Milesians in the Black Sea: Trade, Settlement and Religion

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Introduction

Miletos was, without doubt, the single most important *polis* involved in the Greek colonisation of the Black Sea. Estimates vary as to how many Black Sea colonies Miletos established. Pliny the Elder tells us it was 90 (*HN* 5.122) and some modern scholars have seen this as a slight exaggeration or underestimate.[1] Herodotos gives us further insight when he mentions that there were numerous trading posts (*emporia*) around the Black Sea. Our initial impression therefore is that of a single *polis* that had established a staggering number of colonies, exclusively in the Black Sea region, for the sole reason of trade.

There has been much discussion of the motivations and methods of the Archaic Greek colonial movement. Popular explanations for the colonial movement include trade, population, the search for metals, political dissatisfaction and other factors that prompted the otherwise home-loving Greeks to relocate to the farthest corners of the Mediterranean and Black Sea. There can be no single unifying factor that can successfully explain such a widespread phenomenon. The population, resources and political character of each *polis* community were unique, as were the experiences and motivations of each individual within that community.

In this paper, I would like to examine the role that trade played in the foundation of Miletos' colonies. I hope to show that trade needs to be understood within the broader context of the diachronic socio-economic and environmental history of the *polis* and its *chora*.

One often-cited motivating factor for Greek colonisation is political upheaval within the *metropolis*. From Herodotos and other sources we know of incidents, such as the *stasis* (in the case of Miletos, between the *aeinautai* and the *cheiromachei*), the rule and deposition of various kings and tyrants (including Koos and Kretines, who left Miletos to found Sinope) and other political events that may have played some role in the sending out of Milesian colonies. However, politics will not be included in this discussion because, in my opinion, the historical sources that support such interpretations are too limited to be relied upon solely to explain such a mass colonisation movement. Isolated political events, such as the deposing of a dynast, cannot be seen as

a long-term process within the history of a city that might result in sustained mass colonisation on the scale seen at Miletos. Although turbulent, the history of Miletos is no more bloody and unsettled than that of any of its peers in Archaic Greece and it is much less well documented. Also, this paper aims to explore the interface between the archaeological and historical evidence, and as political events in the *metropolis* can only ever at best be cautiously linked to archaeological phenomena, politics is not included here.

Trade

In his article "Traders and ports-of-trade in the Black Sea in antiquity", John Hind collected together the diverse literary references to *emporoi* and *emporia* in Greek literature.[2] This survey shows that Herodotos names Olbia and Kremnoi in particular as *emporia* and also makes more general statements about numerous other *emporia* in the Black Sea. Reading Herodotos therefore led scholars to make the general assumption that trade was the *raison d'être* for the numerous Milesian colonies in the Black Sea region.

The assumption that trade played a central role in the Greek colonial process suited the preconceptions of colonial and post-colonial anglophone scholars in the early 20th century. This attitude is encapsulated in what was, until recently, the only English language history of Miletos: Adelaide Glynn Dunham's *The History of Miletus: Down to the Anabasis of Alexander* (1915). The overall impression that the reader of this book is left with is that Miletos created, through trade, a homogenous empire of colonies that turned the Black Sea into a "Milesian Pond". The idea that trade and colonialism were linked is neatly summed up by Blakeway's now much commented upon words "…the flag followed trade". The conflation of the concepts and language of British colonialism with that of Greek Archaic colonisation has been slow to change and has only recently been discussed head-on as a separate issue by Anthony Snodgrass in his article "The history of a false analogy".[3]

It is now generally agreed that Miletos was not creating, through trade and its many *emporia*, a single unified imperial entity. Miletos clearly had an enormous influence in the Black Sea from the Archaic period onwards, but it is the role that trade played in the creation of the multifarious Milesian colonial identities in settlements around the Black Sea region that I would like to explore in this paper.

