405). There are, as yet, no associated buildings with the EC, possibly indicating a seasonal settlement (Gill in press). Ptolemais lies on the coast between Cyrene and Tocra. Several late seventh-century BC sherds indicate a founding date equivalent to Tocra Deposit I, *c.* 620 BC (Boardman 1966, 153; Schaus 1985a, 99; *cf.* Stucchi 1985, 162). Apollonia, the port of Cyrene, was certainly settled by the time of Tocra Deposit II, while there are a few possibly late seventh-century fragments, including those of a Rhodian (?) subgeometric krater and an EC alabastron (Boardman 1966, 152; Schaus 1985a, 99).

The finds from Tocra, Euesperides, Ptolemais and (possibly) Apollonia present a remarkably similar picture, showing that *c.* 620–590 BC (on the conventional archaeological dating) a number of Greek settlements were started along the coast of Cyrenaica. As pioneer colonies they may have involved only small numbers; at Euesperides it has been estimated that the early Archaic town comprised only a few hundred settlers (Gill in press; see also Gill and Flecks in press). Nevertheless the distribution and number of foundations (and future excavation may well discover more) is interesting. The wide geographic scatter of these small colonies (suggesting a pattern far different from one of growth from one site to a neighbouring one), the inclusion of a broad range of Greek elements (of mainland as well as East Greek and Cycladic origin) and their founding within a relatively short space of time cannot fail to remind us of Herodotus’ statement (4.169.4) that during the reign of Battus II “a great multitude gathered at Cyrene, and cut out great tracts of land from the territory of the neighbouring Libyans.”

Precolonial and Protocolonial

A summary of finds will illustrate the way that the historical and archaeological records are out of step with regard to the early Greek settlements of Cyrenaica:

- (A) Proto-colonisation (Aziris), historical *c.* 637–631 BC.
MPC (690–650 BC); Bird Bowls Type II (675–640 BC); Cretan EO (700–650 BC); Linear Island style (700–675 BC); LG elements; Samian types (710–650 BC)
- (B) Initial colonisation (Cyrene), historical *c.* 631 BC.
Sculpture pre-670 BC; LG vessel; Rhodian LG (745–675 BC); Bird Bowls Type II (675–640 BC).
- (C) Expanded colonisation (Cyrene plus new sites), historical *c.* 580 BC onwards.
*Settlement of Tocra, Ptolemais, Euesperides and Apollonia (?) during EC (620–600 BC); expansion of Cyrene—building of extramural sanctuary of Demeter (*c.* 600 BC).*

It will be seen that in each phase the conventional dating of the earliest material culture predates the historical dating by some 30–40 years. If we did not have the accounts of Herodotus and other writers, it is likely that modern excavators might have concluded (A) that Wadi Chalig (Aziris) was founded as early as *c.* 670 BC; (B) that Cyrene was founded at about the same time; and (C) that a massive expansion of settlement, including new sites, followed *c.* 620 BC.

These suggestions have already been made, in as many words. With respect to (A), Stucchi (1989, 73) argued that “... we cannot put too much faith in the chronology indicated by Herodotus; there is... at Wadi Chalig and at other places along the Cyrenaean coast, pottery datable to the second third of the 7th cent. BC.” Seeing such early settlement as a primarily commercial rather than agricultural venture, he linked his earlier period of Greek settlement in Libya with the Assyrian invasion of Egypt in 671 BC, which by allegedly closing Egypt to the Mediterranean may have prompted the Greeks to foster an alternative route to the Sudan via the Libyan desert.¹⁹ With respect to (C), Schaus (1985, 100) stated “that at least three and perhaps four towns, in addition to Cyrene, were founded in Cyrenaica before the second wave of colonization”. This presents us with a considerable dilemma. If the expanded settlement *c.* 620–600 BC demonstrated by Tocra, Euesperides, Ptolemais, Apollonia and Cyrene does *not* reflect the oracle-inspired influx of Greek settlers in the reign of Battus II, it might seem that

the latter had no archaeological reflex. Thus there might appear to be good grounds for following Stucchi's cue and abandoning the Herodotean chronology altogether.

Osborne (1996, 15–16) has taken what might seem a logical step:

What the archaeology has revealed is striking. First of all, finds of Greek objects from the first half of the seventh century BC at Ptolemais and at Cyrene itself suggest that this North African coast was not nearly as unknown before the foundation of Greek settlements as the traditions suggested. Even without excavation of the site, pottery which is almost certainly dated to *c.* 650 has been found at the place most likely to be Aziris.... Second, although tradition had it that other sites on the Libyan coast were founded from Cyrene, actually the evidence for occupation from Tocra (ancient Taukheira) and from Ptolemais seems to date back as early in pottery terms as does the evidence for permanent occupation at Cyrene—that is to *c.* 620 BC. The selection of pottery from Tocra differs in slight but significant ways from that at Cyrene (in particular it receives a quite different range of pottery from islands in the Cyclades, with none from Thera), which suggests independent links with the Greek world. Third, the literary tradition maintains that for some fifty years the population of Cyrene remained only the initial Theran settlers and their offspring, before a general invitation to all Greeks to join was issued: not only does this make it hard to see how Cyrene could have founded Taukheira so soon after Cyrene itself was established, but the pottery reaching Cyrene and Tocra before 580 BC came from as wide a range of sites as that reaching them after 580, and the peculiarly wide variety of pottery vessels and of personal items (pins, etc.) imported from Sparta, in particular, from soon after that foundation has led archaeologists to speculate that there must have been residents from Sparta or Laconia from the beginning.

