Mapping Milesian Migration

Processes and practices of migration in the Archaic Period (c. 700-475 BCE)

'Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor in Philosophy by John Brendan Knight.'

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This study examines the processes and practice of migration through the case study of Milesian overseas settlements in the Archaic period (c.800-475). It substantiates critiques of colonialist approaches to the topic and offers a new theoretically rigorous methodology for approaching ancient migrations through the development of a model for interpreting migration in proto-historical contexts. The notion of approaching Greek colonisation as migration is not new but this study moves the discourse forward by grounding its approaches in theoretical debates and discussions of contemporary migration in other scholarly disciplines. By modelling migration as a multi-focal interstice between wider macro-historical processes of diffused movement in temporal and spatial contexts, and meso- and micro-historical individual and group practices it facilitates a clearer understanding of the complexity of movement and resettlement in the ancient world.

Several important conclusions can be drawn from the application of this methodology to the case study of Miletos. Firstly, wider processes of Milesian migration did not occur within a vacuum but were embedded within wider processes of interaction with the local communities and polities they encountered in Anatolia, forest-steppe Skythia and the North Caucasus. Secondly, the drivers of emigration from Miletos were multivalent and acted as stimuli in different ways to different groups within Milesian society. Thirdly, access to migration capital within those social groups, such as elites and vocationally situated individuals, was key to their ability to undertake migration. Finally, the interactions of heterogenous socially and culturally positioned groups led, in time, to the development of negotiated forms of social practices and shared symbolic meanings. In the case of Milesian migration, this was manifested in overlapping communities of practice throughout the Propontis and Black Seas which formed a cultural *koine* which can be normatively termed "Milesian migrant culture".

The model developed here has been applied to the topic of Milesian migration, but it has been designed to offer utility in wider scholarly approaches to migration in proto-historical contexts, both ancient and modern. By approaching the available evidence from different but interrelated viewpoints it can synthesise the literary and material evidence for migration and offer methodological approaches for analysing its significance on a variety of scales. In sum, this study offers a valuable new way of exploring a topic which remains contentious in both scholarly and popular discourses and embraces its complexity and its extensive long-term consequence.

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A note on transliterations and translations

As much as possible I have preferred to use transliterations of Greek names and terminologies even in cases where the Latin version is better known. This is a personal preference based on my belief that Latinising Greek names and terms undergirds a notion of the "Classical world" as a reified historical phenomenon. Most often this is manifested in a preference for spellings with K rather than C and "os" rather than "es". This may seem overly pedantic but given that the importance of terminology in discourse forms an underlying theme of this study, I regard it as a necessary corrective.

All translations are my own unless otherwise stated. All dates are BCE (Before Common Era) unless otherwise status.

Abbreviations

(Abbreviations follow OCD and AJoA conventions)		
AA	Archäologischer Anzeiger	
ACSS	Ancient Civilizations from Skythia to Siberia	
AMA	Antichnyya mir I arkheologiya, Saratov.	
AWE	Ancient West and East.	
BI	Bosporskie Issledovaniya	
BNJ	Brill's New Jacoby	
BP	Bosporskiy Fenomen	
DB	Drevnosti Bospora	
LSJ	Liddell and Scott's Greek-English Lexicon, Abridged (1909). Oxford.	
OAK	Otchet' Imperatorskoy Arkheologicheskoy Kommissie	
MASP	Materialy po arkheologii Severnogo Prichernomor'ya	
MCA	Materiale și cercetări arheologice	
REA	Revue des études anciennes	
RGMG	<i>Recueil général des monnaies grecques d'Asie mineure</i> . Vol. 1.2 (1908). Paris	
SNJvA	<i>Sylloge Nummorum Graecorum Deutschland : Sammlung v. Aulock.</i> Vol. 1 (1957). Berlin.	
SA	Sovietskaya arkheologiya	
TAD	Türk Arkeoloji Dergisi	
VDI	Vestnik Drevney Istori	

PART I Introduction and Theory

I.1 Introduction

The movement and settlement of Greeks in the Archaic period (c. 800-475) continues to be one of the most important developments of this period and, consequently, one of the most intensively studied and discussed topics in Greek antiquity. Briefly put, this phenomenon saw the establishment of communities and settlements exhibiting characteristics of what is normatively termed 'Greek Culture'. This consists of aspects such as language, religious practices, expressive media, political forms and discourses around the coasts of the Mediterranean and Black Seas, from the river Don in the east, to the Iberian Peninsula in the west.

Traditional scholarly approaches focused on cataloguing the evidence for these communities, exploring their relations with their *metropoleis*, examining the reasons behind the process, and exploring their interaction with 'native' or 'indigenous' cultures (e.g. Bilabel 1920; Graham 1964; Ehrhardt 1988). Since the end of the 20th century CE, sharp divisions have emerged between scholars in terms of the theoretical, methodological and terminological approaches to this phenomenon and how mobility and settlement should be understood. While some have described these debates, with some justification, as an "Anglo-Saxon problem" (Greco 2011: 233), any attempt to explore this phenomenon still needs to address these issues. The frameworks we adopt and positions we take when discussing 'colonisation' have a profound impact on how we understand it as an historical process.

The aim of this work is to explore a new paradigm. Simply put to reenvisage 'colonisation' as migration. To achieve this, we shall explore the evidence for mobility and settlement using theoretical and methodological approaches developed in the discipline of migration studies. We will begin by setting out the broad trajectories of migration. These are the ways in which groups and individuals migrate in greater or lesser numbers over time. Then we shall outline the exogenous drivers of migration, which are the social and political conditions experienced by potential migrants in emigrant contexts. Following this we reenvisage migrants through their position practices; the ways in which social and cultural identities provide access to different levels of migration capital and the effect that this has on potential migrants' ability to migrate during different phases of a migration trajectory. Finally, we shall explore the outcomes of these processes and the ways in which migrants' social and cultural practices are reflected in immigrant communities of practices which supplant mono-cultural notions of identity.

This model is applied to the case study of Milesian migration for several reasons. First, Miletos was one of the most important, if not *the* most important, emigrant community in the Aegean basin and Hellenic worlds during the Archaic period. Second, extensive excavation of Milesian overseas settlements over the last two centuries provides a wealth of data to analyse. Third, while these communities are identified as Milesian and appear to demonstrate Hellenic cultural practices and manifestations, they also exhibit distinct divergences from a presumed Greek cultural norm. We will argue that these divergences are not simply forged through the interaction between different cultures (principally Greeks and non-Greeks) but discrete outcomes and negotiated practices of a variety of different positionally practiced migrating peoples operating within specific temporal and spatial contexts. Furthermore, we contend that by setting aside monocausal drivers and recasting migration as a series of multi-focal processes and practices unfolding in space and time, we can better understand both general and specific questions relating to movement in proto-historical contexts¹ where first-person narratives are unavailable, and the body of evidence is temporally and spatially fragmented.

First, though, why is this necessary? As I have pointed out elsewhere "it is of paramount importance that we do not neglect this aspect [i.e. migration] of ancient experience by consigning it to a more reassuring metaphorical plain such as colonialism, but treat it as a dynamic social and psychological force which played an important role in the lives of ancient peoples" (Knight 2019: 59). In other words, colonisation describes an historically and contextually specific process. It is migration, but of a type that is only observable under specific lenses and with reference to specific phenomena (Gosden 2004;

¹ The term proto-historical is used by Yntema (2000) to describe the eighth and seventh centuries, and particular migration during this period. A proto-historical era is one for which limited contemporary literary evidence survives and thus researchers are reliant on later texts and archaeological material to undertake historical reconstructions.

Manning 2013). Migration on the other hand is a universal transformative part of the human experience (Harzig and Hoerder 2009: 13-50; Castles, De Haas, and Miller 2014: 55-81). To ignore the perspectives and implications of both a wider and more nuanced migration approach in favour of a framework of colonisation, which even its advocates admit is anachronistic (Tsetskhladze and Hargrave 2011), at times seems like an exercise in self-abnegation.

By taking an approach rooted in theories of migration we can effectively supersede the colonial paradigm and begin to understand the ways in which societies, rather than states, facilitated conditions which made relocation possible. Furthermore, rather than attempting to identify a single overarching cause for migration, a more nuanced approach considering the interplay between time, space and social context allows us to better understand why some people migrate at certain times while others do not. To achieve this, the approach followed here involves first gaining an understanding of the intellectual and scholarly context in which the colonisation model grew. From an eastern perspective, this focuses primarily on the scholarship of the Soviet Union and FSU² states, with their Marxist and post-Marxist perspectives including bilateralism, emporion theory and quasi-processualist approaches, as well as questions of nationalising scholarly approaches and narratives. Western scholarship, on the other hand has been more interested in casting Greek migration in the mould of 18th, 19th, and 20th century CE imperialism, or taking

² Former Soviet Union.

post- and de-colonised perspectives using positivist and constructivist approaches to the evidence. This is followed by a short exploration of previous attempts to interpret the phenomenon through a migration lens and the implications and limitations of these studies. The conclusions drawn from this material centre on the efficacy of treating this movement as migration and within the frame of migration studies.

Following on from this, a theoretical excursus is provided in Part I.2. This entails a brief discussion of the sociological background to the study,³ and the problems of approaching the divide between agency and structure and causal stimuli in proto-historical case studies. Thereafter, we seek to explore an alternative overarching paradigm focused on processes and practices, which encompasses the wider contexts of migration and the ways in which migrating groups manifest their roles as migrants through social and cultural practices.

Part II, 'Migration processes', offers an outline of the wider contexts in which migration trajectories from Miletos operated, the exogenous drivers of migration and the role of social positions in creating time-space contexts for movement. Part II.1 takes the form of a *periplous*, exploring the history and chronology of Milesian settlement, followed by the quantification of migration trajectories through suitable proxies for a selection of sites as well as for Milesian migration as a whole. This section explores some of the wider exogenous drivers of migration, which are the structural frames constituted

³ See Appendix A for an in-depth discussion of this material.

externally from the migration trajectory. Part II.2 then discusses the role of position practices, which are the ways in which expectations and negotiations of social roles allow certain groups to accumulate and utilise migration capital at different stages of a migration trajectory. These groups are constituted by ethnic identities (including Milesians, Eurasians, Balkans and Anatolians); social statuses (e.g. elites) and vocational positions (e.g. fishers, craftspeople, traders and agriculturalists).

Part III explores the practices of Milesian migrants. First, we explore the topic of domestic space, a controversial topic in Black Sea archaeology. The central focus of this section is on the ways in which it was thought of and utilised through the conceptual tool of 'homemaking' amongst migrants. Homemaking is understood as the ways in which migrants create home spaces as part of the negotiation of their migrant identities. The use of hearths and heating facilities is also explored before a discussion of the division and utilisation of spaces for domestic purposes and social identities as well as a brief discussion of urbanisation. Finally, in part III.2 we look at the ways in which religious practices were used to create, support, and negotiate migrant identities and situations. This includes comparisons between emigrant and immigrant religious practices and the deities worshipped in immigrant contexts.

The study concludes by offering some thoughts on the impact of utilising a theoretically informed migration-based approach. Rather than casting it as a mono-causal state-sponsored endeavour predicated on exogenous drivers, what we are dealing with is in fact a nuanced multi-focal process of individual and group practices over a specific period. Wider contexts and drivers interacted in different ways with different socially situated groups at different junctures in the migration processes. This was predicated on potential migrants' ability to utilise the resources required to pursue migration as a reactive or proactive course of action. Finally, in pursuing this line of enquiry we can begin to map out a picture of the varied temporal, spatial and social interstices involved in migration and understand that the reasons that migration occurs are rarely limited to a single stimulus. For each migrant and each group of migrants the effective role of migration drivers and their own socially situated position and its attendant access to frames of mobility through capital is unique. By exploring this wider picture in some of its complexity a more nuanced understanding of the role of movement in the lives of people and communities in the ancient world can be achieved.

I.1.1 Eastern Scholarship

In the late 18th and 19th centuries CE, the development of Classical Archaeology went hand in hand with the study of the Black Sea region in South Russia and Ukraine. Exploration of the settlements and kurgans of the region, first by land surveyors of the General Staff of the Imperial Russian army, then by such luminaries of early Russian science as Paul du Brux (b. 1770-d. 1835) and H. K. E. Koehler,⁴ led to the development of the first museums in the region

⁴ See Koehler (1822) for an early publication of the epigraphic evidence from Olbia and Tunkiva (2010) for an retrospective analysis of the work and career of du Brux.

displaying the artifacts uncovered there, and the emergence of Classical Archaeology as a scientific discipline in the Russian Empire (Tunkiva 2003). One of the first attempts to synthesise the evidence for Greek settlement in the northern Black Sea was undertaken by a Baltic-German émigré historian Ernst von Stern, who excavated at Berezan between 1904 and 1909 and again in 1913.5 Von Stern drew analogies between the British colonialism of his era and Greek overseas settlement and contended that a relationship of symbiotic prosperity existed between Motherland and colony (von Stern 1909: 139). He believed that archaeological evidence was paramount for exploring the processes of colonisation, emphasising the diagnostic importance of pottery and other small finds. He argued that the historian must become an archaeologist to properly investigate the phenomenon, placing the role of material culture as a nexus through which to understand cultural identity in the foreground of future studies (von Stern 1909: 139). Through analysis of ceramic materials, von Stern asserted the primary role of Miletos in the settlement of the northern Black Sea (von Stern 1909: 141). He noted the early presence of "Milesian" pottery at inland sites which, he argued, demonstrated the important Greek cultural influence on the indigenous societies of the region.⁶ Finally, through his observation of material culture at Berezan, von Stern noted a distinct change

⁵ The early excavations at Berezan were published in *OAK* (1907: 41-49; 1908: 35-38; 1909: 50-58; 1910: 66-75; 1912: 84-93) See Solovyov (1999: 20-22) for a discussion of von Stern's work at Berezan.

⁶ As Solovyov (1999: 21) points out, and as can be observed in his own work, (von Stern 1909: 143) he seems to have had a wide definition of what counted as Milesian wares.

from Milesian to Attic material culture which he dated to the end of the Archaic period (von Stern 1909: 144). Several of von Stern's conclusions, regarding the early presence of Greeks in native communities and the role of Miletos in the settlement of the northern Black Sea, would find much currency amongst his successors.

Following von Stern, the next major treatment of Greek settlement on the northern Black Sea coast by a Russian scholar (though following the 1917 revolutions one who was in exile at the University of Oxford⁷) and later in the United States, was undertaken by Michael Rostovtzeff in his seminal work Iranians and Greeks in South Russia (1922), in which he devoted a chapter to the Greek colonisation of the area. Rostovtzeff allotted an important place for the metals trade in the earliest exploration of the region, first by Karians (contra Iessen 1947), then Milesians (1922: 61-62). Like von Stern (1909: 141) he believed that these early expeditions were captured in the Greek myths situated in the area (1922: 62). For Rostovtzeff, this search for metals entailed journeying along the southern Pontic coast, up as far as eastern Crimea, where the earliest Milesian "stations", at Sinope and Trapezus, were established at sites that already hosted indigenous communities. These journeys begat the development of a second, safer Pontic route following the western coast, principally motivated by trade, but where "[n]early every station ... held out the promise of easy profits and miraculous draughts of fishes" (Rostovtzeff 1922:

⁷ On Rostovtzeff's early years in England see Bongard-Levin (1999).

62). These anchorages soon developed into "Milesian fishing colonies" located close to the major rivers of the region, the Danube, Dniester, Bug, and Dnieper.⁸

By the 1930's Soviet historians and archaeologists, informed by Marxist structuralism, had begun to explore some of the major questions regarding the Greek settlement of the region. Preeminent amongst these scholars was Sergei Aleksandrovich Zhebelev (b. 1867- d. 1941), whose works on the Bosporan Kingdom expounded many arguments which were to profoundly influence the works of his successors (1938, 1953). Zhebelev argued that trade, in the hands of private citizens, was the major impetus behind the settlement of the Bosporan region and that the earliest settlements in the region were trading factories (1953: 52). Another major contribution was his utilisation of Marx's dictum on forced emigration in the ancient world to seek the causes of Greek colonisation in the conditions of the metropolis Miletos.⁹ Zhebelev also claimed that the establishment of Pantikapaion, for example, could be accounted for by reference to Herodotus' description of internal conflict within Miletos following the tyranny of Thrasyboulos in the sixth century (57, 53: 1953).

⁸ Rostovtzeff (1922: 62). Early Berezan is described as "A fishing village … full of vases and vase fragments belonging to the seventh and sixth centuries B.C … closely connected with the town of Olbia", though he concedes that it may well have predated its more illustrious neighbour.
⁹ Zhebelev (1953: 53, 57). This Marxist approach to Greek colonisation has recently been revived, though far from endorsed, for its historiographical interest (Manoledakis 2018: 193-94).

In 1947, Aleksandr Aleksandrovich Iessen introduced what has been called the "Theory of the bilateral character of Greek colonisation" (Koshelenko and Kuznetsov 1998: 253). He held that the process of settlement on the Black Sea coast relied on developments both in the Aegean and Eurasian spheres (Iessen 1947: 89). In the latter, this was facilitated by the development of a "higher barbarism" amongst the indigenous peoples. This was achieved through conflict, enslavement of populations, and monopolisation of the means of production by the local elites. These underpinned rising inequality and a desire for Near Eastern and Aegean luxury goods to function as symbols of social stratification (Iessen 1947: 34-35). Simultaneously, the first Greeks had begun to enter the Black Sea in trading and raiding expeditions recounted in their myths (Iessen 1947: 51-52). This trade was conducted with the highly developed local cultures (1947: 58). Once established as trading factories, the Milesian settlements developed into centres of production in their own right, producing goods for export to the local tribes and the Aegean (Iessen 1947: 83-85). Iessen's focus on development, based around the securing of means of production, is a classic tenet of Marxist historical-materialist approaches to history, while his emphasis on the rise of slaveholding amongst the indigenous elites is predicated on Marx's stages of historical development (Kocybala 1978: 21). The development of a Marxist ideological underpinning for Soviet historiography played an important role in Iessen's conception of Greek colonisation, and his focus on the role of indigenous societies in this process persisted in Russophone scholarship for over two decades.

Dmitry Pavlovich Kallistov, in his 1952 monograph on the northern Black Sea settlements, took up a number of the ideas proposed by Zhebelev and Iessen including the utilisation of Marx's notion of forced emigration, the development of *emporia* settlements into centres of production, the bilateral dependence of sending and receiving areas and the role of internal conflict in the metropolis in creating conditions for emigration (Kallistov 1952: 53-63). To this latter conception he added a significant nuance, claiming that conflicts arising from the rise in slaveholding at Miletos and elsewhere led to the dispossession of the lower orders and precipitated their departure. Kallistov's other important contribution was to elucidate the process by which he believed Greek colonial settlement took place (1952: 61). First, he argued, commercial relations were established by periodic encounters between terrestrial and maritime traders meeting at centralised coastal nodes, which developed into seasonal then permanent emporia. Further migration and settlement nucleation ensued, creating independent centres of production. Again, we see in the work of Kallistov, strong adherence to the Marxist historiographical approach, emphasising the development of social stratification and subjugation and the importance of control of the means of production.

V. F. Gaidukevich, like Kallistov before him, saw slavery at the heart of the social changes that affected Greek society in the early Archaic period (1955: 23). Changing means of production, connected to the demise of tribal organisations, led to the dispossession of small holders and the monopolisation of production by the elites through slave labour which, coupled with an increasing population, precipitated the 'forced emigration' of many of the free population (Gaidukevich 1955: 24). In his schema a much greater emphasis was placed on analysing the socio-cultural conditions of Archaic Miletos as a vector through which to understand the reasons for this process. Miletos and Ionia were well connected to the Near East and experiencing a rapid development in industry and craft production (Gaidukevich 1955: 25). In Gaidukevich's view, Milesians had begun to explore the Propontic and southern Black Sea coasts, establishing trading factories there as early as the eighth century (Gaidukevich 1955: 27-28). By the beginning of the following century, the rise of the Lydian kingdom cut Miletos off from its Eastern trade connections and facilitated a rise in maritime exchange. Social conflict within the polis seemed to occur simultaneously with the beginning of extensive overseas settlement (Gaidukevich 1955: 26, 28). Gaidukevich also agreed with Iessen that the development of trade and the appetite of the indigenous elite for wealth and foreign goods meant that Greek colonies were both established in inhabited areas and required the development of peaceful, mutually beneficial relations with developed local societies (Gaidukevich 1955: 25-26).

Around the same time as Gaidukevich was developing his ideas about the exact conditions which presupposed "forced emigration", Vladimir Blavatsky offered a new model for the development of the Greek cities of the northern Black Sea, taking inspiration from previous attempts to discern the relationships between *emporia* and *apoikia* (Blavatsky 1954). This model saw the development of these settlements unfold over three differentiated periods. First, between the thirteenth and eighth centuries, Anatolian and later Greek merchant-pirates explored the Black Sea coasts taking part in nascent trade in the region, reflected in the appearance of Asia Minor and Near Eastern objects and motifs (Blavatsky 1954: 7-14; 1961: 7). In the second period, roughly between the eighth and the beginning of the sixth centuries, the institution of regular trading voyages resulted in the establishment of factory-emporia on the coast (Blavatsky 1954: 15-17; 1961: 8-9). Finally, from the first half of the sixth century onwards, extensive migration from Asia Minor resulted in the emergence of the *polis* in the region, frequently at the sites of the previous emporia (Blavatsky 1954: 17-28). Blavatsky's schema came to be known as the "emporion theory" in Soviet scholarship (Lapin 1966: 60-85).

Vladimir Lapin, the head of the Berezan expedition between 1960 and 1980, offered an extended and rounded critique of the works of his predecessors focusing on refuting Iessen's bilateralism and Blavatsky's emporion theory, both of which he regarded as pre-revolutionary western conceptions (1966: 20-21). Both theories, in Lapin's view, were actually two sides of the same model with trade between Greeks and indigenous peoples at its heart (Lapin 1966: 22). Instead, he argued that the northern Black Sea coast was in fact sparsely populated around the time of the arrival of the first migrants from Greece and this was an important factor in their ability to settle there (Lapin 1966: 35-39). For Lapin, following Marx's forced migration model, the migrants were the poor and dispossessed whose main activities were agriculture and handicrafts, not trade (Lapin 1966: 236). While Lapin was deconstructing the twin notions of bilateralism and emporisation, Yaroslav Domanskij was also working to refute the notions of the former. Domanskij perceived that, in general, the precipitating causes of migration were heterogenous (Domanskij 1972: 38). For Milesian migration, economic factors, natural disasters, external geo-political pressures and internal conflict arising from the monopolization of land, and the rise of slaveholding in the metropolis all had an effect (Domanskij 1972: 35-38; 1965: 127-30). He further argued that these settlements were centres of production in their own right from the beginning; as evidenced by their agricultural nature and craft industries (Domanskij 1972: 132). While Domanskij was by no means the first scholar to posit the importance of 'push' factors in emigration from Miletos, by widening the potential spatial and temporal scales of these stimuli he opened new avenues for understanding the process beyond the simplistic readings of internal conflict in the ancient sources, which his predecessors had hitherto resorted.

In 1982, Sergey Kryzhitsky published an important volume which dealt with the architecture of the northern Black Sea, focusing on Olbia where he had excavated (Kryzhitsky 1982). He noted that in the early settlements, which were characterised by subterranean dwellings, there seemed to be little evidence of social or economic heterogeneity.¹⁰ He theorised that the arrival of further migrants was the catalyst for the economic and social development of the Black

¹⁰ Kryzhitsky (1982: 164). See also Peterson (2010: 62-63) who notes that the funerary evidence from Olbia also supports the notion of socio-economic homogeneity.

Sea settlements by the end of the sixth century. This latter notion, that there were significant "waves" of migration, was taken up by Anna Rusyaeva to explain the development of Olbia in the latter part of the sixth century and, in particular, the idiosyncratic nature of the Berezan bone tablet inscription (Rusyaeva 1986). She suggested that this object represented an oracular inscription brought by a second wave of colonists to Olbia whose main tutelary deity was Apollo Delphinios and who thus established a new temenos at the site in his honour (Rusyaeva 1986: 63). The suggestion that there was significant religious conflict between the new and established migrants (i.e. Vinogradov 1989: 76-79; Rusyaeva 1992: 172-74), supported by Aristotle's claim of a parallel occurrence at Apollonia (*Pol.* 5.2.11), continues to receive support. Overall, this notion of *epoikoi* (secondary) migration has had an important influence on scholarship since the 1980's (Avram 2012a), and has been used to explain numerous political developments of the Black Sea migrant poleis (e.g. Solovyov 2006: 70).

Since Lapin's rejection of an *emporia* phase preceding the establishment of full migrant settlements, work began to be undertaken to establish the way in which the apparently fully-fledged *poleis* of the Black Sea were established. Scholars, including Yuri A. Vinogradov, looked at the ways in which the small *apoikiai*, as he calls them (1999a, 2007), were established in the Kimmerian Bosporus. He argued that the proximity of the nomadic Skythians in the area north of the Caucasus led to the agglomeration of reasonably large settlements, such as Pantikapaion, for the purpose of defence.¹¹ He also posited a dugout period of around 60-80 years at these settlements before the beginnings of stone architecture.¹² This latter notion has been effectively critiqued recently by Dmitry Chistov, who notes that the notion of a ubiquitous dugout period of this time span does not hold up. He further argues that the development of the settlements was accountable not through secondary migration, but for "internal demographic reasons" in "the lifetime of the second - third generation of settlers" (Chistov forthcoming).

It is necessary to trace a final thread in Soviet, FSU and Balkan scholarship that has had a large impact on the ways in which Milesian migration to the Black Sea has been viewed. This is from the perspective of ethnic, cultural and nationalist identities. Konstantin Marchenko and Sergey Solovyov, both of whom excavated at Berezan, argued on the basis of the subterranean architecture which dominated there, as well as the presence of handmade pottery from indigenous and local regional contexts, that the settlement was in fact an indigenous one in which a handful of Greek traders were resident (Marchenko 1988, 2005a; Solovyov 1998, 1999, 2007b, 2010, 2013). This notion has been roundly rejected by subsequent scholars who have pointed out that nowhere, not even at Berezan, is there a direct convergence of evidence in

¹¹ See now the discovery of fortifications at early Pantikapaion (Tolstikov 2015b: 257)) and later at smaller rural settlements on the Taman peninsula (Tsetskhladze 2016: 52-53).

¹² Vinogradov (2007: 146). See also Knight (2021) for a discussion of the architectural development of Black Sea migrant settlements.

the architecture, material culture or funerary record which would necessitate the identification of non-Greeks as the residents of the settlement.¹³ Nevertheless, in the Bulgarian tradition, notions of national endogeny have led to a greater role being ascribed to local Thrakian tribes in the establishment of the Greek coastal settlements,¹⁴ while in Romania, the issue of ethnicity has ebbed and flowed alongside social and political developments throughout the 20th and 21st centuries.¹⁵

Overall, there are several important strands of enquiry that have been developed in eastern European scholarship, ranging from the causes of migration both internally and externally constructed, to the nature of the relationships between migrants and established communities. To a greater or lesser extent these issues are not exclusive to Soviet, FSU and Balkan scholarship but have been addressed in various other scholarly traditions, though generally in different terms and, prior to the 1990's, with limited dialogue between eastern and western scholars.¹⁶

¹³ Kryzhitsky (2007). Cf. Müller (2013), who argues that notions of ethnocentrism in modern Russian scholarship have done much to obfuscate the relationship between Greeks and non-Greeks in the Black Sea, Porucznik (2021) for a discussion of the construction of identity in the Olbian chora and Donnellan (2021) for identity at Istros.

¹⁴ See Marinov (2015) and Damyanov (2018a) with literature.

¹⁵ See Iancu (2019) with literature. For Georgian scholarship see Kohl and Tsetskhladze (1996: 163-64).

¹⁶ German publications of important works by Soviet and Romanian scholars have appeared including Gaidukevich (1971); Alexandrescu (1990); Vinogradov (1997). It is perhaps the

I.1.2 Western Scholarship

I.1.2.1 Colonial and Postcolonial Scholarship

The earliest scholarly treatment of Milesian overseas settlement came in the form of a short book by the German philologist and writer Friedrich Eberhard Rambach (b.1776 - d.1826). This monograph, composed in Latin, the scholarly language of the day, provided a brief narrative of Milesian history, followed by a catalogue of its settlements. Rambach's work, based exclusively on ancient literary accounts, understood the process of Milesian settlement as embedded in trade (Rambach 1790: 22-28). His conception of Miletos as a 'republica mercatoria' (Rambach 1790: 26) may have been an attempt to draw parallels between its prosperity and that of Hanseatic Hamburg, where he had studied.

Following Rambach, the French historian Desirée Raoul-Rochette, included a number of chapters on Milesian settlements in the fourth volume of his magnus opus, *Histoire Critique de l'Établissement des Colonies Grecques* (Raoul-Rochette 1815a: 169-73, 253-57, 312-42). This work, very much a

anglophone tradition that has been most limited as evidenced by the continued reliance on Minns (1913) and Rostovtzeff (1922), though Blavastky did publish an article in English in *Greek Heritage* in 1965. For a review of post-1990 scholarship in western European languages see now Tsetskhladze (2021b), who alongside the late Pia Guldager Bilde's *Centre for Black Sea Studies* at Aarhus university, has done a great deal to bring eastern scholarship to anglophone audiences i.e. Tsetskhladze (1994a); Tsetskhladze (1998a).

product of its time, envisioned Greek settlement in the context of a civilizing mission to prevent incursions of Barbarians and thus a fate analogous to the fall of Rome (Raoul-Rochette 1815b: 2-4). Raoul-Rochette saw the genesis of Greek colonisation as rising population and concomitant famine which caused internal disorder, the rise of tyranny, and subsequently emigration -a world not unlike that of the revolutionary period in which he had grown up (Raoul-Rochette 1815b: 16-19). The evocative language he employs to describe the Greek experience is redolent of this period. Statements such as "les obligations les plus dures, les restrictions les plus despotiques, furent substituees aux communications libres et fratenernelles" (Raoul-Rochette 1815b: 45), demonstrate a deliberate engagement with the language of the French revolution and was surely meant to evoke comparison with the famous slogan "Liberté, égalité, fraternité". Raoul-Rochette's treatment of Milesian settlements is limited to a credulous survey of the literary evidence which focuses on constitutional convergences between *metropoleis* and colonies. (Raoul-Rochette 1815b: 8-10, 25-43)

A century later, in 1915, Adelaide Glynn Dunham published the first English-language history of Miletos. Her interest, not unlike many of her contemporaries, was on the economic and political history of the polis, thus her brief treatment of Milesian overseas settlements is largely conditioned by the concept of trade routes (Dunham 1915: 47-62). For Dunham, the locations of Milesian settlements were places with the potential for 'commercial development' and it is telling that she gives extended focus to Naukratis (Dunham 1915: 48, 50-55). Like her predecessors, Dunham's account was principally based on literary evidence, and she includes a catalogue of Milesian overseas settlement identifying Olbia, Pantikapaion and Istros amongst others (Dunham 1915: 56-62). Yet, by the time she wrote, Elliot Minns had already published his seminal volume on the Greeks in the Black sea which took into account material from the numerous excavations that had been underway in the region since the previous century (Minns 1913). Already by the 1820's H. K. E. Koehler had begun preliminary work at Olbia and Berezan.¹⁷ In the following decade, Paul du Brux's survey of the ruins of Crimea had documented material at Pantikapaion amongst other places (Tunkiva 2003: 321-23), while Vasile Parvan began excavating Istros in 1914, though the site had been known as early as the second half of the previous century.¹⁸

By the time of the next major treatment of Milesian overseas settlement in a western European language, by Friedrich Bilabel (1920), the events of the Russian revolution had effectively curtailed western scholars ability to engage with the *in situ* archaeological evidence. Bilabel's primary focus, like Raoul-Rochette, was on drawing parallels between the social, political and religious organization of the *metropolis* and its overseas settlements (Bilabel 1920: 9-153).

Over half a century later, Norbert Ehrhardt published a seminal work on Milesian overseas settlement which remains the definitive text on the subject to

¹⁷ For the inscriptions found at Olbia see Koehler (1822). A detailed account of excavation history at Berezan can be found in Solovyov (1999: 19-27).

¹⁸ See Angelescu (2014, 2019) for an extensive discussion of the excavation history of Istros.

the present day. Based on his PhD thesis, defended at the University of Hamburg, *Milet und seine Kolonien* offered an in-depth study of the political, religious and social interactions between Miletos and its emigrant settlements (Ehrhardt 1988). Ehrhardt's methodology drew heavily on previous studies, in particular that of Frederich Bilabel, but better access to materials from eastern Europe in the age of glasnost, and the wealth of epigraphic, numismatic and archaeological study undertaken in the sixty years between the two, ensured an extensive and rigorous study that has yet to be surpassed.

Between Bilabel and Ehrhardt, anglophone academia saw an alternative study of Ionian overseas settlement. Carl Roebuck's 1959 monograph, *Ionian Trade and Colonisation*, unlike previous studies, attempted to place migration from Ionia within its wider geographic and political milieu, approaching it from its Anatolian, Aegean and Near Eastern contexts (Roebuck 1959: 42-76). Yet, his discussion of the actual process of migration was heavily informed by pushpull models of movement and set the tone for future studies focusing on causality in terms of economic utility and resource deficits.

In the vein of Bilabel and Ehrhardt, Kryztof Nawotka's (1999) monograph, *Boule and demos in Miletus and its pontic colonies from Classical age until third century A.D*, sought to explore the interaction between political institutions between Miletos and its migrant settlements. Nawotka was primarily concerned with the evolution of institutions under the influence of democratic Athens and the Delian league in the Classical epoch and thus offered limited analysis of the genesis or development of Milesian migration in the Archaic period.

Conversely, in her study of the history of Archaic Miletos, Vanessa Gorman placed the individual agency of the *oikist* at the heart of the settlement process, seeing temporal and spatial factors as specifically informed by rational choices (Gorman 2001: 61). Her discussion of Milesian overseas settlement is couched in general terms and informed by wider contemporary discourses on Greek colonization (Gorman 2001: 59-66). Nevertheless, her stress on the plurality of experiences remains an important perspective (Gorman 2001: 61, 67). Like many scholars before her, Gorman concluded that Milesian trade most likely held the key to understanding the strength and depth of her migrant activities (Gorman 2001: 66-71), and her concomitant use of loaded economic terminology such as 'monopoly' amply illustrates this point (Gorman 2001: 70-71, 130)

Shortly after the publication of Gorman's study, Alan Greaves' monograph on Miletos also appeared (2002). Despite mutual foci, these studies viewed Miletos from very different perspectives. The former took a primarily historiographical approach, while the latter attempted to provide an archaeological portrait. Greaves sees Milesian migration as the result of a complex intersection of geographical, political, demographic and economic circumstances. Furthermore, he suggests that the sanctuary of Branchidai-Didyma may have played an important role in concentrating migratory endeavours and subsequently shaping their narratives around Miletos, playing a role as a centre of knowledge exchange (Greaves 2002: 104-09). Greaves'

subsequent work on Milesian migration has explored these and other facets of the process including, religion (2004), trade (2007) and cosmopolitanism (2019, 2010).

Recently, Milesian migration has also been explored by Alexander Herda, whose extensive discussion on the subject focused on the relationship between Milesian and Megarian migration in the Propontis and Black Sea (Herda 2016). Herda identifies three main poles of interaction between the two, religious practices, constitutional development, and historical and mythical narrative interconnections (Herda 2016: 17-110). While the depth of Herda's scholarship is impressive, his view of movement is entirely conditioned by statist concerns. His focus on literary and epigraphic evidence aligns the actions of individuals within wider proto-nation states and political motivations and elides any role of individual agency or private concerns in overseas movements.

I.1.2.2 Terminology

In general, western European and anglophone discussions of Milesian emigration have focused on political and economic drivers within a context informed by institutional and colonial paradigms and terms. Yet the basis on which these assessments have been made is problematic. In September 1975, before the Royal Historical Society's annual conference, Moses Finley set out to disentangle this "riot" of "semantics" surrounding, what he called "colonial terminology" (1976: 168). Finley recognised the importance of distinguishing between "colony" as a euphemism or metaphor and as a technical term.¹⁹ One of the defining features of Finlay's "colony" was its notional political dependency on the motherland. This distinguished colonies from migratory communities and led him to an important conclusion,²⁰ namely that the Greek settlements established across the Mediterranean and Black Sea from the eighth to sixth centuries were "independent city-states, not colonies".²¹ The idea of settlements as independent was not a new notion. Although the odd scholar, like Dunbabin, might mistakenly refer to overseas "possession" (Dunbabin 1948: 17), it is generally accepted that, until the Athenian *klerouchies* and Syracusan foundations of the fifth century, the Greek Mediterranean and Black sea *poleis* were, by and large, politically, if not necessarily culturally, independent communities. Thus, scholars were left to pick up the pieces of a terminology that had been deployed uncritically since at least the days of Raoul-Rochette (Raoul-Rochette 1815b).

Much work has been done since, shedding further light upon the problems of equating ancient and modern "colonisation" (De Angelis 2010). It is now recognised that Classical Studies, as a discipline, carries significant cultural and political baggage from its inception due to the foundational position attached to Greek and Roman culture in the so-called Western

¹⁹ Finley (1976: 169) See further Owen (2005: 10-18) for the analogous modelling of ancient colonisation after its modern counterpart.

²⁰ Finley (1976: 173) Though cf. Bérard (1960) for a similar idea.

²¹ Finley (1976) and thus, as Finley puts it, "there can be no colonization without colonies".

tradition (Goff 2005). But, if we are not dealing with colonies or colonisation, what then are we to call the process whereby, over the course of three centuries, Greek communities came to be established across the Mediterranean and Black Sea basins?

Franco De Angelis, one of the leading critics of the old terminology, offers two potential solutions. The first takes the nominal Greek term for overseas settlements, that is ἀποικία (apoikia: usually translated as 'home away from home' [LSJ s.v. $\dot{\alpha}\pi\sigma\sigma\kappa(\alpha')$], this would then be expanded to include apoikism-apoikiazation-apoikize-apoikial to replace the cluster colonialismcolonisation-colonise-colonial (De Angelis 2010: 19-20). At first glance this usage seems more appropriate, derived as it is from the ancients' own vocabulary and specifically tailored to the case of Greek overseas settlement. The earliest attestation of the term $\dot{\alpha}\pi\sigma$ in a fragment of the lyric poet Ibycus of Rhegium in the form ἀποικίας sometime in the late sixth century.²² While it is entirely possible that Greeks of earlier periods would have used the term $\dot{\alpha}\pi\sigma\omega\kappa\alpha$, the evidence is lacking prior to the fifth century. By then the tenor of Greek settlement had changed. Most new settlements consisted of secondary foundations from already established settlements - often under the auspices of individual rulers such as Aitna (Pin. Pyth. 1) - or more "colonial"

²² F7 (S227). This fragment may refer to the foundation of Rhegion by Chalkidians and seems to mention an oath but unfortunately the state of preservation of the papyri leaves only a few words legible. Anacreon (Str. 14. 1. 30) may have also used $\dot{\alpha}\pi\sigma\sigma\kappa\eta$ in the late sixth century when referring to Teian Abdera but it is impossible to definitively ascribe this fragment to him. Otherwise, the first contextually situated use comes in Pind. *Ol.* 1.24.

types, subject to control from the metropolis, of which Athens was the primary progenitor.²³ This second type of settlement, known as a κληρουχία,²⁴ accords with De Angelis' alternative semantic suggestion, namely the sequence *kleroukhism-kleroukhiazation-kleroukhize-kleroukhial* (De Angelis 2010: 21). Again, these neologisms are to some extent anachronistic and carry their own terminological baggage. Κληρουχία presupposes the importance of land allotment in the settlement process, something that cannot be traced prior to the fifth century.²⁵

This terminological quagmire leaves us in a difficult position. Are we following an anglophone obsession with "post-everything theorising so busy deconstructing and decoding language in search of power relationships that ...