Clearly, we must strive to avoid the use of the English word "colony", which is loaded with unhelpful meaning and connotations, when what we are actually referring to are Greek *emporia* or *apoikiai*. But which of these two words would best describe Milesian settlements in the Black Sea? Is it right for Herodotos (or ourselves) to describe Milesian colonies in the Black Sea solely as *emporia*? This term in itself may conjure images of a purely commercial entity that may not be a true representation of such early Greek communities, but the alternative is perhaps worse. How can we call Milesian settlements in

the Black Sea *apoikiai* and conceive of them as fully fledged *polis* communities, when the concept of the *polis* itself was still in the process of formation?[4]

Trade was an important factor from a very early date. Leaving aside the controversial subject of Mycenaean trade with the Black Sea, there is archaeological evidence for early trade. For example, the needs of trade can be seen to have influenced the choice of colonial sites. This early choice was to have a lasting impact on their character as settlements and communities (and our perceptions of them as such) for a long time to come. However, finding secure archaeological evidence for early trade is difficult. The identification of very early Milesian (or other Greek) pottery in the Black Sea is made difficult by a number of factors: the rise in Pontic sea level; an overburden of occupation material from later periods of history at the majority of sites; the presumed trade in archaeologically invisible materials; and (until recently) lack of stratified pottery studies at Miletos itself. There is, however, historical evidence for the early role of trade in the life of the Pontic colonies in the form of the ubiquitous *emporoi* mentioned in literature from Herodotos onwards.[5]

Thomas Figueira defined Miletos as having both a developed agricultural economy and a trading role.[6] I will go on to discuss its agricultural base presently, but for now I will briefly consider what commodities *emporoi* may have been trading to Miletos from the Black Sea. One of the most striking features about Miletos' territory is the fact that it is almost completely lacking in any kind of mineral ores.[7] This is something with which the South Pontic region in particular was well endowed. The location of Milesian colonies such as Apollonia Pontike (Sozopol) near the copper-rich Meden Rid hills would appear to be a reflection of this desire to procure metals. Gold from Kolchis and iron from northern Anatolia may also have been traded. With all these commodities, though, there are alternative sources in the Mediterranean basin, yet it was in the Black Sea that Miletos appeared to colonise so intensively. Likewise, grain could be sourced from a number of regions, of which the Black Sea was only one. Analysis of iron found at Miletos appears to show that it did come from the South Pontic Belt,[8] but a lead ingot inscribed in Lydian shows that the Black Sea was not Miletos' only source of metals.[9] Perhaps, like grain in times of crisis, metals were simply too important to rely on a single source for their supply. More likely, the unplanned and uncontrolled nature of ancient trade, in the hands of numerous private individuals, resulted in a diverse pattern of trade, into which the evidence cited above gives us just a glimpse. The notion of a mutually exclusive Milesian trading bloc constituting Miletos and its colonies must surely have no place here.

Other commodities which the Black Sea is assumed to have traded in, and which may have had distinctive regional characteristics that made them desirable, may have included: timber (including charcoal), fish and slaves. However, all of these commodities are effectively archaeologically "invisible" and this hampers any attempt at trying to quantify (or even qualify) their role in ancient trade networks.

"Visible" and "invisible" archaeological materials

It seems appropriate here to expand slightly on the definition of archaeologically "invisible" and "visible" commodities. Materials that are archaeologically "visible" are those that can survive in the soil and, under normal conditions of deposition and preservation, usually do. Archaeologically "invisible" commodities are generally those that are biodegradable and in normal soil conditions, where there is water, air and warmth, these commodities will form food for bacteria and decay into nothingness.

By far the most familiar and important "visible" material is pottery. Pottery can be either coarseware or fineware (i.e. everyday or decorated pottery) and can also be used for transport or storage vessels (i.e. amphorae or *pithoi*). For each of these, one would expect there to be very different trade patterns. Similarly the other major "visible" commodity, stone, could be traded either for its inherent value (e.g. decorative semi-precious stones) or as a bulk material for building or carving (e.g. marble). The list of goods that are, to all intents and purposes, archaeologically "invisible" is a long and depressing one. It includes: all food products (e.g. oil, wine and cereals), all cloth (e.g. wool, silk and linen), wood, leather, furs, wax, honey, and resin, to name but a few. When such commodities are found intact, due to exceptional preservation conditions that lead to an absence of air, water or warmth, the insight that this provides is invaluable. Such occurrences are so rare and only ever happen as a result of an accident of preservation, so they cannot be used to create reliable distribution patterns to provide an evidential basis to discuss trade networks.