The choice is clear enough: either we reject Herodotus or the archaeological dating. To reject the Herodotean account wholesale would be an extreme step. As Gill (pers. comm. 2005) remarks: "... if we are to reject Herodotus' date for the second wave of colonisation in Cyrenaica, we must also abandon his date for the initial foundation of Cyrene, something I suspect few archaeologists or historians would wish to do". And with good reason. Other details of Herodotus' account, such as the origins of the early settlers, have been confirmed by the provenance of the pottery finds, to which Gill and Flecks (in press) can add possible architectural evidence—the layout of the period 2 house (MC horizon) at Euesperides is similar to that found at Lato on Crete.

Of course, by treating them individually, *ad hoc* explanations might be found for many of the apparent discrepancies between the historical and archaeological records. For example the "early" religious terracottas from Cyrene might be heirlooms brought by the settlers from their homelands, or perhaps have been placed by Aegean traders in a small coastal shrine *c.* 670 BC and then moved, *c.* 600 BC to the safety of the extramural sanctuary of Demeter. Likewise the early seventh-century pottery from Aziris might reflect the pre-colonial activity of Stucchi's traders. It would indeed be unwise to rule out commercial contact between the Aegean and Libya before the 630s BC. The Greeks were surely acquainted with the coast of Libya before setting off under Battus.

Yet the overall picture suggests that arguments involving 'precolonial' activity, while plausible, may not be applicable here. For one thing the episodes of Plataea and Aziris, as described by Herodotus *are* 'precolonial' in themselves, or rather 'protocolonial'—in that they relate the

early efforts of colonists to gain a foothold on the Libyan coast. Further the problem with a precolonial explanation of Aziris, assuming that it has been correctly identified, is the apparent absence of material unequivocally dating to the time when we would expect *colonial* activity, *c.* 637–631 BC. For Tocra, Euesperides, Ptolemais and Apollonia a precolonial model is even weaker historically—there are no traditions rivalling the claim of Cyrene to be the primary settlement. And to assume that a rash of widely separated sites were staked out *c.* 620–600 BC to await the arrival of the oracle-inspired influx *c.* 580 BC would seem rather forced.

Most importantly, a fact that has been overlooked, is that the internal chronology of Herodotus' account is matched by the relative archaeological dating. Taking a date of *c.* 670 BC for the sculptures from Cyrene and the pottery from Aziris, and a date of *c.* 620–600 BC for the founding of Tocra and the other secondary sites, the interval is some 50–70 years. This is exactly what we would expect from the Herodotean account, which places 56+*x* years between the beginning of the reign of Battus I and a point within the reign of Battus II, under whom the Cyrenaean expansion began (see above). Irrespective of the absolute dates there is thus convergence between the relative chronologies of both Herodotus and the archaeology. Given that there is no realistic way to raise the historical dates for the events he describes—for example the expansion of settlement is firmly tied to the time of Pharaoh Apries—we should surely allow that it may be the archaeological dates which are at fault.

A very different picture emerges if we lower Archaic pottery chronology at this point by three to four decades, *i.e.* *c.* 35 years. The horizon of finds belonging conventionally to *c.* 670 BC (pottery and sculpture—Aziris and Cyrene respectively) would then move down to *c.* 635 BC, within the floruit of the short-lived Aziris (637–631 BC) and close to the founding of Cyrene in 631 BC. The date of the EC horizon (*c.* 620–600 BC) from Tocra, Euesperides, Ptolemais and possibly Apollonia would move down to *c.* 585–565 BC, embracing the decade 580–570 BC where Herodotus places the great expansion of settlement under Battus II. Thus at each stage, the archaeological and historical chronologies for Archaic Cyrenaica would be in step. Conversely, on the conventional pottery dating not a single archaeological date matches the historical.

The Wider Picture

To argue such a revision from Cyrenaica alone would be unwise, particularly as vital evidence is missing from Cyrene itself. Yet the overall pattern from other sites (notably Aziris, Tocra and Euesperides) seems clear—the archaeological and historical chronologies are consistently offset by some three to four decades. And the Libyan colonies are far from being isolated in this respect.