²³ Mitchell (2013: 65-80) for Magna Graecia; and Figueira (1991) for Athens.

²⁴ LSJ s.v. 'κληρουχία' "apportionment of land in a foreign country"

²⁵ It is suggested by a number of scholars i.e. Malkin (1987, 2016); Braund (2019: 83-85), that the system of allotment can be traced back as far as the seventh century. This argument is based on a on a misreading of the passage:- 'τοιοῦτος ἐγένετο καὶ Αἰθίοψ ὁ Κορίνθιος, ὅς φησι Δημήτριος ὁ Σκήψιος, οὖ μνημονεύει Ἀρχίλοχος· ὑπὸ φιληδονίας γὰρ καὶ ἀκρασίας καὶ οὖτος μετ' Ἀρχίου πλέων εἰς Σικελίαν ὅτ' ἔμελλεν κτίζειν Συρακούσας τῷ ἑαυτοῦ συσσίτῷ μελιτούττης ἀπέδοτο τὸν κλῆρον ὃν ἐν Συρακούσαις λαχὼν ἕμελλεν ἕξειν' (Ath. Deip. IV.167d), included as a fragment of the seventh century poet Archilochus who, it is claimed, discussed the case of Aethiops of Corinth, who traded his allotment at Syracuse for a honey cake. However, the fragment, in its original context, clearly states that this information was in fact derived from the third century grammarian Demetrius of Skepsis, with Archilochus only mentioning Aithiops in some undetermined poem.

[we are missing] ... the blindingly obvious?²⁶ (Tsetskhladze and Hargrave 2011: 162 n.8). But the 'blindingly obvious' is that colonisation is defined by asymmetric power relations, that of coloniser to colonised.²⁷ It is not just this that presents a problem when we use colonisation as a loose definition of the Greek experience. In many ways it serves to structure how we model our subject, concepts like "trade before the flag" or *Lebensraum*, can become implicit and sought after in the evidence even where they may not exist. The same problem is evident when we consider diaspora or the neologisms of *apoikisation* or *klerouchisation*. By choosing our definitional terms we are inevitably loading the discussion with significant implicit baggage.

I.1.2.3 'Positivism' vs 'Constructivism'

Alongside debates over terminology and analogy another important debate has emerged in the anglophone tradition, particularly from studies of Greek migration to Italy and Sicily. The two sides of this debate broadly fall under the rubric of Ancient History and Classical Archaeology, drawing theoretical and methodological parameters from one or the other discipline. These competing approaches have been used to conceptualize features such as

²⁶ Though the progenitor of these approaches is arguably the French philosopher Michel Foucault (1976, 1982).

²⁷ Cf. Gosden (2004) and Manning (2013) for attempts to separate the semantic links between colonisation and colonialism. But this ignores what Dietler (2010), following the work of Foucault, calls the "archaeology" of knowledge behind the terminology.

chronology and movement and settlement processes.²⁸ Broadly speaking, two distinct models are used for the development of Greek migration in the Archaic period, termed "historical-positivist" and "historical-constructivist" (Hall 2008: 383-88). This is similar to the Braudelian notion of the histoire *événementielle* of events and people contrasted with the *moyen durée* of wider socio-political structures.²⁹ "Historical-Positivist" approaches take a primarily statist perspective where a colonizing polity sent out settlers under adverse circumstances, following a prescribed pattern of behaviour and settlement (Malkin 1987; Graham 1982; Herda 2016; Graham 1964). While this view is to some extent supported by the literary evidence, we must recognize that the body of material on which this model was constructed almost exclusively post-dates the Archaic period. As we have already noted, the ancient terminology for this process cannot be traced back further than the fifth century, much like explicit indications of oracular prescription or state organization. One possible reason for the discrepancy between the bulk of Archaic Greek migration and its literary record may lie in the development of modes of thinking and practice in terms of mobility and settlement which only developed through migration itself (Knight 2021). In other words, the more people moved and settled, the more

²⁸ See Manoledakis (2018: 173-74) with bibliography for an overview of debates on chronology. ²⁹ Braudel (1949). In theoretical terms, though rarely acknowledged, there is very little to separate these debates from wider sociological and anthropological concerns about the nature of the relationship between agency, the prime mover in "historical-positivist" or *histoire événementielle* models, and structure, as a determinant in "historical-constructivist" or *moyen durée* interpretations.

ideas of prescribed methods of doing so were developed. For example, while there is a clear indication in the *Odyssey* that conceptualizations of the formation of new communities were extant (*Od.* 9.116-141), we should be careful not to ignore traditions of Phoenician settlement, alluded to in the poem, which may have occurred as early as the tenth and ninth centuries (Eshel et al. 2019). In short, conceptualizations of movement and migration did not appear ex-ante but were generated in an already interconnected maritime world.

While this holds true for the Greek settlements in the west, the earliest of which at Pithekoussai dates to the 8th century, what of those settlements which claimed Milesian descent, settled in the Propontis and Black Sea? The Black Sea communities, at least, were settled relatively late in the general scheme of Archaic migration, by which time ideas of *ex nihlo* community formation had probably already been developed. Yet we must still follow the archaeological evidence, which, as we shall see, gives almost no indication for regularized patterns of settlement, at least until the second quarter to the middle of the sixth century, as indeed is the case with other migrant communities across the Aegean and Mediterranean regions. The "historicalconstructivist" model, first articulated by Robin Osborne (1998), offers better grounds for analysis. This approach looks at migrant settlement as development rather than foundation, with small groups of migrants establishing communities which over time seem to have begun to conform to the ideational standards of the Greek polis.

The traditional conception of the Greek polis, articulated potentially in the Odyssey (6.1-14), in the work of Herodotus (Hdt. 4.155-60), and most fully developed by the time of Plato, Aristotle and the abstraction of the Politeia, has probably been more of a hindrance than a help in our attempts to understand the establishment of communities in the Archaic Period. New approaches have therefore sought to understand the phenomenon of the migrant community in evolutionary terms rather than as ex nihilo establishments. In recent years scholars of Black Sea and Ionian migration, such as Manolis Manoledakis and Alan Greaves have sought to understand the moyen durée development of overseas communities, from relatively modest beginnings to large prosperous communities (Greaves 2007; Manoledakis 2018). In the case of the former, there is the suggestion that World Systems Analysis can offer an explanatory model of development which takes into account the various stages from small ephemeral community to established urban settlement. This approach also suggests that commercial opportunities provided the beginnings of this system This is an idea that can be traced relatively far in the scholarship, and one which cannot be divorced from formerly prevalent ideas of a "search for resources" (i.e.Roebuck 1959).

I.1.3 Migration and 'Greek Colonisation'

The 'spatial turn' in the humanities has led to an enhanced awareness of the role of movement, in the forms of mobility and migration, in Classical studies. The relationship between these categories should be understood to lie in a taxonomic hierarchy. In other words, mobility and movement, in describing the basic potential of human and non-human actors to traverse space, stands at the head of a system of which migration is a second order form. In Patrick Manning's influential analysis of migration from a historical perspective,³⁰ migration is then broken down into its constituent types including 'home community migration', 'colonization', 'whole community migration' and 'cross community migration' (2013: 3-10). For Manning, language, as a shared system of communication and representation, represents the foundation of the 'community' (2013: 3-4). Nevertheless, most migrations, from the point of view of the actors and agents involved, may be alternatively imagined fitting in with aspects of all these types, creating an epistemological uncertainty and resisting strict classification. In this sense mobility represents an important heuristic tool to understand the modalities of behaviour amongst migrants. In terms of experiences of movement in the Archaic period, these

³⁰ Manning's (2004) *Migration in World History*, a *longue durée* analysis of migration processes, has proven influential in recent theoretically informed studies of historical migration i.e. Lucassen, Lucassen, and Manning (2011); Bosma, Kessler, and Lucassen (2013); Zerbini (2016).

approaches have begun to take hold and offer new ways to understand the movement of agents, individually and in wider groupings.

Furthermore, the persistence of 'colonial' models and analogies for movement and settlement in the Archaic Mediterranean seems odd at first glance. While colonialism and colonisation are contextually specific types of movement and settlement, migration functions on a wider scale human behaviour. It is both a general and constant mode of practice and behaviour across human time and space. The reason for the general abeyance of ideas of migration in Classical studies may be traceable to the roots of the discipline itself. The interrelation of Classics with 18th century European colonialism has been discussed at length here and most scholars now recognize that much of the discipline's early history cannot be meaningfully divorced from this context (Goff 2005). In the context of works on Ancient Greek history, 'migration' is usually used to describe the alleged movement of the main groups of ethne after the collapse of the Mykenaean cultural system (Malkin 2016). This stems, in part, from an understanding of migration as related to primitive or subaltern groups (Zuchtriegel 2019) as opposed to colonialism which was used to create a reflection of imperial elites and justify their primacy throughout colonized areas (Lamboley 2007).

By the middle of the following centuries archaeologists had, by and large, begun to reject the agency of migration for creating cultural change, seeing it as an external imposition on internally developed socio-cultural systems which followed their own internal and generalizable logic (Chapman and Dolukhanov 1992). Due to its contextual specificity, migration could not be generalised and thus, in David Anthony's famous phrasing, "the useful migrationist baby" was thrown out with the bath water (Anthony 1990: 896). Anthony's influential article also raised another problem with previous archaeological approaches to migration, namely their concentration on identifying migration in the material record through cultural markers. While this approach still appears from time to time in the literature (Burmeister 2000), its dependency on a specific model in which culture and community are synonymous makes it problematic when dealing with interactions between communities with different cultural backgrounds and the creation of new cultural forms at the nexus between them.

Migration and mobility, as opposed to colonisation, have had an oftencomplex relationship with Classical studies and ancient history. This may, in part, be a legacy of their development as subjects of study in the late 19th and early 20th centuries. Education in the classics of Ancient Greece and Rome formed an important foundational aspect of European elite thinking and colonial activities (Goff 2005). At the same time, the early conceptualisation of migration as an object of study was initially rooted in ideas of lower-class labour migration (Harzig and Hoerder 2009: 55; Ravenstein 1889, 1885). The pervasive influence of this may be seen in the distinction between Greek movement in the Early Iron Age, termed migration, and movement in the Archaic period, thought of in terms of colonisation, though many continuities can be seen between the two (Malkin 2016; Kotsonas and Mokrišová 2020). Migration, an acceptable terminological category for 'tribal' movement in the 'dark ages', was inappropriate to describe movement in a world of city-states and thus, by inference, civilization.

According to Irad Malkin, the distinction to be made is more a heuristic construction than a historical process. He claims that "Migration ... leans towards a history that is evolutionary and processual. By contrast colonization implies pre-defined and self-aware groups" (Malkin 2016: 289f).³¹ Malkin's approach, however, is limited by his reductive understanding of migration as a heuristic category. While earlier economic approaches certainly did see migration in terms of impersonal external structures "pushing and pulling" migrants,³² in recent years migration studies have begun to identify the complexity of human migration and the intersection between agents and structures (O'Reilly 2011). These approaches have placed agency and the nexus of structural considerations at the heart of the migration process. Nevertheless, Malkin's approach is not without its strengths. His discussion of the relationship between different types of networks and the formation of identities is a timely reminder of the importance of understanding the interrelation between migration and identity, and the transformative ability of the latter in changing spatial and temporal contexts (Malkin 2016: 296-300).

³¹ Yet in the words of Wilson (1997b: 199) "in the eighth century, the concept of the polis was itself in its infancy, not yet fully-formed, and certainly incapable of spawning a child of its own".
³² The analogous 'Processual' turn in archaeology mirrored this intellectual zeitgeist.

Christel Müller's examination of mobility and membership in the northern Black Sea explores three central facets of these phenomena. First, she addresses the intersection between emic and etic identity constructions and strategies for definition and inclusion, in particular arguing that, for the Greek cities, a multitude of categories existed within a citizen/non-citizen continuum (Müller 2013: 28). This conception, allied with her definition of Greek communities as "somewhat closed", is based on evidence from the fourth and third centuries (Müller 2013: 29-30), and she fails to explore whether this situation pertained to all stages of the development of migrant communities. Furthermore, her approach is reliant on Patrick Manning's restrictive notion of migrant colonisation as a process of socio-cultural and political replication (Manning 2013: 5) and fails to account for the differences between emigrant and immigrant communities, accepting uncritically homogenous emigrant identities.

The central problem with Müller's study in terms of Archaic migration processes is that, being based on a historiographical categorization of migration, it fails to explore the inherent heterogeneity of migration processes. Her exploration of migration in the northern Black Sea, in contexts of mobility and the mutability of concepts such as nomadism and sedentarism, offers a novel perspective on the interaction between mobile populations in different environmental spheres. Yet her wholesale acceptance of the Greek migrant element of this process as 'structural replication'³³ of an imagined community, remains within the "reassuring metaphorical plain" of the colonial paradigm. It presents a missed opportunity to explore alternative interpretations of this process (Knight 2019). Even when she acknowledges the ability for integration and transformation, as described in Herodotus' story of Skyles (4.78-9), she also reads this story as exhibiting "all the difficulties that can flourish within a city, especially in a colonial context, with regard to maintaining boundaries with the local populations" (Müller 2013: 42). This forces us to ask how such boundaries were conceived in the Archaic period, when the material culture of 'colonial' settlers bore numerous traces of local material forms such as ceramics and architecture. Overall, while Müller's approach opens the complexities of the conception and reality of mobility for Greeks and Skythians in the region, her adoption of an historiographical model of migration, though acknowledging the complex range of categories this could entail, remains wedded to a Classical model of colonisation and elides the differences between Greek migration in the seventh and sixth centuries and those in the fourth and third centuries.³⁴

Migration in ancient Greece has also been explored from the perspectives of Manning's categories of home and cross community migration. Claire Taylor's examination of these elements in Classical Attica offers an important assessment of the various ways in which movement occurred in this

³³ See Figueira (2015) for a similar perspective.

³⁴ Cf. van Dommelan (2012: 396) who points out the pervasive problem of assuming achronological models of settlement in antiquity.

region in relation to social identities involved a nexus of potential opportunities and conditions including status, age, gender and origin (Taylor 2011). She concludes that mobility and 'non-permanent' migration formed important elements in the organization of the Attic deme system and that the ability for mobile actors and agents to enhance their social capital afforded through mobility "enrich[ed] their community ... [and] strengthened the polis" (Taylor 2011: 132-34).

Developments in archaeological theory between the second half and the last decade of the 20th century CE have had an important influence on the way migration and movement have been understood in archaeological contexts, while the different trajectories of prehistoric, proto-historic and Classical archaeology provide an interesting contrast with wide-ranging implications. Migration, as an explanation of change in archaeological contexts, began to go out of fashion in archaeological studies in the 1960's and 1970's, in part because of recognition of its hitherto nebulous categorization of cultures and change (Anthony 1990: 896), but also due to the recognition of the complexities of networks of cultural exchange and the development of ideas of distinctions between material cultural forms and identifiable groups.

Nevertheless, with Anthony's groundbreaking article (1990), a new impetus was placed on the study of migration in archaeological contexts. A recent attempt to explore the phenomenon of Greek overseas settlement as a type of migration has been offered by Sebastian Müller (S.Müller 2013b). Nevertheless, his treatment of the subject is hampered by his use of a processual prehistoric model for studying migration that is aimed at understanding the motivation and impact of migration in communal contexts and thus fails to understand the dynamic nature of the interaction between migration at the individual and community levels. This 'statist' approach to Greek migration is conceptually related to analogies of colonisation and the importance of the *polis* as the primary organization of ancient Greek political culture.

Overall, recent attempts to study Greek overseas movement through the lens of theories of migration and mobility have encountered difficulties. First, while migration as a heuristic definition seems better equipped to explore the complexities of these movements than ideas of colonisation (Osborne 2016), it tends to be used either as a way of distinguishing between temporal movements (i.e. EIA and Archaic) or as an alternative terminology, without necessarily altering the overarching 'colonial' paradigm. We have seen how recent approaches have tended to accept, uncritically, the evidence for cultural interaction as being between distinct identifiable communities, either cities or ethnic groupings, without understanding the complex ways in which movement, identity and culture were experienced by individuals. The explanatory forces at play in migration studies can often be comfortably mapped onto the preexisting colonial model, blunting its epistemological potential. Yet, if we begin to understand social structures, like the *polis*, as essentially constructs of communities of practice, we can begin to supersede their analytical and epistemological stranglehold on the study of movement and mobility in the Archaic period. All of the works discussed so far embrace an

identity-based approach to movement in the Archaic period, albeit at differing levels. Overarching social, cultural and political identities form the basic unit of analysis yet these are all subject to modification, expansion or contraction through processes of movement (Kotsonas and Mokrišová 2020: 234-35).

For its full potential as a theoretical model for Greek settlement, mobility and movement in the Archaic period, migration theory must first be used to break down pervasive models and conceptual categories. As we have seen, recent approaches using postcolonial approaches have begun to question these basic distinctions and categories. In light of this, migration-based approaches must use this as a baseline on which to reconstruct individual, communal and social models of movement.³⁵

³⁵ See now Ulf (2020) for an important recent attempt to address these problems from a migration based perspective reliant on contemporary Archaic literary evidence.

I.2 Theory

From the seminal works of Ernest Ravenstein (Ravenstein 1885, 1889) onwards, the concept of a universalizing model of human migration has become a central goal of many approaches to migration (Chiswick 1979; Massey et al. 1998). However, whether such a model can be proposed given the diverse nature of experiences, events and processes which make up migration, has been rightly questioned (Carling and Schewel 2018: 959). Nevertheless, there is some agreement as to what such a theoretical model should entail, what questions it should seek to answer, and what approaches it should consider. Douglas Massey and his colleagues have drawn up a framework for studying migration, which seeks to understand the process in its varied spatial and temporal frames (Massey et al. 1998). They conclude that, for such a theoretical framework to function effectively in empirical research, it must take into account four central factors, the promotion of emigration, the enabling of immigration, the motivations of migrants, and the social and economic outcomes of migration in both emigrant and immigrant areas (Massey et al. 1998: 281). Similarly, Oliver Bakewell outlines a series of questions which any rigorous theoretical approach to migration should seek to answer, "Who moves from A to B and why? Why these people and not others? Why do they move to B rather than C? Why now or then?" (Bakewell 2010: 1703). In a more nuanced tone, Bakewell's questions address some important aspects of migration which we will further explore, namely the spatial, temporal, and human frames of migration.

I.2.1 Social Theory

Causality remains one of the central issues at the heart of migration studies and theoretical approaches to migration. In other words, why do people migrate? Responses to this question lie within the wider realms of structure and agency which permeate explanations of causality throughout the social sciences (see Appendix A for an extended discussion). Structures, the conditional contexts in which human life is undertaken, have an enduring legacy on migration and migration studies (King 2013: 12-14). Lying in the realm of economic explanations, studies which posit structural causality of migration, especially in fields such as archaeology and history where structure has long been a constituting element (McSparron et al. 2019), seek to uncover the basic economic forces which act upon people and cause them to migrate.³⁶ It is an essentially reductive explanation, whereby human actors are bound to their historical circumstances and engage in reactive behaviour vis-à-vis wider impersonal historical processes. This approach has had a strong legacy in the study of ancient Greek migration where, for a long time, the main aim of the field was to determine the underlying causes of Archaic settlement through macro-historical processes. Economic opportunism, population increase, social unrest, and climactic factors have all been identified as primary drivers of migration in this period.³⁷ Structural approaches, however, only tell one side of

³⁶ For an early example see Ravenstein (1885, 1889)

³⁷ i.e., Roebuck (1959); Cawkwell (1992); Tsetskhladze (1994a: 124-26); Tsetskhladze (2006: xxviii-xxx); Tandy (1997: 59-83).

the story and it has often been remarked of migration that one of its most obvious and important features is the fact that it is rarely a majority practice (Harzig and Hoerder 2009: 91). The problem this creates is that structural causality fails to address why, if affective structures condition the necessity of migration, many agents demonstrably fail to migrate.

This leads us on to the alternative approach, migration as an outcome of agency. This line of thinking focuses not on the wider context in which migration occurs, but on the individual decision-making processes that lie behind an agent's choice of migration as an option. In other words, their migration decision (Castles, De Haas, and Miller 2014: 37-39). In modern migration contexts, where the individual agent's self-conception of the process is a potential sphere of analysis through survey, interviews or analysis of the construction and dissemination of migrant media forms, there remains the problem of subjectivity. Agents may understand or explain their behaviour unintentionally in subjective ways and the motivations they may ascribe to their decision may be later constructs engendered by external narrative constructs. Thus their explanation of their behaviour and the resulting decision-making process, may be less than accurate (Gray 2009).

Nevertheless, on their own, neither structure nor agency can stand as adequate explanatory models for the reasons people choose to migrate. Because of this, researchers have sought a variety of different mutually exclusive and inclusive approaches to understand the relative nature of these causal factors in migration contexts, and to explore the situation of the agent within their

structural contexts (Harzig and Hoerder 2009: 78-92; King 2013: 20-25; Massey et al. 1998). Two of the more frequently deployed theoretical models which address these issues in contexts of migration are Anthony Giddens' Structuration Theory (Giddens 1984) and Pierre Bourdieu's practice theory (Bourdieu 1977). These approaches share several common features, and both seek to understand the relationship between structure and agency as a constituent element of human behaviour, practice, and action. Nevertheless, Giddens' approach has proven the more popular in migration contexts (Morawska 2001; Goss and Lindquist 1995). The problem with utilising these in proto-historical contexts, however, is that the lack of identifiable individuals negates the researcher's ability to explore individual agency in any meaningful sense. Only in cases where we have written and/or epigraphic evidence which gives some sense of the bio-narrative and actions of an individual is this possible (Greaves, Knight, and Rutland 2020). In the present study, therefore, the role of agency will be primarily conceptualised through potential group behaviours as revealed through social, economic, and cultural practices.³⁸ Structural forces are seen through the lens of migration drivers and, more particularly, driver complexes which undergird the desire, ability, and necessity of movement by identifiable groups. Thus, instead of the traditional focus on structures, agency and the interplay between them, this study reconceptualises them as processes and practices. This has the advantage of negating the obvious

³⁸ See Appendix A for an extended discussion of the role of social theories and agency which informs our approaches.

problems of the absence of the individual agent seen in our evidence body. It allows us to investigate the wider historically contingent processes that form the background and drivers of migration over time, while simultaneously accounting for the role of human actions and behaviours through the ways in which they conceptualise and structure their physical and social worlds as a consequence of their migratory practices.

I.2.2 Processes

I.2.2.1 Driver Complexes

Recent work in the field of migration studies has sought to overcome these theoretical problems and to reconceptualise the causal structural relations through which migration emerges as "fluid and shifting drivers" operating in contextually specific complexes (Van Hear, Bakewell, and Long 2018: 927). This approach seeks to empirically investigate the various complementing and competing structural contexts in which actors take migration decisions and enact migration action. In effect, the construction of driver complexes allows scholars to build up a multi-focal image of the contexts in which migration decisions are taken. This avoids the temptation to attribute primacy to any specific driver, without neglecting the importance of agency in the way in which potential migrants negotiate the specific complex of migration drivers in which they are situated at any moment. As Van Hear and his colleagues note "drivers work by making certain decisions, routes or destinations more likely and bringing them within the orbit of people's capabilities" (Van Hear, Bakewell, and Long 2018: 928). The causal power of drivers can be to a greater or lesser extent and still requires the enaction of agency for particular outcomes to emerge (Van Hear, Bakewell, and Long 2018: 930).

Drivers of migration operate at all levels of the migration process, from long term macro processes such as climate change to more specific micro levels such as economic uncertainty (Van Hear, Bakewell, and Long 2018: 930). Van Hear and his colleagues (Van Hear, Bakewell, and Long 2018: 931-34) categorise four levels of immediacy – predisposing, proximate, precipitating and mediating. Predisposing drivers are macro processes which are not immediately relevant to the migration process itself. These create the conditions in which proximate drivers begin to have causal effects on actors' potential migration agency, such as general economic downturns and conflict caused by predisposing contexts amongst others. Precipitating drivers are those immediate events which underlie the actual decision to migrate, which may have already been conceptualised within the contexts of proximate and predisposing conditions. The way in which driver complexes have causal powers can, in effect, be conceptualised through the ways in which they combine to "shape the specific form and structure of population movements" (Van Hear, Bakewell, and Long 2018: 934). For example, particular economic conditions such as the dearth of a specific resource within a community caused by its geographical spatial context (predisposing) may undergird conflict with a neighbouring community (proximate). Under these conditions an individual or group of actors may consider migrating to an alternative community to

escape this conflict or may see others following this course of action. Alternatively, it could be an event such as the destruction of their home which becomes the triggering mechanism for them to enact this decision (precipitating). The final driver category, *mediating* drivers, can function as both facilitating and constraining and occurs once a migration process has already begun. In essence, migration drivers provide a more nuanced framework for understanding the structural background to migration and provide ways in which structures continue to create conditions for migration decisions throughout the trajectory of a migration process.

I.2.2.2 Junctures and Systems

Another key question for scholars of migration is how to explain the perpetuation of migration processes. Why do we frequently observe situations in which the act of migration itself appears to form an important driver of movement? To answer this question, we must look towards to the temporal phases and cyclical nature of the morphogenetic approach (see Appendix A for discussion and references). We have already discussed the ways in which certain structural complexes create conditions in which migration decisions and action are taken. Emergent structures are those conditions which emerge from the interaction of generative or conditional structural contexts and social and individual agentic action. These facilitate a feedback processes whereby subsequent conditional structural contexts become, in themselves, new drivers which provide new contexts for subsequent agentic actions.

Thus far we have been discussing the theoretical underpinnings with which this essay seeks to explore ancient migration. Taken in isolation, the dynamic processes we have outlined retain explanatory force which does little to go beyond previous structuralist or individualist approaches to migration which have previously been pursued. To reconcile these multiple causative factors, we therefore need to introduce the notion of 'migration systems' to our theoretical exposition (Bakewell 2010). A migration system treats a particular migration process, for example between two regions or from a particular area, as a heuristic whole (Zlotnik 1992). Oliver Bakewell argues that any theoretical analysis of migration as a discrete process must, to a degree, conceptualise it as a system of sorts (Bakewell 2010: 301). Furthermore, he contends that migration systems can exist as discrete observable entities beyond their status as manifestations of wider social systems. This is due to their ability to change over time through internal processes (Bakewell 2010: 301). In short, he claims "migration is a reflection of configurations of relationships and power, which might be called a system, and these have very real impacts on the lives of those involved in them" (Bakewell 2010: 301). For a system to exist as a discrete set of conditions, it should possess internally logical emergent causal mechanisms. These are "pathways by which the phenomenon X may result in outcome Y. Such mechanisms are likely to be abstract and not directly observable, but once hypothesized we can look for evidence of their operation" (Bakewell 2010: 309). The analysis of a migration system involves exploring both its initiation and perpetuation and, in particular, the ways in which feedback processes function to sustain, mediate or cause it to decline (De Haas 2010). Bakewell's

conceptualisation of a 'new migration system' consists of two constituent parts. First, "a set of interacting elements", "flows" of people, groups, and capital. In other words, entities imbued with mobility. Second, there are "strategies" related to this mobility. These consist of demonstrations of agency encompassing mobilities that attempt to affect spatially altered outcomes (Bakewell 2014: 310). The second part of this systems consists of "dynamics", which are the interactions between the elements which exert causal power and create change through agentic action and internal feedback processes (Bakewell 2014: 310). Hein de Haas (De Haas 2010: 1592) notes that the process of feedback establishes "vital conceptual links between ... initiation ... [and] ... perpetuation" which thus lends an internal coherence to a migration system and helps to delineate it as a discrete concept of analysis. At the level of perpetuation, innovators, displaying high levels of individualised mobile social capital, begin to develop networks. When these are accessed by 'early adopters' and an 'early majority' they facilitate the emergence of a full-blown migration system. Therein, access to social capital and the costs of transferring it to migration network access are reduced. This allows for more extensive movement (Fig. 1; De Haas 2010: 1599-600, 606-607). The internal dynamics of emigrant and immigrant contexts become reinforcing during the initiation phase of a migration movement. These simultaneously function to lower the required capital threshold through the facilitating and accumulative effects of migration networks (De Haas 2010: 1608). De Haas further argues that these small groups of innovative migrants form "initial clusters [which] will reach a certain critical threshold level at which endogenous and contextual feedback

mechanisms start to make the process self-reinforcing" (Fig. 2; De Haas 2010: 1608). The result of this process can be a clustering effect, whereby the diffusion of capital, in the form of networks and information flows, allows for the expansion of the system (De Haas 2010: 1609). It is important to note that the development and sustenance of migration systems is by no means an inevitable by-product of initiand migration. Even in a full-blown migration system, expansion can weaken ties or increase capital requirements through negative contextual feedback. Conversely, some migration movements may fail to move beyond the initial phase of movement. Often this is due to specific structural contexts or the ways in which actors beyond the initiands choose to demonstrate agency (De Haas 2010; Bakewell, De Haas, and Kubal 2012: 421).

I.2.2.3 Trajectories

A migration trajectory describes the way in which a system of migration develops over time. They typically grow from a few migrants into large scale movement of substantial groups, or rise and fall through the influence of changing social structures, driver complexes and access to migration capital. Scholarship on the development of migration trajectories is heavily indebted to the work of Everett Rogers concerning the diffusion of innovations (Rogers 1962, 1983, 1995, 2003). These approaches take migration to be an ,innovation, in as much as it is can be observed at the beginning of each migration decision as new to the potential migrants (Rogers 2003). This innovation is then diffused through communication channels and social and information networks in the form of heterophily and homophily, or, in other words, the extent to which the communicators interact through a common semiotic language and participate in overlapping groups of practice (Rogers 2003: 18-19). In practice, as Hein de Haas has shown, the successful communication and actioning of the innovation of migration, in terms of groups having access to migration capital and making migration decisions at suitable conjunctures, results in the widening of the innovation as practice (De Haas 2010: 1599-601).

Thereafter a migration trajectory has the potential to move through the stages associated with widening diffusion consisting of innovation – early uptake - early majority - late uptake - laggard (Rogers 1983: 247-64; De Haas 2010). The diffusion of the idea of migration and the development of a trajectory can be conditioned by a range of variables including the availability of capital which can be transferred towards mobility and the cost reducing or (fig. inflating role of social networks De Haas 2010). 2.1;

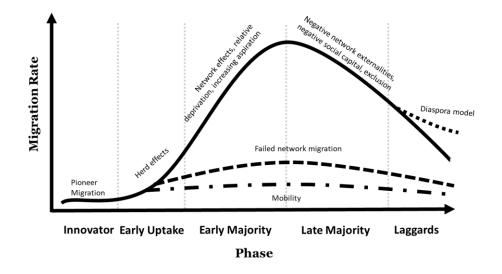


Figure 1 Migration trajectory (adapted from De Haas 2010: 1606, fig. 3)

I.2.3 Practices

I.2.3.1 Capital

Capital forms the bridge between migration processes and practices to the extent that it represents the potentiality for migration under given conditions. The extent to which groups of potential migrants can make migration decisions in a given social context or field is conditioned through the various matrices of social, cultural and economic capital available to them and their relative conversion potential into migration capital i.e., the resources needed to migrate. The concept of capital encompasses the physical, mental and relational resources available to actors which are transferable between types and facilitate opportunities for different modes and actions of agency within and between contextual fields (Bourdieu 1986). Capital plays an important mediating role in migration contexts. Some types of capital can encourage and facilitate movement, while others act to restrain the ability of actors to enact migration projects (De Haas 2010). As Bourdieu has observed, the key to the efficacy of capital lies in its transferability between different types, such as from cultural to economic (Bourdieu 1986: 24). In migration contexts this applies to the ability of actors to transfer capital from immigrant contexts, such as political and economic power, to the ability to move and migrate through creating networks in emigrant and thoroughfare spaces.

There is also an important temporal element in the suitability and efficacy of types of capital in migration processes (Fig. 2High levels of capital tend to be important amongst innovator migrants (De Haas 2010: 1599). For example, the ability to access mobile or migrant infrastructures not yet highly developed in the early temporal stages of migration – such as transport and labour resources – but necessary to create liveable conditions in the emigrant area, are important (De Haas 2010: 1603). Furthermore, access to supracommunal social networks, such as relations with elite or controlling groups in the emigrant area which can be developed through the exchange of intrinsically or extrinsically valuable material and economic capital such as trade relations or gift-exchange relationships, can also be converted into migration capital and facilitate movement between immigrant and emigrant communities (De Haas 2010: 6103). Other forms of social capital, that may represent negative accumulations in the immigrant community, such as weaker familial and communal ties, may also be transferred to migration capital, rendering the processes of rupture less constraining (De Haas 2010: 1609). Conversely, at later temporal stages, once a threshold of migration has passed, the required social capital for migration may begin to decrease (De Haas 2010: 1608). Expanded social networks between immigrant and emigrant areas become accessible to more potential migrants, while economic requirements and migration infrastructure become more readily available to potential migrants (De Haas 2010: 1954).

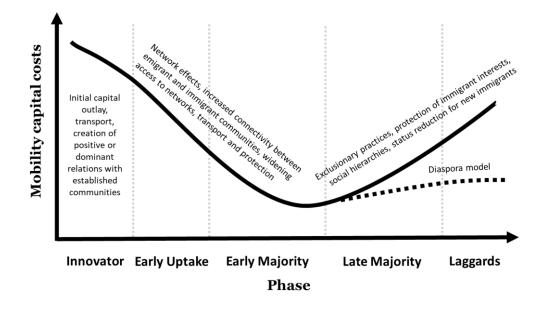


Figure 2 Mobility capital at different stages of the migration trajectory

I.2.3.2 Position Practices

Social positioning and its attendant position-practices form another useful epistemological tool for the study of migration, in particular protohistorical migrations within which individual migrant narratives are problematic, limited or absent altogether. Anthony Giddens (Giddens 1984: 83-84) notes that "a social position involves the specification of a definite 'identity' within a network of social relations, that identity, however, being a 'category' to which a particular range of normative sanctions is relevant", and more broadly identifies social positions as an "identity that carries with it a certain range (however diffusely specified) of prerogatives and obligations that an actor who is accorded that identity (or is an 'incumbent' of that position) may activate or carry out: these prerogatives and obligations constitute the role-prescriptions associated with that position. A social identity is essentially a category, or a typification, made on the basis of some definite social criterion or criteria: occupation, kin relation, age-grade, etc" (Giddens 1979: 117-18). Yet he also emphasises that position-practices are not merely prescriptive roles, in the sense that they can also be constituted and reconstituted by the agent as much as their social context. The social position that an agent occupies can be redefined by their deployment of it in social relations (Giddens 1979: 115-17; 1984: 84; Stones 2006: 64). Scholars have tended to use position-practices as a "point of contact between human agency and social structures" (Bhaskar 1998: 43) or a "meso-level conceptual bridge" (Stones 2006: 65). Taken as a heuristic tool it therefore allows us to understand practice-positions as socially constructed roles or "slots" in which individual agents with their attendant dispositions, internal structures, expectations and aspirations can enact practices (Stones 2006: 62-66). This allows us to bridge the gap between structure and agency in the sense that we can examine both the individual as situated within their social context — with all that this implies about the relative affective force of driver complexes - but also as situating, in respect of the latitude that particular social positions and position-practices can allow for agents and groups to make migration decisions.

I.2.3.3 Emergent Practices

Practices and practiced identities, from emic and etic perspectives, have also become an important unit of analysis for ancient historians and Classical archaeologists alike. Traditional approaches to the subject tend to assume that identities represent a biological constancy, frequently approached in terms such as the inherent characteristics of "the Greek Race".³⁹ Even in more recent works the ancient Greeks are imbued with certain inherent characteristics. These frequently align with positivist notions of the role of antiquity in the formation of modern ideals of 'western civilisation', such as love of freedom and learning, which are often in implied contrast with eastern antonyms (cf. Greaves, Knight, and Rutland 2020). Furthermore, the Greeks' own categories of identity and belonging at various levels, such as Greek and Barbarian, have had a long lasting effect on how scholars have categorized identity formation in antiquity and have understand the potential range of identities open to individuals in all eras (Ojakangas 2016).

In contexts of migration, mobility and movement, identity provides an important unit of analysis. Migrant identities can exist at the confluence of individual and group conceptions of emigration and immigration, while being reconstituted within contexts of migration, settlement, and resettlement as well as return migration contexts.⁴⁰ Within the approach taken here, identities function simultaneously as repositories for the interplay between structures, processes, and practices within the group, and as the outcome of these processes in contexts of mobility.

³⁹ E.g. Müller (1830); Grundy (1901: 81); Jardé (1923); Whibley (1931: 23-31). Hall (1997: 4-15) provides a critical examination of these ideas in reference to racial characterisations of the Dorians.

⁴⁰ See Hau (2017) for a recent overview of approaches to identity in migration contexts.

Much of the discussion and analysis of categories of identity pursued here are based on the rather simple observation that that identity is a socially constructed category of relations. Berger and Luckmann argue that "The same social processes that determine the completion of the organism produce the self in its particular, culturally relative form" (Berger and Luckmann 1966: 68). The identities with which people imbue themselves or others apply to them such as race, ethnicity, gender, sexuality etc., are not based on any identifiable biological or scientifically provable parameters, but on the social context of their development, placement, use, and deployment. These approaches to categories of identity have become increasingly popular in studies of Greek antiquity.⁴¹ They have facilitated the deconstruction of assumed categories of identity and belonging, and instead approach their construction and constitution through their individual elements, prejudices, and assumptions. For example, Ionian identity used to be defined by scholars primarily in terms of linguistic and geographic determinacy (Jardé 1923: 79-80). In this conception, the Ionians were a primordial Greek tribe, like the Dorians and Aeolians who had come as a distinctive group from a defined region of 'old Greece'. This is an idea that John Cook (1963: 24) could ascribe to the "invention of racial theorists" . Even in the ancient world this category of identity was disputed (Hdt. 1.146). In recent decades efforts to understand Ionian identity as the sum of a multitude of negotiated mutually inclusive or contradictory constituent parts has led to the conclusion that, as opposed to

⁴¹ Hall (1997) is the seminal work.

being an historically consistent unchanging group identity, it was most probably developed in a complex interface of social and political contexts throughout the Archaic period (Creilaard 2009; Mac Sweeney 2013; Greaves 2010).

There are a number of competing and complementary theoretical approaches to identity construction (Hau 2017). In this study, we will concentrate primarily on the formation of identity through 'communities of practice'. This approach broadly complements our focus on structures and practice in migration contexts and can be used to understand the nexus between position practices and their wider social contexts. According to Karen O'Reilly, communities of practice are "the context within which an agent is constrained and enabled by the external structures" (O'Reilly 2011: 31). The basic tenet of this approach focuses on the interplay of action, meaning and identity. For Etienne Wenger a 'community of practice' is a negotiated membership scheme based on individual and collective productions of meaning (Wenger 1998: 52-56). In other words, the way actions and practice are imbued with relevance to the individual and group through collective understanding of their importance to the group's concept of itself and its purpose (Wenger 1998: 51-71).

These are enacted in 'joint enterprises' or 'daily practices', which the small constituent behaviours, actions and understandings which are underpinned by the group's negotiated meanings and in turn structure these meanings anew (Wenger 1998: 82). Communities of practice are, in short, groups of people both internally and externally constituted, based on shared dispositions and understandings of the world, their place in it and the meaning of their lives, actions and behaviours (Wenger 1998: 59, 161f). Simultaneously we must understand the ephemeral nature of these groups. Constant renegotiation of meaning enables dynamic interactions and engagement by group members. Through this participants constituent a collective regime of meaning in both mental and physical forms.