One class of materials that should logically be classed as archaeologically "visible" but which in practice is "invisible" is metals. As a fact of their nature and their great value, metals are subject to the three R's: rust, re-use and robbery. Metals are so rare in the archaeological record that although they might occasionally be used to show that one particular metal was being extracted in one region and exchanged to another (as above), it will never be possible to quantify the scale of that exchange. The bones of slaves and animals might also be expected to survive archaeologically, but there is nothing on the bones of the deceased individual to denote their status as a slave, or to prove that an animal had been imported (although the advent of isotope and DNA analysis may yet provide new clues to their provenance).

To summarise, the only "visible" commodity to have been found and studied in any quantity is pottery. It would be tempting to extrapolate out from what we understand about the distribution of this one commodity similar trade patterns for other commodities that are archaeologically "invisible". However, before we do this we must appreciate that each type of pottery may have had its own trade pattern, which was a product of that particular form of pottery's perceived value, function, weight, contents, etc. and the overall pattern of its distribution is complex and unique unto itself.

It has been argued that the distribution of pottery can be taken as an indicator of the distribution of bulk commodities, because pots were carried in the hold of ships as a component of mixed cargoes, the majority of which were archaeologically "invisible".[10] This approach is very useful to help us think about the nature of ancient trade in general (i.e. that pots were just one of a basket of commodities carried in each ship and may only have formed a small part of each transaction), but the analogies between the known distribution patterns of pottery and those of "invisible" commodities should not be taken too far. For example, does the fact that no identifiably Pontic pottery has yet been published from Miletos mean that all trade with the Black Sea was entirely one way and that Milesian trade ships went out full and came back empty?

Another approach to proving the trade in "invisible" commodities is the observation of geographical phenomena in the vicinity of the Black Sea colonies. For example, the fact that early Greek colonies are located close to metaliferous mineral reserves (e.g. at Apollonia Pontike, above) or are positioned to take advantage of environmental phenomena such as tunny runs may give us an insight into what trade activities that colony was engaged in.[11] Such observations appear simplistic, but for all its seeming sophistication, the ancient economy was essentially agrarian and low-tech in character and so geographical and environmental factors were of paramount importance. It is to be hoped that the new-found freedom of scholars to travel in the Black Sea basin and advances in satellite imaging and Geographical Information Systems (GIS) technology, will result in a new and systematic study of these geographical phenomena and their relationship to the Greek colonies.

Population

Greek historical sources often cite *stenochoria* ("lack of land") as the prime motivator for colonisation. This does not just mean an excess of population, it can also be caused by there being insufficient land to provide a viable food supply for a pre-existing population. A shortfall in the food supply might be caused by environmental factors, such as a drought (e.g. at Thera, Hdt. 4.150-159), or by gavelkind inheritance, by which land is divided into smaller and smaller parcels between brothers. Consequently, it was thought that colonies were established to relieve pressure on land in the *metropolis* and scholars such as John Graham asserted population over trade as the main motivation for the Greek colonial process.[12] This position was refined and developed by Snodgrass who proposed that changing demography (i.e. a population explosion) was the main cause of the movement,[13] a position that was subsequently criticised by George Cawkwell and others.[14]

The following discussion is a development of the ideas previously expressed in my case study of population in *Miletos: A History*.[15] The various models of calculating population and carrying capacity for the city of Mile-

tos and its territory that were mentioned in that book are examined here in more detail. The figures presented here, though, are by no means meant to be definitive. They are merely guidelines to possibilities of population and carrying capacity and are intended only to illustrate points of consideration within a larger argument. The reader is reminded to approach them with this in mind.