For example, at Naukratis finds of EC to MC (the latter associated with buildings) have produced an 'archaeological date' of *c.* 615/610 BC for the founding of the Greek settlement there (Cook 1937). Consequently, Herodotus' statement (2.178) that the site was given to the Greeks by Pharaoh Amasis (570–526 BC) has had to be simply ignored. Alternatively it has been argued, from a combination of history with the Egyptian, Cypriot and Phoenician evidence from the site, that Naukratis actually provides an invaluable fixed point and that Archaic dates

should be lowered by up to 35 years at *c.* 600 BC from the Payne/Cook/Coldstream dates (James 2003; cf. Bowden 1991, 1996).²⁰

At Old Smyrna, though the text of Herodotus (1.16.2) suggests that it was sacked by Alyattes after 585 BC (Bowden 1991, 50), finds of EC in the destruction level means it has been dated earlier, to *c.* 600 BC. Langlotz once suggested a date of *c.* 580 BC for the sack, which J. M. Cook (1958–1959, 26) rejected on the grounds that it would “entail a drastic revision of Corinthian pottery.” For his Corinthian chronology, Cook appealed to Payne’s conclusions from Selinus which, it now transpires, were based on a false premise (Snodgrass 1985, 201–203). According to Thucydides Selinus was founded in 628 BC, and Payne (1931, 25, 32, 56) used this as a fixed point for the dating of EC, then the earliest Greek style known from the site. The subsequent discoveries of LPC at Selinus—first in the finds stored at Palermo Museum (Snodgrass 1985, 201–203) and later through excavation (Morris 1996, 54–55)—should have upset Payne’s chronology, but this has been maintained by recourse to various arguments. In the words of R. M. Cook, “simply to lower the dates of the phases by fifteen or twenty-five years seems impracticable...”, so he opted for different strategies: first to abandon the Thucydidean date in favour of the 650 BC given by Eusebius (Cook 1972, 263), later to revert to the Thucydidean date and argue, from the presence of local wares in the same graves, that the problem material came from a “native pre-colonial” cemetery—“and the accepted chronology can be justified without the shifty device [*sic*] of preferring Eusebius here to Thucydides” (Cook and Dupont 1997, 253). Cook’s argument fails here as the new LPC finds are not from a pre-colonial phase. Yet because of them, the excavators have now returned to the 650 BC date given by Eusebius and Diodorus (Tusa 1984, 191–192; Rallo 1984, 217). Morris (1996, 55, 57) echoes Snodgrass in pointing out the illogicality of trusting Thucydides for every western colony date except for Selinus, and on the basis of the new finds has suggested lowering the MPC/LPC transition by ten to twenty years. The revision required is probably greater, given that MPC and even imitation Late Geometric has been found at Selinus (Rallo 1984). And Selinus is far from being the only problem site among the western colonies.²¹

There has always been a strong undercurrent of thought in the literature pulling for lower dates for the EC and related series.²² Despite many good arguments offered, such a lowering has often been perceived as unlikely because of the overall framework for the Archaic set by the “fixed points” for Late Geometric and Early Protocorinthian, derived from Near Eastern contexts and/or the Thucydidean dates for the western colonies. However, at each site in question the evidence/context has now proved to be unclear or problematic.²³ The present author and colleagues have suggested that lowering the end of Attic Late Geometric from *c.* 700 BC by some 25 years to (at least) *c.* 675 BC can make better sense of both the Western and Near Eastern evidence. The reduction was accepted as “plausible” by I. Morris (1993, 30–31; cf. 1996, 51), who adduced further supporting arguments, while S. Morris (1995, 362) has since argued that the “Geometric period lasted well into the seventh century”.

Nor do any of the “fixed points” for the seventh century, as summarised by Cook (1997, 252–256), stand up to scrutiny. His first is Tarsus, allegedly destroyed by Sennacherib in 696 BC, but as Cook himself notes it is “not yet agreed” whether the Archaic Greek finds “belong

before or after that destruction”.²⁴ Next is Thucydides’ date of 688 BC for the founding of Gela in Sicily, which Cook’s table juxtaposes with MPC. Yet in the earliest levels the excavators found pottery of EPC type, ended by Payne in 700 BC. They attempted to preserve this date by assuming a pre-colonial settlement. Such a solution was wisely avoided by Coldstream (1968, 326) who compromised by lowering the end of EPC to 690 BC. On the notional reduction of 35 years suggested here, EPC would have been manufactured *c.* 685–655 BC, in better accord with the Thucydidean date. Next, Cook gives Aziris at 637–631 BC, Selinus at 628 BC and Old Smyrna at *c.* 600 BC, where the evidence—as argued above—actually supports a three to four decade reduction.