The relationship between communities of practice and construction of identities is integral to our understanding of both. Identity is both the foundation of a practice community and simultaneously its outcome. The creation, manifestation, inculcation and internalization of identities is the result of "negotiating the meanings of our experience of membership in social communities" (Wenger 1998: 145). This community requires its constituent members to share the ability to negotiate constructions of meaning (Wenger 1998: 149). For Wenger, identities are not so much conceptualisations of selfimage or understanding as "lived experience of engagement" (1998: 151). Accordingly, identity is constructed through 'modes of belonging' which are enacted, negotiated and reaffirmed through a 'social ecology of identity' (Wenger 1998: 192-203). Wenger identifies three central modes of belonging: 'engagement', the individual's interaction with the meanings, trajectories and history of the community of practice (Wenger 1998: 174-75); 'imagination', the process of shared systems of meaning and media involved in "creating models, reifying patterns [and] producing representational artifacts" (Wenger 1998: 175-78, 85; and 'alignment' – the ways in which the individual enacts the

process of belonging through the interplay between actions and practices and meanings negotiated by the community (Wenger 1998: 178-80). In sum, "identities form in ... [the] tension between our investment in various forms of belonging and our ability to negotiate the meanings that matter in those contexts" (Wenger 1998: 188).

Another important theorical consideration highlighted by the concept of communities of practice is the 'nexus of multi-membership'. This is the sphere in which competing, contradictory and complementary membership interact and are enacted within the body and mind of the individual agent (Wenger 1998: 158-61). This is relevant in our analysis. Horizontal and vertical intersections of different identities, such as Greek, Ionian or Milesian, all appear as markers of identity in the source material and can represent similar or divergent conceptualisations of internal and external constitution or relations. The relationship between the regimes of meaning negotiated by communities of practice and ideas of internal structures and habitus (see appendix A) are also tangentially important. In this study we follow the argument that all three are active in the production of meanings and identities in individual and social contexts. The ways that individuals and groups understand their identity, positioning, and actions through their internalization of the negotiated meanings of practice are constituted in the community of practice, while simultaneously renegotiated within the terms of their interactions with alternative communities, personal experiences and agency.

I.2.4 Conclusions

Overall, it is clear that numerous theoretical approaches to migration exist in contemporary scholarship. Given the nature of the object of this study, a proto-historical migration process at considerable remove and evidenced by deficiently quantifiable data, it is necessary to utilise a multi-focal approach to the topic. Previous studies of movement and migration in the Archaic period have tended to focus on a single discrete body of evidence, be it the literary (Graham 1964; Malkin 1987; Ehrhardt 1988) or archaeological record (Tsetskhladze 1994a; Faulkner-Gentry 2018). Yet, to understand movement as migration, theoretical approaches require assessment of the totality of the evidence in a broadly holistic way. If, as we have shown, the underpinnings of migration involve the interstices of processes and practices, it is essential to consider all the evidence at our disposable to create a nuanced image of the potential avenues of study in the context of proto-historical migration. This in turns allows us to shine new light on many of the continuing debates on the study of Greek migration, such as its causes, mechanics, and the various identities of its participants. Furthermore, despite the difficulties in identifying individual agents in these migration processes, our approach allows us to analyse the role of social roles and group dynamics creating composite profiles of practice positions and their role in creating conditions in which individual and group migration can take place. To achieve this requires a framework which allows us to utilise the broad spectrum of surviving evidence.

It remains to demonstrate how this framework can be used to analyse migration in proto-historical contexts and reveal the factors underpinning the movement of groups of people to and between, different spatial localities. Furthermore, while migration can be generalised in terms of its constituent parts — in the form of synthetic heuristic components — the development of specific migration processes is temporally, spatially and contextually contingent. Therefore, to overcome the possibility of determinism or positivist analysis and the dichotomy of structure and agency, it is necessary to analyse migration processes at different temporal and spatial levels. The starting point of a migration trajectory is often a nebulous juncture. Migration, in this sense, exists on a historical continuum rather than as a discrete set of ascending steps. It is circular rather than linear. The migration decision, the aspect on which the process hinges, structures and is structured by its attendant driver complexes and the ways in which position practices are enacted. The alternative, the nonmigration decision, is often the more likely outcome and involves the use of alternative strategies and practices which negate the link between driver complexes and movement (fig. 3).

For our purposes, conditioned by the available literary and material evidence, it is necessary to first enumerate the processes of migration. The chronology of movement, as well as the wider historical structures within which it was undertaken require exposition in order to create a framework of potential driver complexes which are, so to speak, in play during the migration trajectory. To understand the nebulous role of agency in proto-historical migrations it is necessary to place individuals within their social contexts and wider patterns of migration as a tool of analysis. This is achieved through an exploration of the nexus of position practices and their potentiality for movement. The purpose of this is to place potential synthetic groups of migrants within these wider contexts and begin to understand the ways in which their social roles created opportunities for movement and provided them with potential migrant capital. This migration capital provides a bridge between structures and agency and functions as the means by which agents operate at proximate structural levels. We introduce the notion of "migration/mobility capital" to designate these mechanisms and resources which can be parlayed into the ability to move from place to place and utilise the resources required to settle beyond the emigrant community. The third part of our model involves exploring the practices of migrants within the immigrant context – specifically the ways in which communities of practice were created, structured, and modified. Reductive notions of identities based on colonial or post-colonial paradigms obscure the multiplicity of social and ethnic vectors which form individual and group identities. Thus, in our view, migrant communities can be better understood as communities of practice. This allows us to gain a unique perspective on the manifestation of the migrant position in social formations. While migrant practices are evident in the totality of evidence within the immigrant context, here we shall focus on aspects of practice which give important insights into the migrant community of practice and thus the ways in which agents, in the form of positionally situated inhabitants of social roles and as wider negotiating members of practice communities, negotiated their social experience.

In sum, the theoretical underpinnings of this study allow us to approach migration through a number of spatial, temporal and social lenses. This facilitates a multi-focal that allows us to identify the components of the wider framework, without lapsing into dependency on a particular body of evidence or aspect of migration dictated by evidence survival. Furthermore, while some elements may be easier to study than others, it still allows us to glimpse something of the multifocal nature of a migration processes and analyse the interplay between its various constituent aspects, while simultaneously acknowledging the absence of predictive force and contextually contingent nature of explanations (Bhaskar 1998: 23, 50).

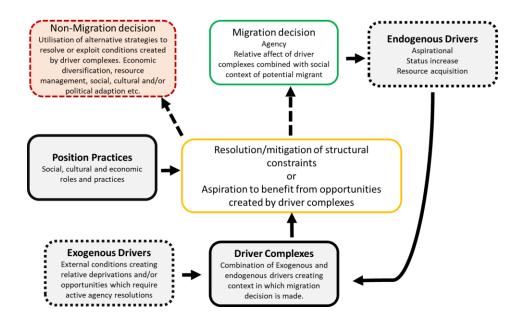


Figure 3 Process of migration decision making.

I.3 Questions and Thesis Structure

The approach that we have developed in the previous section lends itself to exploring several important questions in relation to Milesian migration in the Archaic period. First, as we have shown in section I.1, one of the central aims of this thesis is to demonstrate that by reinvestigating "Greek colonisation" through the lens of an approach based in contemporary migration studies, we can offer more nuanced answers to old questions such as "what caused Greek colonisation/migration?" and, more importantly, begin to explore new questions informed by our theoretical approach.

These questions include, how did the process of migration unfold over time? To what extent did endogenous conditions act as drivers of migration? What effect did the temporal and spatial contexts in which innovator migrants moved have on subsequent phases of migration trajectories? Can we identify exogenous drivers of migration within the emigrant community? What relationship can be identified between exogenous drivers and migration trajectories? Did migrants' associations with different social and cultural identities, in the form of position practices, affect their migration opportunities? To what extent did these position practices facilitate access to mobility capital? In what ways did the mobility capital available to different social positions relate to migration at different temporal and spatial levels? Finally, in what ways did the convergence of a multiplicity of specific trajectories, drivers and identities result in the formation of specific social and cultural practices in immigrant communities? To begin to answer some of these questions we will employ a model based on the theoretical approaches outlined above (fig. 4). This model is designed to move from broad temporal and spatially scaled evaluation to more specific granular assessment. This approach offers the best opportunity to explore the multitude of questions, perspectives and evidence required to form a complete multi-focal analysis of the enactment of migration in time and space.

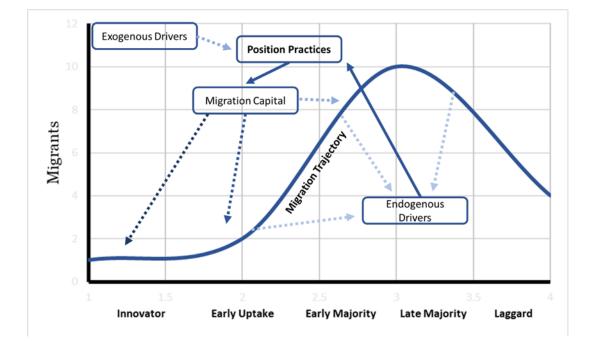


Figure 4 Interactions between position practices, migration capital, drivers and migration trajectories. Shading of arrows (dark-light) indicates relative theoretical strength of interaction.

We begin, in the following section (II.1), by mapping out migration trajectories in the areas in which Milesian migrant communities were established. This entails establishing chronologies of movement and the expansion and retraction of migration over time. In addition to providing case study analyses of these communities, we map out these trajectories using proxies such as numbers of dwellings, settlement size and settlement numbers over time. While the nature of the evidence ensures that these can only provide provisional trajectories in conjunction with other evidence, they allow us to explore temporal scales of migration and the development of migratory practice over time.

Furthermore, in our analysis of these trajectories we also pay attention to the wider contexts in which migration was undertaken (II.2). The spatial distribution of immigrant settlements is explored in terms of the social, cultural, and political networks both prefiguring it and developing alongside it. This allows us to gain a better understanding of the exogenous drivers of migration, the ways in which it developed in relation to the specific contexts and conditions into which the migrants moved, and the interaction and effect that this had on both the trajectory of migration and wider regional contexts.

The aim of these sections is to create a wide ranging and multi-focal image of Milesian migration in space and time, in the medium of meso-durée. While this allows us to explore important questions regarding the ways in which Archaic migration unfolded over time, in particular its drivers, regional level effects, and broad socio-political interactions and outcomes, it remains a view of migration which marginalises migrants. Therefore, in part II.3, we begin to populate our model with the flow of migrating groups and individuals. Given the lack of first-hand accounts of migration during this period we are left at a disadvantage compared to analysis of more modern migration movements. Therefore, we introduce the heuristic tool of position practices to begin to understand the motivations, opportunities, and junctures in which different groups may have migrated. We have selected three main categories to demonstrate this, cultural identities, social statuses, and vocations. We argue that these provide us with the best opportunity and evidence to examine the specific contexts in which groups migrated in relation to their social positions and practices, and their access to capital. By analysing the chronological evidence for their migration, in conjunction with the trajectories we have established, we can begin to understand why certain groups moved at specific times and the changing nature of their access to migration capital and its relative worth. Thus, we are able look at discrete processes of migration within social contexts, avoiding speculation as to the motivation of specific agents and placing them within the interstices of their social positions, practices, and contexts.

Having established the processes of migration on both meso- and microlevel scales, in Part III we seek to understand the relationship between these processes and the formation of migrant communities of practice. As we shall see, these do not necessarily fit into monocultural conceptions of Greek or Milesian culture but exhibit features which are shared across different "Milesian" migrant communities. These are pronounced, and well evidenced, within the spheres of domestic space and architecture, and religious practices. We shall argue that the contexts in which these migration processes unfolded, and the subsequent social and cultural practices of the migrants, created a *koine* of Milesian migration. In other words, a community of practice consisting of the various migrant practice communities which made claim to a Milesian identity and engaged in shared practices based on their "Milesian" emigrant status.

The model we have developed is designed to be applicable to a variety of proto-historical contexts. By following the development from macro- to microlevel analysis, through trajectories, drivers, position practices and practices, it can be utilised in contexts beyond Archaic Greek migration. Our model provides the researcher with a nuanced and holistic framework to approach other proto-historical migration case studies, which lack the first-person interviews and discrete economic and social datasets⁴² that form the main basis for much modern analysis of migration as a macro- and micro- level process. It is specifically designed to incorporate a wide variety of evidence, from material culture to literary narratives, epigraphy to onomastics and provide a theoretically grounded methodology for exploring migration across a variety of disciplines and case studies.

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 $^{^{\}rm 42}$ See for example the approaches outlined in Brettell (2015).

Part II Migration Processes

II.1 Trajectories and Endogenous Drivers

Between the eighth and sixth centuries, Milesian migration, both from the Milesian emigrant community and through further migration from immigrant communities, came to account for some fifty-six separate settlements in Egypt, the Aegean, the Hellespont, the Propontis and the coast of the Black Sea (see appendix B). Ancient authors give similarly high numbers, Pliny (NH. 5.112) claims Miletos was "super xc urbium per cuncta maria genitrix" ("the mother of over 90 cities scattered over all the seas" [Trans. H. Rackham]), while according to Seneca (Helv. 7.2) "Miletus quinque et septuaginta urbium populum in diversa effudit" ("Miletus has poured forth in divers [sic] directions enough people to fill seventy-five cities" [Trans. J W. Basore]). Modern scholars have tended to view these numbers as exaggerated. For example, Bilabel (1920: 9-60) counts 45, though with the caveat that some may be misattributed and does not include secondary colonisation in his tally. John Graham (1982: 160-62) tallied 30 primary settlements, while Norbert Ehrhardt (1988: 96-97) identifies 70 in total, of which 40 are primary settlements. Vannesa Gorman (2001: 257-58) lists 45 primary and secondary settlements and Hansen and Neilson (2004: 1391-95) total 37 settlements,

though some are re-foundations. Of the 56 primary and secondary sites settled before C437, are explicitly identified as Milesian in the ancient sources.⁴³

Here, we will present a series of case studies which briefly outline the chronological and historical development of those settlements we have identified as Milesian, followed by the trajectories of migration which emerged through them. Issues around the exact dating of many of the settlements have generated massive interest and debate and many are still unresolved. The main lines of this debate have fallen between historians and archaeologists, whose use of evidence and interpretation of literary sources is often at odds.44 Though to reduce this problem to one between archaeologists and historians oversimplifies the issue (i.e. Manoledakis 2018: 174). In general, the difference is as much geographic and evidential as it is disciplinary. Sustained excavation on the northern and western coasts of the Black Sea has provided ample chronological data while literary references are few and far between. The opposite scenario exists in the Propontis and the southern coast where we are furnished with numerous allusions to dating in the ancient literature while archaeological investigation has been limited. We do not wish to go into too much detail on this vast subject (see n. 44) but will endeavour to provide a

⁴³ This does not include Apollonia-on-the-Rhyndacus which was probably founded around C3 by the Attalid dynasty despite an inscription attributing it to Miletos (Kawerau and Rehm 1914: no. 155) see further Greaves (2002: 127-28; 2007: 15-16, 128; 2010: 19); Knight (2019).

⁴⁴ Kerschner (2006a: 228-31); Tsetskhladze (2012a: 335); Manoledakis (2018). For recent discussions with relevant literature see Manoledakis (2018: 173-87); Tsetskhladze (2019).

general idea of the chronology of migration and, most importantly, the relative timescales in which the migrant communities were established.

The second aspect of these case studies will be to present a brief sketch of the historical development of the migrant communities. Given our focus on migration as a process of emigration and immigration, these will primarily focus on the earliest periods of settlement, though some account of historical developments up to the beginning of the fifth century will be offered where appropriate. The case studies are grouped regionally, we will start by looking at the small number of Aegean settlements before moving up to the Hellespont, Thrakian Chersonese and Propontis, then traversing the southern and eastern coasts of the Black Sea, before retracing our steps and following the route up the western and northern coasts as far as modern Anapa.⁴⁵

Overall, these case studies allow us to set out the junctures at which migration trajectories developed, followed by an exploration of the endogenous drivers which facilitated and/or constrained migration to particular places at particular times. This provides us with the backdrop within which positionally practicing groups moved and allows us to place the vectors of their movement within specific external circumstances in different spatial and temporal dimensions. The approach taken here conforms to more traditional discussions of Greek migration and deploys a combination of literary, archaeological and

⁴⁵ Absent from this assessment is Naukratis. For discussion see Knight (2019).

epigraphic data to elucidate the circumstances in which these immigrant communities and migration trajectories developed.

II.1.1 Aegean, Hellespont and Propontis

There is some uncertainty whether the Aegean communities claiming Milesian migrant origins were settled from Milesia or were otherwise incorporated into the Milesian state (Gorman 2001: 48-51). The evidence is too fragmentary to answer this question definitively. Migration to these locations may have been as much a case of local movement as external immigration. Miletos formed close relations with a number of neighbouring Aegean islands between the end of the eighth and the beginning of the seventh centuries, some, such as Lade, were incorporated into Miletos' *chora*, while others formed a kind of Milesian offshore *peraia*.⁴⁶ Besides Leros, which we discuss below, Patmos, Ikaros, Lepsia, Korsiai and Kalymnos may all have been settled or controlled from Miletos. However, Archaic evidence is lacking, apart from some pottery on Lepsia mentioned by Vanessa Gorman.⁴⁷

⁴⁶ Dunham (1915: 47); Greaves (2000a; 2007: 15; 2010: 140); Gorman (2001: 49-50); Unwin (2017) see Balcer (1984: 84-85) for Milesian imperializing strategies in the area.

⁴⁷ Gorman (2001: 49-50). See also Ehrhardt (1988: 15-20); Reger (2004), there is little we can add to these surveys.

Leros lies some 60 km southwest of Miletos. Little information is available about the nature settlement there in the Archaic period.⁴⁸ According to J. L. Benson, geometric and Archaic surface sherds recorded near Ayia Marina indicate that the island's main settlement was probably somewhere in this area during the seventh and sixth centuries (54-5, 46, 6: 1963 fig.1a-d). Leros is identified as a Milesian *apoikia* by the fourth century historian and rhetorician Anaximenes of Lampsakos (*BNJ* 72 F 26 = Strab. 14.1.6.), while the latter's inhabitants are described in the Athenian tribute list of 454/3 as "Mtλέσιοι | [έ]χς Λέρο" (*IG* I³ 259.20). While we might be tempted to identify these Milesians from Leros as a migrant community, it is more likely that this should be taken to mean that these are Milesian citizens on Leros in much the same way that the "[Mt]λέσιοι [ἐκ T]ειχιόσσε[ς" mentioned in the following line were probably also Milesian citizens from Teichioussa on the southern coast of the Milesian peninsula.⁴⁹

⁴⁸ See the discussions in Manganaro (1963-4: 296-302); Ehrhardt (1988: 15-16); Hansen and Neilson (2004: 114); Reger (2004: 758).

⁴⁹ Robertson (1987: 365); Thonemann (2011: 283-84). Excavations at Teichioussa, situated in the southeast corner of the Milesian peninsula uncovered evidence for some large buildings dating from the Archaic period, see Voigtländer (2004) for a detailed study.

Abydos was located at the narrowest point of the Hellespont on a small cape protruding into the strait at modern Nara Burnu. It was settled sometime in the 660's, originally as a Lydian mercenary settlement inhabited by Milesians, probably to protect Lydian interests in the region including its gold mines (Pernicka et al. 2003: 149-51; De Boer 2006: 64; Roosevelt 2007: 74; Knight 2019; Roebuck 1959). Archeometric analysis of the "Ionie du Sud 3" pottery type has suggested that its centre of manufacture was located at Abydos (see section II.3.3.1 below).

II.1.1.3 Artake

Artake lies at modern Erdek on the eastern coast of the Arktonessian peninsula, some seven kilometres north-east of ancient Kyzikos. The ancient town may have lain to the east of the present harbour or on the lower slopes of Mt. St. Simeon which may have been the acropolis (Hasluck 1910: 15-19; Müller 1997: 785-86; Erpehlivan 2018). Archaic period *kouroi* have been identified around Artake, though the lack of clear archaeological contexts for these objects makes it difficult to ascertain whether they were intended to be displayed at the site or were being transhipped elsewhere such as Kyzikos.⁵⁰

⁵⁰ Ehrhardt (1988: 38) suggests this may support the literary tradition of a Milesian origin given the similarity between one of the *kouroi* and examples from Miletos; cf. Loukopolou (1989: 166-70) who places it within a Samian milieu and more recently Erpehlivan (2018: 121-22).

Kyzikos, lying on the eastern coast of the Arktonnessian isthmus, was one of the most important cities of the region in antiquity. Nevertheless, it has received very little attention from scholars, in part due to the dearth of excavation.⁵¹ According to the late antique scholar Eusebius, Kyzikos was settled in 756 and 679.⁵² In 1937, a Proto Corinthian *aryballos* dated to around the third quarter of the seventh century was uncovered on the Byzantine acropolis of Kyzikos, to date the earliest ceramic material from the site.⁵³ The site of Kyzikos is located in the modern town of Belkis at the north-eastern end of the isthmus connecting the Arktonessian or Kyzikene peninsula (m. Kapıdağ) with the mainland, on the southern coast of the Propontis (Hasluck 1910: 5-6). Prior to the fourth century, the Arktonessian peninsula seems to have been an island, though the subsequent construction of two moles or bridges may have

⁵¹ Hasluck (1910) remains the fullest treatment of Kyzikene history, while Ehrhardt (1988: 40-42) discusses it in the context of Milesian settlements. See now Tozeren (2009: 81-85) and Avram (2004: 983-86).

⁵² Eusb. *Chron.* 88b, 93b (Helm). Gorman (2001: 246) suggests that this was a double foundation. Hasluck (1910: 163-64) accepts the earlier date with reference to the Milesian Thassalocracy which he attributes second foundation to conditions created by the rise of oligarchy and tyranny, particularly Thrasybulous, see also Graham (Graham 1958: 32; 1971). ⁵³ Akurgal (1956b: 20). See also Ehrhardt (1988: 42, 49-50).

encouraged the creation of the current isthmus.⁵⁴ Very little archaeological material from the Archaic period has been identified at Kyzikos apart from a small amount of statuary (Erpehlivan 2018: 138).

II.1.1.5 Lampsakos

Lampsakos (m. Lampseki) was founded in 654 according to Eusebius (Chron. 95d Helm) by migrants from Miletos (Strabo, 13.1.19) and/or Phokaia (*BNJ* 70 F 46, 262 F7a, b). Epigraphic evidence attests to relations with other Phokaian settlements (*I.Lampsakos* 4.26) and shared month names with the metropolis itself (*I.Lampsakos* 8.5). Therefore, most modern scholars conclude that it was founded from Phokaia (Avram 2004: 986; Morel 2006), though some concede that Milesians may also have made up part of the populace (Hornblower 2013: 23 n..65).

The fifth century local historian Charon (*BNJ* 262 F 7a, b) provided a detailed aetiological foundation story which claims that, following an invitation to settle at Pityoussa by the Berbycian king Mandron, Phokaian settlers began to abuse the local people. A Berbycian plot to rid themselves of the Greeks was betrayed by Mandron's daughter Lampseke, who was canonised by the Phokaian settlers, following their removal of the Berbycian populace. The name Mandron may be of Thrakian origin, potentially localised in the Propontis

⁵⁴ Older accounts refer to Kyzikos as on an Island, i.e. Ap. Rhod. 936; Anaximenes of Lampsakos *BNJ* 72 F26, while later accounts describe it as an isthmus or peninsula, i.e. Ps-Scylax 94; Schol. Ap. Rhod. 936. On the bridging of the strait see Strab. 12.8.11; Plin. *NH*. 5.40.

(*I.Kyzikos* I 286). Nevertheless, it also bears a resemblance to the Mandronames of Ionia and Miletos (see section II.2.3 below). This offers an intriguing hypothesis; namely that sometime in the fifth century, Lampsakos began to craft a Phokaian identity, rejecting its Milesian heritage, with the latter being represented by the hapless Milesian sounding Mandron. The context in which this occurred could have been the aftermath of the Ionian revolt. Lampsakos returned to the Persian empire and may have sought to distance itself from the conflict's Milesian instigators. It should also be noted that Lampsakos, at least in its literary attested dating, predates the next Phokaian settlements by around half a century. Furthermore, Phokaian migration is generally aimed towards western horizons rather the Propontic or Pontic region. The questions that are raised alongside Strabo's testimony have necessitated the inclusion of Lampsakos in the current study, though reservations remain as to its Milesian origins.

Very little archaeological work has been carried out at Lampsakos and even less has identified any Archaic period material. Nevertheless, in 2010 a small fragment of Archaic pottery was uncovered east of modern Lapseki (Arslan and Bakan 2011: 461). This fragment, which may have been part of a stemmed dish or bowl, bears some resemblance to SiA Id wares (e.g., (Schlotzhauer and Kerschner 2005: 33-45, figs. 41, 42), in which case it should be dated between 610 and 480/70. Located around 5km from Mustafakemalpaşa on the Balıkesir – Bursa highway, Miletoupolis sat on an eminence which allowed it to control the surrounding plains (Erpehlivan 2018: 140, 304 fig. 6.27). Excavations undertaken in 1975 uncovered mostly later material though confirmed the localisation of the city (Akat, Dedeoğu, and Kozaman 1977: 5-39; Schwertheim 1983: 89-90).

II.1.1.7 Parion

The ancient site of Parion is located on the southwestern coast of the sea of Marmara, just north of modern Kemer. According to Strabo, it was established by emigrants from Miletos, Paros and Erythrae (10.5.7; 13.1.14), while Pausanias (9.27.1) talks of Ionian and Erythraian settlers. Eusebius' chronology gives a date of 709 for these eventsCh while archaeological evidence from the site itself does not pre-date the final third of the seventh century (Ertuğ Ergürer 2015: 137).

II.1.1.8 Prokonessos

Prokonessos, lying on modern Marmara island, seems to have been settled by Milesian migrants after the second quarter of the seventh century (Loukopolou 1989: 46-48). The island was geologically well equipped and exported marble (Strab. 13.1.16). Its Archaic history is obscure but given that Herodotus recalls its tyrant Metrodorus as participating in Darius I's Skythian expedition (4.138) and its subsequent destruction during the Ionian revolt (6.33) we can probably surmise that it was subsumed into the Persian empire sometime between 546 and 515, though given the apparent lack of interest in the region by Kyros and Kambyses, a date toward the end of this period may be preferable.

Kardia

According to Pseudo-Skymnos, Kardia, located on the northern side of the Thrakian Chersonese, was established by migrants from Miletos and Klazonmenai (770-3). Kardia may have come into conflict with the Thrakian Bisaltes in the sixth century, which implies that mobility could be a source of conflict in the region (*BNJ* 262 F1).

II.1.1.9 Kios

Kios (m. Gemlik) was settled in 626/5 according to Eusebius (*Chron.* 97 b Helm). It is situated on the gulf of Gemlik, on the western side of the isthmus between the Sea of Marmara and İznik Gölü. The ancient settlement itself was probably located around the Yeni district of the modern city (Erpehlivan 2018: 127). Pliny the Elder states that Kios was a Milesian "emporium" on the former site of a Phrygian settlement named Ascania and that it was established to facilitate trade with the Phyrgians of the interior (*NH*. 1.144). According to Aristotle the site may have hosted Mysian and Karian populations before the arrival of the first Milesian migrants.⁵⁵

II.1.1.10 Discussion

When assessing the local economic and geopolitical contexts and endogenous drivers of migration from Miletos to the Hellespont and Propontic regions, we must first address the problem of chronology, particularly pressing for these regions. For the settlements of the Hellespont and Propontis, where excavation has been limited or never occurred, we possess little means of comparison with the more prosaic literary evidence. As table 1 shows, there is a significant difference between the two. Furthermore, it is also notable that the literary sources which provide dates do not appear until Roman Imperial times. Therefore, it is worth questioning how reliable these are in the absence of corroborative archaeological evidence, or to put it another way, should we be downdating these settlements in line with the material evidence?

Dating evidence from other sites, which do not have correlative archaeological dating material, also offers us an insight into these problems, though hardly provides clarification. First, Abydos is commonly dated to 680 by scholars (Loukopolou 1989: 46), given that this is generally thought to be the accession date of Gyges who, as Strabo tells us (12.1.22), acquiesced to the

⁵⁵ Arist. F 514 R³ = Scho. Ap. Rhod. 1.1177. "Κιανίδος: περιφραστικῶ τὴν Κιον ἔστι δὲ πόλις Μυσιας ἀπὸ Κιου τοῦ ἀφηγισαμένου τῆς Μιλησίων ἀποικίας, ὡς ἱστορεῖ Αριστοτέλης ἐν Κιανῶν πολιτεία. κατώκεσαν δὲ αὐτὴν πρῶτον Μυσοί, ἒπειτα Κᾶρες, τρίτον Μιλήσιοι."

establishment of the site in territory he presumably controlled. A date so early in his reign seems unlikely, though not impossible given his alleged links with the area — his father's connection with Daskyleion and his own alleged birth there (*BNJ* 90 F46) — but as we have noted above and elsewhere (Knight 2019: 48-49), the 660's provide a more secure, though by no means certain, historical context. This dating is expanded by inference to Priapos and Prokonessos, which Strabo (13.1.12) claims were founded around the same time. Kios, which Eusebius dates to 627 (*Chron.* 97b, Helm), is the only site which has a literary date within the ambit of the archaeological evidence for Greek migration to the region.

Site	Earliest Archaeological Material <i>approx</i>	Literary Foundation Date	Source	Source Date
Parion	625-600	709	Strabo 13.1.14	C1 CE
Kyzikos	650-625	676	Eusb. <i>Chron.</i> 88b (Helm)	Late C3 CE
Lampsakos	610-570	654	Eusb. <i>Chron</i> . 95d (Helm)	Late C3 CE

Table 1 Archaeological and Literary dates for select Propontic settlements.

When the first Milesian and Aegean migrants began to settle in the Propontis the two most important centres in the region were Daskyleion and Troy. Between the eighth and the end of the seventh centuries, Troy was an expanding site of regional import (Aslan 2009: 39), while the ceramic record was dominated by local $G_2/3$ ware (Fisher 2000: 120). This period of prosperity ended in the middle of the seventh century with the destruction of the site

(Aslan 2009: 33). During this period there is some evidence of imported east Greek wares, including fragments of late Geometric ware from the second half of the eighth century (Fisher 2000: 90, 167 nos. 59, 60), in addition to Ionian bird bowls from the first quarter of the seventh century (Fisher 2000: 93, 168 nos. 61, 61). As (Fisher 2000: 92) notes "The primary importance of llion's bird kotylai is their demonstration that llion was settled enough by the mid-eighth century to be importing vessels". Nevertheless, these only appear in small quantities (Aslan and Pernicka 2013: 39) and according to Jan de Boer offer "only a little evidence for wider trade connections with the Ionian world" (de Boer 2021: 21).

The destruction event itself has been variously ascribed to Kimmerians, Lydians, Greeks or natural causes (Aslan 2009: 40), and more recently to the Treres (de Boer 2021). From the meagre archaeological evidence in the Propontis, at Troy, and on the Southern Black Sea coast, Jan de Boer has recently concluded that the first Milesian migrant settlements may have been established as late as the last quarter of the seventh century, though he accepts that there were probably Ionian traders in the region earlier (2021). Around this time the quantity of east Greek wares increased significantly following the destruction level. Rosette bowls, Ionian cups, various ceramics in Wild Goat style and a fragment of Chiot amphorae dating from between 625 and 600/575 appear in the west sanctuary area and excavation plot D9 (Aslan 2002; Lawal 2002; Aslan and Pernicka 2013: 41-42; Aslan 2009). In sum, it has been argued that "the colonists found a depopulated and weak region, which may have made it easier as well as more attractive for them to settle there" (Aslan and Pernicka 2013: 39). Furthermore, it has been suggested that the Propontic settlements eclipsed Troy in regional importance, with the latter becoming a cult centre (Aslan and Pernicka 2013: 39).

It then remains to explore the nature of the relationship between the arrival of Ionian migrants and the destruction of Troy. Following the literary record, the first Milesian migrants began to settle in the Propontis in the first half of the seventh century and, finding a strong and well-connected Troy with links across the Northern Aegean region, had little impact on the material culture of the site. Indeed, they themselves may have been dependent on the networks forged from and through Troy to establish and sustain their nascent settlements. Alternatively, taking a strictly archaeological view, while there may have been some Ionian activity in the Propontis *en route* to the early Pontic settlements of the second half of the seventh century (i.e. Orgame, Istros and Taganrog), the Trereian destruction of Troy created a power vacuum in the region which allowed migrants to begin to settle its coasts (Aslan 2009: 40) usurping economic primacy, including exploitation of mineral resources, and taking advantage of trade routes.

The situation at Daskyleion has some similarities to that of Troy. At the beginning of the first millennium its cultural sphere seems to have included Thrake and the northern Aegean (van Dongen 2014: 706). By the eighth century Phrygian influences are apparent (Bakır 1995: 272; 1997: 231-32), before it seems to have become an important part of the Lydian empire by the late

seventh century (Bakır and Gusmani 1993: 141-44; Gül Gurtekin-Demir 2003: 204; Koçak Yaldır 2011: 373; Gül Gürtekin-Demir 2002). The earliest Greek pottery consists of a Corinthian late geometric *oenochoe* dated around 740/30 (Bakır 1988: 77; 1997: 231-32; 1995: 271-72 no. 6; Gül Gurtekin-Demir 1996). Nevertheless, it is not until the last quarter of the seventh century that East Greek wares, including some Milesian vessels (Attila 2005: 77-78 nos. 30-32), appear in larger quantities (Bakır 1995: 273; 1997: 234; Gül Gurtekin-Demir 1996: 88-89; 2003: 214-24; Koçak Yaldır 2011: 365-67).

We are left with similar possibility regarding the chronology of the nearby Milesian colony of Kyzikos, which, like those in the Troad, is only archaeologically attested from the second half of the seventh century. It is possible that the establishment of Lydian hegemony in the region acted as a catalyst for economic interactions between Daskyleion and its coastal neighbours and brought imported East Greek pottery to the site in increasing quantities. Certainly it seems that Kyzikos acted as the main port for Daskyleion throughout the Archaic period (Gül Gurtekin-Demir 2003: 225; Koçak Yaldır 2011: 371). This may have both facilitated its growth and importance, drawing in further migrants from the Aegean and Anatolia.⁵⁶ Furthermore, analogous to the Milesian migrant settlements in the Troad, it is possible that the first migrants to Kyzikos did not appear until the final quarter of the seventh century, as implied by the archaeological record.

⁵⁶ For the case of Manes, a Phrygian(?), granted tax exemption at Kyzikos see Lewis (2016: 320).

In sum, the development of the Greek settlements of the Hellespont and Propontis and opportunities to migrate to them seem to have been imbedded within local and regional geo-political and economic systems. As endogenous drivers, the destruction of Troy and the arrival of Lydian authority at Daskyleion can be argued to have provided proximate drivers for the potential for Milesian migrants to locate to these areas, while simultaneously offering social and economic opportunities to individuals participating in region wide social, cultural and economic interactions.

II.1.2 South and East Coasts of the Black Sea

The southern and eastern coasts of the Black Sea present many of the same problems as the Propontic region. Though there is some literary evidence for the Milesian migrant communities there in the Archaic period, at the majority of sites very little archaeological work has been undertaken pertaining to their earliest period. Another important feature of this region is that we have explicit information claiming that some of the settlements in the region were founded from Sinope, itself the earliest Milesian migrant community on the Southern Black Sea. In addition to the settlements discussed below, Kromna and Sesamos were also established by Milesian migrants, but very little is known of them in the Archaic period.

II.1.2.1 Sinope

Sinope is generally accepted to be the oldest of the Milesian migrant settlements in the Black Sea. The Archaic city seems to have been located on an

isthmus occupying the area of the historic prison (Doonan 2004: 74). According to Eusebius it was settled in 631/0 (96b Helm) and the earliest pottery, a proto-Corinthian aryballos, found in 1951 by Ekrem Akurgal and Ludwig Budde, dates to the third or fourth quarter of the seventh century (Akurgal 1956a). It was found at the site of the city's Archaic necropolis located on the western edge of the town (Barat 2010: 37-38). In the museum garden area, terracotta objects and small finds were identified from as early as the seventh century, though the nature of these finds tells us little of the area's function, leading researchers to propose that it could be an "extramural sanctuary or refuse disposal area" (Doonan 2004: 75-76). Excavations at the Kumkapı cemetery at the western end of the Isthmus also uncovered Greek ceramics from the end of the seventh to the beginning of the sixth centuries (Boysal 1959; Doonan 2003: 1382; 2004: 72; 2016: 220). Sinope may also have had a defensive wall as early as the Archaic period (Barat 2010: 45). Prior to the arrival of Milesian migrants, a small Bronze and Early Iron age site was located on Sinope Kale which demonstrated material and cultural links across the Black Sea (Doonan 2004: 51-62; 2016). Throughout the Archaic period, the Milesian city seems to have been predominantly maritime orientated and there is little evidence for expansion inland (Doonan 2004: 76f; 2007; 2016: 220).

II.1.2.2 Kotyora

Most scholars attribute the settlements east of Sinope to Sinopean migration. Xenophon calls Kotyora an *apoikia* of the Sinopeans and records that it paid tribute to Sinope in the early fourth century (Xen. Anab. 5.5.10-11).⁵⁷ Kotyora, has been located at the modern town of Odru, possibly at Boztepe (Erciyas 2007: 1196) and was probably established sometime in the sixth century (Tsetskhladze 2010b: 232).

II.1.2.3 Kerasus

Kerasus, located at the site of modern Giresun, was established in the sixth century (Erciyas 2007; Tsetskhladze 2010b: 233). Mining including for iron, copper, silver and lead had been undertaken in the locality possibly as early as the Bronze Age (Kaymakçi 2021: 94-95). According to Strabo (12.548), Pharnakeia (an alternative name for Kerasus probably given to the site by Pharnakes I around 183) was established by migrants from Kotyora (Erciyas 2007). It is unclear whether Strabo's use of the name should be taken to indicate that this event occurred after Kerasus became Pharnakeia. Nevertheless, it remains plausible that the original migrants to Kerasus may have come from Kotyora further up the coast. The island of Giresun Adası, lying northeast of Kerasus, may have been settled in the Archaic period (Doksanaltı and

⁵⁷ Erciyas (2007); Tsetskhladze (2010b). Only Kotyora is explicitly stated to have been founded from Sinope. Scholars have inferred that Trapezos and Kerasus, which apparently paid tribute to Sinope, were founded from there. Yet the passage of Xenophon which contains this information is a speech given by the Sinopean ambassador to Xenophon and his comrades. Sinopean claims on Kotyora might have been motivated by this contemporary relationship and what seems looks like late Archaic/early Classical Sinopean migration might in fact represent Sinope's attempts to control her neighbours in the fourth century.

Mimiroğlu 2010: 89; Atasoy 2018: 141). By analogy with other migrant settlements where offshore islands saw the earliest settlements - such as Berezan-Olbia, St. Kirik-Apollonia - it is possible to suggest that Giresun Adası may have been the site of the earliest settlement of Kerasus. This suggestion has recently been strengthened by the discovery of fragments of a South Ionian skyphos from the first half of the sixth century on the island (Kaymakçi 2021: 96-97).