Jeffery Zorn proposed that the best method for estimating the populations of ancient communities was to use two different methodologies to achieve estimates, and then compare them in light of the natural resources available to that community.[16] Following this approach, I will first of all present and discuss models and calculations that provide estimates of the population of Miletos based on literary evidence. I will then present and discuss models that calculate population based on the carrying capacity of the land. I will then balance the results of these two approaches with reference to the specific environmental conditions and resources within the *chora* of Miletos itself.

The first type of population modelling that I will discuss is based on literary evidence. It has been suggested that one way of calculating the population of Miletos was by using Herodotos' description of the ships attending the Battle of Lade in 494 BC (Hdt. 6.8), which is effectively a role-call of the able-bodied men able to fight and defend the city against the attacking Persians. Miletos fielded 80 ships at this battle. In his book *Ionian Trade and Colonization*, Carl Roebuck used the number of ships at Lade as a basis on which to calculate the populations of the cities of Ionia at the time, including Miletos.[17] Assuming a crew of 200 per *trireme* (although this figure is not certain), a fleet of 80 ships would require 16,000 adult males as crew. Roebuck estimated that these men would represent 25 % of the total population of the city and used this in order to calculate its overall population (see Fig. 1).

(no. of ships) × (200 crew per ship) × (4) = (total population)
80 × 200 × 4 = 64,000

Fig. 1: Method for estimating the population of Miletos based on Herodotos.[18]

Mogens H. Hansen suggested a different way of calculating the population when studying the Athenian citizen body.[19] He suggested that the high infant mortality rate would result in a large proportion of the population being below fighting age. In the case of Miletos, this would mean that the men at Lade (16,000) were the adult male proportion of a total population that must have numbered about 54,000 to 56,000. Taking the inventory of ships from Lade and using it as a basis on which to calculate the population of the city by estimating what proportion of the total population these adult males represented, has given us a figure of approximately 54,000 to 64,000. Using this passage in this way is problematic for various reasons: the Milesians had already lost

men in battle in Karia (Hdt. 5.120); the city itself would have needed to be defended (Hdt. 6.6); and crew of the ships at the battle may have originated from other Ionian cities.[20] Nevertheless, if we take a figure of 54,000 to 64,000 as being the possible population of the city at the time, would the *chora* of Miletos have been able to support such a population?

The second, method of calculating population that I would like to use is based on carrying capacity models. Existing models that calculate the carrying capacity of ancient territories, such as that developed by Franco de Angelis,[21] depend largely upon the ability of the land to produce cereals. In order to apply this methodology correctly to Miletos it is necessary to understand the nature and extent of the Milesian *chora*. There were four main elements to the territory of Miletos: the limestone peninsula of Milesia itself; Mount Grion to the east; the lower Maeander Valley; and the Milesian Islands. Of these, the Maeander Valley was the most important for the production of cereals (see Fig. 2).

Region	Sub-Regions	Area (km^2)	Landuse[22]
Milesia	Northern Plain	52	Arable
	Stephania Hills	220	Grazing
Mount Grion		340	Grazing
Maeander Valley[23]		321.5	Arable
Milesian Islands	Ikaros	340	Grazing
	Leros	64	Grazing
	Patmos	40	Grazing
	Lade	2.5	Grazing
Total		1380	

Fig. 2: Approximate area of the Milesian territory, by region.

Following de Angelis' model: taking the total area of Miletos' territory in hectares; minus the areas which are unsuitable for arable; minus 50 % for the area left fallow in any one year; multiplied by 0.624 for the metric tonnes of cereal produced per hectare; minus 20 % set aside for seed for the following year; minus 15 % waste; divided by 230 kg per person per year for biological subsistence; gives the total population that could be supported by the territory of Miletos based on production of cereals alone (see Fig. 3). The resultant figure of 34,453 is the population carrying capacity of the territory of Miletos, based on this model.