For his last seventh century “fixed point”, Cook refers to Mezad Hashavyahu in Palestine, where there are abundant finds of the EC horizon in a short-period settlement thought to have been abandoned in 606 or 604 BC (Fantalkin 2001a). However, it is acknowledged that the argument here is circular, as the excavator Naveh relied partly for his dates on Cook’s dating of the East Greek pottery finds (Francis and Vickers 1985, 137; Vickers 1985, 17–18; Waldbaum and Magness 1997, 25–26; Fantalkin 2001a, 128, n. 57). Other Levantine sites, notably Ashkelon and Ekron, contain imported wares of the EC horizon and are thought to have been destroyed in 604 BC by the Babylonian king Nebuchadrezzar (Waldbaum and Magness 1997). But here there are major problems. The dating of all these sites is based on a debated epigraphic restoration of the name “Ashkelon” in the Babylonian chronicle for that year (James 2004, 54; in more detail, James forthcoming). At Ekron the evidence of the recently discovered seventh-century BC temple inscription (naming individuals known from Assyrian records) strongly suggests that the late Iron Age strata there need to be lowered by several decades (James 2005; James forthcoming). More specifically, it can be argued that the date for the destruction of Stratum IB at Ekron, containing Archaic Greek imports of the Early Corinthian horizon, should be lowered by some 35 years, from 604 BC to *c.* 570 BC (James forthcoming).

Concluding Remarks

The allegedly ‘early’ Archaic evidence from Cyrenaica forms part of a much wider pattern in which the conventional archaeological dating has produced conflicts with the historical dating. Together, the evidence from these sites strongly argues for a lowering of Archaic pottery chronology *c.* 600 BC by some 35 years.²⁵ Harmony would then be restored between the historical and archaeological records for the early Greek colonies in Libya. The pottery from Aziris, as well as the earliest material from Cyrene (pottery and terracotta sculptures) would date to *c.* 635 BC, close to the historical dates, rather than *c.* 675/670 BC. For the next phase in the history of the Cyrenaican colonies, it would seem to be only the present archaeological chronology that has prevented us seeing the Early Corinthian (allegedly 620–600 BC) flowering of settlement in Libya in the light of the Pythian oracle *c.* 580 BC, invoking the Greeks to settle in Libya.

The case of Cyrenaica is vitally important to our wider understanding of the processes involved in the Archaic Greek expansion, as well as to our perception of the reliability of Herodotus. Assured from the archaeological evidence that Herodotus was wrong about Cyrene,

Osborne (1998) has recommended rejection of the entire vocabulary of Greek ‘colonies’, ‘foundations’ and the like as being fifth-century BC concepts inapplicable to the Archaic (cf. Malkin 2003). Yet it has to be noted that, in his two most detailed expositions, Cyrenaica and Naukratis, Herodotus outlines two vastly different cases: the first settled through strength of arms by colonists under demographic pressure in their homeland, the second as a commercial emporium sanctioned by the Egyptian Pharaoh (see Boardman 1994, 137). Both accounts are intrinsically plausible. Osborne (1996, 357) also remarked that “many archaeological accounts [are] very much beholden to the literary texts.” Yet this overlooks the fact that there is no archaeological dating without the literary texts. One cannot ignore the dates they offer (as has been done at Cyrenaica, Naukratis, Selinus and Old Smyrna) and then use the resulting archaeological chronology to ‘correct’ the literary accounts.

In the case of Cyrenaica it seems clear that the historical evidence for the earliest Greek settlements should be added to the balance sheet as ‘fixed points’ against the conventional (Payne/Cook/Coldstream) chronology for Archaic pottery. A full review of the balance sheet—particularly with reference to the sixth century BC—is overdue and beyond the scope of the present article, but enough has been said to argue that the dates for Corinthian pottery *c.* 600 BC should be lowered by some three to four decades. If so, any conclusions drawn from the archaeology about the ‘incorrectness’ of Herodotus’ accounts of early Greek colonisation are redundant. We should not use a dubiously dated archaeology to control our interpretation of the sources.

Acknowledgments

My sincere thanks are due to the Mainwaring Archive Foundation for its generous assistance during the research and preparation of this paper and to many friends and colleagues for reading the manuscript, providing information and encouragement, and suggesting improvements—Jaimee Uhlenbrock, David Gill, Dmitri Panchenko, Robert Morkot, John Bimson, Peter van der Veen, Bob Porter and most importantly, Nikos Kokkinos. While I take sole responsibility for the statements here, much of the thinking in this paper owes a debt to many years of discussion and joint research with Nikos on Aegean and Near Eastern chronology and chronography.

Notes

- 1 The bibliography is extensive. For references and discussion see conveniently Cook 1989; Biers 1992, 82–85, 99–101; Whitley 2001, 72–74; James 2003, 241 (and nn. 31–32), 260–262.
- 2 Calame’s 2003 treatment of allegedly “mythical” elements in the foundation traditions has nothing to offer the historian. For more useful studies see Giangiulio (2001) on the local information (both oral and written) available to Herodotus and the sage remarks of Malkin (2003, esp. 170): “A Battos scared of a lion and losing his stammer is one kind of tradition, Battos as leader and king is another”.
- 3 The surviving Latin translation of Eusebius (apud Jerome) actually gives three dates: 1336, 762 (or possibly 761) and 632 BC (Helm 1984, 52, 87, 96). The first is clearly a foundation of legend, in which the origins of the historical colony were back-projected into the Age of Heroes (Chamoux 1953, 71–90) and the second is most likely the product of a calculation based on a 40-year generation (Burn 1935, 140; Chamoux 1953, 70–71). As to the third, while the Latin gives 632 BC (Ol. 37, 1), the less certain date of 631 BC, drawn from the idiosyncratic Armenian version, has become the standard, following Chamoux (1953, 121, n. 3).