II.1.2.4 Amisos

Amisos was probably established by Milesian migrants in the area of Kurupelit, in the suburb of Atakum in modern Samsun (Summerer 2018: 168). This is the location of the earliest ceramic evidence found at the site, uncovered in a *bothros* during rescue excavations in 2009 (Summerer 2018: 156). Earlier MWG II/SiA Id pottery and terracotta architectural decorations had been identified at Akalan, some 18km from Amisos in the early 20th century (Macridy 1907: 262-66; Atasoy 2003: 1346; Summerer 2005: Fig. 3; 2007: 30; 2008). Pseudo-Skymnos gives the identity of the earliest migrants as Phoikaian (F 25 Marcotte). The region around Amisos offered important economic benefits, including salt (Strab. 12.3.39), jade (Plin. *NH*. 37.115) and iron (Weimart 1984: 117), while the first settlement may have been a Milesian emporion (Summerer 2007: 29).

II.1.2.5 Tios

Located at modern Filyos in the Çaycuma Zonguldak region of Turkey, roughly half way between Sinope and the entrance to the Black Sea, Tios seems to have been established relatively early, towards the end of seventh century (Atasoy and Erpehlivan 2012; Atasoy 2016: 207). A small amount of Archaic and Classical era pottery sherds have been discovered on the acropolis and are the only material testimony to the early migrant settlement there (Atasoy and Erpehlivan 2012; Atasoy 2016: 209; 2018: 113f).

II.1.2.6 Gyenos

Gyenos is generally thought to have been located to the northwest of modern Ochamira at the mouth of the Dzhikimur river in modern Georgia (Braund 1994: 103-06; Tsetskhladze 2018a: 478). The city was established on three artificial mounds and the area seems to have been inhabited in the Bronze and Early Iron ages (Braund 1994: 103f). Almost a third of the pottery found in the Archaic levels of the site came from Ionia, including "Rhodian-Ionian" (possibly MWG II or LWG [?]) wares (Kvirkvela 2003: 1280-81) and was supplemented by local imitations (Braund 1994: 105; Tsetskhladze 2018a: 478). Phasis was located at the mouth of the modern river Rioni (the ancient Phasis) but attempts to locate the remains of the site have been unsuccessful.⁵⁸ A passage in Pseudo-Hippocrates (*Aer.* 15), indicates that there was both an *asty* and *emporion* at Phasis, though whether they were contiguous is difficult is not recorded. The attention paid to Phasis in ancient literary sources, including the Aristotelian *Constitution of the Phasians*, suggests that it was an important settlement by the Classical period, but until its remains are identified, its Archaic history remains vague.

II.1.2.8 Dioskourias

The exact location of Archaic Dioskourias remains uncertain. Some scholars have proposed that it is now submerged off the coast of Sukhumi, where remains of buildings and a fifth century grave marker have been found (Nikonov 1996: 197-99; Tsetskhladze 2018a: 479). Others maintain that it lies under the modern city (Braund 1994: 106). Alternatively, the sixth century layer of the settlement at nearby Eshera have been suggested. However, given that imported Greek pottery only accounts for 10% of the total from this site it is more likely a Kolchian settlement with links to Dioskourias (Braund 1994: 107-08; Tsetskhladze 2018a: 481-83). The earliest imported pottery at Sukhumi consists of a pair of Chian amphorae from the end of the sixth century, while

⁵⁸ Strab. 11.2.17. See also Tsetskhladze (1992); Tsetskhladze (2013; 2018a: 476-78); Braund (1994: 96-103); Lordkipanidzé (2000).

there is some East Greek material at nearby Vereschagin Hill (Braund 1994: 107).

II.1.2.9 Discussion

Dating the beginning of Milesian migration on the southern Black Sea coast has been the subject of much debate. There is a fundamental discrepancy between the literary record, which often give multiple foundation dates and stories, some as early as the middle of the eighth century; and the archaeological material, none of which can be dated any earlier than the final quarter of the seventh century.⁵⁹ Given the obvious problems with mythic narratives and late antique chronological calculations, it seems preferable at this time to opt for the later dating.

The southern Black Sea coast was extensively populated around this time between the coastal plains around the estuaries of the Halys and Iris rivers (Summerer 2007: 29; Manoledakis 2016: 60). An important local settlement, possibly the seat of a regionally important potentate (Tsetskhladze 2012: 238), was located at Akalan. Judging by the presence of extensive quantities of Greek material, it "may have played a mediating role in the interactions between Greek settlers and inner Cappadocian settlements" (Summerer 2007: 31). Both Amisos and Sinope were located conveniently to interact with this centre and it seems likely that the earliest migrants settled with the consent of the local elites

⁵⁹ For recent discussions of these issues see Tsetskhladze (2012b); Manoledakis (2018) with bibliography.

(Manoledakis 2018: 191). The demographic situation around Tios is less certain, though no doubt the region was inhabited around the end of the seventh century when the first migrants began to arrive (Burstein 1972: 15-38).

Some scholars have suggested that both Amisos (Strabo 12.3.9; Summerer 2007: 29) and Sinope began life as emporia (de Boer 2021: 22) and, while this is quite possible, there is still little reason to place their beginnings any earlier than the final third of the seventh century. By the sixth century migrants from Sinope, probably in the role of traders, began to establish a series of settlements along the eastern half of the north Anatolian coast towards Colchis. The reasons for this are obscure. Little archaeological evidence has been uncovered from these settlements and the literary sources are totally silent on the expansion of Sinopean influence until the end of the fifth century when Xenophon and his army appeared in the region.

The early histories of the Milesian migrant settlements in Colchis are likewise difficult to reconstruct owing to the continuing debate over their locations. Nevertheless, as Gocha Tsetskhladze has pointed out, Greek pottery appears at a number of local communities close by their presumed locations in each case dating to before the first half of the sixth century (Tsetskhladze 2018a: 511-14 fig 4.1). This demonstrates that the earliest migrants to Colchis probably appeared around this time and that from the beginning they were engaged in economic and political interactions with the indigenous communities (Tsetskhladze 2018a: 506). Indeed, the former was a particular necessity given the lack of arable land in the marshy estuarial areas in which they settled and the relative ease of riverine communication.⁶⁰ Another interesting development is the apparent disappearance of small local craft communities along the Black Sea shoreline, the so-called dune settlements, which ceased to function during the sixth century coinciding with the arrival of Greek migrants at places such as Pichvnari (Giorgadze and Inaishvili 2015). It is possible that these people practiced their craft and religious undertakings elsewhere or migrated themselves to the nascent migrant communities. Overall, the picture that emerges of migration to the south and east coasts implies a continuum with older forms of movement in these regions (Doonan 2016). In the period of innovator migration there seems to have been close interaction between the Milesian immigrants and settled populations in these regions.

II.1.3 West Coast of the Black Sea

II.1.3.1 Istros

Istros was established on a small peninsula facing the open sea (Romanescu 2014; Bivolaru, Giaime, et al. 2021; Preoteasa et al. 2013; Vespremeanu-Stroe et al. 2013). The earliest material there comes from a *bothros* discovered at the end of the 1970's (3/1979), around 2m west of the site of the future temple of Zeus, and is dated to the last third or last quarter of the seventh century (Alexandrescu 2005: 202,445,540). It contained a round-mouthed *Oenochoe* in a style which seems to represent the turn between MWG

⁶⁰ (Tsetskhladze 2018a: 506). Nevertheless, agriculture was practiced in some coastal regions, cf. Giorgadze and Inaishvili (2015: 153-54).

I and II dated between 630 and 620 (Alexandrescu 2005: 330-31 no. C7, pl. 53; Cook and Dupont 1998: 36), a krater with horizontal handle from the same time (Alexandrescu 2005: 354 no. C136, fig. 46), a fragment of a lekané — possibly from Miletos (Alexandrescu 2005: 357 no. C136, fig. 47), a Hallstatt style pot (Alexandrescu 2005: 385 no. C153), a cup with raised handles (67/1976), which had analogies with material found earlier at Istros as well as the nearby village of Istria and Berezan (Alexandrescu 2005: 357-58 no. C158, fig. 47), and part of the basin and spouted edge of a lamp (Alexandrescu 2005: 438 no. L7). An abundance of other Archaic pottery testifies to Histria's prosperity throughout the sixth century (Lambrino 1938; Alexandrescu 1978, 2005; Bîrzescu 2012b).

The earliest settlement at Histria seems to have consisted of a small number of houses on the western part of the plateau, with religious activities taking place in the sacred zone to the east which was almost certainly the city's acropolis (Dimitriu 1966). The number of houses in this area increased consistently during the Archaic period and, towards the end of the sixth century, a fortification wall was built encompassing the area of the plateau.⁶¹ The acropolis was also fortified probably around the same time (Condurachi 1954: 115). By the end of the sixth century, the urban area covered most of the space enclosed by the fortification wall and new domestic or public buildings had been constructed on the acropolis (Bottez 2015: 364-66). There is also

⁶¹ Coja (1990: 161); Fredericksen (2011: 152-53). According to Maria Coja these fortifications were constructed in the second quarter of the sixth century though more recent analyses dispute this dating.

evidence to suggest some level of planning at Istros during the Archaic period.⁶² Not long after this time, a layer of burning can be identified. This destruction level marks the end of Archaic Istros (Dimitriu 1966: 36). The necropolis of Istros, which archaeologists began to excavate in 1955, was located on the isthmus between Lakes Histria and Sinoe and contains a number of tumuli which date as far back as the end of the third quarter of the sixth century (Alexandrescu 1966). The earliest tumuli exhibited evidence of human sacrifice and mass burial, though it is difficult to determine how much these features can be seen as cultural or whether they are connected to specific events which allude us.

II.1.3.2 Orgame

Orgame is located on Cape Dolosman, south of the Danube delta. The name of the settlement seems to be derived from ὀρχάμη, meaning an uncultivated copse (LSJ s.v.; Lungu 2003). This most likely indicates that the earliest Greek migrants found the area wooded (Baralis and Lungu 2015: 376). Sedimentological and palynological analysis have identified increasing quantities of carbon in the cores nearest to the cape confirming the deforestation of the peninsula by the earliest Greek migrants (Bony et al. 2013: 123; Baralis and Lungu 2015: 376). Very little Archaic material has been

⁶² Krebs (1997: 59). The extent to which the roads Krebs identifies in the Tumular necropolis are related to planning on the plateau area is difficult to ascertain. In the latter, orthogonal planning does not seem to appear before the fifth century at the earliest, see (Angelescu 2017: 204).

uncovered in the urban area itself due to the presence of the later Roman settlement of Argamum. It is almost certain that Argamum can be equated with the Orgame mentioned by Hekataios (*BNJ* 1 F172).

Ceramics, found in both the settlement and its necropolis, suggest that the first migrants arrived probably in the third quarter of the seventh century (Mănucu-Adameșteanu 2003b: 356). In sector FE of the urban area, a handful of *oenochoe* fragments of MWG I style pottery, dating to between 640 and 630, have been identified (Mănucu-Adameșteanu 2000). In the necropolis two proto-Klazomenian amphorae and a Villard A2 cup can be dated between 650-630 (Lungu 2000: 69; 2000-2001: 173-75).

II.1.3.3 Apollonia

Apollonia was located at modern Sozopol on the Skamni peninsula and the adjacent island of St. Kirik. It was established towards the end of the seventh century according to the finds of MWG II/SiA Id pottery (Reho, 1986). Recent excavation on St. Kirik has uncovered a series of domestic dwellings, a street and an early sixth century metallurgical workshop. The latter was identified by remnants of iron slag mined from nearby Medni Rid (Panayotova et al. 2014: 595). The early settlement also encompassed the sheltered eastern side of the Skamni peninsula where significant ceramic deposits, dating as early as the late seventh century, have been identified along "Milet", "Kiril i Metodiy" and "Apolonia" streets (Nedev and Gyuzelev 2010: 32). By the second half of the sixth century, the earlier structures on St Kirik had fallen out of use and the area was dedicated as a temenos (Panayotova et al. 2014). During the same period, the settlement on the peninsula expanded northwards to the area of "Morski Skali" street, while the early necropolis was overbuilt with an industrial quarter including facilities for bronze and ceramic production (Baralis et al. 2016: 159-60).

The earliest burials at Apollonia, discovered in the 'Iujna krepostna stena' sector, date from around the end of the seventh century.⁶³ A tomb was dug into the sand near the city walls and contained two adult individuals, one a pregnant female, and three infant burials in an amphora. They were found with a Corinthian ware aryballos and a number of alabastra which span a period between the last third of the seventh century and the second quarter of the sixth century.⁶⁴ This early necropolis may have stretched as far as the harbour on the western side of the peninsula. In 1927, dredging in this area uncovered a number of funerary stelae bearing the image of a goddess, possibly Demeter who played an important role in the religious landscape of sixth century Apollonia (Hoddinott 1975: 33-34; Isaac 1986: 244; Konova 2009: 68-69). By the mid sixth century, a new necropolis was established to the south, on the slopes of Harmanite Hill, which eventually spread down towards the Kalfata

⁶³ See Seure (1924: 320-25) for the suggestion that there was another early necropolis on St. Kirik Island, though the only evidence for this is the apparent funerary character of pottery sherds found there which he attributes to the activities of grave robbers.

⁶⁴ See Baralis et al. (2016: 156) for preliminary details. See now Nedev (2019) for the publication of the graves and their contents.

peninsula in the following centuries, indicating fairly rapid population growth or a significant change in deposition practices.⁶⁵

II.1.3.4 Nikonion

Nikonion, located immediately northwest of the modern town of Roksolany in the Dnieper estuary, seems to have been established between the second half and final third of the sixth century. The bulk of the ceramic material found at the site falls into this period (Sekerskaya and Bujskikh 2018; Bujskikh and Sekerskaya 2019; Sekerskaya 1989, 2007, 1976). Nevertheless, a handful of pieces might be dated to the first decades of the sixth century (Sekerskaya 1976: 91; Bujskikh and Sekerskaya 2019: 204; Sekerskaya and Bujskikh 2018: 38).

II.1.3.5 Odessos

The settlement of Odessos was located on high ground on the northwest side of the bay of Varna opposite the modern port (Minchev 2003: 210). This sheltered location seems to have offered several advantages including access to fertile agricultural land and timber sources (Isaac 1986: 254; Preshlenov 2002: 13; Minchev 2003: 216; Damyanov 2004-2005: 293; 2010: 265). The name Odessos itself has been attributed to the Thrakian or Karian language and may imply the existence of an earlier settlement at the site (Lazarov 1985: 63; 1998:

⁶⁵ Panayotova (2010: 39). We would caution against connecting this expansion to the arrival of new settlers detailed by Aristotle (*Pol.* 5.1303a, 1306a, e.g. (Pol. 5.1303a, 1306a; e.g. Konova 2009: 70)), it seems more likely that the expansion of the settlement over the previous half century led to the need for new burial grounds.

92; Isaac 1986: 255; Preshlenov 2002: 13; Minchev 2003: 210; 2006: 61; Girtzi 2015: 97).

The earliest finds at Odessos are late seventh to early sixth century Ionian-Rhodian cups (Lazarov 1998: 91; Minchev 2003: 248), but the majority of the subsequent early material can be dated between the second quarter and middle of the sixth century (Lazarov 1985: 66; 1998; Preshlenov 2002: 13; Minchev 2003: 248-49; 2006: 61). Based on this, a date around 575 would seem appropriate for the establishment of the settlement. In addition to the archaeological material, Pseudo-Skymnos (748-70) also gives us a date, saying that it was founded in the reign of Astyages which, according to Margarit Damyanov, should place it between 584 and 549, in accordance with the archaeological evidence (Damyanov 2004-2005: 289).

II.1.3.6 Tomis

The ancient city of Tomis was in what is now the old town of Constanța. The promontory on which it stood was an important landmark on this part of the coast and may have contributed to its growth as a centre of maritime trade (Isaac 1986: 266; Buzoianu and Barbalescu 2012: 115). There is some debate as to whether Tomis was originally settled from nearby Istros as part of its attempts to exert regional control (Avram 1996: 253; Bîrzescu 2018), but this supposition is difficult to prove (Buzoianu and Barbalescu 2012: 119-20). The earliest Greek pottery at the site appears in the second half of the sixth century, and particularly in its final quarter. It includes Chiot, Attic, Corinthian and Klazomenian amphorae and tableware (Radulescu and Scorpan 1975: 34; Radulescu 1977; Buzoianu 1991; Buzoianu and Barbalescu 2012: 292-93). Analogies with material found in the Athenian agora has allowed accurate dating of the Attic material, which belongs to the years between 530 and 510 (Buzoianu and Barbalescu 2012: 124-25). This suggests that the settlement itself may have been formed around this time, probably in around 525.

II.1.3.7 Tyras

Tyras was established on a limestone promontory in the northern part of the modern settlement of Bilhorod-Dnistrovskyi (Cojocaru 2008: 218). Like nearby Nikonion, it was well placed to exploit the local riverine and terrestrial agricultural resources (Samoylova 2001: 85; 2007: 440). Early ceramic evidence points to the arrival of the first migrants in the second half of the sixth century, probably nearer its end (Kocybala 1978: 170; Karyshkovskij and Klejman 1994: 87) Some scholars dispute this, pointing to the larger amount of wares from the turn of the sixth and fifth centuries and speculating on a date of around 500 (Cojocaru 2008: 218). These include Attic Black Figure pottery, Ionian Amphorae, utensils, lamps and black glazed Attic and Chiot wares (Karyshkovskij and Klejman 1994: 89; Samoylova 2001: 80; 2007: 440).

II.1.3.8 Discussion

Prior to the arrival of the first Aegean and western Anatolian migrants to the western coast of the Black Sea, and particularly northern Dobrudja, a complex demographic picture existed. In the Late Bronze and Early Iron ages the region had been dominated by the carriers of the so-called Babadag culture, named after the important fortified settlement of Babadag on the shores of its eponymous lagoon.⁶⁶ The main settlements of the Babadag culture were concentrated along the river valleys of the Danube, Prut and around the Razelm-Golovita lagoon complex. Most of these sites had been abandoned by the time the first Milesian migrants arrived at the beginning of the second half of the seventh century. While the reasons for the disappearance of this culture are uncertain, due to the chronological disparity, it does not seem to be connected to the arrival of Milesian migrants in the region (Ailincăi, Miriţoiu, and Soficaru 2006: 93; Ailincăi 2016: 229).

Orgame seems to have been the earliest settlement established by these migrants around 640, with Istros' no more than a decade later.⁶⁷ It seems probable that the migrants who eventually settled at Istros came from Orgame, or at least arrived there prior to moving on to Istros (Alexandrescu 2000: 520). The presence of the large early tomb T-A95, at the former, may even imply a central role for Orgame in an early Istrian-Orgame *poleis*, given that the earliest monumental funerary architecture in the Istrian necropolis does not appear until the middle of the following century (Alexandrescu and Eftimie 1959; Alexandrescu 1966). Opinion now favours the argument that Orgame was an independent polis from the beginning, complete with its own *chora* (Baralis and

⁶⁶ On Babadag and the Babadag culture see Jugănuru (2005); Ailincăi (2016).

⁶⁷ The Ister (Danube) seems to have been known in the Aegean from the eighth century i.e. Hes. *Theog.* 339; Hipponax F115 Gerber = Archilochus F114 Lattimore.

Lungu 2015: 373). This consensus, however, seems to obfuscate an important point. The assumption of the status of independent poleis may be a heuristic construct rather than lived reality and it seems quite possible that the earliest settlers at Istros may have come to or from Orgame first, before settling at the former. The migration network that the innovator inhabitants of Orgame created could lower the cost for further migrants who settled both at Orgame and Istros and in their adjacent hinterlands. Istros may have presented a more desirable destination due to its less exposed location and potential for agricultural expansion. While we should not automatically a rational costbenefit decision making process, the diffusion of migration ideations amongst migrants to the region could soon have made Istros a more promising destination.

While Orgame seems to have remained a relatively small unimportant community, Istros quickly grew to dominate the region. Two datasets can be used as proxies for the trajectory of migration there and shine a light on the different phases of movement both to and within northern Dobrudja in the Archaic period.

First, there is the pattern of settlement and necropoleis growth (fig. 5). Following the collapse of the Babadag culture, "the context became unfavourable to social aggregation and authority mobilisation" (Ștefan et al. 2021: 81). While some sites such as Beidaud, Tichilești and Orgame appear to have been repopulated one and two centuries after the Babadag collapse, most that exhibit features of local culture appeared *ex novo* (Ștefan et al. 2021: 81). Between the final quarter and the end of the seventh century, settlements with a local character can be identified at the aforementioned, as well as at Zimbru southwest of Orgame (Baralis and Lungu 2015: 379). Simultaneously the earliest burials at the tumular necropolis at Celic-Dere appear (Simion 2000: 72). Furthermore, Nuntaşi II, generally assumed to represent the earliest settlement of the Istrian *chora*, was also settled during this time (Domăneanţu 1993: 59). Given the (re)emergence of local communities during the sixth century, it seems certain that the indigenous population of northern Dobrudja experienced some level of geographic continuity prior to the establishment of Istros and Orgame, though not necessarily in an archaeologically visible way (Avram 1996: 242; Ştefan et al. 2021: 85).

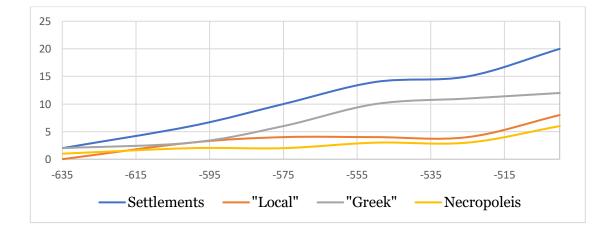


Figure 5 Settlements and Necropoleis in Northern Dobrudja circa 640-500 (see appendix C for data).

Between the second quarter and the middle of the sixth century a number of other settlements and necropoleis were established around Istros and Orgame including Tariverde (Preda 1972; Bîrzescu 2012a), Histria Bent (Teleaga and Zirra 2003), Sinoe-Zmeica (Avram 2006: 62; 2007: 490; Baralis and Lungu 2021: 109), Călugăra (Baralis and Lungu 2015: 383), Açic Suat (Baralis and Lungu 2021: 109-12), Visina (Mănucu-Adameșteanu 1983; Mănucu-Adameșteanu 1980), Sarinasuf (Alexandrescu 1978: 41 no.s 55, 57) and Histria Pod (Zimmermann and Avram 1987, 1986). While in the second half of the sixth century, further settlements attributed to the *chorai* of Istros and Orgame appeared, include Baia II (Baralis and Lungu 2021: 96), Vadu (Irmia 1975: 95), the necropoleis at Histria Sat (Suceveanu et al. 1970: 115) and Corbu de Jus (Bucovală and Irmia 1971). The local settlements of this period are rather more difficult to date. Greek pottery, which is used as a chronological marker, only demonstrates the beginning of interaction with the coastal immigrant communities. Nevertheless, the evidence suggests that Enisala (Alexandrescu 1978: 119-20 no. 28), Celic-Dere (Simion 2000), Cassiana (Ştefan et al. 2021), and Murighiol (Suceveanu and Angelescu 1988) – the latter trio a considerable distance from the coast – appeared around the beginning of the fifth century at the latest.

Concurrently, local necropoleis have also been identified at Cernavoda, Isaccea and Telița.⁶⁸ It has been noted that the material culture of all of these sites exhibited a number of similarities including location, lack of fortification, pit assemblages, Late Hallstatt and Greek wares, and depositions of arrowhead

⁶⁸ Berciu (1957). The necropoleis at Isaccea (Simion 2003b) and Teliţa (Lăzurcă and Simion 2000: 84) are also thought to have been established between the sixth and fifth centuries though more specific chronological information is unavailable.

coins.⁶⁹ Indeed, this homogeneity calls into question the fundamental notion that we can delineate sites as "Greek" or "local" based on their relative vicinity to either of the two main Milesian migrant settlements on the coast (cf. Baralis and Lungu 2015: 383-84). The appearance of "local" and "Greek" sites, populated by heterogenous short distance migrants seems to have been driven, to some degree, by the expansion of social, political, and economic networks. This was a result of the development of coastal nodes, and the re-emergence of stable conditions in local contexts which encouraged social accretion (Avram 1996: 246; 2006: 63; Simion 2003a: 176; Stefan et al. 2021: 85, 115-16). Lieve Donnellan, applying a network approach to the Archaic necropoleis of the region, as well as those further inland, has recently observed that shared practices between Istrian and local funerary observations seem to imply a community of practice exhibiting "appropriation" of certain aspects by maritime immigrants from terrestrial contexts (Donnellan 2021: 63). She argues that, the increasing use of these traditions at Istros towards the end of the sixth century, may have been aimed as a show of continued regional power in unstable times, "at the same time as forging ties to the surrounding native groups" (Donnellan 2021: 63).

⁶⁹ Ştefan et al. (2021: 81). The suggestion that these local sites grew up around places of ritual importance (Ştefan et al. 2021: 82, 115) may be strengthened by the recent suggestion from François de Callataÿ that these tokens began life as *ex votos* (2019). The fact that they tend to be found in hoards (i.e. Avram 1996: 248; Ştefan et al. 2021: 84) lends credence to this hypothesis.

A second proxy that we can use to illustrate the trajectory of migration, specifically at Istros, is the number of dwellings built during the Archaic period. Half a dozen structures can be attributed to the Archaic Ia layer, two to Ib, six to IIa, one to IIb, nine to IIIa, twelve to IIIb and fifteen to IIIc (fig. 6). When plotted on to a trajectory, we find a relatively stable demographic situation in the urban area until the middle of the sixth century.⁷⁰ Following this, we can see an expansion of both the quantity of dwellings and the number of settlements in the wider region. This period coincides with the earliest monumental tumuli in the tumular necropolis, Tumulus XX (Alexandrescu and Effimie 1959; Alexandrescu 1966). Between the middle and the third quarter of the sixth century, temple "I-J", dedicated to Aphrodite, was also constructed (Alexandrescu 2005: 73-74). Towards the end of the century, further temples, public buildings and fortifications were constructed (Avram 2012a: 199-200).

⁷⁰ We must bear in mind that the life span of some of these dwellings is difficult to calculate so the number in use at any given time may be more than shown here. Furthermore, dwellings have only been excavated in a handful of areas in the northwest corner of the plateau (sectors X, XNV, XV1) a further four come from the Basilica Parvan sector of the acropolis while a single dwelling has been identified in sector S.

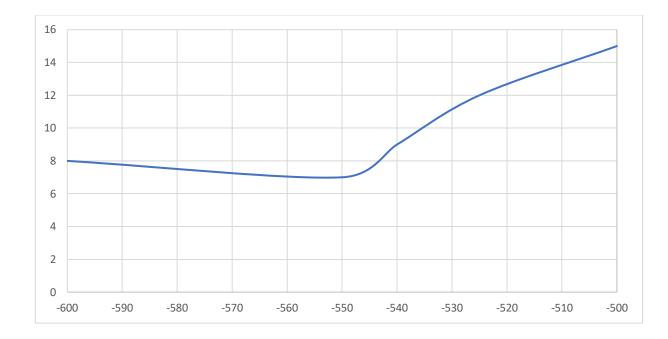


Figure 6 Number of new dwellings constructed at Istros 600-500 (see appendix D for data).

Clearly then, the *asty*, *chora* and wider region around Istros experienced demographic expansion particularly in the second half of the sixth century. While it is possible to attribute some of this increase in population to internal demographic growth, to wholly ascribe it to this ignores the focus of expansion at a specific time, rather than gradually over the whole of the century. We have already noted that the number of "local" communities appears to increase particularly in the last third of the century, while the settlement of Istros' and Orgame's *chorai* appear to expand a little earlier. Both seem to have attracted local terrestrial migration. This internal migration may also be connected to increasing social stratification and the appropriation of local cultural elements (Donnellan 2021), yet we cannot discount the role of subsequent maritime

migrants.⁷¹ Alexandru (Avram 2003a: 386) has identified two subsequent phases of migration, in the middle of the sixth and beginning of the fifth centuries, both of which accord well with the evidence we have presented. Other scholars, analysing funerary evidence, have suggested that the motivation behind the construction of the monumental tumuli "should be sought for in the hereditary tradition of the first group of Ionian colonists, trying to preserve their privileged position against the newcomers (epoikoi)" (Damyanov 2005: 93), and that the difference in burial customs between Istros and its *chora* between cremation and inhumation - represents the customs of the innovator/early uptake migrants for the former and the *epoikoi* for the latter.⁷²

While the presence of *epoikoi* at Istros seems eminently possible, other evidence may be adduced for this phenomenon at Apollonia. While we are prevented from constructing any useful proxy trajectory for migration there, due to the overlying modern settlement of Sozopol and the fact that no identifiable *chora* existed prior to the end of the sixth century (Baralis et al. 2019: 446), some literary evidence survives which may shine a light on

⁷¹ Generally known as *epoikoi*. See Casevitz (1985: 151-60) for attestations and discussion of the term which does not occur before the fifth century, and Avram (2012a) for examples from the Black Sea.

⁷² Lungu (2010: 57). While the recent analysis by Lieve Donnellan calls into question the intended audience of the funerary rites performed in the tumular necropolis, her network analysis does seem to suggest significant differences in practice between Istros and its near choraic necropoleis of Istria-Sat, Istria-Bent and Corbu de Jos (Donnellan 2021: 62 fig. 8, 64-66).

subsequent migration processes (Panayotova and Damyanov 2020: 253). There is the explicit statement of Aristotle that a period of stasis at Apollonia was the direct result of *epoikoi* migration (*Pol.* 5.1303a). While some scholars suggest that this occurred during the sixth century and Anaximander of Miletos was the leader of this group (Avram 2012a; Herda 2019a), others plausibly place it later in the middle of the following century (Panayotova and Damyanov 2020: 263). In any case, a model of migration knowledge diffusion accounts well for the further uptake of migration to and within northern Dobrudja, and it seems that the second half of the sixth century corresponds quite aptly to a theorised majority phase.

Migration trajectories for other parts of the western Pontic coast are more difficult to reconstruct. The presence of the modern city of Varna and the lack of evidence for settlement beyond the urban space at Odessos limits what can be said about its development (Damyanov 2004-2005: 294-95). Nevertheless, if we place these settlements within the context of the trajectory of migration to northern Dobrudja, Apollonia appears in the innovator/early uptake phase, Odessos in the early uptake, Tomis in the early majority and Dioysopolis in the late majority.

Migration to the lower Dniester region provides an interesting addendum to some of the issues that we have been discussing. The earliest settlement there is Nikonion, established between the second quarter and second half of the sixth century, in the early majority period. Scholars have suggested that the earliest migrants to Nikonion came from Istros, arguing from the large quantities of Istrian bronze coins found at the site (Sinitsyn 1966: 55; Okhotnikov 1990: 66) and, to a lesser extent, epigraphic allusions (Vinogradov 1999c). Nevertheless, the latter argument is based on an inscription which significantly postdates the Archaic period and may be better explained in a contemporary context (Avram 2012a: 210-11). Most of the coinage comes from between the fifth and fourth centuries and, though some may be as early as the sixth century (Mielczarek 2005; Okhotnikov 2006), this can only testify to the regional importance of Istros in the late Archaic and early Classical periods, rather than the origin of the Nikonion immigrants. Yet as we have already observed in the case of Orgame vis-à-vis Istros, there is no *a priori* reason to assume that it had in the establishment of Nikonion, particularly as a way station for migrants, rather than a metropolis. Historical-positivist and statist interpretations obscure this fuzzy intermediate role in favour of clear binary distinctions of metropolis and *apoikia* which demands either Istros or Miletos as the ultimate emigrant community.

Towards the end of the century, the lower Dniester region experienced a significant increase in immigration. Tyras was settled on the left bank of the estuary, while around the turn of the sixth to fifth centuries rural settlements and farmsteads appeared around Nikonion (Okhotnikov 2001). This extensive increase in settlement around the late majority phase (or for the Dniester region itself perhaps the early one), coincides with the majority phases observed in the urban and rural contexts of Istros and Northern Dobrudja and the putative beginnings of settlement in the *chora* of Apollonia. This may be taken to imply

an interconnection between the various phases of migration across the western Pontic seaboard. It points towards the existence of potentially uniform drivers for movement, to and within the region, not least the expansion of economic and political networks fostered by the establishment of coastal emigrant communities, inland agricultural and trading centres.

Looking more closely at the development of the migrant trajectory of Istros during the Archaic period, a number of observations can be made.73 While only limited areas of housing were uncovered, if we are to assume that this represents the temporal density of domestic structures in other areas, it is clear that the innovator phase of migration probably lasted for around the first 35-50 years, a period also categorised by the use of the earliest bothroi in the sacred area and possible the construction of the "oikos" building there. By the middle of the sixth century, alongside the first monumental kurgan burials in the necropolis, we see the beginning of the early-uptake stage while the earlymajority phase appears to coincide with further monumental funerary architecture related to the earlier burials, as well as the development of the temple of Aphrodite in the sacred zone. This suggests that increasing migration, rather than internal demographic growth, which played little role in increasing the population for almost half a century; coincided with greater social stratification and the establishment of communal spaces and complex social relations. Coinciding with the peak of the trajectory, we also see the first

⁷³ See the following chapters for details and references to the material discussed here.

evidence for local craft production and the construction of a defensive wall encircling the plateau.

When we look at the development of other poleis in the region some differences and similarities may be noted. At Orgame, despite evidence for complex social hierarchies during the innovator period, the migration trajectory appears to tail off during the innovator or early-uptake phase, possibly because of Istros' concurrent development. At Nikonion, on the other hand, the innovator phase seems to be characterised by limited ceramic remains, while the early uptake/majority phase sees the construction of dwellings and religious facilities in the third quarter of the sixth century, somewhat later than at Istros. Apollonia presents a rather different case. Religious and craft activities occurred during a more complex innovator phase there, while the early uptake/majority phases are notable for the development of even more extensive sacred architecture and craft facilities. Yet unlike Nikonion, Istros or Orgame, Apollonia did not develop an extensive *chora* prior to the fifth century, possibly due to the relative proximity of established local settlements.

II.1.4 Northern Coast of the Black Sea

II.1.4.1 Berezan

The Berezan settlement is located at the mouth of the eponymous river on a small island, which may have been a peninsula in antiquity (Nazarov 1997). The dating of the first settlement on Berezan remains controversial.⁷⁴ A fragment of a *skyphos*, found in a building from the second half of the seventh century, which may have come from Miletos, is dated using the chronology developed by Udo Schlotzhauer and Michael Kerschner (2005) to between the second and beginning of the third quarters of the sixth century, that is 675-650 (Bujskikh 2016). More recently, Alla Bujskikh (2018) has identified further evidence of pottery which she dates to c. 650-630 from the material discovered by V.V. Lapin at Berezan including Milesian *oenochoae* and kraters. This material is dated through analogous material from Miletos, though only one cited piece there comes from a contemporary datable layer.⁷⁵ This dating also appears to be supported by the literary record, where Eusebius of Caesarea gives a foundation date of 647 for Borysthenes (*Chron.* 95b Helm).⁷⁶

⁷⁴ The earliest material alleged to have come from Berezan is an eight century *hydriskos* acquired from a private collector at the beginning of the 20th century. It is now generally accepted that this piece, with its uncertain provenance, cannot be used to corroborate such an early date for the settlement (Boardman 1991, 1998; Tsetskhladze 1994a: 112). Much of the argumentation on either side is bound up in questions over the reliability of the archaeology versus the literary record. For an attempt to reconcile these traditions see Vinogradov, Domanskij, and Marcenko (1990)

⁷⁵ Käufler (2004: 208 no. 223). Kaufler dates this piece, the shoulder of a jug, to 660-645/0. The other two pieces Bujskikh cites from his catalogue (nos. 223 and 224) come from later contexts, though are dated to the same era on stylistic grounds.

⁷⁶ Tsetskhladze (2012a: 295) suggests that this has had an undue influence on the positing of a higher chronology.

Nevertheless, such an early date has not yet found wide acceptance. Many scholars eschew the higher chronology and settle on a date around 630 for the earliest fragments from Berezan (Tsetskhladze 2019: 12; Posamentir 2010: 67; Solovyov 1999: 29). Their arguments are, in general, based on a preference for the lower dating scheme of Cook and Dupont (1998), rather than any disagreement with the relative chronology of the material. Furthermore, as Gocha Tsetskhladze has observed,

"All the chronological ranges given ... in some degree or other, fall within the last third of the 7th century. In short, it is entirely reasonable to assign all our examples to this latter, single period, rather than looking to over-refine the differences within a very limited body of evidence." (Tsetskhladze 2012a: 334)

An even stronger argument for rejecting this early date is the simple observation that we have no evidence of a habitation layer until the end of the seventh century at the very earliest (Chistov et al. 2020). Taking the chronologies of Käufler, or Kerschner and Schlotzhauer, this leaves a period of almost half a century where very little seems to be happening. While there are potential explanations for this situation, i.e., a temporary settlement, or trading post, given the extent of excavations at the site, we prefer the lower dating schema, barring the appearance of new evidence for some earlier activity beyond a handful of pottery sherds. Around the turn of the seventh to sixth centuries, the first traces of settlement begin to appear on Berezan, including small semi-dugout structures, waste and storage pits, and possibly the earliest burials in the necropolis (Solovyov 2007b: 532). By the 540's the urban character of the Berezan settlement begins to change, with the establishment of a quasi-orthogonal street system and relatively equally sized insulae (Chistov and Krutilov 2014: 220; Chistov 2015a: 403; Bujskikh and Chistov 2018: 11; Chistov 2021). Despite the site suffering a destruction event around the last third of the sixth century (Chistov et al. 2020: 61), the layout of the streets remained the same, while above ground houses began to be constructed (Chistov et al. 2020: 127-51).

Towards the end of the sixth century, a series of public structures were built in Sector O (Western) (Chistov 2012: 405-11; Chistov and Krutilov 2014: 211; Bujskikh and Chistov 2018: 14-16; Chistov 2015a, 2019a, 2021). These included a pair of double roomed buildings with porticos along their southern edges,⁷⁷ which may have been *hestiatoria* for public dining on social, political and religious occasions by a limited group of participants — the elite of the

⁷⁷ The first building consists of two rooms of unequal size with no apparent internal connection, the largest being to the west (Chistov and Krutilov 2014: 212). The southern side of the building was covered by a stoa, though evidence for the column bases was not identifiable (Chistov and Krutilov 2014: 212). A pair of lamps were uncovered in the inner courtyard with analogies at Miletos and Pantikapaion, though somewhat earlier than the Berezan examples (Bujskikh and Chistov 2018: 17; Chistov 2015a: 411) The second structure, around 5.4 m west of the first sported an almost identical layout, though there the bases of the wooden posts for the southern portico were found in situ.

community (Chistov and Krutilov 2014: 213; Bujskikh and Chistov 2018: 14; Chistov 2012). Nevertheless, they do not appear to have been able to accommodate *klinai*, and their contents do not point towards any particular purpose (Chistov 2012). This centre also contained a number of other structures which may indicate communal practices, including an altar surrounded by a small semi-circular wall (Chistov 2019a: 97-100; 2021), and a house with an apse excavated by Lapin in the 1960's (Chistov and Krutilov 2014: 210; Chistov 2015a: 403-04; Bujskikh and Chistov 2018: 14). In addition, the recent find of a pair of late sixth century burials, not far from these structures, may be interpreted as a *heroon*, given their unique location (Chistov 2021: 118).