138,000 (total area) – 100,650 (non-arable land) – 18,675 (fallow) x 0.624 (mt per ha) – 20 % (seed) – 15 % (waste) ÷ 230kg (biological requirement per person p.a.) = 34,453 (total supportable population).
Total: 34,453

Fig. 3: de Angelis' model for calculating population, as applied to Miletos.[24]

Another method of calculating population based on natural resources and territory is that proposed by Robin Osborne.[25] This is a less complex model and observes simply that an average household required three to four hectares each and housed an average family of five. Taking the total area that was available to Miletos for agriculture, i.e. without the non-arable land and minus 50 % fallow, in hectares, divided by three or four and then multiplied by five gives an approximation of the total carrying capacity of the land (see Fig. 4).

(available area) ÷ (3 to 4 ha per house) × (5) = (total population)
18,675 ÷ 3 × 5 = 31,125
18,675 ÷ 4 × 5 = 23,344
Total: 23,344 to 31,125

Fig. 4: Osborne's model for estimating population, applied to Miletos.

Let us now discuss these models.

Was Miletos over-populated?

Both of the carrying capacity models presented above result in a much lower figure than the population figures suggested by the literary evidence, in fact about half as much. An estimated population of 54,000 and 64,000 would appear to have lived in a region where the available natural resources could supposedly only support 23,000 to 35,000 people. Miletos' population therefore appears to be over-extended. This might lead one to conclude that this was the cause of its extensive colonies. However, when the nature of the Maeander Valley, which inundated annually and could be harvested every year, is taken into consideration it becomes clear that there was no agricultural shortfall within Miletos' own territory.[26]

Access to supplies of grain from the Black Sea, Egypt and southern Italy may have helped cushion Miletos from extremes of climate or crises in food supply, but would never have formed a significant component of the city's food supply in the Archaic period. For example, when Alyattes besieged Miletos, the city was able to withstand the blockade because it had control over the sea – and could therefore import food. However, in the same passage Herodotos also tells us that when the Persian herald entered the city Thrasyboulos had food brought from every corner to give the impression there

was enough food to go round (Hdt. 1.21). The implication of this is clear – that there was *not* enough food to go round and the city was on the edge of starvation because it did not have access to its own fields.

Why did Miletos colonise? The interaction of trade and population

In his 1994 article in *The Archaeology of Greek Colonisation*, Gocha Tsetskhladze surveyed the available literary and archaeological evidence for the foundation of the Greek colonies in the Black Sea and concluded that there were two waves of colonisation during the Archaic period. These waves coincided with the Lydian and then Persian incursions into the west coast of Asia Minor and Tsetskhladze suggested a political motivation for that movement. To these two movements could be added a third in the Hellenistic period, when the alluviation of the Gulf of Latmos by the Maeander River, directly or indirectly, prompted many Milesians to migrate to Athens where their grave stele have been found in large numbers.[27]

The precise details of the mechanism of the World Systems Theory that Tsetskhladze is in effect applying to the Greek colonial process need to be examined closely. In my view, what made the population mobile was not their unwillingness to live under foreign rule but the fact that the invaders took land from Miletos and it was this land that had been its greatest asset.[28] Miletos may have a reputation as a great trading state but this reputation originates from later, post-Archaic sources. Herodotos, our most detailed source, makes little or no mention of Miletos as a trading centre. Instead he mentions on three separate occasions the fields that surrounded Miletos (Hdt. 1.17, 1.19, 5.92). He also says that when the Persians sacked Miletos, "the pearl of Ionia" (Hdt. 6.18), and its great temple at Didyma, with riches comparable to those of Delphi, they confiscated the city's land and kept the lowlands for themselves, giving the uplands for the Karians. It is this loss of fertile land to the Persians, and before them the Lydians, that prompted Milesians to become mobile and colonise, because without that land the *polis* could no longer sustain its own population.

Miletos undoubtedly already had trading interests in the Black Sea area and, as we have said, traders were present in the Black Sea from the time of the very earliest Greek contacts with the region. Such trading posts presumably became the foci to which the newly mobile Milesian population moved to following the loss of their lands at home. In this way, a large proportion of the Milesian population was made to become mobile due to *stenochoria* ("lack of land"), the main reason for colonisation cited in the Greek texts themselves, and came to settle in locations originally chosen for their potential as ports of trade, identified through archaeology. The reason why Miletos settled in the Black Sea on the scale it did, even though it has a reputation as a great trading power, was therefore primarily population pressure and *not* trade.