- 4 Burn (1935, 140) suggested how the chronographers drawn upon by Eusebius may have arrived at the date of 631 BC by calculations based on the length of the Battiad dynasty. Cyrene became a republic after its eighth and last monarch Arcesilaus IV, in Burn's reckoning "sometime after 460 BC". Eight reigns at 25 years each would bring the lifetime of the dynasty to 200 years, a traditional figure given by the scholiast on Pindar (Chamoux 1953, 205–206). Burn's argument is improved on if we accept the opinion of some scholars that the republic started *c.* 440 BC (Chamoux 1953, 206–210; see, however, Giangulio 2001, 148, n. 44), bringing us to *c.* 640 BC for the beginning of the reign of Battus I. It should be noted, on the other hand, that there is little evidence of the use of a 25-year generation in such ancient calculations.
- 5 The more precise figure given here, "seven years" before the founding of Cyrene, must reflect the tradition in Herodotus that the colonists moved from Aziris to Cyrene in the seventh year. Hence the import of this statement would be that the colonists discovered silphium in the year that they arrived on the Libyan mainland.
- 6 Since the parameters of his reign include the Eusebian date, 631 BC, it has been suggested (Chamoux 1953, 122) that the manuscript tradition followed by Solinus may originally have referred to the 35th (XXXV) rather than 45th (XXXXV) Olympiad and a period of 546 (DXXXXVI) rather than 586 (DLXXXVI) years after the Trojan War.
- 7 There is the intractable problem of whether Herodotus' "40 years" for Battus I is merely a round figure indicating a long reign, while the distance of time (my *x* above) between the beginning of the reign of Battus II and the fall of Apries of course remains unknown.
- 8 Stucchi (1984, 162) mentions a survey carried out by himself and the Dept. of Antiquities, Shahat, with a reference to a paper in the forthcoming *Atti del Colloquio, Cirenaica di Parigi 1979*. My enquiries regarding this publication suggest that it did not appear and I would be grateful to hear from anyone who has access to Stucchi's manuscript, entitled "Appunti di topografia cirenaica su un passo dell' Epistola IV di Sinesio".
- 9 Bird Bowls are no longer thought to be an exclusively Rhodian product with some, at least, being manufactured in North Ionia (Cook and Dupont 1998, 26–27; Boardman 1998, 141–142).
- 10 Boardman 1966, 151; cf. Cook 1997, 101: "The humbler candidates for the group appear in Thera, Delos (including Rheneia) and Paros, which is often accepted as its home. But almost all the important amphorae and kraters have been found on Thera...".
- 11 This had too long a currency to help with dating. Now better known as 'Aeolian Grey Ware', it was popular in East Greece in the eighth, seventh and sixth centuries and is known even from the hellenistic period (Cook and Dupont 1998, 135).
- 12 See generally Applebaum 1979, 9–12. The mother of Battus I was reputedly Cretan (Herodotus 4.154–155); Korobios the Cretan fisherman taken by the colonists as guide (Herodotus 4.151.2–3). Kolaios the Samian merchant visited Plataea, forming "the beginning of a close friendship between them [the Samians] and the men of Cyrene and Thera" (Herodotus 4.152.1–5). Battus I was accompanied by the sons of Pankis from Rhodian Lindos, according to *The Lindian Temple Chronicle*—for references and discussion, Chamoux 1953, 124–125; Applebaum 1979, 11.
- 13 Stucchi (1984, 162) confirms that a Bird Bowl from Aziris belongs to Coldstream's Group II.
- 14 For the *Banded cups* Boardman compares those on plates 33 and 38 of the Samos report. Of these examples the excavators (Walter and Vierneisel 1959, 19) date Beil. 33.3–4 shortly before 700 BC, Beil. 38.1 to *c.* 680–670 BC and Beil. 38.2–3 to *c.* 670–650 BC. Of the *Closed vases* selected for comparison (Beil. 46–48) the excavators described Beil. 46.1.2 (still Geometric) as closely related to those of the late eighth century BC, Beil. 47.1 as first half of the seventh century BC, and Beil. 47.2 and 49.1 as about the middle of the seventh century BC (Walter and Vierneisel 1959, 21).
- 15 Jaimee Uhlenbrock informs me (pers. comm. 2005) that she is presently more tentative about the "Samian" origin of the torso, pending further analysis of the fabric. *If* this confirms that it is Samian, it would lend further weight (cf. the Samian pottery fragments from Aziris) to Herodotus' account of how Samians helped the early colonists (see n. 12 above).