II.1.4.2 Olbia

Olbia is located on the left bank of the Hypanis river (m. Bug) just south of the village of Parutino. Recent reassessment of the early ceramics suggest that it was established between 620/10 - 590 (Bujskikh 2013a: 223; 2013b), a date which is now accepted by most scholars (Fornasier et al. 2017: 21; Tsetskhladze 2019: 3). The early settlement consisted of small dugout structures in the southern and central parts of the upper town (Kryzhitsky and Rusyaeva 1980; Vinogradov 1989: 46; Kryzhitskii 1993: 88, fig. 51; Vinogradov and Kryzhitsky 1995: 28). Around the first quarter of the sixth century,⁷⁸ a handful of sites in the Olbian *chora* began to be settled at Kaborga 1, Bol'shaya

⁷⁸ For this new dating see Bujskikh and Bujskikh (2010: esp. table 1). For the Olbian chora during the Archaic period see Kryzhitsky et al. (1989); Kryzhitsky, Bujskikh, and Otreshko (1990); Bylkova (1996); Kryzhitsky (2000, 2006b).

Chernomorka 2, Beikush, Kutsurub 1 (Marchenko and Domanskij 1999), Shirokaya Balka 1 (Malyshev 2004), Yagorlyk and Vyktorovka 1 (Bondarenko 2018a, 2018b; Bondarenko and Smirnov 2013).

By the second quarter of the sixth century, the first religious rites were conducted in the western temenos (Rusyaeva 2006b: 7-15; 1995, 2010), while around 550, the earliest burials in the Olbian necropoleis⁷⁹ can be identified, including a number of *enchytrismoi* inhumations (Skudnova 1988; Papanova 2006: 65-67; Peterson 2010: 62-65). By the middle of the sixth century, a large throughfare had been constructed through the middle of the site running past the western temenos (Vinogradov and Kryzhitsky 1995: 28) where, around the third quarter of the sixth century, the earliest temples were constructed (Rusyaeva 2010: 69). Simultaneously, the city had begun to expand to the west where a series of dugout structures has recently been identified alongside the "weststrasse", a second north-south road running along the edge of the plateau (Fornasier et al. 2017; Fornasier, Bujskikh, and Kuz'mishchev 2017).

Towards the end of the second half of the sixth century, the urban area experienced significant expansion including houses and a second temenos to the east of the main throughfare (Levi 1964: 6-9; Karasev 1964; Rusyaeva 2010). Immediately south of this area, an agora seems to have been established around the same time, though the earliest structures there do not seem to have

⁷⁹ In addition to the well know northern one, a new necropolis in the "Orient" section of the sites was identified in excavations between 2010 and 2018 see Ivchenko (2019).

been constructed until the end of the sixth century (Levi 1956: 42-43, 48, 50; 1964: 5-6, 9-16; Vinogradov and Kryzhitsky 1995: 29).

II.1.4.3 Pantikapaion

Pantikapaion, the future western capital of the Bosporan kingdom, was located on Mount Mithridates, in the southern part of the modern city of Kerch. Prior to the arrival of the first Milesian migrants, the area to the west of the future polis was inhabited from the fourth millennium (Kulikov et al. 2012). By the Early Iron age, a settlement existed on the saddle between Dolgaya Skala and Pyramidal'naya, at the western end of the Mithridates ridge, evidenced by the identification of ceramics ascribed to the Kizil-Koba culture (Kulikov et al. 2012: 257).

The first Milesian migrants seem to have arrived at the site around 615 (Tolstikov 2017a: 70; 2017b: 15, 42). Early pottery, from the first construction layer located on the upper plateau of the first 'chair' of Mount Mithridates, confirms this dating. Notable amongst the earliest finds of amphorae is the neck of an unlocated specimen with analogies at Histria, Abdera and in Etruria (Astashova and Lomatadze 2017: 92 no. 208). In addition, fragments of amphorae from Chios (Blavatsky 1962: 10, fig. 5; Astashova and Lomatadze 2017: 55-56, 65-69, nos. 1, 3-8), Klazomenae (Astashova and Lomatadze 2017: 56, 69-75, nos. 37-46, 56, 57, 59-61), Miletos (Astashova and Lomatadze 2017: 56-57, 75-79, nos. 77-79, 88-99, 101-04), Lesbos (Astashova and Lomatadze 2017: 57, 79-80, nos. 109, 10, 16-23) and Samos (Astashova and Lomatadze

2017: 57-58, 86-88, nos. 156-72); all dated between the last quarter to the end of the seventh and the beginning of the sixth centuries, have been identified. Analogies for the majority of these vessels can be found at Histria, Berezan and Smyrna (Astashova and Lomatadze 2017: 65-88).

A handful of pieces of North Ionian and Aeolian pottery, from the end of the seventh to the beginning of the sixth century, have also been identified (Tugusheva and Tolstikov 2015: 94-95; Tugusheva 2015, 2017; Tolstikov, Astashova, and Samar 2017). These include a pair of bird bowls (Tolstikov 2017b: 13; Tolstikov, Astashova, and Samar 2017: 559; Tugusheva 2017: 94, 111, nos. 1, 2), seven north Ionian *dinoi* (Tugusheva and Tolstikov 2015: 352, 67; Tolstikov 2017b: 13; Tugusheva 2017: 111-12, nos. 4-10) and one Aeolian example from the London group, found during the excavations of the Old Museum in 1945 (Tugusheva and Tolstikov 2015: 352; Tolstikov, Astashova, and Samar 2017: 559; Tugusheva 2017: 111, no. 3). In addition, fragments of a North Ionian oenochoe also date from this period (Tugusheva 2017: 122, no. 57). Other fragments from this time include Attic (Samar 2017a: 165-98; Tolstikov, Astashova, and Samar 2017: 558; Agafonov and Samar 2021: 512-15) and Corinthian wares (Samar and Astashova 2015; Tolstikov, Astashova, and Samar 2017: 559; Samar 2017b: 151-60) as well as a number of pieces of Anatolian pottery which have aroused great interest amongst researchers.

Archaeological evidence indicates that, during the first construction (c. 615-550), the acropolis was delineated by the construction of a defensive wall (Tolstikov 2017b: 36). A section of this edifice, designated "masonry 44", has

been traced in a northeast-southeast direction. It was made of irregular limestone blocks with a mudbrick superstructure around 2.3m thick, resulting in a potential height of 8m. The course of the wall seems to have taken into account the presence of rocky outcrops and used these to further bolster the early polis' defences (Tolstikov 2015a: 267; 2017a: 72). The earliest building, D-3 found in 2014, was a rectangular structure covering an area around 19.2 m² identified through the remains of masonry 43, 45 and 47 – the limestone socles supporting its walls – and was attached to the defensive wall sharing masonry 44 as part of its construction (Tolstikov 2015a: 267; 2017b: 14-15). In the first quarter of the sixth century, habitation seems to have spread to the western plateau, confirmed by significant quantities of pottery found in the works in the central excavation zone (Tolstikov 1989: 72-73; 1992: 59)

The first construction period ended with a conflagration which can be dated to the middle of the sixth century, based on pottery finds in the levelling layer (Tolstikov and Muratova 2013: 183; Tolstikov 2015a: 267; 2017a: 71; 2017b: 15). The destruction layer, up to 1.4m thick in some places, contained evidence of military action, including a numerous Skythian type arrowheads which showed evidence of having impacted a solid surface, part of an iron Skythian *akinake* sword, bronze armour scales and human remains (Tolstikov 2017a: 71; 2017b: 14). The earliest construction following this fire, building D-2, was in a poor state of preservation, with only the northern ("masonry 41b") and eastern ("masonry 41a") walls identified (Tolstikov 2017b: 15). In general, dugout architecture seems to characterise the domestic architecture of

Pantikapaion in the second construction period (c. 550-530), while an early temenos may have been constructed within the confines of the acropolis. This period also sees the beginning of metallurgical activities in the northern part of the settlement.

The third construction period (c. 525-510) is marked by the construction of two buildings cutting through previous remains: D-1 and D-7. Both were occupied until the end of the final Archaic construction period, around the beginning of the second quarter of the fifth century (Tolstikov 2017a: 72; 2017b: 20-21). This layer, dated between c. 520 and 480, culminated in a destruction event. Nevertheless, prior to this, it saw a significant expansion of the settlement in the new esplanade sector, including numerous domestic dwellings, workshops, and a road system (Marchenko 1979: 164-73; Tolstikov 1992: 59; 2017b: 42). The construction of a number of monumental buildings was aligned with a new street system in the central excavation zone on the western plateau of the first chair of Mt. Mithridates (Tolstikov 1992: 63-64).

This latter area, part of the Pantikapaion acropolis, developed into a public centre around this time. The earliest building here was a Tholos type structure with an internal diameter of around 15 m, a circumference of ca 47 m and a total area of ca 177 m². Its circular superstructure consisted of mud bricks. An adobe floor was found in situ, with fragments of Chiot, Klazomenian, Lesbian and Aeolian amphorae as well as a red figure *kylix* which can be reliably dated between the final quarter of the sixth and the beginning of the fifth

centuries (Tolstikov 1992: 64-71; 2001: 393; 2017b: 29; Tolstikov, Zhuravlev, and Lomatadze 2002: 45; 2003: 309; Kovalenko and Tolstikov 2013: 191).

Some 7m south of this structure, on the far side of the adjacent street, a building labelled MK I (multiroom complex I) was identified. It seems to have been constructed at the same time as the tholos. It consisted of three rooms with an internal L-shaped courtyard covering an area of around 120 m² (Tolstikov 1992: 63; 2001: 393-96; Tolstikov, Zhuravlev, and Lomatadze 2002: 46). Between 525 and 510, another three buildings were added to the structures in the central zone, to the north of the tholos. One of these, MK II/A, consisted of three rooms with an area of around 130 m² (Tolstikov 2001: 397-98; Tolstikov, Zhuravlev, and Lomatadze 2003: 310-15). Amphorae, from around the third quarter of the sixth to the turn of the fifth centuries, were found within the structure (Tolstikov, Zhuravlev, and Lomatadze 2003: 311). The others, MK III and MK IV, both offset from this structure due to the topography of the area, were added in the final decade of the sixth century (Tolstikov, Zhuravlev, and Lomatadze 2003: 317-18; Tolstikov 2017b: 29).

In addition to dating the complexes of the central excavation zone, ceramic finds also shed some light on their purpose. As well as numerous fragments of Chiot, Aeolian, Klazomenian and Attic Black Figure amphorae,⁸⁰

⁸⁰ On the finds of Athenian Black Figure amphorae see (Tolstikov, Zhuravlev, and Lomatadze 2002: 46-47 nos. 1-4) and (Kovalenko and Tolstikov 2013: 191-94, nos. 1-4, 15). For Athenian pottery in general see Samar (2017a); Agafonov and Samar (2021).

the buildings in the central excavation zone complex also contained examples of Attic Black Figure *kraters*, *olpes*, *skyphoi* and *kylikes* (Tolstikov, Zhuravlev, and Lomatadze 2002: 46-47 nos. 5-14; Kovalenko and Tolstikov 2013: 191-94 nos. 5-15) as well as black glazed *kylikes*, plates, salt shakers and Ionian lamps from the turn of the sixth to fifth centuries (Tolstikov, Zhuravlev, and Lomatadze 2003: 317-18). Furthermore, in the courtyard of MK I, 80 fragments of a large richly decorated ceramic bathtub were identified (Tolstikov 2001: 48; Tolstikov, Zhuravlev, and Lomatadze 2002: 396). A considerable number of the Black Figure pieces had images alluding to Dionysiac rites. These included Dionysus himself, maenads, and satyrs. In addition to the predominance of shapes associated with drinking practices, this strongly implies ritual wine consumption within the complex (Tolstikov 2001: 47; Tolstikov, Zhuravlev, and Lomatadze 2003: 719; Kovalenko and Tolstikov 2013: 194). In the words of Agafonov and Samar, "these items are undoubtedly tableware for drinking wine while enjoying a symposion" (2021: 515).

If the tholos was exclusively a dining or symposiastic space then we could expect it to accommodate somewhere between 20 and 25 *klinai*,⁸¹ or between 40 and 70 seated diners,⁸² depending on the number of entrances and layout of

⁸¹ For estimates and reconstructions of the *klinai* layout for the slightly larger Tholos in the Athenian agora see Miller (1978: 55-62); Travlos (1980: 553-61)

⁸² See Camp (2010: 49-50) for the suggestion that the Athenian tholos accommodated seated diners. N.B. This suggestion is based on a need to accommodate all 50 Athenian *prytaneis* in

the interior furnishings. Comparison with the tholos in the Athenian agora, another mudbrick structure with building annexes, indicate a similar ceramic assemblage.⁸³ The problem with making these comparisons, which are not infrequent in the literature, is that they take the Athenian example as primary and use it to reconstruct the Pantikapaion complex (e.g. Tolstikov 1992: 67; 2017b: 29; Tolstikov, Zhuravlev, and Lomatadze 2002: 49). Yet the Tholos and multi-chamber buildings of Pantikapaion were constructed around half a century prior to the Athenian examples. Therefore, despite the more limited evidence at Pantikapaion, we should be cautious in assigning labels such as *bouleutrion* or *prytaneion* to it.⁸⁴ Nevertheless, undoubtedly the complex had a public function which involved communal eating and drinking, probably amongst the Pantikapaion elite.

⁸⁴ As has been pointed out, the Athenian Tholos was not the same structure as the prytaneion, e.g. Steiner (2018: 208-09). The latter remains undiscovered emphasising further need for caution in the assignation of the Pantikapaion building which has not always been followed, cf. Tolstikov (1992: 66) and Tolstikov, Zhuravlev, and Lomatadze (2003: 308-09), who imply that the discovery of a fragment of a Panathenaic vase may indicate that its winner was entitled to dine there, a situation vaguely analogous to the benefits received at the Athenian prytaneion by Panhellenic victors (*IG* I² 77 = *SEG* 10.40).

the space. Cf. Steiner (2018: 213-15) for a balanced, but ultimately (and rightly) inconclusive discussion.

⁸³ Steiner (2018: 215-23) Like the Pantikapaion tholos, deposit G 12:22 just outside the Athenian building contained *lekanes*, amphorae, *olpes*, *askoi* and salt cellars.

In the courtyard of building MK-I, excavations uncovered numerous fragments belonging to a large ceramic bathtub richly adorned with Lesbian *kymation*, palmettes, lotus-buds, pearls and bigas (Kovalenko and Tolstikov 2013: 194). The location and decoration of this object imply that it was used for ritual cleansing or for a more utilitarian function, such as bathing prior to participation in the consumption of food and alcohol. However, the lack of parallels and analogous finds elsewhere make interpretation difficult.⁸⁵

The destruction of this layer at the end of the first quarter of the fifth century is widely thought to have been a result of military activity. In MK III a cache of twenty arrowheads was found, including one embedded in the structure itself and another two in the collapsed mudbrick wall (Tolstikov, Zhuravlev, and Lomatadze 2003: 323-24). Furthermore, the overlying stratigraphic layer, construction period V, contained a ritualised horse burial. This is interpretated as a ritual cementing a truce between the inhabitants of Pantikapaion and their Skythian neighbours,⁸⁶ a commemoration of the

⁸⁵ Tolstikov (1992: 69-70; 2017a: 34); Kovalenko and Tolstikov (2013: 194-95). Analogies have been observed with terracottas from Larisa, while a fragment of a bath from Klazomenae (Cevizoğlu 2004: 192-3) has led to Tolstikov (2017b: 30) suggesting that the Pantikapaion example was manufactured there. Baths in private domestic settings are not uncommon in Archaic western Anatolia (Cook 1959). For baths and bathing in the Archaic period in general see Truemper (2010: 528-532)

⁸⁶ Twardecki (2014: 38) states that this is the opinion offered by Tolstikov (2011), yet the latter actually suggests that it was a "magic ritual" ("магического ритуала") designed to "counter the

successful defence of the city, or a protective ritual to prevent further attacks (Tolstikov 2011: 38; Tolstikov and Muratova 2013: 188-89; Tolstikov 2017b: 28).

II.1.4.4 Taganrog

In the 1930's significant quantities of Greek painted ceramics were observed washing up on the beach in the modern city of Taganrog, located on a bay⁸⁷ at the north-eastern end of the sea of Azov (ancient Lake Maeotis) facing the Don delta. A handful of this material may be dated as early as the middle to the third quarter of the seventh century. This includes two fragments of Klazomenian amphorae, a fragment of an Athenian SOS amphora, and Ionian *kylikes*, as well as some stucco ware found in the phase 1 layer (Kopylov 1996: 329; 2000: 3; 2007: 66-67; Dally et al. 2012: 174, 82-83). Nevertheless, the bulk of the material that has appeared dates from the end of the seventh century. This includes jugs, a variety of bowls, and Milesian and Chiot amphorae from the third quarter of the sixth century (Kopylov 1996: 332; 2000:4; 2007: 67; 2011: 226-27; Dally et al. 2006: 276; Dally et al. 2009: 73; Dally et al. 2012: 276:180-82). All of this implies that any putative immigrant settlement at Taganrog was probably established between the third quarter and the end of the seventh century, making it the earliest in the region.

threat of groups of nomads" ("противодействовать угрозе со стороны номадов") (Tolstikov 2011: 38).

⁸⁷ According to Kopylov (2018: 66) the bay did not exist in antiquity.

Attempts to identify the area of settlement through excavation, along the shore between Pushkinskaya gardens and Solnechnyj Plaza in 2004, uncovered the remains of a pavement made of small pebbles and covered with amphorae and pottery fragments including Milesian, Lesbian, Klazomenaean and stucco wares dating to the sixth century (Dally et al. 2009: 80-82; Dally et al. 2012: 174-76). These excavations also uncovered fragments of south Ionian and Milesian bowls, as well as a piece which has been tentatively identified as belonging to a Lydion (Dally et al. 2006: 280). The excavators have speculated that the study area may have lain on the periphery of the settlement. Unfortunately, the centre of the site may have been destroyed during the planting of Pushkinskaya gardens in the 1970's (Dally et al. 2009:74, 102).

The nature of the Taganrog settlement and its ancient name have elicited much debate since its initial identification. Herodotus mentions an emporion called Kremnoi, described as being on the border of the territories of the free (or nomad) and Royal Skythians (4.20.1, 110.2). Many researchers have suggested that this can be identified with the remains at Taganrog⁸⁸ though other locations have been suggested.⁸⁹ Nevertheless, some scholars maintain

⁸⁸ Kopylov (1996, 2000, 2007, 2011, 2018); Braund (2005b: 100); Solovyov (2007a); Braund (2008: 11-12); Ivantchik (2017); Rusakov and Rusakova (2021). See Kothe (1969: 23-24 n. 3) and Boltryk and Fialko (1987: 41-42 n. 4-40) for earlier references.

⁸⁹ Pantikapaion: (Hind 1997: 112); Stary Krym: (Westberg 1904: 183); Genichesk area: (Minns 1913: 21; Zhebelev 1953: 330); Nogaisk: (Neumann 1855: 54) Neumann 1855: 54; Don delta: (Scholl 2015: 59); Botijeve: (Boltryk and Fialko 1987); mouth of the Molochna river: (Maslennikov 1995) Maslennikov 1995.

that Kremnoi remains unidentified (Avram et. al. 2004: 930; Tsetskhladze 2018: 1-2). Herodotus description is unhelpful as it seems to imply that the land of the Royal Skythians stretched deep into Crimea. He notes that Kremnoi was on lake Maeotis (m. Sea of Azov). If Kremnoi was, as he says, in the land of the free/nomadic Skythians (4.110.2) but also marked the border with the Royal Skythians (4.20.1), the boundaries of whose territories are given as the river Gerrus (m. Molochna), Taurike to the south, the ditch dug by the children of the blinded slaves to the east, but also stretched to the mouth of the Tanais, then it is extremely difficult to locate. However, it seems quite possible that the mouth of the Tanais and Kremnoi could represent the same area. As Kopylov has pointed out, if the settlement ceased to exist before Herodotus time (the late fifth century) then he may have confused these two locations (Kopylov 2000: 9; 2007: 66, 68; Dally et al. 2009: 102). Furthermore, if Herodotus confused the Gerrus with its tributaries, the modern Yushanly, Kuroshany or Tokmach; then he would be describing the northern rather than western reach of the Royal Skythian territory, thus opening up the possibility for it to spread into the northern Crimea. Indeed, the evidence, as far as it stands, strongly implies an eastern location for Kremnoi.

The word Kremnoi itself, meaning cliffs or bluff, does little to help us as this feature is found along much of the north Maeotian coast. Though, as David Braund has pointed out, it certainly does not exclude the Taganrog settlement (Braund 2008: 11-12). Overall, in the absence of any significant Greek remains between the mouth of the Dnieper and the mouth of the Don, Taganrog seems a likely enough identification for Kremnoi (Kopylov 2018: 67). Herodotus description of Kremnoi as an *emporion* has elicited much discussion (e.g. Hind 1997), while recent excavations have suggested links with the Skythian tribes of the lower Kuban and forest-steppe regions in the sixth century (Dally et al. 2009; cf. Vinogradov 1999a: 9; Kopylov 2000). Additionally, the unpublished P.Oxy. inv. 112/54, provisionally dated to the late Archaic/early Classical period, may mention the death of a Milesian aristocrat somewhere on the Tanais river.⁹⁰ This corroborates the conclusions drawn by Yu. A. Vinogradov from an ostracon found in 1989 with inscribed symposiatic verses in the Ionian dialect. The quality of the poetry, he argued, implied a "high level of literary culture" congruent with a thriving Greek settlement (Vinogradov 2000: 18). This document, along with the presence of a sizable number of pieces of Milesian pottery, has led Kopylov to conclude that the Taganrog settlement was established by Milesian immigrants (2018: 67). Overall, barring the discovery of any extensive remains from the late seventh and early sixth centuries, the place of the Taganrog settlement in wider Milesian migration is difficult to ascertain. It seems that, at least for a short period of time, it was a flourishing settlement geared towards trade with the Skythian peoples of the Kuban valley and north Caucasus.

⁹⁰ *Our Boys Lost in Fragments. Three New Texts of Greek Literature*. Presentation by Marco Perale on 28/03/2017 at the University of Liverpool.

<<<u>https://www.liverpool.ac.uk/events/event/?eventid=84477</u>>> [Last accessed 27/01/2022]

II.1.4.5 Kepoi

Kepoi is located on the Taman peninsula in the northern part of the modern village of Sennoy. The earliest material there, including Vallet-Villard B1 cups (Kuznetsov 1992: 34), a fragment of a "Rhodian-Ionian" amphora or oenochoe, fragments of Chiot amphora, Samian wares and Ionian kylikes may date back as far as the beginning of the sixth century (Nikolaeva 1977: 150-51). The problem with this dating is that no layer prior to the third quarter of the sixth century, when the site was levelled following a destruction, is identifiable (Kuznetsov 1991b: 37; 1992: 32). All that remains prior to this event are around four dozen Archaic pits some of which contain fragments of the same vessels which indicates their infilling occurred simultaneously (Kuznetsov 1991b: 37; 1992: 32; 2001a). The largest number of fragments in these pits, including Vallet-Villard B2 and 3 cups from 580-530, late Wild Goat kraters, amphorae and *oenochoe*; Siana cups, and Chiot, Samian and Klazomenian amphorae, strongly implies the existence of a settlement by the middle of the sixth century at the latest, though more likely by the second quarter of that century (Sokolsky 1961, 1963; Nikolaeva 1977: 150-51; Kuznetsov 1991a: 37-39; 1992: 34-42). It has been suggested that the destruction level and rebuilding, as well as some notable differences between the mortuary and material records between Kepoi and other Milesian migrant settlements, may have been due to the establishment of Phanagoria around 540 (Kuznetsov 1991a: 37; 1992: 43; Hind 2019: 287). By the end of the sixth century, a temple for Aphrodite could also be found there and, indeed, it may have been the 'Gardens' of Aphrodite which

lent the site its name (Hind 2019: 289) suggesting the importance of this deity from an even earlier time.

II.1.4.6 Nymphaion

The site of Nymphaion is located on the promontory of Kara-Burun near the modern village of Eltigen some 14 km south of Pantikapaion. The circumstances surrounding the arrival of the first innovator migrants at Nymphaion have elicited much debate. A series of 17 pits in sector B in the south-eastern part of the site containing stucco ceramics, the bones of domestic animals, and seeds; were once thought to represent the remains of the houses of a pre-Greek settlement in the Skythian or Kizil-Koba cultural milieu (Khudyak 1962b: 13). Further analysis, however, has conclusively identified these as overlapping domestic refuse pits, in use from no later than the middle of the sixth century (Butyagin 1997: 61; Sokolova 2010: 481; Chistov 2017: 137 cf. Chistov 1998: 29.) Later work identified the earliest dugout structures at the site in sector G. These date to the first half of the sixth century and contained significant quantities of stucco ware, as well as East Greek pottery and terracotta statuettes. These dwellings have also been placed in a local context, though not necessarily pre-dating the arrival of the first maritime migrants (Butyagin 1997: 67; Sokolova 2003: 766).

The date of the arrival of the first migrants and their cultural identity has likewise been the subject of considerable discussion. Based on the material from the site, early scholars suggested the Nymphaion had been established by migrants from Samos (Gaidukevich, Levi, and Prushevskaya 1941: 175; Khudyak 1962b: 233). This notion was disavowed in 1983 with the discovery of an inscription naming three months of Nymphaion's calendar as Taureon, Thargalion and Kalamaion (Grach 1984). At Samos, the month which covers our late June to early July was called Pelusion (Samuel 1972). Nymphaion followed the Milesian (and indeed wider Bosporan) tradition of identifying this month as Kalamaion (Ferraru 2015). Given that Nymphaion actively resisted incorporation into the Bosporan Kingdom and seems to have had strained relations with Pantikapaion for much of its history (Chistov 1998), there seems little reason to suggest that this calendar was an external imposition. Thus, in the absence of further evidence, we should regard the innovator migrants at the site as probably coming from Miletos (Sokolova 2002: 81).

As for the dating of their arrival, there is a tendency to place it sometime between 580 and 560 following Kuznetsov (1991: 33), though some scholars question this (cf. Avram et. al. 2004: 948), while others opt more generally for some time in the first half of the sixth century (i.e. Khudyk 1952: 233; Sokolova 2002: 81). The earliest artifacts from the site span much of this period. There is an Egyptian scarab dated to the end of the seventh century (Khudyak 1962: 17 fig. 5.2). Nevertheless, given the nature of this item, there is no reason to assume it could not have been deposited significantly later than this time. The earliest identifiable Greek pottery at Nymphaion consists of fragments of a Chian amphorae from the beginning of the sixth century, a pair of Attic Black Figure vessels decorated with a siren and bird from the second quarter of the sixth century (Khudyk 1962: 17), a fragment of a north Ionian krater displaying a sphinx from the first to second quarters of the sixth century,⁹¹ fragments of an Attic vessel with horse's head (Khudyk 1962: 17 fig. 5.1), a krater from the Lydos workshop from the first third of the century (Skudnova 1956; Brashinsky 1963: 21) and east Greek wares, including Klazomenian amphorae and fikellura style vessels from around 575-500 (Khudyk 1952: 249 fig. 12.1; Khudyk 1961: 18; Butyagin 1997: 61). In general, there is a large quantity of pottery from throughout the first half of the sixth century (Khudyak 1952: 246-52) and, given that the earliest dugouts can be dated prior to the middle of the century (Butyagin 1997: 64), it seems reasonable enough to place the arrival of the first permanent settlers sometime around 575.

Between the arrival of the first migrants at this time and the middle of the century, the core of the settlement seems to have focused on sector G. By the second half of the sixth century, there were a series of dugout houses in this space as well as the development of the settlement's religious centre. Towards the end of the century, the settlement began to expand. There is evidence for above ground housing in sectors B-C and G, and a regularised street plan aligned to the cardinal points (Chistov 2017: 137, 156). In sector M to the southwest, the only Archaic remains thus far identified, consist of a household waste pit with the remains of a Klazomenian amphorae from the turn of the century. A second Klazomenian amphorae was found in later excavations in the

⁹¹ Khudyk 1962: 17 fig. 5.3. While it is identified as Rhodian ware from the second quarter of the sixth century, it bears a striking resemblance to a fragment of north Ionian pottery held in the British Museum dated 600-575 (BM 1886,0401.1091).

same area (Sokolova 2015: 122). The necropolis of Nymphaion, situated to the north of the inhabited area, has evidence for a small number of burials from the third quarter of the sixth century, increasing towards the turn of the fifth century (Grach 1999; Peterson 2010: 208-12, 29-35).

II.1.4.7 Hermonassa

Hermonassa is generally thought to be located on the northern coast of the modern town of Taman.⁹² The earliest material identified at the site consists of *kylikes*, cups, bowls and fragments of an amphora and *oenochoe* in east Greek styles, particularly north Ionian Wild Goat style (termed by the excavators "Rhodian-Ionian"). These all date to the first half of the sixth century, with the oldest pieces probably manufactured around the second quarter of that century (Zeest 1961, 1974; Korovina 2002: 31; Finogenova 2003: 1012, 15). No architectural features from this period have been identified with the exception of two pits of uncertain purpose. The first, (no. 111) was 0.9 m deep with a diameter of 1 m while the second (112a) was 0.95 m deep with a diameter of 1.7 m (Zeest 1961: 33; Korovina 2002: 31). It has been suggested

⁹² The site is named in several texts, the earliest of which is the the work of Hekataious of Miletos at the turn of the sixth century (*BNJ* 1 F 208), while the Hellenistic Pseudo-Skymnus also mentions the site (F17b Marcotte). The rest date from the imperial and late antique periods (e.g.; Strab. 11.2.10; Pomp. 1.112; Pl. *NH*. 6.6.1; Steph. Byz. *s.v.*; Ptol. *Geog.* 5.9.8; Amm. Macr. 22.8.30). Since the discovery of the "Kuban Bosporus", some scholars have questioned whether Hermonassa could be located at m. Taman (cf. Dan et al. 2020: 701), though, until the evidence for this supposition is presented in detail, there is little reason to alter our identification (Tsetskhladze 2007; Zavoykin 2017).

that this earliest period represents an *emporion* phase in the life of the settlement (Finogenova 2010: 511), yet the ceramic evidence seems to point towards consumption rather than trade.

By the middle to the second half of the sixth century, further remains appear including masonry and a third pit (no. 107) containing, amongst other materials, red-banded Ionian bowls, a chian "fat-belly" amphora, as well as some fragments of Attic Black Figure and Corinthian wares (Zeest 1961: 54; Korovina 2002: 32). Around the turn of the sixth to fifth centuries, there is a notable expansion of the site with the appearance of the earliest attested houses as well as a granary pit still containing grain (Zeest 1961: 53, 55; Finogenova 2003: 1016; Bondar, Markova, and Ustayeva 2010: 16). Attic, Corinthian and especially Klazomenian ceramics, Chiot and Proto-Thasian amphorae, terracotta statuettes and Dolphin coins all appear at this time (Sidorova 1987; Korovina 2002: 33-45; Finogenova 2003: 1016-17).

II.1.4.8 Myrmekion

Myrmekion is located across the bay of Kerch from Panikapaion on Cape Quarantine. In antiquity, the early settlement was located directly on the cape while a nearby stream provided fresh drinking water for the inhabitants (Vinogradov, Butyagin, and Vakhtina 2003: 803; Butyagin 2007a: 22; 2017: 91). There may have been a Bronze Age settlement at the site, indicated by the discovery of a burial and some scattered material (Butyagin 2015: 131). There is extensive debate as to whether, given its extremely close proximity to Pantikapaion, the earliest migrants at the site arrived from there. The majority of scholars believe that the settlement was established as part of the the expansion of Pantikapaion's power in the region. Small coastal sites were established in lieu of a hinterland based chora (Vinogradov, Butyagin, and Vakhtina 2003: 803; Gourova 2013: 14; Butyagin 2017: 94-95). The first migrants seem to have arrived at the site around the end of the first quarter of the sixth century (Vinogradov, Butyagin and Vachtina 2003: 805; Vinogradov 1999: 288; Butyagin 2001: 197). The earliest ceramics appear in a number of pits and have been found across the site (Gaidukevich, Levi, and Prushevskaya 1941). Fragments of Wild Goat pottery, kraters, plates, and rosette cups were all found during early works at the site (Gaidukevich 1941: 96-99, 146-147). In a group of pits near the site of the later wall there is a large body of material which predates the destruction level and may date as early as the first third of the sixth century (Vinogradov 1999b: 288; Butyagin 2007a: 22; 2017:91-92). Of the 1,125 fragments, 60% were amphora, a comparatively small amount compared to other contemporary sites in the region (Butyagin 2001: 182). Of the remaining materials, 40% were red clay tableware, 5% were gray clay tableware, while 32% were east Greek painted vessels (Butyagin 2001: 181-184).

The fortification wall, constructed around the third quarter of the sixth century and enclosing the acropolis (and potentially the whole urban area), was in use until the destruction of the first quarter of the fifth century (Tsetskhladze 1997: 62; Vinogradov 1999b: 290-93; Butyagin 2007a: 23). Despite the lack of military artifacts, it is thought that the destruction of the site was caused by enemy attack. The defensive wall seems to be the first structure erected on the

rebuilt site suggesting a need for immediate protection from external threats (Vinogradov 1999b: 290; Butyagin 2021: 80-81). Around the end of the sixth century, the settlement area almost doubled in size (see fig. 10), and the first identifiable streets and industrial activities are evident. This may have been the result of further migration from Pantikapaion (Butyagin 2007: 24; 2021: 80). The first burials in the necropolis also date from around this time. They include 3 *enchytrismoi* burials and two inhumations in crouched positions. The ethnic identity of the inhumed individuals is the subject of uncertainty, not helped by a lack of grave goods (Butyagin 2021: 80).

II.1.4.9 Theodosia

Theodosia was located in the southern part of the modern settlement of Feodosia on Quarantine hill, later the home of the vast Genoese fortress that dominates the current city. The construction of this edifice, as well as more recent building activity, has done much to obscure any ancient remains from the first phases of the settlement's existence. As a result, reconstruction of its history and archaeology in the Archaic period are limited. The date of the arrival of the first migrants to Theodosia has been a matter of much debate and conjecture. The earliest ceramic material at the site consists of a fragment of an Attic Black Figure amphora depicting a fight between two hoplites (though the image of only one has been preserved, the other is identified by the presence of a second shield facing the first), dated to the 570's or 560's (Beazley 1956: 81 n.7; Kuznetsov 1991b: 33; Vdovichenko 2008: 24). Overall, there is limited material from this period. Alongside this, a fragment of an Attic Black Figure *olpe* and a piece of a Klazomenian amphora can be added, both dating to the third quarter of the sixth century (Vdovichenko 2008: 20, 24). In general, there is a greater wealth of material in the second half of the sixth century (Peeters and Golenkov 1981: 70; Petrova 2010: 355), particularly its last quarter, which has led some scholars to date the settlement to the second half of the sixth century (Petrova 2000: 18; Katyushin 2003: 645).

In addition to the ceramics found on Quarantine hill, a fragment of a Chiot amphorae from the third quarter of the sixth century was found on the northern slope of Tepe-Oba some 2km to the west (Katyushin 2003: 646). This has led to speculation that a settlement or estate was located in this area (Katyushin 2003: 646; Petrova 2010: 26). Other early material from the *chora* of Theodosia include late Corinthian and Black Figure material from Novopokrovka-Zhuravka, which suggests that the area was already being exploited from Theodosia by the second half of the sixth century (Vdovichenko 2008: 24; Gavrilov 2006). Overall, then, it seems likely that the innovator phase of Theodosia's trajectory can probably be dated to the second third of the sixth century, while the early majority phase may have begun in the third quarter occasioning the expansion of regional ties, including the establishment of the settlement on Tepe-Oba.

II.1.4.10 Tyritake

Tyritake was located 11 km away from Pantikapaion in the southern suburbs of Kerch, overlooking the Kimmerian Bosporus. The earliest ceramics suggest that it was established around 565-560 (Zinko 2010: 223-24). Some of the earliest material found there includes a number of fragments of Siana cups (Gluszek 2014: 158) with decorations including a horse's head, with analogies from the workshop of the "C Painter" dated around 560-550 (Gaidukevich 1952a: 61; Gluszek 2014: 159), and a rooster or cock which can be dated to the same time (Gluszek 2014: 174). A column *krater* can be dated to no later than the middle of the century (Gaidukevich 1952: 20).

The development of Tyritake can be divided into three main phases during the Archaic period. Stage I, around the second third of the sixth century, is categorised by dugout architecture, while by the last third of the century (Stage IIa) above ground houses appear (Zinko 2014). This stage ends with a destruction level marked by traces of fire throughout the site. Finally, in stage IIb (end of the sixth to the first quarter of the fifth centuries), a fortification wall was constructed (Zinko 2014). Some buildings of the previous stage were reconstructed, and the general layout of the site was preserved. This indicates reoccupation by the previous inhabitants of the site. The orientation of structures on the upper plateau show the beginning of regularised urban planning (Zinko 2007: 828-30; 2014: 58). Like the previous stage, IIb was also destroyed, seemingly in a military engagement as evidenced by the presence of arrowheads in both destruction layers (Zinko 2014: 57). Overall, the site seems to have spread up to around 10ha in the second stages (Twardecki 2014: 16). According to Sergey (Kryzhitsky 1982: 164), its population may have included up to 2100-2900 individuals, based on a density of around 7-8 people per 100 m².

II.1.4.11 Kytaia

Located in the southern eastern corner of the Kerch peninsula, some 4km southeast of the modern village of Zavitne, Kytaia seems to have been settled between the end of the sixth and the beginning of the fifth centuries by migrants from an undetermined emigrant community.⁹³ The earliest ceramic materials at the site include a pair of fragments from a Black Figure *olpe* found in the eastern sector of the site. The earliest graves in the necropolis also contained a complete proto-Thasian amphora —in addition to fragments of other vessels of this type and origin — and fragments of Black Figure wares including a *krater* and *askos* (Molev 2007: 90-91; 2010: 23-25).

II.1.4.12 Sindike-Gorgippia

It is generally accepted that the site of Gorgippia, named after the Bosporan King Gorgippos (r. 389-349), was located at the site of modern Anapa (Saprykin 2006). Prior to this, the settlement referred to as Sindikos Limne or Sindike in the ancient sources (Ps-Skylax 72; Ps-Skymn. 886; Arr. Peripl. 18.4-19.1; Strab. 11.2.4) was probably located in the same area (Alekseeva 1991: 3-7; 1997: 22-24). Fragments of a bird bowl, from the late seventh century, have been located at Alekseevskoe and Anapa, leading to the suggestion that an early

⁹³ Molev (2007: 91) suggests Pantikapaion as the most like departure point. Its religious life points towards an Ionian origin and it seems to have fallen within the cultural *koine* of the Milesian migrant settlements of the area, thus its inclusion in this study.

emporion was located somewhere in the vicinity (Novichkhin 2017: 69-73). However, this remains difficult to confirm until the discovery of further synchronous material. The majority of the material belonging to the Sindike settlement begins to appear around the third quarter of the sixth century (Alekseeva 1997: 18), including a *kylix* with bird decoration (Kharaldina and Novichkhin 1997: 349) and numerous fragments of amphorae dating to the end of the century (Kruglikova 1977: 77; Novichkhin 2017).

II.1.4.13 Discussion

The migration trajectory by which the settlements at Berezan and Olbia were established and developed has been the source of much debate in the literature. Several important questions have been raised, including the nature of the regional demography prior to the arrival of the first Aegean migrants, the circumstances under which the region was settled, the political statuses of the settlements, and the nature of the later stages of their migration trajectories. It is generally agreed that, from around the first half of the seventh century, the area around the lower Dnieper and its estuary contained no archaeologically visible population (Lapin 1966: 35-59). What small centres had existed in the area in the late Bronze Age seem to have been abandoned by this time (Kryzhitsky 2000: 169). Nevertheless, some scholars have sought to explain this situation by postulating the existence of nomadic peoples using the area for winter pasture whose camps fail to survive due to riverine action,⁹⁴ though

⁹⁴ Solovyov (1998: 207-08; 2007a: 41; 2019: 162). The problem with this argument is that it is based on Solovyov's thesis that the early Berezan settlement was predominantly inhabited by

unless positive evidence is identified it is difficult to argue on the basis of this supposition.