Satellite imagery shows how the *chora* of the relatively late foundation of Chersonesos is dividing into equal sized *kleroi*. This might be cited as evidence of the need for land at the time of the foundation of this colony, which had not been apparent when earlier colonies such as Berezan were founded. It has been more usual to explain the different locations of earlier and later colonies, or the translocation of island or peninsula communities, such as Berezan, to mainland locations, such as Olbia, as a result of the local population now being safely subdued and the colony being able to expand onto the land, rather than as a result of changed priorities in the mother-city. However, I would suggest that we have assumed and projected onto this process an aggressive character because the term "colony" is so loaded with colonialist meaning in the English language.

Religion and colonisation

I would just briefly like to mention the role of religion in Miletos' activities as a coloniser in the Black Sea. Religion played an important part in the creation of identity in Greek colonies. Norbert Ehrhardt's detailed survey of cults of the *metropolis* and colonies of Miletos shows the many and various ways in which the cults of mother-city and colony were connected.[29] The mode of transmission of cult was through the movement of people from the mother-city to the colonies and the medium that facilitated this transference of cults was the oracle.

It is interesting to note that, if the historical and mythic traditions surrounding the establishment of Greek colonies are to be believed, then really it is the oracle (and therefore religion) that is cited as the starting point of all Greek colonies, and rarely an explicit desire for trade or land. However, the rational explanation, which is inferred from the sources, is that traders first established links to colonial sites, which were then legitimised as settlements by the oracle.

Miletos is famous for its colonies in the Black Sea, Propontis and North Aegean, but it should also be noted that Miletos also had some trading interests in the western Mediterranean (at Sybaris) and the Near East (at Naukratis). Why were its western interests, in particular, not developed into full colonies? It is now widely thought that the oracles acted as "clearing houses" for information on settlement activity in different regions for the Greek colonisation process.[30] This being so, could it be that what we actually see reflected in the distribution of the colonies of different *metropoleis* are the regional responsibilities (the "turf", so to speak) of the different oracles, rather than the trading interests of the mother-city?

The Berezan bone tablet, whether a genuine oracular response or not, would appear to confirm the very important role that Didyma played in the colonies of Miletos in the Black Sea.[31] Given that, unlike Delphi, Didyma was situated within the *chora* of a powerful *polis* (i.e. Miletos) and was, at best,

only semi-independent of that *polis*, it would seem likely that Milesian colonists would consult Didyma in an era when Delphi's credentials as the pan-Hellenic oracle had yet to be established. It is possible that all the so-called "Milesian" colonies of the Black Sea were in fact Didyma-sanctioned foundations, which claimed Miletos as their mother-city through Didyma. We often flatly assume that no other state would want to associate the foundation of one of its own colonies with Didyma and yet Miletos had founded several joint colonies with other Ionian states,[32] and Didyma was widely consulted from across western Anatolia in the Archaic period. It seems reasonable to me that minor pro-Milesian states within Ionia would choose to consult Didyma about founding their colonies at this time, when Miletos was at its peak and Delphi was not yet the dominant Greek oracle.[33]

We also know that the oracle at Didyma had played a role in the reinvention of Apollonia-on-the-Rhyndakos as a Milesian colony in the 2nd century BC. In this often over-looked inscription, ambassadors from Apollonia-on-the-Rhyndakos in Mysia approached Didyma and asked the oracle to confirm that they were indeed founded as a colony of Miletos, which the oracle duly did.[34] However, this Apollonia was probably a later foundation of the Attalid kings and could never have been a foundation of Miletos.[35] There was clearly some *kudos* attached to being a Milesian colony in the Pontic region at this time and it must, in some way, have been politically expedient for the people of Apollonia to claim Miletos as their historical *metropolis*. This raises the question of whether or not there were other colonies in the region that claimed to have been founded by Miletos, but in truth were not. Given the lack of early stratified deposits at most sites (as noted above) which could prove, if not the founding *metropolis* then at least the date of foundation, the true origins of many colonies in the Black Sea will have to remain unknown until firm archaeological evidence can be found, because the episode of Apollonia-on-the-Rhyndakos has shown that historical records can be positively misleading on this point.