ARCHAIC GREEK COLONIES IN LIBYA

- 16 The sanctuary also produced an amulet seal that dates to the first half of the seventh century (Kocybala 1999, 97).
- 17 "... there is every reason to believe that it was brought to Tocra as a prized possession by one of the early colonists and subsequently offered as a dedication in the sanctuary" (Boardman in Boardman and Hayes 1966, 21).
- 18 The only literary evidence for an earlier Laconian presence in Cyrenaica concerns a single individual—one Chionis who, according to Pausanias (3.14.3; 4.23.4; 6.13.2) won seven times at the Olympic games (first in Ol. 28.1 = 668 BC) and "took part in the expedition with Battus of Thera and helped him found Cyrene and subdue the neighbouring Libyans". That accurate Olympic records were preserved so early is extremely unlikely (see conveniently James *et al.* 1991, 328–330).
- 19 Stucchi's hypothesis seems unlikely. There is no evidence for direct trade between Nubia and the Aegean at this date (pers. comm. Robert Morkot 2005).
- 20 The lowering of Early Corinthian by some 5–10 years proposed by Amyx (1988: 428) has already achieved wide currency.
- 21 At least five other Sicilian colonies (Gela, Syracuse, Megara Hyblaea, Sybaris and Mylae) have produced allegedly "precolonial" Greek imports. For references see conveniently James *et al.* 1991, 102–3, 360, n. 24. For Gela see below.
- 22 For example Langlotz suggested lowering EC by 20 to 30 years, while Gjerstad argued that MC should be dated 25 years later. For references to these and other early attempts at a low Corinthian dating see Amyx 1988, 403–413; James 2003, 260–262. More recently Morris (1996, 57), in a review of the evidence from the Greek colonies in Sicily, has suggested lowering the beginning of LPC by ten or twenty years, with a consequent lowering in the start for Early (Ripe) Corinthian.
- 23 Herrera and Balensi 1986; Francis and Vickers 1985; James *et al.* 1987, 34–39; Hankey and Warren 1989, 167; James *et al.* 1991, 99–110; Bowden 1991, 49–50; Morris 1993, 31; Waldbaum 1994, 55–58; Hannestad 1996, 44–48; Gill and Vickers 1996 (cf. Ridgway 1999); Fantalkin 2001b; James 2003, 241–242 and n. 38.
- 24 For this notoriously problematic site see Boardman 1965; Coldstream 1968, 320–321; Forsberg 1995, 52–81.
- 25 The notional figure argued here applies only to the Corinthian series and East Greek ware, not Attic. For reasons which I hope to explore elsewhere in a paper with Nikos Kokkinos the chronology of Attic pottery at this period needs to be revised, but by a lesser amount.

References

- Amyx, D. A. 1988. *Corinthian Vase - Painting of the Archaic Period: Vol II, Commentary: The Study of Corinthian Vases*, Berkeley, CA.
- Applebaum, S. 1979. *Jews and Greeks in Ancient Cyrene*, Leiden.
- Biers, W. R. 1992. *Art, Artefacts, and Chronology in Classical Archaeology*, London.
- Boardman, J. 1965. Tarsus, Al Mina and Greek Chronology. *Journal of Hellenic Studies* 85: 5–15.
- Boardman, J. 1966. Evidence for the Dating of Greek Settlements in Cyrenaica. *Annual of the British School at Athens* 61: 149–156.
- Boardman, J. 1994. Settlement for Trade and Land in North Africa: Problems of Identity. In G. R. Tsetskhladze and F. De Angelis (eds.), *The Archaeology of Greek Colonisation: Essays Dedicated to Sir John Boardman*, Oxford (University Committee for Archaeology, Monograph 40): 137–149.
- Boardman, J. 1998. *Early Greek Vase Painting*, London.
- Boardman, J. 1999. *The Greeks Overseas*⁴, London.
- Boardman, J. and Hayes, J. 1966. *Excavations at Tocra 1963-65: The Archaic Deposits* (British School at Athens: Supplementary Volume 4).
- Bowden, H. 1991. The Chronology of Greek Painted Pottery: Some Observations. *Hephaistos* 10: 49–59.