The first migrants to settle at Berezan probably did so in the years around 630. It has often been claimed that the earliest Milesians to visit Berezan did so on a seasonal basis, more often than not followed by claims that they were engaged in economic interactions with the tribes of the forest-steppe and/or "scouting" the region for suitable areas of settlement (von Stern 1912; Iessen 1947: 66-67; Rusyaeva 1986: 35; Boardman 1998: 203-04; Solovyov 1999: 29-30). The evidence adduced to support this conclusion centres on the relative chronological discrepancy between the dating of the earliest ceramic materials from the site and the first signs of habitation (Bujskikh and Bujskikh 2013: 28). This fails to answer the question of what kind of shelters were used by these seasonal migrants as well as the problems of determining the dates of the dugout structures of the first period given the tendency for later structures to overlap them (Chistov forthcoming). Indeed, the earliest stratigraphic layer at Berezan (IA) covers a period of over half a century between the last quarter of the sixth and middle of the fifth centuries. Nevertheless, a strong scholarly current argues for Berezan's status as an emporion rather than a fully-fledged

local peoples who must, despite the absence of evidence, have been resident in the district around the time of the settlement's initial inhabitation.

polis, placing trade and manufacture at the heart of the reasons for its establishment.⁹⁵

A second school of interpretation suggests that Berezan was established as a permanent settlement from the outset (Bravo 1974; Wasowicz 1975: 34). This argument is based on the appearance of subsequent settlements on the banks of the Berezan river in the first half of the sixth century, implying that only a community organised as a *polis* would have the means and need to establish a *chora* beyond the urban unit (Kryzhitsky and Otreshko 1986: 10-12). Anna Rusyaeva, arguing from the evidence presented by the Berezan bone tablet, supports this claim. She notes that the apparent worship of Apollo Ietros as a tutelary deity, as well the appearance of arrowhead coins in the early sixth century support the existence of a conscious decision to settle at Olbia (Rusyaeva 1986: 49-51). In her attempts to account for the unplanned nature of the settlement and the lack of space set aside for religious purposes until the second half of the sixth century, she coined the term "micropolis" for Berezan, alternatively describing it as "a small, peculiar polis-state" (Rusyaeva 1986: 3-4). Yet scholars such as (Kryzhitsky and Otreshko 1986: 10) point out the ambiguity of this terminology and its failure to make a clear distinction between a "micropolis" and an emporion. An alternative term, coined by V. L. (Yailenko 1982: 226), to distinguish early Berezan as something more than an emporion, is "protopolis". Nonetheless, this has been questioned by Yuri G. Vinogradov on

⁹⁵ This interpretation has been heavily influenced by interpretations of early Pithekoussae (Vinogradov 2010).

the basis that the early Milesian colonies tended to have civic institutions (Vinogradov 1989: 62), though evidence for such at Berezan, prior to the late sixth century, is absent.

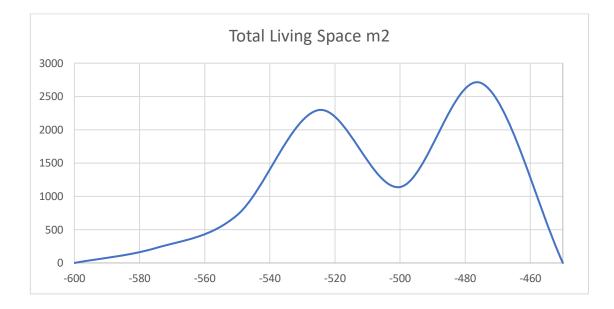


Figure 7 Combined Space of Dwellings at Berezan (see appendix E for details)

We are again faced with a problem created by the scholarly impulse to place the Berezan settlement within a heuristically constructed categorisation (Bujskikh 2005a: 156-57). Either it is a polis, an emporion, or a kind of quasipolis. Yet it is not clear what the relationship was between these notions, outside of theoretical discourses in the ancient world itself. For example, it has been demonstrated that emporion could refer to a variety of different concepts, but in the lived world, as an official designation for a type of settlement, we are operating within a statist framework where an authoritative body can designate a place or a settlement an emporion for legal and economic reasons (Hansen 1997). This notion is reliant on state prescription of migration from the emigrant community to which the immigrant community then remains politically and economically linked. The ad hoc nature of construction at Berezan, until the second half of the sixth century, and the diverse economic activities undertaken there, belie any notion of a planned economic settlement as we understand it. Examples of emporia which are clearly designated thus, such as Naukratis, show clear evidence for external organisation and control (in that case by the Saite rulers of Egypt).⁹⁶



Figure 8 Trajectory of migration to the Olbian Chora (data from Kryzhitsky, Bujskikh, and Otreshko 1990, appendix I for details)

The nebulous nature of early Berezan stands in marked contrast Olbia. From the beginning, it would appear that Olbia exhibited some signs of being a

⁹⁶ (Knight 2019: 49-50). See Demetriou (2012) for a discussion of generally accepted emporia sites.

planned settlement.⁹⁷ While the initial dwellings seem to have been dispersed into small nucleated groupings (Lapin 1966: 176), no buildings were constructed on the site of the western temenos and already in the earliest period religious activities were undertaken in this area.98 Like Istros, scholars have often suggested that Olbia too received subsequent *epoikoi* settlers following the arrival of innovator migrants. This argument is based upon the establishment of an eastern temenos, adjacent to the earlier western one, for the cult of the tutelary god of the new migrants, Apollo Delphinios ((Vinogradov 1989: 74-79; 1997: 17; Rusyaeva and Vinogradov 2000: 233-34; Avram 2012a: 206-07). Whether this event caused conflict, as has been argued (Solovyov 2006: 70), it is clear from the quantity and size of dwellings at Berezan (fig. 7) and the increasing number of settlements in the Olbian chora (fig. 8), that new groups of early majority migrants began to arrive in the area after the middle of the sixth century. Furthermore, following the destruction event at Berezan around the beginning of the third quarter of the sixth century, there is extensive evidence to suggest a more widespread new or late majority migration phase (fig. 7). First there is the introduction of new architectural forms of above-

⁹⁷ Rusyaeva (1986: 51); Bujskikh (2005b: 158). Debates over whether its initial habitation occurred in the same context as the establishment of settlements in the Berezan chora (i.e. Wąsowicz 1975: 41; Kryzhitsky and Otreshko 1986) have been settled by extensive excavation over the last 40 years (Bujskikh 2005a: 155).

⁹⁸ Rusyaeva (1986: 42; 1999: 77; 2006a: 226-33; 2010: 69); Vinogradov (1989: 46). The earliest remains consist of some charred animal bones and fragments of east Greek ceramics from the second quarter of the sixth century.

ground stone and mudbrick dwellings at both Berezan and Olbia (Chistov 2016; Bujskikh 2017), while the early part of this era also sees the construction of the first temples at both sites (Rusyaeva 2006a; Nazarov 2007). Furthermore, the construction of the *hestiatoria* at Berezan (Chistov 2012: 405-11; Chistov and Krutilov 2014: 211; Bujskikh and Chistov 2018: 14-16; Chistov 2015a, 2019a, 2021) and the first buildings of the Olbian agora (Levi 1956: 42-43, 48, 50; 1964: 5-6, 9-16; Vinogradov and Kryzhitsky 1995: 29), at the end of the sixth century, suggest a need for more explicit delineation of public spheres which may have been intended to solidify social hierarchies pressured by an increased and increasing population (Vinogradov 1989: 74-76). Arguing whether Olbia and/or Berezan was (or became) a polis at this time (Kryzhitsky and Otreshko 1986; Vinogradov 1989: 67) or, indeed, in previous decades (Vinogradov 1999a; Bujskikh 2005a), is based on a particular notion of what a polis should look like, itself a problematic concept (Hansen and Neilson 2004: 55-149). We must consider that this may be as much a literary *topos* as a lived reality. Even the apparently 'primitive' looking huts of early Olbia, along with open spaces or groves set aside for religious practices, does not mean that we are necessarily dealing with a community devoid of political authority or social stratification (cf. Paus. 10.4.1–2). It may well be that, until the arrival of further migrants in later phases, no pressing need for the physical manifestations of political authority or independence were necessary.

The first migrants to traverse the Cimmerian Bosporus region seem to have bypassed the straits themselves and established a settlement at m. Taganrog, probably around 630. This location was beneficial to interact with the Maeotian tribes and early Skythian cultures of the North Caucasus and avoided the migration path across the straits (Vinogradov 2012: 60-61). The discovery of the ancient Kuban Bosporus, in addition to the early settlements on the Taman peninsula and the putative settlement at Alekseevka, may suggest that this eastern strait proved easier to navigate and was the path traversed by the innovator migrants to the region (Schlotzhauer and Zhuravlev 2011: 285-86; Dan et al. 2016: 115). It seems reasonable to deduce that, due to the relative lack of local sedentary population in the area of the straits themselves – the nearest settlements seem to have been in the region of m. Krasnodar and around the eastern and north-eastern coasts of Lake Maeotis, Taganrog may have been chosen by these earliest immigrants for its proximity to the mouth of the Tanais, which offered connections beyond to the Skythians established in the trans-Caucasian region.99 Finds of seventh century Greek wares and amphorae in this region support such a conclusion. In this sense, the demographic situation of the north-eastern Black Sea acted as a driver for the spatial specificity of migration there. Furthermore, this implies some knowledge of the region probably at least a decade or two prior to the appearance of Greek objects in the region.¹⁰⁰ Even so, given the lack of concrete

⁹⁹ Whether the Alexandreevska settlement near modern Anapa can be seen as a Milesian *emporion* or settlement remains obscure. Given the very limited evidence before the second half of the sixth century, it seems difficult to attribute it to maritime emigrants at this point. ¹⁰⁰ The earliest references to the Tanais are limited and obscure. Aristeas of Prokonessos may have discussed the river (*BNJ* 35 F2), likewise Hakataious (*BNJ* 1 F18b), while it also seems to archaeological evidence for any kind of organised settlement at Taganrog prior to the laying down of a pavement in the sixth century, it is possible that the innovator migrants at the site may have been principally engaged in trade with the trans-Caucasian Skythians. The Taganrog settlement, in its earliest incarnation, probably best fits the idea of an emporion, though it seems to have become a well-established permanent migrant settlement by the sixth century.

In the decades following the arrival of the first innovator migrants at Taganrog, further immigrants began to settle on Mt. Mithridates. The earliest migrants to Pantikapaion almost certainly intended to settle there permanently, deploying significant time and resources into construction of buildings and a defensive wall at the summit of the hill. Whether these immigrants came via the Taganrog settlement or Miletos itself is difficult to discern. The reason for their arrival is obscure. Even so, this period may have witnessed the beginning of Skythian expansion from the north Caucasian region, and the potential use of the Taman – Bosporus – Crimean route for seasonal movement.¹⁰¹ It is possible that the early migrants to Pantikapaion (fig. 11), like those at Taganrog, chose the site based on the changing

have been referenced in poetry from the turn of the sixth and fifth centuries . Recently it has been suggested that earlier attestations of the Phasis (i.e. Hes. *Theog.* 340) may have in fact meant the Tanais (Dan 2016).

¹⁰¹ Interestingly scholars who propose the existence of this route in the middle Archaic period tend to assume that the nomads came from the Crimea or northwest Maeotis and moved towards the Taman peninsula (i.e. Marchenko et. al. 2005) but the opposite route is rarely discussed. For further ancient references see (Schramm 1973: 176-90).

demographic situation and the mobility exhibited by the inhabitants of the region. Indeed, given that conflict between marine (Greek) and terrestrial (Skythian) migrants seems to have been sporadic and generally equitable relations were probably fostered, there is good reason to assume that this situation may have acted as a driver for migration to Pantikapaion. Furthermore, despite characterisations of the Skythians as archetypal barbarians (Hartog 1980; Dana 2019b: 59-61), the role of eastern contacts in the development of Skythian culture, and the use of animal motifs in their art (possibly further developed by captured Near Eastern craftspeople), may have helped the development of economic, political and cultural relations between the two groups. Given the Ionian Greeks penchant for animal motifs, such as birds and goats, particularly evident in the types of pottery often found in early Skythian contexts, shared iconography may have provided a site more cultural interaction.¹⁰²

In the innovator stage of migration to the Kimmerian Bosporus and northeast Maeotis, rather than envisioning a group of dispossessed Milesians or Ionians establishing transplanted *poleis* in an otherwise uninhabited region, or even hardy groups of merchants exchanging wine for grain and slaves, we must recognise the complexity of the early interactions. Both Skythians and Greeks had significant mobility resources, marine and terrestrial, and probably derived mutual benefit from their developing interactions.

¹⁰² See Meyer (2013), for a discussion of Animal Style.

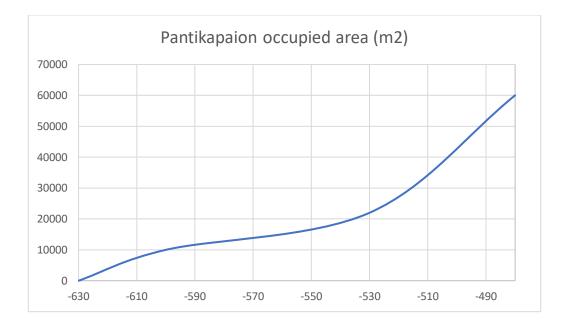


Figure 9 Trajectory of migration to Pantikapaion

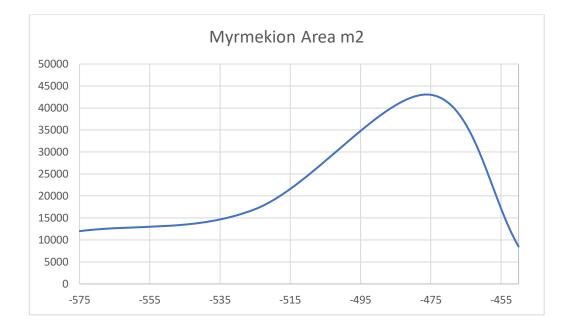


Figure 10 Trajectory of Migration to Myrmekion

It is clear from the migration trajectory at Myrmekion (fig. 10) that, like our other examples, the innovator period was prolonged and saw limited growth while the early-uptake/majority phase occurred rapidly. This implies a short period of fairly intense migration activity, in this case immediately following the fire which destroyed the site. Thus, again we can identify an important nexus of demographic and migratory growth around the last third of the sixth century.

An important development in the trajectories of the settlements of the Kimmerian Bosporus is the presence of relatively synchronous destruction events. Between the middle and the third guarter of the sixth century, destruction events occurred in the region, including at Pantikapaion, Kepoi and Myrmekion, not to mention Berezan further afield. A further series of destructions occur at the end of the period under investigation. At the beginning of the second quarter of the fifth century, these are evident at Pantikapaion and Tyritake and in the Olbian chora. These events have been connected to the transhumance of Skythian tribes between the northern Caucasus and Crimea, though evidence for aggressive military action is not always present. Nevertheless, the potential for destructive events seems to have done little to dissuade migrants from moving to these locations, or the population rebuilding as opposed to moving, which implies a level of stability and social resilience. The Kimmerian Bosporus is one of the most important transit areas in the Black Sea, connecting it with the Sea of Azov and the Don and Kuban. It provides the shortest route between the Crimea and the Taman peninsulas and beyond to the forest-steppe and north Caucasus regions (Maslennikov 2005: 154; Vinogradov 2012). The migration trajectory to the Taman peninsula seems to have expanded earlier and included more extensive rural settlement than in

eastern Crimea. It may have been more fertile (Koshelenko and Kuznetsov 1998: 258), but the presence of early fortifications at Golubitskaya 2 also suggests instability in the region (Schlotzhauer and Zhuravlev 2014: 211-12).

Settlement on the Kerch peninsula begins with Pantikapaion at the turn of the seventh to sixth centuries. There is much debate as to its role, along with Nymphaion, in the subsequent settlement of the region. Some scholars argue that Pantikapaion was the metropolis of many adjacent communities such as Tyritake and Myrmekion (Yailenko 1983: 135; Vinogradov 1995: 154-59), while others posit migration direct from Aegean emigrant communities (Kuznetsov 2001b). This notion of secondary foundation seems to obfuscate the role of extant emigrant communities in subsequent migration. It treats the relationship between metropolis and *apoikia* as primary, rather than negotiated. Nevertheless, the general settlement pattern in the region, of 'small towns' on the coast, and the lack of rural settlement until later in the period, has convincingly been linked to nomadic migration through the area (Vinogradov 2010). It is clear that the wider political and geographic contexts of the Kimmerian Bosporus region played an important role in driving and restricting migration spatially and temporally and influenced settlement structures and patterns.

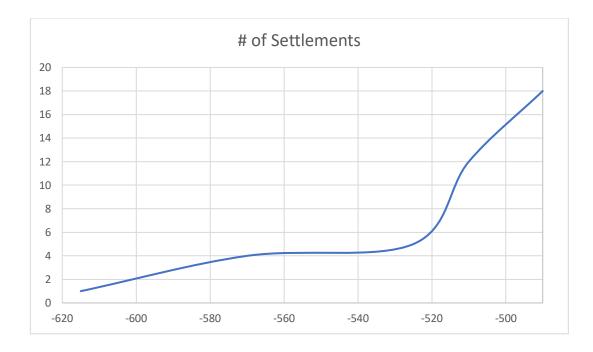


Figure 11 Trajectory of migration in Easter Crimea/Kerch Peninsula



Figure 12 Trajectory of migration in Taman Peninsula (data from Maslennikov 1998, see appendix F)

Overall, while the trajectories of migration to the northern Black Sea exhibit a number of divergences, some common themes emerge. The claim that there was a primitive dugout period at most settlements lasting around 60-80 years is difficult to maintain. the initial periods of innovator migration for most sites indicate fairly slow demographic growth. It is plausible to suggest that the diffusion of innovation tended to be limited for a reasonable period of time, though migration to other innovator settlements seems to have continued.

II.1.5 Conclusions

While some emigrants from Miletos may have moved to the nearby Aegean islands of Leros, Patmos and Ikaria around the turn of the eighth century, it was not until the second quarter of the seventh century that movement occurred to any notable degree. The main focus of this migration was to the Hellespontine and Propontic regions of northeast Anatolia. Between 680 and 650, migrants settled at Parium, Abydos, Priapos, Prokonessos, Kyzikos, Lampsakos and Kardia along the southern shore of the straits. This period was marked by instability and upheaval throughout the region. The movement of Thrakian groups across the straits; the development of Lydian power, particularly at Daskyleion, and the Kimmerian threat to central Anatolia, including the Lydian capital at Sardis; all contributed. In the Troad, one or more of these factors may have been responsible for the destruction of Troy around the middle of the eighth century, hitherto the most important site in the region. The devastation of Troy seems to have played a particularly important role in creating an economic vacuum into which the Milesian Hellespontine settlements moved. Prior to this, while there is some evidence for interaction with the culture of the incoming migrants, Troy appears to have

functioned as part of a wider northern Aegean cultural *koine*. In general it exhibits limited interactions with the emerging Milesian communities of the region.

Furthermore, the removal of the Thrakian/Trerian threat, possibly by a resurgent Lydian empire towards the middle of the century, created more stable conditions in which the nascent Milesian emigrant settlements began to flourish. Kyzikos, due to its proximity to Daskyleion, was a particular beneficiary of this process. At the same time, Abydos, located at the narrowest point of the Hellespont, was in a position to control maritime traffic both through and across the straits, contributing to its own prosperity. Despite the lack of archaeological evidence from this region, it is possible to surmise that a reasonable number of Milesian emigrants, along with other groups of Greeks and possibly northern Anatolians, migrated at this time.

At the beginning of the second half of the seventh century, the first migrants began to enter the Black Sea. There is limited evidence to suggest earlier voyages for economic purposes, though some materials of an early date can be identified. Nevertheless, on the balance of evidence, it seems that Milesian migrants established the small settlement of Orgame at Cape Dolosman in the Razim-Goloviţa lagoon complex, around 55km south of the start of the Danube delta. This region had previously been occupied by the bearers of the Babadag culture, though their main centres were abandoned around the end of the eighth century. There does not seem to have been a significant depopulation of the area. Yet nucleated, archaeologically visible, settlements seem to have declined. There is little evidence for the early settlement at Orgame apart from a small amount of pottery in the urban area and at Tomb T-A95 in the necropolis.

Less than a decade following the arrival of the innovator migrants at Orgame, a second settlement was established in the region, around 25km to the south, at Istros. It seems to us highly probable that the earliest migrants there initially arrived at Orgame. Whether they intended to continue their migration to Istros at the point of their initial departure, or whether migrants established at Orgame subsequently moved on, is impossible to say. Nevertheless, Istros provided several advantages lacking at Orgame. The latter is constricted by high ground to the north where there may have been some remaining local habitation, while the area around Istros is mostly flat steppe-land punctuated by numerous lagoons. Both communities were able to benefit from the mines at Altân Tepe, though there is little evidence for exploitation before the casting of arrowhead coins in the late Archaic period (Alexandrescu 1986: 23). It was Istros' position on the open sea and its agricultural potential which encouraged innovator migrants to settle at the site. Early Istros seems to have consisted of a handful of small wattle and daub houses on the northern edge of the western plateau area, a low-lying sandy island with lacustrine deposits on a bed of green shale, during the earliest years of the settlement (Timofan 2010: 355). The first migrants also seem to have identified the sacrée fosse, on the paleo-islandic acropolis, as an important sacred site and performed rituals there. The remnants of these were either deposited in bothroi, or first in the sacrée fosse

prior to later re-deposition. No indication is given of the size of the early dwellings, so it is difficult to estimate the number of initial innovator migrants, though less than 250 seems a reasonable presumption.

The beginning of the final third of the seventh century represents a second crucial temporal juncture in the trajectory of migration from Miletos.¹⁰³ In addition to migration to northern Dobrudja (i.e. Istros and Orgame), Milesian migrants settled considerably further afield. The earliest materials on the island of Berezan, in the northwest corner of the Black Sea, can be dated to this time. The nature of settlement there in the innovator phase is difficult to reconstruct, despite extensive excavations at the site. While around 15 dugout structures can be identified in the first quarter of the sixth century, it is very difficult to say how many predated this period, but again we are probably looking at less than 250 initial innovator migrants.

Around the same time, or slightly later, a settlement or emporion was established at m. Taganrog, in the north-eastern corner of Lake Maeotis. It seems almost certain that this was motivated by establishing connections with the Skythian tribes in the Don valley and Northern Caucasus. There may also have been a small trading centre at Alekseevskoe near m. Anapa, but this is

¹⁰³ The first being the second quarter of the seventh century when the earliest Propontic and Hellespontine immigrant settlements appeared. While a strictly quantitative assessment of Milesian migration (appendix J) suggests a slight tailing off at this time, this may be explicable by the relative distances of the first Black Sea emigrant communities which discouraged diversification of settlement patterns.

debatable. While the Taganrog settlement may have developed into a permanent emigrant community, its early history is almost impossible to elucidate given the lack of archaeological evidence. A similar situation exists at Sinope on the southern shore of the Black Sea. While we have several literary references, which name its Milesian founders — Habrondas, Koos and Kretines — and give some indication of its early history, these must be taken sceptically (Ps-Skym. F27 Marcotte). Nevertheless, Sinope existed as an important node in a trans-marine network of mobile fishing communities and traders in the LBA and EIA. It is quite possible that this community was still extant when the innovator migrants arrived around 630, and they seem to have maintained the settlement's primarily maritime focus.

Overall, the role played by the innovator migrants in the Propontis and Hellespontine regions seems to have been particularly important as an endogenous driver of migration to the Black Sea towards the end of the seventh century. The only other Greek migrant communities in this region were established by Megarians at Astakos (c. 712-710), Khalkedon (c. 675), Byzantion (c. 660), and Selymbria (c. 659-8) (Robu 2014). Nevertheless, this raises the question of why, given the advantageous position Khalkedon, and particularly Byzantion, for controlling the Bosporan entrance to the Black Sea, were Milesian migrants the main innovators of movement into this region. It is possible, as some scholars have suggested, that Megara and Miletos had entered into an alliance, designating spheres of influence, and further Megarian settlement was limited until changing conditions in the second half of the sixth century.¹⁰⁴ It seems more plausible, however, that the growth of the Milesian emigrant settlements facilitated prosperous conditions which encouraged further movement into the Black Sea and settlement at important nodes. Abydos and Kyzikos played important roles in this process, predicated on close interaction with intra-regional polities at Troy and Daskyleion. The elaboration of this Milesian migrant network appeared first on the west coast near the Danube, then in the northwest at Berezan, before turning east to Taganrog. Along the southern Black Sea shore, Sinope was established at an important site for controlling movement along the coast, between the Bosporus and Colchis. It also offered the shortest trans-Pontic route to the Crimea and Kimmerian Bosporus. It is important to consider the wider picture of migration during the innovator phase, where higher order conditions prevailed beyond the control or comprehension of migrating agents, to understand the historically contingent unfolding of a migration trajectory. Here, Kyzikos, as a port for the important regional centre at Daskyleion in the Phyrgian and Lydian eras, as well as the destruction and limitation of the reach of Troy, played an important role in the ability of Milesians to migrate into the Black Sea, almost certainly by way of the Proportic and Hellespontine migrant settlements. This type of migration, often known as leap-frog (Lee 1966), is characterised by the

¹⁰⁴ Scholars adhering to this argument have used religious, political and onomastic evidence to show convergences between Ionian Milesian and Doric Megarian "colonisation" (Herda 2016). The problem with these arguments is that they assume a definitive state role in emigration from the beginning, a viewpoint which we have demonstrated to be anachronistic.

expansion of migration networks and the reduction in required capital facilitated in the innovator/early majority phase. Therefore, in the context of seventh century Milesian migration, the combination of endogenous and exogenous drivers, as well as the decisions taken by migrating groups such as to settle at Kyzikos — whether with an eye to the potential wider benefits of this decision or not, played an important role in the dissemination of migration as an innovation. This subsequently led to the expansion of the migration trajectory in its earliest phases. By way of comparison, we might briefly look towards a migration trajectory which failed to take off, at least beyond its initial phases. Around 650, migrants from Klazomenae established a settlement at Abdera in Thrake (Hdt. 1.168). While northern Aegean immigration was certainly a feature of early Archaic migration, with the lead taken by Thasian migrants, the failure of the settlement at Abdera seems to have had a negative effect on subsequent Klazomenian group emigration. Furthermore, Klazomenae's favourable regional position and trading links, especially in the Black Sea, may have been another outcome of this process. In sum, it is important to understand the multi-focal processes involved in the development of migration trajectories, avoiding monocausal explanations, and analysing local and regional contexts, to paint a detailed picture of the varied generative and emergent structures at macro- and micro- levels of analysis.

By the end of the seventh century, we can see some important changes in the nature of Milesian migration, particularly in the Black Sea. In northern Dobrudja, south of Istros, we can identify the first rural settlement at Nuntaşi II. Around this time, local settlements and necropoleis, attributed to Getic peoples, also appeared at Zimbru, immediately north of Orgame, and at Beidaud and Celic Dere, inland from Istros. It is possible to ascribe this renucleation of local settlement patterns to the appearance of the coastal migrant communities and changes in the local economic and demographic conditions that this development wrought. The second change in migration patterns can be observed at Pantikapaion in the northeast and Apollonia in the southwest. Both show clear evidence of the organisational capacity of the immigrants. At Apollonia links were immediately established with the Thrakian communities of the Medni Ridge, from where metals for processing were obtained. The innovator migrants also built stone houses, while these appear at Pantikapaion alongside a defensive wall. Pantikapaion was located at a strategic point overlooking the Kimmerian Bosporus. It controlled traffic through the area and was ideally positioned to interacted with the nomadic peoples who used it as a crossing point. Olbia presents a slightly different picture, its relative proximity to the small Berezan community strongly implies a localised movement of people, or at least the latter's status as a migrant staging post. Indeed, the domestic architecture of Olbia reflects that of the earlier Berezan settlement. Yet, the Olbian migrants also sought interactions with terrestrial groups, particularly the communities of forest-steppe Skythia such as Belsk and Nemirov. These sites, themselves immigrant settlements of the late eighth century, were embedded in cultural and exchange networks which stretched into the Balkans, Carpathians, central Europe and east to the open steppe and the Caucasus. This change in the pattern of the Milesian emigrant trajectory

implies more centralised hierarchical planning. Yet this does not need to be attributed to a central government decision making process at Miletos. It is more likely that the establishment and development of other migrant settlements in the innovator phase, particularly Istros and Kyzikos for Apollonia, Berezan for Olbia, and probably Taganrog for Pantikapaion; facilitated movement in the early majority phase. This allowed greater migration and infrastructural capital to be utilised amongst potential migrants.

By the end of the innovator phase, around the first quarter of the sixth century, Milesian emigrants had established settlements on the southern, western, and northern coasts of the Black Sea. The social, political, and economic development of these communities, within the first three decades of the arrival of the first migrants, was an important endogenous driver for the subsequent development of an early majority phase between the first quarter and the middle of the sixth century. Around 575, migrants from Pantikapaion also established a series of small towns on either side of the Kimmerian Bosporus. These included Myrmekion, Akhtanizovskaya 4, Hermonassa, Kepoi, Patraeus, Nymphaion, Theodosia, Tyritake and Golubitskaya 2. Around the same time, Sinopeans settling along the southern Black Sea coast at Trapezus, Kerasous, Kotyora, Kromna, Kytoros, Sesamos. In the western and northwestern coasts, migrants from Olbia and Istros began to move shorter distances into the hinterland. Arguably, the expansion of these settlements necessitated wider agricultural exploitation across both regions. Istros seems to have played a role as a staging post for new emigrant communities at Nikonion, on the

Dniester, and Odessos in the Gulf of Varna. All these new settlements demonstrate the development of the migration trajectory across the entire Pontic region by the middle of the sixth century. Though most of these communities were small agglomerations of dugout houses and huts, the number of migrants necessary to inhabit such a large region attests to the lowering of mobility capital required to migrate. The establishment and development of regionally important settlements, at each of the cardinal points, played an important role in creating these conditions. Unlike in the innovator phase, migrants did not need the capital resources to traverse extended distances, such as from the Aegean to the Propontis or Propontis to the Kimmerian Bosporus. Rather, the established settlements provided nodes where emigrants could temporarily settle, while capital resources, such as networks of mobility and information, could be accessed.

The end of the early majority phase between c.550-530 was marked by a series of destructive events, first at Pantikapaion and Kepoi, then later at Berezan. Following these events, the trajectory of Milesian migration moves into a middle majority phase in the third quarter of the sixth century. This is marked by extensive migration to inland areas of the Kimmerian Bosporus and the lower Bug region around Olbia.¹⁰⁵ In the former, 32 new settlements can be identified in the third quarter of the sixth century, with another 24 in the latter. In addition to the extensive appearance of new migrant settlements, we begin to see the development of regularised urban features. One of the most

¹⁰⁵ See appendices F, G, I and J for lists of settlements enumerated here and below.

important is the change from dugout to above ground domestic architecture. Furthermore, evidence of regularised urban planning, and the construction of monumental religious architecture is apparent across the region. It seems unlikely that these changes could be wrought by internal demographic growth alone. This period almost certainly saw the appearance of large groups of new *epoikoi* migrants. The nature of the relationship between new migrants and their second and third generation cohabitants is difficult to untangle. Apart from the explicit mention of conflict at Apollonia (Arist. *Pol.* 5.1303a), there is no need to assume that changes in cultural forms and religious practices were a source of tension between migrants. Furthermore, the extended exploitation of rural agricultural resources does not imply any form of gatekeeping by established migrants. Indeed, whatever the causes of emigration in the middle majority phase, a threshold had been reached in the immigrant region which facilitated the movement and settlement of large numbers of migrants.

These migration patterns continued into the late majority phase, roughly between the last quarter of the sixth and the first quarter of the fifth centuries. The Kimmerian Bosporus region witnessed the establishment of around 55 new rural and urban settlements, while the Lower Bug region saw 66 new rural communities appear. Settlement numbers in northern Dobrudja and the Dniester increased by 10 and 16, respectively. Simultaneously, at Berezan, Olbia, Istros and Pantikapaion, as well as other sites; we see evidence for the first public constructions. These include dining halls at Berezan, a possible *bouleterion* at Pantikapaion, and an agora at Olbia. In general, this period sees construction and rebuilding of religious architecture across the region. This late majority phase came to an end between the end of the sixth and first quarter of the fifth century. At this time, destruction events are recorded at Istros, Pantikapaion, Myrmekion and Tyritake. Simultaneously, we can observe the abandonment of Berezan and other rural settlements around Olbia, as well as the destruction of the Milesian emigrant community in 494. Several exogenous drivers may have played a part in these events. The movement of nomadic Skythians through the Kimmerian Bosporus and into the Lower Bug region toward the Danube, the rise of the Thrakian Odyrsian and Getic polities in the west, and the Persian expedition under Darius I - which may have reached asfar the Taman peninsula and the Don River (DFa) – all may have contributed. In any case, this era brought to an end a trajectory of Milesian migration which had expanded across the Propontis and into the Black Sea in over a century and a half. Changes in the Aegean world, particularly the rise of the Delian and Peloponnesian leagues in the fifth century, significantly changed the picture of migration across the ancient world. New processes, drivers and trajectories, with marked differences to the experiences of earlier migrants in the Black Sea and beyond, began to form.

It is also worth outlining the wider trajectory of Milesian migration across the Archaic period (see appendix J). The uneven nature of the evidence means that it is difficult to identify suitable proxies which can be obtained from all sites. Nevertheless, the total number of inhabited sites in the areas of emigration provide a suitable vector for analysis. By analysing migration to and within the Hellespont, Propontis and Black Sea, some of the wider patterns of movement can be discerned. Furthermore, we can observe the ways in which generative and emergent endogenous drivers played an important role in the historically contingent development of the overall Milesian migration trajectory.

By modelling the wider trajectories of migration across these regions we have established a theoretically rigorous picture of migration in time and space. In the following section this will allow us to provide a fresh perspective on the potential drivers of migration in the context of the emigrant community, drawing our attention to the phases and temporal contexts at which migration appears to have been prevalent. Furthermore, we have been able to map out, admittedly in broad strokes, the way in which the migration process unfolded. This allows us to gain a new understanding of its ebb and flow. The first analytical layer of our model has allowed us to develop a framework which better accounts for the inherent multi-vocality and multiplicity of migration processes which take place over extended time scales and within changing social and cultural contexts.

II.2 Exogenous Drivers

Contemporary evidence from the Archaic period, whose authorship and audience can probably be identified as elite individuals, can give some idea of the conditions under which migration was undertaken during this period. In general, literary accounts of migration focus on emigration as a result of conflict from both internal and external sources.¹⁰⁶ Turning more specifically to the literature of the Archaic period, Christoph Ulf (2020, forthcoming) has recently identified several migration *topoi* which appear in works of this period. First, he cites incidences of manslaughter in cases where the victim has a kinship or peer relationship with the perpetrator, common in epic poetry. The second *topos*, revolves around activities which are seen to present a threat to communal cohesion. The sense this is found in Lyric poetry tends to be any conflict with the current authority of the community. Aiming for tyranny and defying a tyrant are both relevant in this case.

By the Classical period further migration contexts are elucidated in the literature, while notions of conflict in the immigrant community are expanded

¹⁰⁶ Dougherty (1993: 31-44); Tsetskhladze (2006: xxixx); Ulf (2020: 121-24; forthcoming). Bernstein (2004) identifies a number of passages which suggest a purificatory role of migration vis-à-vis crimes and conflicts in the emigrant community, while Miller (1997: 31-64) in an analysis of fifth and fourth century literature; identifies land-hunger, trade, internal conflict, external pressure and empire building as the primary motives for migration. See also Avram (2012b: 19-22) for the problems of reconstructing Archaic migration from the extant literary sources.

beyond individual misdeeds to encompass conflict between groups in which specific incidents are discussed, particularly those which are noteworthy in their brutality. To take two examples, the emigration of the Therans who eventually settled at Kyrene is accounted for, by Herodotus, as a direct result of (divinely ordained) environmental disasters which lasted for seven years,¹⁰⁷ while the foundation of Zankle is attributed by Thucydides to various groups including exiles from Syracuse who were defeated during a civil war.¹⁰⁸ When we turn to the specific evidence from Miletos for mobility and migration, we can also identify some of the *topoi* outlined above, particular civil disorder and tyranny (e.g. Hdt. 6.22), which acted as exogenous drivers to a greater or lesser extent for different groups of migrants.

II.2.1 Social Conflict

The extent to which we can posit "isolated political events" as wider external structures for Milesian migration has been questioned by Greaves who fails to see in them a "long-term process … that might result in sustained colonization" (Greaves 2007: 9-10). Yet in eliding this body of evidence, the world systems approach taken by him has come under sustained criticism for its structural reductionism, limiting agency within medium and long-term historical processes (Gold 2005). *Stasis* and tyranny seem to have taken place

¹⁰⁷ Hdt 1.151. "έπτὰ δὲ ἐτέων μετὰ ταῦτα οὐκ ὖε τὴν Θήρην, ἐν τοῖσι τὰ δἑνδρεα πάντα σφι τὰ ἐν τῆ νήσφ πλὴν ἑνὸς ἐξαυάνθη".

¹⁰⁸ Thuc. 6.5.1. "ξυνφκισαν δε αὐτοῖς καὶ ἐκ Συρακουσῶν φυγάδες στάσει νικηθέντες".

at regular intervals at Archaic Miletos. Herodotus provides a number of stories of the Milesian tyrants Thrasyboulos, Histaiaous and Aristagoras.¹⁰⁹ Furthermore, a group of tyrants coalesced around the otherwise unknown Thoas and Damesenor is mentioned by Plutarch.¹¹⁰ Herodotus (5.28) and Heraclides Ponticus both refer to the recurrence of destructive periods of civil disturbance in the city (Ath. Deip. 12.523e-524c.). While the extent to which these events are interconnected remains unclear, there are several important implications for migration. First, in instances of civil disorder, it is likely that one of the groups involved would have prevailed. For the defeated party or individual fellow travellers, migration could function as an important 'out' and a preferable alternative to remaining at the mercy of their victorious enemies (Van Wees 2008: 47-48), or as an opportunity to reestablish their sociopolitical capital through strategies of 'structural replication' (Forsdyke 2005: 28; Figueira 2015: 323-30). Similarly, the establishment of a tyranny and the concentration of power and political capital in the hands of an individual or small group, could also create conditions which might encourage the emigration or exile of dissidents.¹¹¹

Much of our literary evidence for the history of Archaic Miletos focuses on internal and external conflicts. These occur between groups within the polis

¹⁰⁹ Hdt. 1.20-23. For a thematic discussion of Thrasyboulos see Forsdyke (1999) and for Histaious and Aristagoras see Greaves, Knight, and Rutland (2020) with references.

¹¹⁰ Moralia 298C–D. See Gorman and Gorman (2000)

¹¹¹ Garland (2014: 79-96); Nic. Dam. BNJ 90 F57.

and between Miletos and its Greek and non-Greek neighbours.¹¹² *Stasis*, i.e., civil conflict between members of the community, presented a recurring experience in the socio-political history of Miletos. Scholars have identified three narratives of this kind of conflict which seem to date to the Archaic period (Hdt. 5.28-30; Heraclid. Pont. F50 Wehrli = Ath. *Deip.* 12.523f-524b; Plut. *Mor.* 298c-d). Many have chosen to assume that a combination of these passages refers to the same events, despite their notable differences in tone and details. Those pursuing an alternative approach, identifying them as temporally distinct events, have sought to place them within a wider chronological vista of Milesian history in the sixth and fifth centuries (Herda 2016: 65 n.121). We shall return to these issues forthwith, but first we shall present a short analysis of each passage in its literary context. We shall start with Herodotus narrative of Milesian *stasis*. It is the earliest recording of such events, though not necessarily the earliest historical occurrence.