Conclusions

Trade as a motivation for colonisation needs to be understood within the broader context of the socio-economic history of the founding *metropolis* and its *chora*. Trade cannot be understood in isolation from agriculture in an agrarian society like that of ancient Greece. In the case of Miletos, I hope to have shown that it was *stenochoria* ("lack of land"), prompted by the loss of land to the Lydians and then the Persians, which motivated large-scale colonisation. These colonies were established on the site of, or developed out from, pre-existing trading posts and their locations relative to local geographical phenomena often still reflect their original function.

When discussing trade in the Black Sea, we must be cautious of making assumptions about precisely which commodities were being traded and in

what quantities. Only pottery survives in sufficient quantity for studies to be made of its distribution pattern, and even this picture is incomplete. We must recognise that pottery was traded as both a low-order and high-order good and then seek to differentiate the two. We must also be cautious not to project out from the distribution pattern of one "visible" commodity (i.e. pottery) the distribution patterns of "invisible" commodities (i.e. everything else), which may have been traded very differently.

Finally, when we are trying to make a socio-economic rationalisation of colonisation, let us not forget the two most important agents in the colonisation movement – the individual colonist and the oracle. In most cases, it would appear that migration was the result of decisions made by individuals within a community as a result of land hunger (or just hunger), even if these decisions were made within the context of some broader environmental or political crisis. Oracles promoted colonisation as an acceptable choice and validated the decision of states and individuals to move their cults and themselves to a new location. Their fundamental importance to the Greek colonial movement should not be forgotten.

Notes

1 Morgan 1989, 26; Parke 1985, 10, respectively.
2 Hind 1995-1996.
3 Snodgrass 2002.
4 Wilson 1997.
5 Hind 1995-1996 *passim.*
6 Figueira 2002, 25.
7 Greaves 2002, 14-15.
8 Yalçin 1993.
9 Adiego 1997, 157.
10 Gill 1991.
11 Greaves 2002, 106-107.
12 Graham 1964, 5.
13 Snodgrass 1980, 10.
14 Cawkwell 1992.
15 Greaves 2002, 99-109.
16 Zorn 1994.
17 Roebuck 1959, 21-23; Greaves 2002, 99-103.
18 After Roebuck 1959.
19 Hansen 1988.
20 Roebuck 1959, 22.
21 de Angelis 1994.
22 Presumed predominant landuse based on suitability of soils, topography and hydrology.
23 The size of the area of the Maeander Valley is based on an estimate of the extent of progradation of the Büyük Menderes Graben at ca. 500 BC (Aksu, Piper & Konuk 1987, 230, fig. 3). For the purposes of this discussion, Miletos is presumed to have controlled the valley floor from the coastline to Magnesia-on-the-Maeander (Hdt. 1.18).

24 After de Angelis 1994.
25 Osborne 1987.
26 Greaves 2002, 101-102.
27 Vestergaard 2000; Greaves 2000.
28 Greaves 2002, 107-108.
29 Ehrhardt 1988; see also Greaves 2004.
30 Parke 1967, 45-46.
31 Burkert 1994.
32 At Kardia (with Klazomenai), Parion (with Erythrai and Paros) and possibly Amisos (with Phokaia?): Gorman 2001, 244, 245, and 249, respectively.
33 Greaves forthcoming.
34 Kawerau & Rehm 1914, no. 155; Greaves 2002, 127-128.
35 Magie 1950. I have visited the site of Apollonia-on-the-Rhyndakos (modern Gölyazı in Turkey) and the ruins at the site that I could see were all Hellenistic, or later, in date. This would appear to confirm Magie's 3rd century BC foundation date.