- Bowden, H. 1996. The Greek Settlement and Sanctuaries at Naukratis: Herodotus and Archaeology. In M. H. Hansen and K. Raaflaub (eds.), *More Studies in the Ancient Greek Polis*, Stuttgart: 17–38.
- Burn, A. R. 1935. Dates in Early Greek History. *Journal of Hellenic Studies* 55: 130–146.
- Calame, C. 2003. *Myth and History in Ancient Greece: The Symbolic Creation of a Colony*, Princeton.
- Chamoux, F. 1953. *Cyrène sous la Monarchie des Battides*, Paris.
- Coldstream, J. N. 1968. *Greek Geometric Pottery: A Survey of Ten Local Styles and Their Chronology*, London.
- Cook, R. M. 1937. Amasis and the Greeks in Egypt. *Journal of Hellenic Studies* 57: 227–237.
- Cook, R. M. 1958-1959. Old Smyrna, 1948-1951. *Annual of the British School at Athens* 53-4: 1–34.
- Cook, R. M. 1972. *Greek Painted Pottery*², London.
- Cook, R. M. 1989. The Francis-Vickers Chronology. *Journal of Hellenic Studies* 109: 164–170.
- Cook, R. M. 1997. *Greek Painted Pottery*³, London.
- Cook, R. M. and Dupont, P. 1998. *East Greek Pottery*, London.
- Edel, E. 1978. Amasis und Nebukadrezar II. *Göttinger Miszellen* 29: 13–20.
- Fantalkin, A. 2001a. Mezad Hashavyahu: Its Material Culture and Historical Background. *Tel Aviv* 28:1: 3–166.
- Fantalkin, A. 2001b. Low Chronology and Greek Protogeometric and Geometric Pottery in the Southern Levant. *Levant* 33: 117–125.
- Forsberg, S. 1995. *Near Eastern Destruction Datings as Sources for Greek and Near Eastern Iron Age Chronology. Archaeological and Historical Studies. The Cases of Samaria and Tarsus (696 B.C.)*, Uppsala.
- Francis, E. D. and Vickers, M. 1985. Greek Geometric Pottery at Hama and Its Implications for Near Eastern Chronology. *Levant* 17: 131–138.
- Giangiulio, M. 2001. Constructing the Past: Colonial Traditions and the Writing of History. The Case of Cyrene. In N. Luraghi (ed.), *The Historian's Craft in the Age of Herodotus*, Oxford: 116–137.
- Gill, D. W. J. 2004. Euesperides: Cyrenaica and its Contacts with the Outside World. In K. Lomas (ed.), *Greek Identity in the Western Mediterranean: Papers in Honour of Brian Shefton* (Mnemosyne Supplementa 246), Leiden: 391–409.
- Gill, D. W. J. in press. Early Colonisation at Euesperides: Origins and Interactions. In G. J. Bradley and J.-P. Wilson (eds), *Greek and Roman Colonisation. Origins, Ideologies and Interactions*, Swansea.
- Gill, D. W. J. and Flecks, P. in press. Defining Domestic Space at Euesperides, Cyrenaica: Archaic Structures on the Sidi Abeid. In R. Westgate, N. Fisher, and J. Whitley (eds), *Building Communities: House, Settlement and Society in the Aegean and Beyond*, London.
- Gill, D. W. J. and Vickers, M. 1996. Bocchoris the Wise and Absolute Chronology. *Mitteilungen des Deutschen Archäologischen Instituts, Roemische Abteilung* 103: 1-9.
- Graham, A. J. 1958. The Date of the Greek Penetration of the Black Sea. *Bulletin of the Institute of Classical Studies* 5: 25-42.
- Graham, A. J. 1960. 'The Authenticity of the *horkion ton oikisteron* of Cyrene', *Journal of Hellenic Studies* 80: 94–111.
- Graham, A. J. 1964. *Colony and Mother City in Ancient Greece*, Manchester.
- Graham, A. J. 1982. The Colonial Expansion of Greece. In J. Boardman and N. G. L. Hammond (eds.), *The Cambridge Ancient History* III.3: 83–162.
- Hankey, V. and Warren, P. 1989. *Aegean Bronze Age Chronology*, Bristol.
- Hannestad, L. 1996. Absolute Chronology: Greece and the Near East c. 1000–500 BC. *Acta Archaeologica* 67: 39–49.
- Helm, R. 1984. *Eusebius Werke 7: Die Chronik des Hieronymus*³, Berlin.
- Herrera, M. D. and Balensi, J. 1986. More about the Greek Geometric Pottery at Tell Abu Hawam. *Levant* 18: 169-171.
- James, P. 2003. Naukratis Revisited. *Hyberboreus: Studia Classica* 9.2: 235–264.
- James, P. 2004. Review Article: The Assyrian, Babylonian and Persian Periods in Palestine. *The Bulletin of the Anglo-Israel Archaeological Society* 22: 47–58.