Immediately following a short narrative of the background and conquests of the Persian Otanes in the Northeast Aegean and the Bosporos (Hdt. 5.25-28), Herodotus provides a brief account of events at Miletos.

> "μετὰ δὲ οὐ πολλὸν χρόνον ἄνεσις κακῶν ἦν, καὶ ἤρχετο τὸ δεὑτερον ἐκ Νἁξου τε καὶ Μιλήτου Ἰωσι γἱνεσθαι κακά. τοῦτο μὲν γὰρ ἡ Νἁξος εὐδαιμονἱῃ τῶν νἠσων προἑφερε, τοῦτο δὲ κατὰ τὸν αὐτὸν

¹¹² For overviews of Milesian Archaic history see Dunham (1915); Gorman (2001); Talamo (2004); Herda (2006a); Zurbach (2019); Greaves, Knight, and Rutland (2020).

χρόνον ή Μίλητος αὐτή τε ἑωυτῆς μάλιστα δὴ τότε ἀκμάσασα καὶ δὴ καὶ τῆς Ἰωνίης ἦν πρόσχημα, κατύπερθε δὲ τοὑτων ἐπὶ δὑο γενεὰς ἀνδρῶν νοσήσασα ές τὰ μάλιστα στάσι, μέχρι οὗ μιν Πάριοι κατήρτισαν: τούτους γὰρ καταρτιστῆρας ἐκ πάντων Ἑλλήνων είλοντο οἱ Μιλήσιοι. κατήλλαξαν δὲ σφέας ὦδε Πάριοι. ὡς ἀπίκοντο αὐτῶν ἄνδρες οἱ ἄριστοι ές τὴν Μίλητον, ὥρων γὰρ δή σφεας δεινῶς οἰκοφθορημένους, ἔφασαν αὐτῶν βούλεσθαι διεξελθεῖν τὴν χώρην: ποιεῦντες δὲ ταῦτα καὶ διεξιόντες πασαν τὴν Μιλησίην, ὅκως τινὰ ἴδοιεν ἐν ἀνεστηκυίῃ τῇ χώρῃ άγρὸν εὖ ἐξεργασμένον, ἀπεγράφοντο τὸ οὕνομα τοῦ δεσπότεω τοῦ άγροῦ. [2] διεξελάσαντες δὲ πᾶσαν τὴν χώρην καὶ σπανίους εὑρόντες τούτους, ώς τάχιστα κατέβησαν ές τὸ ἄστυ, ἁλίην ποιησάμενοι άπέδεξαν τούτους μέν πόλιν νέμειν τῶν εὖρον τοὺς ἀγροὺς εὖ έξεργασμένους: δοκέειν γὰρ ἔφασαν καὶ τῶν δημοσίων οὕτω δή σφεας έπιμελήσεσθαι ὥσπερ τῶν σφετέρων: τοὺς δὲ ἄλλους Μιλησίους τοὺς πρίν στασιάζοντας τούτων έταξαν πείθεσθαι. Πάριοι μέν νυν Μιλησίους οὕτω κατήρτισαν. τότε δὲ ἐκ τουτἑων τῶν πολίων ὧδε ἤρχετο κακὰ γίνεσθαι τῆ Ἰωνίη."

"Around this time, after a period of remission, again occurred many evils. These ills were wrought in the first and second place by Miletos and Naxos. Indeed, at this time, Naxos' prosperity was ahead of the islands, and Miletos was blooming above all the Ionians. However, previous to, this, for/after [?] two generations of men, there was sickness and great stasis, until the Parians put it to order - of all the Greeks chosen by the Milesians. Change was affected by the Parians thusly, on arrival of their best men at Miletos, seeing for themselves the terrible squandering of households, they decided to journey through the chora. They made this journey through all Milesia and anytime they saw somewhere well-kept in the chora with its fields being worked, they wrote down the name of the owner of the plot. Proceeding through all the chora and rarely finding this, they swiftly went to the town. Assembling the demos, they dispensed power in the polis to those whose fields they had found well-worked, expecting for those people to take care of it like their own. So that the other Milesians should not be at variance with this; they made them agree. In this way the Parians restored order to Miletos, though in the aftermath, great evils were wrought on the Ionians."

(Hdt. 5.28-30)

The first thing to note here is that the actual *stasis*, which has often evoked the central interest of scholars in this passage, is dealt with in very short order. It is difficult even to identify the opposed groups. Herodotus seems to imply that those given power by the Parians may have had no involvement in the *stasis* and concentrated instead on their land holdings, rather than the internal political struggle. In this we may see shades of Hesiod's advice to his brother Perseus (Hes. *Op.* 30), though whether Herodotus intended to invoke this passage — he was certainly aware of Hesiodic poetry (2.53, 4.52) — or whether it represents a more general literary *topos*, is unclear. It has also been

suggested that this narrative falls within a theme of 'rise and fall' (Guth 2017), or more accurately 'fall and rise and fall', a common Herodotean theme (i.e. Hdt. 1.1), in terms of its micro emphasis on the establishment of order and prosperity and which, nevertheless, acts as a precursor for a more serious fall.

The passage seems to suggest a close link between order in the *oikos* and order in the *polis* (Burford 1993). We may also infer that the importance of land ownership was a factor in political power at Miletos. In this sense, the Parian episode may be identified as an *aition* for a ruling group whose main qualification to power was the ownership of a certain amount of land. Furthermore, it has also been identified as a potential charter myth for a ruling group at Miletos in the fifth century (Guth 2017), which, if accurate, would mean that those in power in the city following its restoration (in the first quarter of that century) consciously presented themselves as a group whose previous stint in power had been beneficial to the community. Though, in reality, as an aition and charter myth it could also be Archaic in origin. While it seems generally plausible that the group who were handed power were, or were represented to be, a landed elite. Notwithstanding potential heterogeneity within this group, the disenfranchised group may be taken to be either the *demos*, though it seems that this included those who were receiving power, or the more nebulous "other Milesians" ($\ddot{\alpha}\lambda\lambda\sigma\nu\varsigma M\lambda\eta\sigma\dot{\alpha}\sigma\dot{\alpha}\sigma\dot{\beta}$). In isolation then, it is very difficult to nail down the relative distribution of power and identity of the groups involved in these events and the exact role of a putative elite within it.

The temporal setting of this episode has also proven difficult to identify. One school of thought sees the Parian's settlement as being directly related to the *aisymnetai* list published in the Delphinion at Miletos. Noel Robertson dates the list to 525/4and sees it as being part of a general reorganization of ¹¹³ which the statutes of the *molpoi* were also a part.¹¹⁴ This date is not unproblematic. First if we are to read Herodotus, " $\dot{\epsilon}\pi$ ì δύο γενεὰς ἀνδρῶν" literally, as referring to the length of the *stasis*,¹¹⁵ then this suggests the rather problematic notion that, at the time of the Persian conquest of Ionia and subsequent Persian rule, Miletos was suffering from sustained civil disorder

¹¹³ Robertson (1987: 376) dates the list by counting back from the magistry of Alexander son of Philip (Alexander III of Macedon: the Great) which he assumes cannot have occurred before 334/3. Nevertheless Peter Rhodes (2006) has noted that, taking into account the presence of suffect officials, it may date to 522/1. Cf. Gorman (2001: 141) who suggests a gap between 494 and 479 which brings the date up to c. 540. For a recent discussion see Greaves, Knight, and Rutland (2020: 29 n.234). The dating of the aisymnetai list (Milet I.3 122 = SEG 45 1620) is not uncontroversial.

¹¹⁴ Robertson (1987: 376) suggests that the *molpoi* rituals were intended to "promote unity of Miletos and the countryside" reinforcing the Parian settlement.

¹¹⁵ Some translators such as Robin Waterfield (*The Histories*, trans. Oxford World's Classics, 2008) prefer to see this as another chronological marker indicating that the *stasis* occurred two generations *before* the Naxian campaign, but parallels to the phrase "ἐπὶ δὐo" in Herodotus including numbers of days (2.19.3); depth of drawback for a bowstring (3.30.1); something fixed in in two places Hdt (4.72) all indicate it is the length of the stasis being referred to. We can also cite the length of the the Heraklidai reign at Lydia - "ǎρξαντες μὲν ἐπὶ δὐo τε καὶ εἴκοσι γενεᾶς ἀνδρῶν ἔτεα πἐντε τε καὶ πεντακόσια" (1.7.4) and the duration of Kroisos mourning for his son "ἐπὶ δὐo ἕτεα ἐν πἑνθεϊ μεγάλῷ" (1.46.1) as further support for this interpretation.

(Gorman 2001: 114-15; Rubenstein and Greaves 2004: 1085). Nevertheless, this point is somewhat mitigated if we follow Gorman's suggestion that " $\dot{\epsilon}\pi$ ì δύο γενεὰς ἀνδρῶν" conveys a sense of vagueness and should actually be taken to indicate that Herodotus himself was unaware of the exact length of time, only that it was of a significant duration (Gorman 2001: 112).

Gorman provides a second salient point regarding the temporal context of the Parian arbitration episode. The use of the term " $\kappa \alpha \tau \upsilon \pi \epsilon \rho \theta \epsilon$ " as a temporal marker is rare in Herodotus and does not necessarily indicate a direct chronological relationship between the events being described (Gorman 2001: 118). She compares this to the description of Spartan prosperity at the time of Kroisos embassy there (Hdt. 1.65-66) which is said to have been as a direct result to the actions of the lawgiver Lykourgos, stating "Herodotos found a lengthy interval of time no obstacle to the juxtaposition of cause and effect, and recognizing Herodotos's narrative pattern, we see that an earlier date for the Parian arbitration is by no means excluded by the text." (Gorman 2001: 118-20).

Her comparison of the Lykourgan reforms and the Parian arbitration is apt for a second reason. The story of the Parian settlement, as we have it, bears a number of resemblances to traditional tales of lawgivers in ancient Greece. Andrew Szegedy-Maszak has pointed out that these stories tend to follow a set pattern which unfolds in three stages (Szegedy-Maszak 1978). First, there is the "initial stage", where a crisis in the polis necessitates the appearance of a "uniquely suited" individual, in this case the Parians who Herodotus states, were chosen "ἐκ πἀντων Ἑλλήνων" (of all the Greeks). This is followed by a "medial stage", in which the lawgiver takes action to decide and implement the new code. Here we would place the Parians travelling throughout Milesia and recording the well-attended landholdings. Lastly, there is the "final stage", where the new law code is established, or in this case the handing over of power to those individuals found to have maintained their farms during the crisis.

The choice of the Parians as arbitrators has also garnered significant attention. Dina Guth has persuasively argued that we should see a deliberate contrast between the good work of the Parian arbitrators and the negative outcome of the Naxian expedition (Guth 2017: 5-6). She argues that Herodotus intended to draw his readers attention to this comparison by using the Parians, traditional rivals of the Naxians, as a signifying narrative device. This also causes her to question the historical veracity of the story and see it as part of an identity construction by the newly established Milesian elite of the fifth century (Guth 2017: 6). However, when we take into account the argument that the arbitration need not have occurred in the sixth century, or was not directly temporally relevant to the Naxian expedition and Ionian revolt, we may posit a scenario where the story of the Parian arbitration was both historical, and specifically chosen by Herodotus as a signifying narrative *topos*. The lack of parallels for this episode may further indicate its historical reality.¹¹⁶ It is both vague and indeterminate enough to suggest a wider context unrecorded by Herodotus, but which fits in to the general notion of periodic *stasis* at Miletos and in many Greek communities in the Archaic and early Classical periods. This brings us to the important final lines of the passage which turns from the peaceful resolution of the Milesian *stasis* by the Parians to the belligerent nature of the Naxian exiles requesting Aristagoras assistance. The close proximity of these ideas may well be intended to imply that those who lost out in the Parian settlement at Miletos likewise became exiles, though significantly did not seek a violent return to the polis such was the equanimity of the arbitration. We might tentatively suggest that Miletos long history of emigration provided the perfect safety valve to prevent this kind of return and, furthermore, may indicate parallels with other episodes of failed exile-and-return to the quasi-migrant settlements of Myrkinos and Leros during the Ionian revolt (Hdt. 5.23, 125).

The second account we have of *stasis* at Miletos comes from Athenaios' *Deipnosophists*, contained within a moralising discourse of the deleterious effects of luxury for the Milesians.

¹¹⁶ Plutarch (*Mor* 21.30) notes an episode of arbitration by communities rather than individuals where a conflict between Andros and Chalcis was resolved by Erythrae, Samos and Paros. But this was an interstate rather than civil conflict.

"Μιλήσιοι δ' ἕως μὲν οὐκ ἐτρύφων, ἐνίκων Σκύθας, ὥς φησιν Ἐφορος, καὶ τάς τε ἐφ' Ἑλλησπόντῷ πόλεις ἕκτισαν καὶ τὸν Εὕξεινον Πόντον κατῷκισαν πόλεσι λαμπραῖς, καὶ πάντες ὑπὸ τὴν Μίλητον ἔθεον. ὡς δὲ ὑπήχθησαν ἡδονῇ καὶ τρυφῇ, κατερρύη τὸ τῆς πόλεως fἀνδρεῖον, φησὶν ὁ Ἀριστοτέλης, καὶ παροιμία τις ἐγεννήθῃ ἐπ' αὐτῶν.

πάλαι ποτ' ἦσαν ἄλκιμοι Μιλήσιοι.

Ήρακλείδης δ' ό Ποντικὸς ἐν δευτέρῷ Περὶ Δικαιοσύνης φησίν· ἡ Μιλησίων πόλις περιπέπτωκεν ἀτυχίαις διὰ τρυφὴν βίου καὶ πολιτικὰς ἔχθρας· οῦ τὸ ἐπιεικὲς οὐκ ἀγαπῶντες ἐκ ῥιζῶν ἀνεῖλον τοὺς ἐχθρούς. στασιαζόντων γὰρ τῶν τὰς οὐσίας ἐχόντων καὶ τῶν δημοτῶν, οῦς ἐκεῖνοι Γέργιθας ἐκάλουν, πρῶτον μὲν κρατήσας ὁ δῆμος καὶ τοὺς πλουσίους ἐκβαλὼν καὶ συναγαγὼν τὰ τέκνα τῶν φυγόντων εἰς ἀλωνίας βοῦς εἰσαγαγόντες συνηλοίησαν καὶ παρανομωτάτῷ θανάτῷ διέφθειραν. τοιγάρτοι πάλιν οἱ πλούσιοι κρατήσαντες ἅπαντας ὧν κύριοι κατέστησαν μετὰ τῶν τέκνων κατεπίττωσαν· ὧν καιομένων φασὶν ἄλλα τε πολλὰ γενέσθαι τέρατα καὶ ἐλαίαν biερὰν αὐτομάτην 🗆 ἀναφθῆναι. διόπερ ὁ θεὸς ἐπὶ πολὺν χρόνον ἀπήλαυνεν αὐτοὺς τοῦ μαντείου καὶ ἐπερωτώντων διὰ τίνα αἰτίαν ἀπελαύνονται εἶπεν·

καί μοι Γεργίθων τε φόνος μέλει ἀπτολεμίστων

πισσήρων τε μόρος και δένδρεον αιει άθαλλές."

"As long as the Milesians were not addicted to luxury, they maintained the upper hand over the Skythians, according to Ephorus, and founded their cities on the Hellespont and established attractive settlements around the Euxine Sea; all these places were subject to Milesian authority. But after they succumbed to pleasure and luxury, their city's courage collapsed, according to Aristotle, and a proverb was coined that referred to them:

'Once long ago the Milesians were valiant men.'

Herakleides of Pontus says in Book II of On Justice: The city of Miletus got into trouble because of their luxurious lifestyle and political animosities, since they felt no interest in behaving reasonably, and instead annihilated their enemies. For when a civil war was going on between the people who owned property and average citizens - the former referring to the latter as Gergithes – initially the average citizens dominated, and they expelled the rich from the city, and then collected the exiles' children in threshing-yards, and drove oxen in and crushed them to death, killing them in the most criminal fashion possible. When the rich in turn got the upper hand, therefore, they smeared pitch on everyone they captured, along with their children; when they were burned, people say, among the many other marvels that occurred, a sacred olive tree spontaneously caught fire. This is why the god for many years refused to admit the Milesians to his oracular shrine, and when they asked why they were banned from it, he said:

'I am in fact concerned about both the murder of the peaceful Gergithes, and their fate when they were smeared with pitch, and the tree that will never flourish again.'

(Ath. *Deip*. 12. 523f-524b = Heraclid. *Pont*. F4 Wehrli, trans. S. D. Olson)

In a sense we may also see shades of the Parian arbitration episode in this narrative. While the latter does not specify luxury as the cause of Miletos' downfall, we may still draw parallels between the fall from grace explicitly set out in both passages. Nevertheless, at face value this passage seems to describe a vicious example of atrocities in the context of a civil war. Yet the narrative is not without problems, foremost of which is the difficulty in placing these events in any kind of chronological relationship to emigration from Miletos, or indeed within a particular wider social or political context.¹¹⁷ Dina Guth (2017: 9-12) has offered a persuasive argument that the story, with its use of folktale motifs such as inversion of behavioural norms and transgression of boundaries, was

¹¹⁷ Parke (1976) accepts the notion of civil conflict at Miletos but opines that the oracle itself is a forgery, see also Robertson (1987: 375). Vanessa Gorman (2001: 103) has suggested that the story follows a common pattern as part of an "offended god" motif and suggests that the outcome, elided by Athenaios, was probably the Persian destruction of Miletos as punishment for these transgressive acts. But Cf. Guth (2017: 10-11) who points out that this ending would have suited Athenaios rhetorical strategy and thus its absence makes little sense within the fragment's embedded context.

originally an *aition* for the establishment of some kind of cult at Miletos of which the 'Gergithes' were a part.

This leads us on to a second line of enquiry regarding this passage. Who were the Gergithes? Many theories have been put forward to explain the nature and presence of this group at Miletos. A number of commentators have suggested that they represent the predominantly Karian rural population of Milesia and may have taken their name from the village of Gergakome some 75km east of Miletos (Robertson 1987: 374; Figueira 2015: 341 n.101). Others have tentatively suggested that it represents some kind of legalistic designation possibly describing a *demotai* population (Roebuck 1961: 506f n.29; Ruzé 1986: 164; Faraguna 1995; Herda 2010; Zurbach 2019). In seeking to locate the identity of the Gergithes, an important observation is frequently underplayed. The second group involved in the conflict are in fact called the *demoton* and demos by Heraclides. It is only their opponents who label them Gergithes (Roebuck 1961: 506; Robertson 1987: 374). This opens the possibility that Gergithes, if it was synonymous with Karians, may be being used in a pejorative sense. The other side of this stasis are more easily identified. The $o\dot{v}\sigma i\alpha \varsigma$ $\dot{\epsilon}\chi\dot{o}\nu\tau\omega\nu$, roughly translatable as the 'propertied' or 'those of substance', seems quite clearly to point to a group who possessed notable wealth. Indeed, it is worth noting the potential parallel between those property owners given power by the Parians in the previous passage. However, given the significant differences in these accounts, this does not necessarily indicate that we are

dealing with the same events. Nevertheless, in both accounts we may reasonably take these designations as shorthand for some kind of elite.

Following Guth's identification of the story as an aetiological folk tale, it is also possible that instead of a cult aetiology, what we are in fact dealing with is an oracular aetiology. The origins of the oracular pronouncement given in the passage are obscure, though it seems likely that, in the context of the story, it originated from Didyma (Parke 1976), though we cannot rule out a Delphic or chresmologian origin (Parke 1976; Fontenrose 1978: 10; 1988: 209-10). Whatever its origins, it seems likely that the oracle predated the narrative we are given. The story became the aetiology for the oracle itself, which was either recorded without context or decontextualized in transmission. The story of stasis may have been appended by Heraclides or an earlier source. Importantly it does not actually mention Miletos, which means that the Gergithes we are dealing with could well be the more famous Gergithes of the Troad (Hdt. 5.122; Xen. Hell. 3.1.15). When and why this oracle became attached to a story of stasis at Miletos is difficult to determine. The Milesian element may be related to the Milesian migrant settlement at Lampsakos, though equally the story may be wholly an invention of Heraclides or his source (Parke 1976: 53). Nevertheless, stasis at Miletos was clearly an important motif in ancient thinking about the *poleis*, in the late Suda (s.v. $\Gamma \epsilon \rho \gamma \epsilon \theta \epsilon c$), and many subsequent accounts (Parke 1976: 51), and therefore the oracle regarding the Gergithes was placed within this framework to explain an otherwise obscure pronouncement.

The final passage recounting *stasis* comes from the *Greek Questions* section of Plutarch's *Moralia*. In answer to the question 'Who were the Milesian aeinautai?' ('τίνες οἱ ἀειναῦται παρὰ Μιλησίοις'), he provides the following explanation:

"τῶν περὶ Θόαντα καὶ Δαμασήνορα τυρἀννων καταλυθἐντων, ἐταιρεῖαι δύο τὴν πόλιν κατἐσχον, ὧν ἡ μὲν ἐκαλεῖτο Πλουτὶς ἡ δὲ Χειρομἀχα. κρατήσαντες οὖν οἱ δυνατοὶ καὶ τὰ πρἀγματα περιστήσαντες εἰς τὴν ἐταιρεἰαν, ἐβουλεύοντο περὶ τῶν μεγἰστων ἐμβαἰνοντες εἰς τὰ πλοῖα καὶ πὀρρω τῆς γῆς ἐπανἀγοντες: κυρώσαντες δὲ τὴν γνώμην κατἐπλεον, καὶ διὰ τοῦτ᾽ 'ἀειναῦται' προσηγορεὐθησαν."

"When the tyrants around Thoas and Damasenor were removed, two *hetaireia* gained control of the polis called *Ploutis* and *Cheiromacheia*. The more powerful prevailed and their group took control. When they sat in council to deliberate on important issues, they would board their ships and put far out to sea and once they had ratified their decision they would sail back, thus they were termed the 'Perpetual Sailors'".

(Plut. Mor. 21.32)

In this passage, Plutarch seems to account for three separate regimes at Miletos. First, "the tyrants around Thoas and Damasenor" have been convincingly shown to represent a group of individuals, within whom the named individuals probably had some important leading function (Gorman and Gorman 2000). We should probably assume that this group was essentially oligarchic, though the exact terms of membership remain opaque. Then there follows a period in which two hetaireia, Ploutis and Cheiromacha appear to gain control. Their description as hetaireia, often translated as "factions" or "political parties" would suggest that they were exclusive closed membership groups (Greaves, Knight, and Rutland 2020). Yet most scholars, drawing upon their seemingly indicative appellations, have chosen to see them as manifestations of capital and labour.118 While Ploutis, almost certainly seems to indicate either an emic or etic definition of this group as categorised by their wealth, the semiotic force of *cheiromacha* has proved far more difficult to pin down. Within Marxist or elite-middling¹¹⁹ discourses this group has been variously conceptualised as either labour, or non-elite (Greaves, Knight, and Rutland 2020; de Ste. Croix 1981). Yet, as we have noted above, their definition as an *hetaireia*, with its aristocratic connotations, seems to belie these conceptualisations. If we are to take Plutarch at face value and assume that *Cheiromacha* is the name used for a group within the Milesian elite, or at least one constituted around an individual or family group, then the meaning of the word can hardly be synonymous with 'labour' etc., unless it is to be taken pejoratively. The word itself - a compound of χειρός, in this context probably meaning either the hand or something done by the hand, and $\mu\dot{\alpha}\chi\eta$, which we

¹¹⁸ Guth (2017: 14) suggests that both groups should be seen as "a relatively small group championing the interests of a social class.", while Mac Sweeney (2013: 64) offers the view that *Cheiromacha* were "hand-workers" and thus we are dealing with "socio-economic factors". See also Greaves, Knight, and Rutland (2020: 84 n. 107) with literature.

¹¹⁹ For this approach see Kurke (1999); Morris (2000).

can take to mean fighting or battling – is rare in the extant literature.¹²⁰ Its literal definition, which seems to be something like "hand-fighters", has been taken to represent either those who were too poor to own their own weapons (Ruzé 1986: 163), a middling group of hoplites who were opposed to a hippic elite or an "established warrior nobility" (Gorman 2001: 110).

There is however an alternative explanation which has received little attention. While *cheiromacha*, as a noun, is only used by Plutarch and Eusthatius, Apollodorus names one of the sons of Electryon and Anaxo, Cheiromachos (Χειρίμαχον).¹²¹ While it is unlikely that Plutarch's text itself originally designated the Cheiromacha as a patrilineal group (i.e. Cheiromachidai), it seems possible that this was the origin of the name in his source which then became a common noun to highlight the distinction and binary between the Cheiromacha/idai and the Ploutis. The passage itself, first and foremost, offers an aition for the name of the aeinautai while the connected story of Thoas and Damasenor and the two *hetaireia* seems to have little actual connection other than offering an historical context for the aition. Indeed,

¹²⁰ The only other attestations of the word are in the works of the twelfth century CE Byzantine scholar Eusathius of Thessalonica (e.g. Eust. *Od.* 1426.5), who suggests that the word, in the form of the phrase *cheiromacha plethys* – which Cullhed (2016: 315) translates as "multitude battling with their hands" – appears in other authors known to him though which we can only assume have not survived to the present.

¹²¹ *Bibl.* 2.4.5. Other names with the root χ ειρός, Cheiroboulos and Cheirokrates are attested at Thasos between the sixth and fifth centuries (*IG* 12 (8) 280) and Cilician Korykos around the second and first centuries (Heberdey-Wilhelm, *Reisen* 71,155).

Plutarch is not even clear as to which group, Ploutis or Cheiromacha, prevailed and became the aeinautai. We would argue then, that the narrative itself is a compound of different historical events and groups. The Cheiromacha, rather than being a non-elite group opposed to the elite *ploutis*, may have been a *hetairea* which traced its descendance to a figure called Cheiromachos, possible even the mythological figure named by Apollodoros.

The identity of the *Aeinautai* has also engendered much debate.¹²² First, the whole passage is clearly identified as providing an *aition* for this group (Gorman 2001: 108; Guth 2017: 15). Various suggestions have been posited to explain the name of this group. Two main lines of interpretation exist, the first sees in them an official body of state, while the second argues for a more informal party with shared interests. Many scholars have sought to locate them as part of a trading aristocracy of "merchant princes" (Meyer 1893: 366; Busolt 1920: 177 n.5; Halliday 1928: 146; Avram 1996: 246), though this conception seems to owe as much to analogies with other historical polities, such as the Hanseatic league, as to the evidence for Archaic Miletos. Others have argued that they were a corporation of ship-owners (Glotz 1928: 68), or a *hetairea* related to the molpoi (Guth 2017: 13-15). Influenced by the contemporary British empire, Helbig (1898: 396) saw them as a kind of naval police force,

¹²² Hesychius *s.v.* describes them as "ἀρχῆς ὄνομα παρὰ Μιλησίοις". Robertson (1987: 382 n. 33) argues that Hesychius either got this information from Plutarch's source or another Milesian historian as the arche of the Aeinautai is not explicitly mentioned by Plutarch. Though if modern scholars can get the "inference" then why not Hesychius?

while others suggested that they represented the commanders and admirals of the Milesian fleet, analogous to the Athenian Naukrariai and Trierarchs (Wilamowitz-Moellendorff 1906: 78; Bravo 1977: 29). Less anachronistic interpretations suggest that they may have been keepers of the public hearth, the officials of the Delphinion (Wachsmuth 1874: 481; Herda 2016: 66), foreign policy officials¹²³ or officials with unspecified duties.¹²⁴

More recently scholars have sought to link the *aeinautai* to the performance of *embateria* rites at Miletos, the opening of the sailing season in the spring (i.e. Bruekner et. al. 2014: 119; Herda 2016: 64-65). This argument is most fully developed by Noel Robertson (1987: 383-4), who argues that the perpetual nature of the aeinautai "suggests that the council of Miletus conducted the embarkation rite month by month throughout the season" and that "Civic routine has made ... the councillors of Miletos into 'perpetual sailors'". Conversely, Thomas Figuiera (2015: 330) has recently pointed out that the word aeinautai itself carries some interesting connotations, denoting as it does that "their lifestyle defied the canons of seasonality" and was "formulated

¹²³ Graham 1964: 98; Herda 2016: 64. Both Graham and Herda cite Glotz (1928), yet the point the latter makes yet is that the elite controlled this corporation and *also* founded colonies, not that the Aeinautai did. In reference to the Aeinautai at Chalcis (*IG* 12(9) 909; *IG* 12(9) 923), "The Knights of Chalcis … founded colonies in Thrake and in the West and controlled the flourishing corporation of ship-owners (aeinautai)".

¹²⁴ i.e. Gorman (2001: 110) an "obscure name for a corporation of functionaries" or Simonton(2017: 190) "unremarkable but oddly named magistracy".

around their prowess as sea captains and willingness to bear absences routinely transcending earlier canons of temporality".¹²⁵

Overall, these literary allusions and attestations of *stasis* at Miletos are problematic as evidence for conflict during the Archaic period. The sources all post-date the Archaic period and contain elements which are clearly aetiological. Nevertheless, the persistence of the motif and the presence of aspects such as the aeinautai and cheiromachia, which later authors seem to have misrepresented or not fully understood, may be taken to suggest that these narratives contain older elements, arguably dating back to before the Persian destruction of the city in 495, hence during the Archaic period. Furthermore, as we shall see, there is other, more reliable, evidence to suggest that civil conflict could act as a driver of emigration. and it seems plausible to suggest that instances of *stasis*, occurring during the seventh and sixth centuries, acted in the same way for certain groups at Miletos.

¹²⁵ Aeinautai also appear at Chalkis in the third century where they are described as a *koinon* (IG 12(9) 909; IG 12(9) 923) and Eretria in the late fifth century (SEG 24 989; Petrakos 1963). In the former case Robertson (1987: 384) argues that "It is not surprising that in later times the civic term should be adopted by private persons celebrating the embarkation rite; the civic term epimenioi was adopted more generally by private groups." While the latter appear to him to be a group operating in the same vein as the Milesian group.

II.2.2 Economic Drivers

In modern studies of migration, economic drivers are some of the most commonly adduced reasons for individuals and groups to migrate (Winchie and Carment 1989). Simplistic reasoning, such as economic decline, belies the complexity of economic interactions in the ancient world which could create the driving conditions for emigration. In general, there are two sides to the relationship between economies and migration. In the short term, economic development can be an important driver for migration. Long term trends of economic decline may likewise precipitate conditions where migration junctures are enabled (Massey 1989). Therefore, in this section, we will explore the evidence for both economic prosperity and stagnation at Miletos in the Archaic period.

According to Herodotus, on the eve of the Ionian revolt, Miletos was at its acme and the most prosperous city in Ionia (5.28). While many scholars have contested this (Gorman 2001: 129-34), there are many more grounds for accepting that Miletos was indeed at the height of its economic power at this time (Greaves, Knight, and Rutland 2020: 74-81). But when assessing the economy of an Archaic Greek poleis, how do we measure relative prosperity? The extant evidence provides a number of vectors of analysis which shall be enumerated. These show that Miletos' wealth and prosperity developed throughout the seventh and sixth centuries. First, we shall look towards the evidence for prosperity in the seventh and sixth centuries, through the manifestations of wealth and prestige. These are particularly evident in the art and architecture of the *asty* and its urban, peri-urban and rural sanctuaries. Between the second half of the eighth century and the first half of the seventh century, land reclamation was taking place throughout the peninsula on which the city stands, extending the habitation area significantly (Brückner et al. 2006: 61 fig. 10, 74). The logistical, economic and manpower requirements of this would surely have been extensive and would require an established political organisation to plan, oversee and execute such a project. In addition to this, we can also point to the extensive building works throughout the peninsula in the second half of the sixth century including the Delphinion in the centre of the city (Herda 2005: 260), the Temple of Athena,¹²⁶ the temple of Artemis Kithone on Kalabaktepe (Senff 1995; Kerschner and Schlotzhauer 1999), and the socalled "Tempel II" at Branchidai-Didyma which replaced an earlier enclosure and sacred grove ("sekos I") (Drerup 1964; Dirschedl 2019; Tuchelt 2007).

Second, we shall look at the extent of Milesian trading relations beyond those with the settlements and regions where migrants settled. While we must acknowledge that transport amphora need not necessarily have travelled on an

¹²⁶ Debate still surrounds the dating of this structure. While it was originally thought to have been constructed after the Persian destruction of the city in 495 (von Gerkan 1925: 122), the discovery of an egg and dart feature in a closed archaeological context antedating this event, which had analogies with earlier finds from the temple, has led to the proposal of an Archaic date probably around the end of the sixth century (Niemeier, Greaves, and Selesnow 1999; Weber 1999; Senff 2006), contra Held (2000, 2004). See now Lohmann (2021: 53-54), who questions the strength of the evidence and concludes that neither date can be thought definitive.

uninterrupted journey from their place of origin to the location of their deposition containing a single unchanging product, it is still worth looking at their spread to gain some idea of the extent of exchange networks in which a given production centre was involved. In the case of Miletos, transport amphora identified as coming from there are found across the Mediterranean. Between the last quarter of the seventh and the first quarter of the sixth century, they can be identified at Methone in Messinia (Kotsonas et al. 2017: 9-11), Emporio on Chios, Cypriot Salamis, Pithekoussae and Taras in Italy (Cook and Dupont 1998: 174) and Ashkelon in Canaan (Waldbaum 2002: 58-59). From the second half to the final quarter of the sixth century they can also be identified in Egypt (Villing 2013: 77; Smoláriková 2014), the Saronic Gulf, Etruria, Megara Hybalai, Gravisca (Cook and Dupont 1998: 174) and the Cyclades (Knodell et al. 2020: 13). It has been proposed that olive oil may have been one of the prime commodities for export at this time (Cook and Dupont 1998: 174) and Milesian amphora have also been identified on the Kekova Adası shipwreck, a vessel carrying predominantly agricultural produce and probably bound for the Levant from Ionia (Greene, Leidwanger, and Özdaş 2011). Furthermore, Milesian wool, whether processed or unprocessed, had a reputation for luxury often tipping over into decadence throughout the ancient Mediterranean possibly as early as the seventh century (Ar. Ran. 943; Diod. Sic. 12.21; Ath. Deip. 12.5.19). This implies that it was exported in some form, though the extent of its contribution to the Archaic economy is difficult to quantify (Greaves 2002: 31; 2010: 76; Méndez Dosuna 2021: esp. 672 n. 20).

In addition to Miletos' relatively widespread trading relations, we should also note that it was the first Greek polis to mint coinage, probably around the first quarter of the sixth century, and the Milesio-Lydian standard became widespread throughout the region due to this (Psoma 2015). Milesian minted coins of the Archaic period have been found as far afield as Egypt (*IGCH* 1637, *IGCH* 1638). It is clear then, that Miletos was extremely successful in the economic sphere throughout the Archaic period. This acted as a potential driver for migration through increasing opportunities for wealth creation and the interaction with mobile networks of goods and people which went with it. The apogee of this economic expansion seems to have coincided with the early majority phases of migration following the middle of the sixth century and we can argue that to some extent, the increasing wealth of Miletos facilitated an expansion of migration capital, alongside the declining capital costs of migration which, at least for some of the migrants of this phase, may have eased their ability to emigrate.

The basis of Miletos' domestic economy in the Archaic period is extremely difficult to quantify. First, we must distinguish between its domestic, regional and overseas economic activities. Agriculture intended to support family groups was probably the basic unit of production. This likely includes the cultivation of the so-called Mediterranean triad: olives, wheat and vines; alongside animal husbandry (Greaves 2002: 15-30). As we shall see, the loss of agricultural territories due to conflict could be one of the key migration drivers in relation to this activity. Furthermore, the economic interactions between Miletos and its terrestrial neighbours, in particular the Lydian and later Persian empires, should be considered. Setting aside notions of tribute and exploitation,¹²⁷ vectors such as the introduction of coinage, mobile artisans and access to export markets in Lydian dominated areas provide some contexts in which the presence of the Lydian empire may have economically benefitted Miletos (Knight forthcoming-b). This potentially undergirds both the movement of Milesians during the period of Lydian hegemony and the presence of majority migration phases to a number of emigrant communities in the northern and western Black Sea around the time of Lydia's eclipse by the Persian empire.

Nevertheless, economic decline and stagnation may also play a role as an exogenous driver of migration, particularly for individuals bound to specific economic relationships with agriculture which may be subject to decline outside the individual or group's ability to rectify or influence. One of the most pervasive theories of why the Greeks chose to migrate is concerned with "land-hunger". That is the relative demographic relationship between population and resource base (Scheidel 2003). Thomas Gallant, in his study of risk management strategies in ancient Greece, noted that families "found themselves in the untenable position where, after *employing all the adaptive measures* and *resorting to many of the response strategies ...* they were *still* either so deeply in debt that they were on the verge of losing their land or else

¹²⁷ Discussed in Greaves, Knight, and Rutland (2020).

on the brink of going under in the face of crops losses. For many, flight was one of the few *options* left." (emphasis my own) (Gallant 1991: 137f). This passage aptly illustrates the way in which external structures and exogenous drivers at upper and proximate levels and their emergent qualities can operate in terms of migration. First, the upper structural layers in this case could consist of such factors as drought, crop blight or natural disasters such as earthquakes. There is relatively little that the individual agent can do to prevent these. Nevertheless, they still possess "adaptive measures" and "response strategies" which we will here identify as proximate structures. These are used to mitigate and offset the effects of the upper structural layer and, if successful, operate to restructure responses within similar conditions. This results in situated learning (Lave and Wenger 1991), codified strategies and knowledge capital of internal structures. In short, external structures work to create, adapt and restructure internal forces.

For Aubrey Gwynn, the size and relative poverty of Greece was enough to precipitate an extended period of out-migration, and all other potential motivations can be circumscribed under the rubric "of a growing population seeking to expand within limits which were inevitably too small" (Gwynn 1918: 92). The broad strokes of this thesis and the attendant notion of a population explosion in Archaic Greece have found many supporters in the years following Gwynn's seminal study.¹²⁸ While most scholars accept a rising population

¹²⁸ I.e. Ehrenberg (1968: 13-19); Snodgrass (1980: 39f, 40-42); Graham (1982: 157-59); Murray (1993: 110-17); de Ste. Croix (2004)

between the Geometric and Archaic periods, the precise extent of this increase has been extensively debated (Snodgrass 1980; Tandy 1997; Scheidel 2003; Morris 1987). What is important, from our point of view, is that the data which has been used to model these demographic trends has come almost exclusively from the funerary contexts of Attica and the Argolid (Snodgrass 1980: 19-22; Morris 1987). The lack of such material from Miletos means that it is impossible to determine, from the burial record,¹²⁹ whether any concomitant increase in population is visible there. Furthermore, neither Athens nor Argos can be identified as an emigrant community of any note in the Archaic period. When we turn to Archaic emigrant communities, we are beholden to survey archaeology to make any judgements regarding demographic expansion. John Fossey, collating survey information from a number of notable emigrant regions, has demonstrated that there is little evidence for any kind of resource saturation vis-à-vis population which would have resulted in the need for migration as a solution (Fossey 1996). Fossey's study, however, did not include Miletos, predating as it did Hans Lohmann's extensive survey of the Milesian peninsula between 1990 and 1999 (Lohmann 1995, 1997, 1999, 2004, 2007). Both this work, and Anja Slawisch's recent intensive survey at Panormos, seem to support Fossey's conclusions (Slawisch and Wilkinson 2020). In the Archaic

¹²⁹ It is generally accepted that Miletos' Archaic necropolis lies under the present location of Balat village (Greaves 2002: 87-89). Over the last few years, the necropolis of Panormos has been extensively excavated though we still await publication. For preliminary reports see Slawisch and Bilici (2013); Slawisch (2014); Slawisch and Akat (2015); Slawisch and Wilkinson (2016).

period, land use seems to have significantly increased around the same time that emigration became more frequent (Slawisch and Wilkinson 2020: 200-01). Yet, according to Greaves' calculations of the potential population of Archaic Miletos it seems highly unlikely that it exceeded the carrying capacity of the Milesian agricultural territories (Greaves 2007: 13-17). Furthermore, we again see a large increase in site number on the peninsula in the Byzantine period (Slawisch and Wilkinson 2020: 200-01), which further indicates that the expansion of the Archaic period did not in and of itself result in land shortages and subsequent emigration. While natural demographic processes do not seem to be accountable for Milesian migration we must bear in mind that "contractions of the resource base, not uncontrolled reproduction, were the principal cause of 'overpopulation'" (Scheidel 2003: 121). We cannot rule out that external and internal pressures may have played a role in relative 'overpopulation' at Miletos.