ARCHAIC GREEK COLONIES IN LIBYA

- James, P. 2005. The Date of the Ekron Temple Inscription—a Note. *Israel Exploration Journal* 55.1: 90–93.
- James, P. forthcoming. Dating Late Iron Age Ekron (Tel Miqne).
- James, P. J., Thorpe, I. J., Kokkinos, N. and Frankish, J. 1987. Bronze to Iron Age Chronology in the Old World: Time for a Reassessment?. *Studies in Ancient Chronology* 1: 1–143.
- James, P., Thorpe, I. J., Kokkinos, N., Morkot, R. and Frankish, J. 1991. *Centuries of Darkness*, London.
- Kocybala, A. 1999. *The Extramural Sanctuary of Demeter and Persephone at Cyrene, Libya. Final Reports Vol. VII: The Corinthian Pottery*, Pennsylvania.
- Leahy, A. 1988. The Earliest Dated Monument of Amasis. *Journal of Egyptian Archaeology* 74: 183–199.
- Malkin, I. 2003. “Tradition” in Herodotus: The Foundation of Cyrene. In P. Derow and R. Parker (eds.), *Herodotus and His World: Essays from a Conference in Memory of George Forrest*, Oxford: 153–170.
- Meiggs, R. and Lewis, D. M. 1988. *A Selection of Greek Historical Inscriptions to the End of the Fifth Century BC*, Oxford.
- Morris, I. 1993. Geometric Greece. In A. Leonard (ed.): *Centuries of Darkness: A Workshop Held at the 93rd Annual Meeting of the Archaeological Institute of America, Chicago, Illinois, USA, December 1991. Colloquenda Mediterranea A/2*: 29–38.
- Morris, I. 1996. The Absolute Chronology of the Greek Colonies in Sicily. *Acta Archaeologica* 67: 51–59.
- Morris, S. P. 1995 Bearing Gifts: Euboean Pottery on Sardinia. In M. S. Balmuth and R. H. Tylot (eds), *Sardinian and Aegean Chronology: Proceedings of the International Colloquium ‘Sardinian Stratigraphy and Mediterranean Chronology’, Tufts University, March 17-19, 1995*, Oxford (Studies in Sardinian Archaeology V): 361–362.
- Osborne, R. 1996. *Greece in the Making, 1200–479 BC*, London.
- Osborne, R. 1998. Early Greek Colonization. In N. Fisher and H. van Wees (eds.), *Archaic Greece: New Approaches and New Evidence*, London: 251–269.
- Payne, H. 1931. *Necrocorinthia*, Oxford.
- Rallo, A. 1984. Selinunte: Le Ceramiche di VII Secolo A.C. della Necropoli Meridionale di Manuzza dopo gli Scavi. *Annuario della Scuola Archeologica di Atene* 60: 203–218.
- Ridgway, D. 1999. The Rehabilitation of Bocchoris: Notes and Queries from Italy. *Journal of Egyptian Archaeology* 85: 143–152.
- Schaus, G. 1985a. *The Extramural Sanctuary of Demeter and Persephone at Cyrene, Libya. Final Reports Vol. II: The East Greek, Island and Laconian Pottery*, Pennsylvania.
- Schaus, G. 1985b. The Evidence for Laconians in Cyrenaica in the Archaic Period. In G. Barker, J. Lloyd and J. Reynolds (eds.), *Cyrenaica in Antiquity* (Society for Libyan Studies Occasional Papers 1 / BAR International Series 236): 395–403.
- Snodgrass, A. M. 1971. *The Dark Age of Greece*, Edinburgh.
- Snodgrass, A. M. 1985. Greek Archaeology and Greek History. *Classical Antiquity* 4:2: 193–207.
- Stucchi, S. 1984. I Vasi Greci Arcaici e La Cirenaica: Importazioni, Imitazioni ed Influenze. *Reconditi della Accademia nazionale dei Lincei* 39: 161–171.
- Stucchi, S. 1989. Problems Concerning the Coming of the Greeks to Cyrenaica and the Relations with their Neighbours. *Mediterranean Archaeology* 2: 73–84.
- Tusa, V. 1984. Recherche e Scavi nelle Necropoli Selinunte. *Annuario della Scuola Archeologica di Atene* 60: 189–202.
- Tsetskhladze, G. 1994. Greek Penetration of the Black Sea. In G. R. Tsetskhladze and F. De Angelis (eds.), *The Archaeology of Greek Colonisation: Essays Dedicated to Sir John Boardman*, Oxford (University Committee for Archaeology, Monograph 40): 111–134.
- Uhlenbrock, J. P. 1992. History, Trade and the Terracottas. *Expedition* 34, 1–2: 16–23.
- Vickers, M. 1985. Early Greek Coinage: A Reassessment. *Numismatic Chronicle* 145: 1–44.
- Vickers, M. and Gill, D. W. J. 1986. Archaic Greek Pottery from Euesperides, Cyrenaica. *Libyan Studies* 17: 97–106.
- Waldbaum, J. C. 1994. Early Greek Contacts with the Southern Levant, ca. 1000–600 B.C.: The Eastern Perspective. *Bulletin of the American Schools of Oriental Research* 293: 53–66.

PETER JAMES

- Waldbaum, J. C. and Magness, J. 1997. The Chronology of Early Greek Pottery: New Evidence from Seventh-Century B.C. Destruction Levels in Israel. *American Journal of Archaeology* 101: 23–40.
- Walter, H. and Vierneisel, K. 1959. Heraion von Samos. Die Funde der Kampagnen 1958 und 1959. *Mitteilungen des Deutschen Archäologischen Instituts Athenische Abteilung* 74: 10–34.
- Whitley, J. 2001. *The Archaeology of Ancient Greece*, Cambridge.
- White, D. 1984. *The Extramural Sanctuary of Demeter and Persephone at Cyrene, Libya. Final Reports Vol. I: Background and Introduction to the Excavations*, Pennsylvania.