For many scholars, the rise of the Lydian Kingdom and its aggression against the Ionian Greek cities, including Miletos, remains one of the most important factors in the potential "contraction" of Milesian resources. It is also thought to have precipitated emigration from the city in the seventh and sixth centuries (Tsetskhladze 1994a: 124-26; Tsetskhladze 2006: xxviii-xxx; Greaves 2007; Yailenko 1982; Kallistov 1952; Koshalenko and Kuznetsov 1992). According to Alan Greaves the most agriculturally important area of Milesian territory, the lower Maeander valley, was the area most affected by this aggression, and the resulting loss of land and agricultural resources was the prime mover in "mass" emigration from the city (Greaves 2007). Greaves estimates that Miletos' Maeanderine territory comprised some 321.5 km² from the mouth of the river to Magnesia-on-the-Maeander (Greaves 2007: 15, 21 n.23). Ongoing work in this region may alter this picture, potentially suggesting even more land at Miletos' disposal (Akçer-Ön et al. 2020). Nevertheless, the actual effects of Lydian and Persian aggression area remain opaque. To begin to answer this we must turn to Miletos' relations with these two major powers over the course of the seventh and sixth centuries and establish the extent to which they presented an existential danger to the poleis and a motivating factor for migration.

II.2.3 External Conflict

The growth of the Lydian empire in the seventh and the first half of the sixth centuries has frequently been cited as an important factor for explaining the depth and breadth of migration from Miletos (Tsetskhladze 1994a: 124-26). According to Herodotus, beginning with Gyges, whose accession to the Lydian throne is traditionally dated to around 680, the Lydian empire made a series of attacks on Miletos and the other Ionian states (Hdt. 1.14-25). These lasted until the turn of the sixth century (Knight 2019, forthcoming-b). External evidence is lacking to confirm the historicity of the early invasions from Gyges to Sadyattes, though we know that other Ionian poleis such as Kolophon and Smyrna were almost certainly in conflict with the Lydians during this period (Mimnermus F 13, 14 Gerber). Nevertheless, it seems clear that the Lydians were involved in military campaigns on the Ionian coast at this time and, on

balance of probability, that Herodotus was aware of traditions involving several Lydian attacks on Miletos. If we are to envisage periodic incursions and raiding or sustained campaigns of external aggression, these would, at the very least, make living conditions difficult for some Milesians. Those particularly effected are likely to be the populace whose interests lay outside the city walls. Furthermore, this groups probably accounted for a sizeable portion of the population, given the extensive exploitation of the Milesian peninsula and the adjacent Maeanderine valley in the Archaic period.

Around the end of the seventh to the beginning of the sixth centuries, the Lydian king Alyattes conducted a series of raids into Milesian territory, destroying the produce of farms in the apparent hope of starving the city into submission (Hdt. 1.19-22). There are parallels between Alyattes tactics and those used by the Spartans in the opening stages of the Peloponnesian war, which Herodotus seems to be clearly alluding, when he remarks that Miletos control of the sea, like Athens a century later, made it invulnerable to attacks on its landward side. We might also suggest that this is also intended to draw a comparison with the Persian naval victory at Lade at the end of the Ionian revolt which gave them control of the city.

Alyattes' campaigns were brought to a premature end with the accidental conflagration which destroyed the temple of Athena at Assessos. According to Herodotus, this caused the gods to afflict him with illness (1.19). Following this, the Delphic oracle apparently ordered him to rebuild the temple. Subsequently, his attempts to make a treaty with the Milesian tyrant Thrasyboulos led to a lasting peace being established with Lydia and Miletos on terms of guestfriendship and alliance ('ξείνους ἀλλήλοισι εἶναι καὶ συμμάχους') (Hdt. 1.22.4).

There are aspects of Herodotus' story which can be independently verified. First it is clear that Miletos was fortified by a city walls from at least the seventh century (Greaves 2000b: 66; Gorman 2001: 166-68; Fredericksen 2011: 169-70), though their purpose may have been as much a part of regional aggrandizement as disincentive against potential besiegers (Greaves 2010: 117, 61). Secondly, excavations at Assessos (m. Mengerevtepe) have revealed dedications to Athena (SEG 48-1419) and evidence of a destruction layer concurrent with the time of Alyattes (Kalaitzoglou 2008: 5-15; Kerschner 2010: 259-60). Therefore, it is clear that we should accept the broad terms of the story, though elements such as Thrasyboulos tricking the Lydian ambassadors and the divine punishment of Alyattes, exhibit the hallmarks of folk tale elements either added and adapted by Herodotus or part of the original stories told by his sources (Gray 2001: 16-19).

We hear little more of Lydian aggression against Ionia until the accession of Kroisos who, according to Herodotus, conducted a campaign of conquest rather than periodic aggression and raiding (1.6). There is some debate over whether Kroisos renewed Alyattes' treaty with Miletos.¹³⁰ Nevertheless, according to Herodotus (1.92), Kroisos' Lydio-Ionian half-brother Pantaleon

¹³⁰ According to Gorman (2001: 87-88) Miletos fell from favour with the Lydians in the reign of Kroisos, though Cf. Badian (2007: 36); Fantalkin (2014: 38-42) for the opposite view.

contested his accession to the throne. After his victory, Kroisos dedicated some of Pantaleon's possessions to the Milesian sanctuary of Branchidai-Didyma. This suggests that the Miletos was indeed still favoured by Kroisos and may even have had a hand in the defeat of a rival claimant to the Lydian throne (Knight forthcoming-b).

Therefore, as a driver of emigration from Miletos, we need to look at the consequences of Lydian aggression in the seventh, rather than the sixth century. When discussing Alyattes' invasion of Milesia around the turn of the sixth century, he says:

> έν τοῖσι τρώματα μεγάλα διφάσια Μιλησίων ἐγἐνετο, ἕν τε Λιμενηἰφ χώρης τῆς σφετἑρης μαχεσαμἑνων καὶ ἐν Μαιἁνδρου πεδίφ.

> "two significant defeats were suffered by the Milesians, at battles at Limenion in their own chora and in the Maeander pedion."

There is no clear consensus as to where Limenion in the Milesian chora actually was. The name itself is derived from the word $\lambda\mu\eta\nu$, meaning a harbour or safe haven (*LSJ* s.v.). Thus, a number of sites may be posited. Famously, Miletos itself had four harbours, the Lion harbour, Theatre harbour, Humeitepe harbour and east harbour. Whether all four were in use during the Archaic period, however, is a matter of dispute.¹³¹ There seems to have been an

⁽Hdt. 1.18)

¹³¹ Strab. 14.1.6. See Brückner and Herda (2009) for a survey focusing on the lion harbour.

additional landing spot adjacent to the temple of Athena and a peri-urban harbour off Kalabaktepe (Brückner and Herda 2009: 49-50). Other potential locations could be Panormos, or one of the numerous southern natural harbours around the bay of Akbuk. The order in which events are described in Herodotus narrative seem to suggest that the battles at Limenion and in the Maeander pedion took place before Alyattes destruction of the temple of Athena Assessos; itself roughly concurrent with the Lydian siege of the city. Limenion could then be located somewhere northeast or southeast of Assessos, which stood in a prominent position overlooking the entrance to the northern plain of Milesia. This argument may be supported by recent work at Bafa Gölü (Lake Bafa) which, using radiocarbon dating, has identified the Lake as an almost closed lagoon at this point with only a small opening probably plied by shallow draft rivercraft for ferrying people and goods (Akçer-Ön et al. 2020). Therefore, Limenion could represent anyone of the many inlets at the northern end of this lagoon.

While there was probably no widespread economic crisis in Archaic Miletos, we cannot discount that individuals and familial and social groups may have been under pressures themselves, though not ones which were widespread amongst the whole community. During the seventh century, Miletos is thought to have controlled wide territorial holdings stretching from the islands of Leros and Ikaros in the west (Manganaro 1963-4; Sarantides 2020), to mount Latmos in the east, and from the bay of Akbuk in the south (Lohmann 2007) to the Maeander plain north of the city (Thonemann 2011: 27-31). In the latter area it

has proven difficult to quantify the extent of these holdings which has been obscured by changing hydrological conditions. Frequent conflict may have ensured a lack of stability in landholding in the area (Thonemann 2011: 27-31). Nonetheless, it is precisely in this area where some scholars have suggested a regression of Milesian holdings occurred, principally caused by the establishment of Lydian and later Persian estates in this highly fertile area.¹³² There is much evidence to suggest the Persian practice of granting land and estates to notables and benefactors. Unfortunately, little survives to indicate such practices in the second half of sixth century in Ionia or the Maeander valley. The only evidence we have in this region post-dates the Ionian revolt. Herodotus tells us that:

δὲ Μιλησίων χώρης αὐτοὶ μὲν οἱ Πἐρσαι εἶχον τὰ περὶ τὴν πόλιν καὶ τὸ πεδίον, τὰ δὲ ὑπερἀκρια ἔδοσαν Καρσὶ Πηδασεῦσι ἐκτῆσθαι.

"Of the Milesian *chora* the Persians held that around the polis and the plain, the uplands were granted to the Karians of Pedasa".

(Hdt. VI.20)

The land around the polis, referred to here, is most likely the low-lying northern plain of Milesia stretching from the sanctuary of Aphrodite Oikous in the west to Assessos in the east. The uplands may either refer to the western reaches of Milesia around Mount Grion (Modern Ilbir Dagı) or possibly the Stephania hills

¹³² See Greaves, Knight, and Rutland (2020: 75-76) with references.

and central plateau of the peninsula itself. More interesting is the identity of the pedion. It may indicate the plain mentioned above, with $\pi\epsilon\rho i \tau \eta v \pi \delta \lambda v$ referring to the immediate vicinity of the *asty* such as the areas around Değirmentepe and Zeytintepe, thus the land to the east would be the pedion. Alternatively, it is possible that this refers to the Milesian holdings in the Maeander plain. If Persian settlement on Miletos' Maeanderine territories only dates to after 494, then it seems less likely that the removal of Milesian landholders is responsible for emigration from the region in the second half of the sixth century.

Further evidence can be deployed to emphasise the importance of the Maeander pedion to Miletos. Peter Thonemann's thesis that Mav δ po- and - μ av δ po ς names represent potamonymics, strongly implies the importance of the river to the Milesian aristocracy (Thonemann 2006). In his catalogue of seventh and sixth century attestations of Mav δ po- and - μ av δ po ς names, Thonemann cites 26 instances from this period. The majority are from Ionia, with Miletos accounting for 46% of attestations (12/26). A further two from settlements attested as Milesian, namely Kyzikos and Olbia.

Place	Name	Туре	Source
Olbia	Άθηνόμανδρος	Theophoric	DuBois, IGDOlbia 74
Miletos	Άναξιμανδρος	Verbal stem	Diels-Kranz 12
Miletos	Άναξιμανδρος	Verbal stem	I. Didyma 2.1
Miletos	Άναξιμανδρος	Verbal stem	Milet I 3, 122 I.7, 13, 19
Miletos	Άναξιμανδρος	Verbal stem	Milet I 2, 8
Thera	Άρασίμανδρος	Theophoric	IG XII 3 562

Uncertain Ionia	'Ερμόμανδρος	Dvandva potamonymic	ABSA47, 1952, 161
Miletos	Θεμισθομανδρος	Theophoric	Milet I 3, 122 I.8
Smyrna	Καλώμανδρος	Verbal stem	I. Smyrna 902
Chios	Μανδραγόρης	Verbal stem	LSAG 344 no. 47
Miletos	Μανδραγόρης	Verbal stem	Milet I 3, 122 I.30, 36, 40
Miletos	Μάνδρις	Simple suffix	SEG 43, 848
Miletos	Μανδρόδικος	Verbal stem	Milet I 3, 122 I.3
Miletos	Μανδρόδικος	Verbal stem	Milet I 3, 122 I.14
Chios	Μανδροκλής	Verbal stem	LSAG 344 no. 47
Uncertain Ionia	Μανδροκλής	Verbal stem	LSAG 276 no.25
Samos	Μανδροκλής	Verbal stem	Hdt. 4.87-8
Priene	Μανδρόλυτος	Verbal stem	Apul. <i>Flor</i> . 18
Miletos	Μανδρόμαχος	Verbal stem	I. Didyma 2.1
Kyzikos	Μάνδρον	Simple suffix	I. Kyzikos I 286
Uncertain Ionia	Μανδρώναξ	Verbal stem	BM Gems & Cameos, 445
Uncertain Ionia	Νε(ι)λόμανδρος	Dvandva potamonymic	SEG 18, 651
Miletos	Πυθόμανδρος	Epiklesis	Milet I 3, 122 I.20, 27
Myous	Πυθόμανδρος	Epiklesis	BE 1971, 585
Uncertain Ionia	Πυθόμανδρος	Epiklesis	Anacreon F400
Miletos	Μανδρωνα-(-ξ or · κτιδης)	-	I. Didyma 15.3

Table 2 Distribution of Mav $\delta \rho o$ - and - $\mu a v \delta \rho o \varsigma$ in C7 and C6 (adapted from Thonemann 2006).

No other polis comes close to demonstrating this preponderance for these naming conventions, though we must be necessarily cognisant of the possibility that the vagaries of survival contribute to this picture. It is also worth considering the type of names we find. Of those with a verbal stem, some of the more popular names have distinctly aristocratic connotations, such as $\lambda v \alpha \xi_{1}$, $K \alpha \lambda \dot{\omega}$ -, $-\delta \iota \kappa \circ \varsigma$, and $-\kappa \lambda \dot{\eta} \varsigma$. This phenomenon has also been interpreted as evidence for non-Hellenocentric ideas of Milesian identity by Naoise Mac Sweeney (Mac Sweeney 2013: 74) who noted "many Milesians saw themselves as connected with this landscape, as people of the Maeander river valley."

This extraordinary emphasis on the Maeander, has implications for our line of enquiry. Firstly, as Thonemann (2006) has so cogently argued, the elite nature of these names suggests that the Maeander valley was an arena of conflict, one where the Milesian aristocracy could prove themselves in warfare against external enemies. If some Milesians did lose land in this area, it would have put a difficult economic burden on them. We might suggest that the lack of rural settlement in Milesia is down to the short distance between the settlements of Miletos itself and Assessos, and the agricultural plain in the north of the peninsula. Yet, if we are to utilise later evidence, it is possible that settlement on-the-land would necessarily have been practiced in the Maeander plain. According to the epigraphic evidence, large estates were the norm there throughout much of antiquity (Thonemann 2011), though hydrological and agricultural changes make these very difficult to uncover. Thus, loss of land to Persian or Lydian invasion and settlement, or even local intra-Ionian conflict, could have rendered some individuals and families destitute, leaving little option but to try their luck abroad as migrants.

We must also consider the emotional aspect of this loss. By placing the Maeander at the heart of their self-identity, the Milesian elites may have perceived what could potentially have been a short-term economic problem, as striking at the very heart of their conception of themselves and their place in their environment. It has been noted that one of the most important characteristics of refugees is their dislocation from 'home' and the psychological trauma involved in the loss of the space and idea of 'home'.¹³³ The ideological disruption involved in the trauma may have precipitated internal migration from the Maeander valley to the Milesian peninsula or *asty* itself. Furthermore, this could engender a reaction in which complete dislocation and external migration became a potential mode of action. Nostalgia is an important factor in both ancient and modern conceptions of 'home', and it is possible to see migratory decisions undertaken as a way of conceiving the 'home' community through the lens of constructed nostalgia, rather than dealing with the trauma of reality (Taylor 2013: 144). Even if, economically speaking, this trauma is not necessarily decisive in the ability to continue living in the 'home' community, it still enforces a change in conception of the identities structured around the perception of 'home' which may be easier to accommodate in a new context removed from the contemporary reality of the community.

Finally, we turn to the Persian destruction of Miletos in 494. While Herodotus claims that this was total (6.18-19), some doubts have been raised,

¹³³ On varied notions of 'home' for refugees see the important discussion in Taylor (2013).

and there seems to have been some limited settlement on Kalabaktepe immediately following the Persian sack (Lohmann 2021). Nevertheless, archaeological excavation, where the destruction layer has been uncovered, suggests that the raising of the city was complete (Herda 2019b). Indeed, the Kalabaktepe settlement has been convincingly attributed to the occupying Persians themselves (Lohmann 2021). Furthermore, Herodotus claims that the Milesian population was deported to Sogdiana in modern Uzbekistan (6.22). Yet the reestablishment of Miletos two decades later, implies some Milesians escaped. Vanessa Gorman has argued that the *isopolietia* decrees between Miletos and some of its emigrant communities represent the establishing of rights which allowed emigrants to return to the city (Gorman 2002). Furthermore, in an often-ignored passage, Herodotus also refers to a group of Milesians who had fled the sack emigrating to the east coast of Sicily near Zankle (6.22.2). Thus, there seems to be good grounds to argue that the sack of Miletos precipitated some level of emigration. At the same time, as we have seen (section II.2), there seems to have been increased migration to the Kimmerian Bosporus, while several new settlements such appeared on the western Pontic coast. Therefore, it is possible to argue that the Persian sack of Miletos may have driven a new majority phase of Milesian migration, albeit temporally limited.

II.2.4 Conclusions

The role of exogenous drivers in Archaic emigration has formed one of the most important foci of the previous studies of the process. Overpopulation, land-hunger, external and internal conflict, environmental disasters and more, have been posited to explain why Greeks chose to emigrate between the eighth and sixth centuries. Yet, as far as Miletos is concerned, there is very little direct evidence which would point towards any specific driver of emigration. Ancient authors are of little help since, in most cases, emigration is characterised as a result of conflict between individuals. These tensions often result in murder or manslaughter, acts which precipitate the departure of the perpetrator from the political community. While this may usefully be seen as a perennial literary *topos*, its historical counterpart, *stasis* — internal civic conflict between peer groups or elites and non-elites — may have played some role in contextually contingent moments of emigration.

The literary record preserves a number of instances of stasis reputed to have occurred at Miletos during the Archaic period. Nevertheless, some clear problems emerge from this body of evidence. First, as we have argued, they are mostly achronological and episodic in character. Some scholars have tried to place them within a chronological timeframe of Milesian history or suggest that they provide differing perspectives on corresponding events. Yet, the arguments to support these positions are, more often than not, positivist or ahistorical. Secondly, within these accounts there is almost no mention of longdistance emigration. The furthest distance that any emigrants move is the case of Aristagoras fleeing to Myrkinos during the Ionian revolt (Hdt. 5.126). This specific incident can hardly be taken as a framework for the outcomes of our other narratives. Notably, Athenaios, in his introduction to Heraklides Ponticus story of the murder of the Gergithes, suggests that it was prior to the stasis that Milesians emigrated to significant effect. While we are clearly dealing with a late and possibly anachronistic source, it is still worth querying whether Athenaios is implying here that migration and *stasis* were two sides of the same coin, and interchangeable as outlets for the resolution of civil conflicts. Plutarch's tale of Milesian *stasis* also raises some interesting if tangential questions. While we have noted that the losing party seems to have been more likely to have undertaken emigration, in this narrative it is the victors who become the *aeinautai*, the perpetual sailors. This demonstrates the primacy of maritime interests amongst the ruling group at Miletos and, more importantly, suggests the importance placed upon the maintenance of maritime networks of mobility. These could be accessed by potential migrants and their existence may have played a vital role in the lowering of required migration capital.

Just how we should conceptualise these networks is another important consideration. There is no doubt that, during the period of Milesian emigration, the emigrant community itself experienced a high level of prosperity and economic development. Miletos was the first polity outside Lydia to mint coinage. Its use of a Milesio-Lydian standard became the benchmark for coin production across the region. This testifies to the broad reach of the emigrant communities' economic ties and their potential ability to lower migrant capital costs through access to persistent economic networks. Furthermore, throughout the sixth century, there is much evidence for extensive infrastructure and construction projects at Miletos. These are evident within the urban area itself and further afield, including extensive land reclamation around the peninsula on which the city was located; road and temple building, including the sacred way between Miletos and Didyma-Branchidai, temples to Artemis, Demeter, Athena, and Aphrodite in the urban and peri-urban areas; fortification walls around Kalabaktepe; and possibly the nascent beginnings of concerted urban planning later attributed to Hippodamas. In addition to these projects, the wealth of the city can be seen in the extensive dedicatory practices of its temples, particularly that of Aphrodite on Zetintepe. Materials from as far away as Cyprus and Egypt have been found there in abundance, as well as finely wrought votives made of precious metals (Hölbl 1999; Senff 2015; Henke 2017; von Graeve 2019).

These indicate extensive cultural and economic links formed an important basis of the city's prosperity. By the second half of the seventh century, at least, and continuing down to Miletos' destruction at the hands of the Persians, trading relations were maintained with mainland Greece, Magna Graecia, Etruria, forest-steppe Skythia, Cyprus, the Balkans, the Caucasus, Anatolia, Egypt, and into the Levant. Given that we can trace the movement of Milesian people as well as goods to many of these regions (though not necessarily in large numbers), there seems to be little doubt that the mechanisms and networks which facilitated Milesian participation in extensive inter-regional trade also lowered migrant capital through the provision of means, opportunities, and infrastructure for movement.

In addition to the role of overseas trade in Miletos' economic and cultural connections, it also stood on the cusp of the large polities of Anatolia and the Near East, most importantly the Lydian and Persian empires. For the former, the literary record preserves some indications of aggression toward Miletos in the seventh century (Knight forthcoming-b). Yet, following this, and particularly in the early uptake and majority phases of the Milesian emigration trajectory, conditions between the two seem to have been more settled. According to Herodotus, Miletos signed a treaty with the Lydian king Alyattes, probably between the end of the seventh and the first quarter of the sixth century. If anything, then, participation in a stable western Anatolian cultural *koine* not only benefited Miletos economically and politically, but may also have facilitated conditions for migration, particularly to the Propontic and southern Black Sea regions. Still, in the former area, Lydia may have also played a role in the establishment of immigrant communities, possibly as early as the first half of the seventh century.

Nevertheless, despite the seemingly amicable relations between the Lydian kingdom and Miletos, it remains possible that the power imbalance between the two might have had an uneven effect on the latter. The threat of Lydian aggression, as well as conflict with other Greek *poleis* in the important Maeander valley region, is a case in point. The clear emphasis placed on this region in the naming conventions of the Milesian elite imply not only its importance as a source of self-conception, but the potential for conflict in the area (Thonemann 2006; Mac Sweeney 2013). Though the lack of archaeological evidence across the valley makes analysis problematic, this region seems to be the one area where Milesian influence could have been curbed. In the sixth

century, first Lydia and then Persia may have exerted influence there. The relationship between the Milesian elite and the Persian empire seems to have been one of mutual, yet uneven, benefit. Evidence for the appropriation of land, following the Ionian revolt, might suggest a threat to the Maeander valley region (Greaves, Knight, and Rutland 2020). In any case, it is somewhat ironic that the destruction of Miletos following the Ionian revolt, concurrent with the late majority phase of the migration trajectory, facilitates our only explicit evidence of an exogenous driver for Milesian emigration, albeit emigration to the west rather than the north.

Overall, the political and economic context of Archaic Miletos provides tantalising glimpses of exogenous migration drivers. Yet, these are rarely explicit and can only provide a limited component of any model of Milesian emigration in a general sense. Furthermore, with the exception of internal disorder, these potential drivers are limited to higher order generative structures and fail to tell us much about the historically contingent individual migration decisions taken by small groups in historically contingent circumstances. In this sense, alongside the endogenous drivers of migration processes and the long-term trajectory of migration discussed in the previous section, they provide another background layer that played a role in the migration of individuals and groups. Yet without understanding more specific cultural contexts and social positioning, this can only provide us with a partial perspective of the way in which migration unfolded in time and space.

II.3 **Position Practices**

As the previous two sections have shown, the reconstruction of trajectories and drivers of migration allows us to create a big picture of the process of migration. We have discussed the ways in which the movement of groups of people rises and falls within specific exogenous historical contexts and the ways in which phases of migration interact with one another to allow for the expansion and contraction of movement. These broad stroke historical processes provide a canvas, a landscape of movement. It is now necessary to people this landscape with individuals and groups negotiating their positions within these broader cumulative movements. The lack of any first-hand participant account of a migration experience of the kind essential to sociological and agent-based studies of migration requires us to use an alternative model to begin to understand the more specific exogenous processes involved in individual and group migration over time and space.

Therefore, we need to introduce the theoretical tool of position-practices to overcome these problems. The matrix of social relations and practices associated with positionally situated individuals can facilitate reasonable inferences about the ways in which they act within different historical contexts. By selecting from an individual's overlapping social identities, we can begin to understand the opportunities and constraints afforded by their social positioning to their access to capital and the relative ease or difficulties they face in converting this capital to mobility capital at different junctures in a given migration trajectory. For this purpose, we have identified three broad categories of position practices which give some insight into these processes.

First, we shall explore the role of cultural identity. This section is based on the underlying recognition of the malleability of identity characteristics and markers based around socially constructed categories of ethnicity, and recognises that biological origin does not necessarily line up with perceived and adopted ethnic identities (Hall 1997; Siapkas 2004). These identities are divided into Milesian, Eurasian, Balkan, and Anatolian.

As we shall demonstrate, the role of Milesians in the migration process constitutes both a lived reality (Ehrhardt 1988) and an historical construction (Braund 2019). We understand Milesian as both a unifying label for the wider process of migration and as designating a group of culturally positioned emigrants. In addition to analysing the evidence for Milesian migrants, we shall also consider the development of the notion of the metropolis and, more specifically, Miletos as a metropolitan emigrant community. Our other categories of cultural identity are broader. Balkans includes essentially those peoples labelled Thrakian and Getic in our ancient sources amongst others, though we must be aware that these constructions belie a heterogenous agglomeration of temporally and spatially distinctive practices and identities. Likewise, Eurasians, who in this context include groups and societies from the forest-steppe region of modern Ukraine, the sea of Azov, the Taurian mountains of Crimea, the Taman peninsula, the Kuban valley, and the Caucasus. In ancient accounts they are designated Skythians, Maeotians, Sindians, Colchians etc. Finally, our discussion of Anatolian migrants focuses on both the inhabitants of the southern coast of the Black Sea and those of western Anatolia. Unlike the previous two cultural identities, these Anatolians could follow terrestrial or maritime migration routes and it is important to recognise that, in a geographic and cultural sense, they may be indistinguishable from so-called Milesian emigrants. Nevertheless, here we will focus on Anatolian migrants in the northern Black Sea. There is no doubt that Anatolian people were resident, temporarily or permanently, in the settlements of the southern coast (Summerer 2005, 2007, 2008) yet the evidence for this is often from the fifth century or later and it is their presence further afield which affords better grounds to explore their role as migrants.

There were, no doubt, other culturally practicing groups involved in this migration process, including people from the Aegean such as Boiotians (Fossey 1999, 2019), Aiolians (Handberg 2013; Yailenko 2019), Megarians (Robu 2014; Herda 2016), Teians (Kuznetsov 2003) and, later, Athenians (Braund 2005a; Kakhidze 2005; Mattingly 2005). The dominance of Milesian cultural identity as a heuristic tool for understanding the immigrant communities under investigation means that these are often better explored within other position practice categories particularly in relation to migrant vocations.

The second position practice category that we explore is related to status. While a variety of social statuses existed in a hierarchical progression in the Archaic and Classical periods (Kamen 2013), here we focus primarily on elite identities, perhaps one of the best evidenced socially practicing positions in this period. Given the relative wealth of evidence which has survived and the nature of elite status and practices, the migration capital available to social elites is clearer.

The final category of position practices we shall explore are vocations. Synthetic categorisations of settlements such as *emporion*, fishing station, handicraft or agricultural settlement belie both the heterogenous activities of the inhabitants evident from the archaeological record and the ways in which groups practicing different vocations had opportunities and access to capital to migrate at different points in the migration trajectory. By treating these vocational identities on a spectrum rather than as foundational points in relation to a settlement's establishment and purpose, we can begin to elucidate the multiplicity of factors surrounding their ability to migrate and the various exogenous and endogenous drivers which undergird this process. While a variety of vocations were, no doubt, practiced to a greater or lesser degree in the immigrant communities under investigation, we will focus on a quartet consisting of craftspeople, fishers, traders, and agriculturalists. These roles are well represented in the available evidence for vocational practices and, given their intimate links to traditional conceptions of the drivers of migration and the economic character of particular settlements, they allow us to view these activities in a novel way, free from the prejudices of scholarly schools of thought such as commercial migration and *stenokhoria* (land shortage).

Overall, we shall demonstrate that by conceptualising migrants as positionally practicing individuals and groups, it is possible to achieve a far more nuanced reading of the temporal, spatial and capital dynamics of their migration. By situating these positions within the contextually specific trajectories that we have modelled in the previous sections we can also gain a new understanding of the conditions under which specific people and groups migrated, their motivations and experiences, as well as their negotiations of their wider social contexts to facilitate the potential of movement at migration junctures.

II.3.1 Cultural Identity

II.3.1.1 Milesians

Ancient authorities provide varying estimates for the number of colonies founded by Miletos (see above section II.1), though it is generally recognised as the most prolific metropolis of the Archaic period.¹³⁴ Nevertheless, the earliest explicit attestations of settlements as Milesian do not appear until the late C5.¹³⁵

¹³⁴ We are taking metropolis here to merely mean emigrant community rather than organising state. For a critique of the 'Historical-Positivist' approach with reference to 'Milesian' settlements see Knight (2021).

¹³⁵ We agree with Irwin (2018) suggestion that the ending of Herodotus *Histories* indicates composition after the Peloponnesian War.

Herodotus claims Olbia-Borysthenes,¹³⁶ Istros,¹³⁷ Myrkinos¹³⁸ and Naukratis were all settled by Milesians (in the latter case along with various others). Taking Istros as an example, however, there is a temporal disparity of over two centuries between Herodotus claim of Milesian ancestry and the earliest archaeological material for the settlement (Dimitriu 1966; Alexandrescu 2005; Knight 2021). We cannot take it as given, on the basis of Herodotus alone, that Istros was indeed settled by Milesians. This remains true for all the literary material, some of which postdates settlement by significantly longer. The other significant problem we encounter with this material is its concentration in the work of just a few authors.

¹³⁶ Hdt. 4.78.3: "οἱ δὲ Βορυσθενεῗται οὖτοι λέγουσι σφέας αὐτοὺς εἶναι Μιλησίους" ("the Borysthenites say they are Milesians").

¹³⁷ Hdt. 2.33.4: "τῆ Ἰστρίην οἱ Μιλησίων οἰκἑουσι ἄποικοι." ("Istros is inhabited by Milesian settlers")

¹³⁸ Hdt. 5.11.1: "ὁ μὲν δὴ Ἰστιαῖος, ἄτε τυραννεὐων τῆς Μιλήτου, τυραννἰδος μὲν οὐδεμιῆς προσεχρἡιζε, αἰτἐει δὲ Μὑρκινον τὴν Ἡδωνῶν, βουλὀμενος ἐν αὐτῇ πὀλιν κτἰσαι." ("Histiaios, Tyrant of Miletos, requiring no further tyrannical power, asked for Myrkinos in Edonia, wishing to be a city founder.")

Name	Source	Date
Berezan	Hdt., 4.78.3	C. 400
Olbia	Hdt., 4.78.3	C. 400
Istros	Hdt., 2.33.4	C. 400
Myrkinos	Hdt., 5.11.2	C. 400
Naukratis	Hdt., 2.178	C. 400
Abydos	Thuc. 8.61.1	C. 400
Leros	<i>BNJ</i> 72 F26	C. 330
Kyzikos	<i>BNJ</i> 72 F26	C. 330
Ikaria	<i>BNJ</i> 72 F26	C. 330
Limnai	<i>BNJ</i> 72 F26	C. 330
Artake	<i>BNJ</i> 72 F26	C. 330
Paisos	<i>BNJ</i> 72 F26	C. 330
Amisos	Theopompus, F 389	C. 300
Kios	I.Milet 3.141	C. 228
Phasis	Heraclides Lembus, 46	C. 170
Apollonia	Ps-Skymn. 730-33	C. 120
Odessos	Ps-Skymn. F 1	C. 120
Tomoi	Ps-Skymn. 767	C. 120
Kepoi	Ps-Skymn. 893	C. 120
Tyras	Ps-Skymn. 832	C. 120
Sinope	Ps-Skymn. 781-97	C. 120
Kardia	Ps-Skymn. 700-3	C. 120
Kromna	Ps-Skymn. 1005	C. 120
Kytoros	Ps-Skymn. 1005	C. 120
Sesamos	Ps-Skymn. 1005	C. 120
Tieion	Ps-Skymn. 1005	C. 120
Miletoupolis	<i>BNJ</i> 1054 F 63	C. 10 CE
Pantikapaion	Strab. 7.4.4	C. 10 CE
Parium	Strab. 10.5.7; 13.1.14	C. 10 CE
Prokonessos	Strab. 13.1.12	C. 10 CE
Priapos	Strab. 13.1.12	C. 10 CE
Lampsacus	Strab., 13.1.19	C. 10 CE
Skepsis	Strab. 13.1.52	C. 10 CE
Arisbe	Strab. 14.1.6	C. 10 CE
Kolonai	Strab. 13.1.19	C. 10 CE
Theodosia	Arr. Peripl. M. Eux. 19.3	C. 130
Dioskourias	Arr. Peripl. M. Eux. 10.4	C. 130

Table 3 Earliest mentions of Miletos as Metropolis.

A solitary fragment of the rhetorician Anaximenes of Lampsakos,¹³⁹ preserved in Strabo's *Geographica*, provides us with a little under one fifth of the extant literary notices identifying Milesian settlements.

"Άναξιμένης γοῦν ὁ Λαμψακηνὸς οὕτω φησὶν ὅτι καὶ Ἰκαρον τὴν νῆσον καὶ Λἑρον Μιλήσιοι συνῷκισαν καὶ περὶ Ἑλλήσποντον ἐν μὲν τῆ Χερρονήσῷ Λἰμνας, ἐν δὲ τῆ Ἀσἰᾳ Ἄβυδον Ἄρισβαν Παισόν, ἐν δὲ τῆ Κυζικηνῶν νήσῷ Ἀρτἀκην Κὑζικον, ἐν δὲ τῆ μεσογαἰಢ τῆς Τρῷἀδος Σκῆψιν: ἡμεῖς δ' ἐν τοῖς καθ' ἕκαστα λέγομεν καὶ τὰς ἄλλας τὰς ὑπὸ τοὑτου παραλελειμμένας."

"Anaximenes of Lampsakos says Leros and Ikaros were settled by Milesians, and around the Hellespont – Chersonessian Limnai; in Asia, Abydos, Arisbe and Paisos; on the island of Kyzikos, Artake and Kyzikos, and in the middle of the Troad, Skepis. I have already spoken of others this writer left aside."

(Anaximenes $F_{26} = Strb. 14.1.6$)

Strabo's comment at the end of this passage proves useful in allowing us to speculate as to Anaximenes' choice of sites to mention. That they are all in the Aegean, Hellespont and Propontis implies that Anaximenes, a Propontic Greek himself, was well aware of the metropolitan traditions of settlements in the area. Furthermore, though Strabo does not offer us any information on whether

¹³⁹ Anaximenes likely wrote sometime around 366/5 (Diod. Sic. 15.76.4; see also FGrH 72 T 4)

these references are derived from Anaximenes' 12 volume *Protos Hellenikon* or are contained within the same passage, it seems likely, given the nature of this work, that these *poleis* were mentioned when some historical action took place there, though what that might have been is impossible to speculate.

The literary tradition contained in Strabo accounts for our identification of all Miletos' remaining Propontic and Hellespontine *apoikia* (table 3). Including the fragment of Anaximenes, Strabo's *Geographica* accounts for nearly 40% of our earliest literary notices on Miletos as metropolis. Pantikapaeum is the only Pontic settlement for which Strabo provides our earliest mention, the remaining are identified as Milesian settlements by Pseudo-Skymnus. Unfortunately, Strabo fails to offer any sources other than Anaximenes, so it is impossible to determine any starting points for their traditions.

The information provided by Pseudo-Skymnos, however, may prove to have a long heritage. In a recent article, Valery Yailenko has offered an in-depth analysis of these allusions and suggested from the nature of these fragments, particularly the method of dating events in relation to Persian history, that Pseudo-Skymnos' information was derived from Demetrias of Kallatis and Ephorus, who themselves seem to have relied on the works of Hellanikos of Lesbos (Yailenko 2015-2016: 10-19). His reconstruction continues by suggesting a further line of transmission to Hellanikos through Charon of Lampsakos (or less likely Dionysus of Miletos), all of which may have drawn on the Yailenko's Ur-text for the Pseudo-Skymnos fragments, Kadmos of Miletos (Yailenko 2015-2016: 20-22). The further back the reconstruction goes, the more room for doubt is created. Nevertheless, Yailenko's case is well argued and eminently plausible, if very difficult to verify. The implications are also of foremost importance in that, if Yailenko is correct, this means that the idea of Milesians establishing migrant communities was established by the middle of the sixth century. This dating is crucial as it falls at a time when many communities were still being established and, of those mentioned by Pseudo-Skymnos for which Kadmean origin can be conjectured, Odessos would then have only been established almost certainly in Cadmus' lifetime.¹⁴⁰

Yailenko's line of transmission is predicated on the notion that the information which comes down to Pseudo-Skymnos was originally disseminated in local histories of Miletos and its emigrant communities (Yailenko 2015-2016: 16-17, 21). Foundation stories themselves have a long tradition in Greek literature.¹⁴¹ In a recent study of local polis histories,

¹⁴⁰ Cadmus presents a nebulous figure. The ancient sources (e.g. Plin. *HN*. 5.12, 7.205; Strab. 1.2.6; Joseph. *Ap*. 10.7.9) see him as one of the first prose writers and historians, though with mythologizing tendencies (Diod. Sic 1.37.3), who wrote a history of Miletos. But the tradition is confused by conflations with the mythical Cadmus (Suda s.v. Κάδμος ὁ Μιλήσιος, Κάδμος Πανδίονος, Κάδμος ᾿Αρχελάου) and many modern scholars have cast doubt on his historicity e.g. Jacoby (1919); Almagor (2016). A recent treatment (Fontana 2014) has argued for his historicity and placed him around the mid sixth century.

¹⁴¹ See Fowler (1996, 2002); Thomas (2019) for discussions of local histories in their contemporary and historiographical contexts. The earliest example comes in the Iliad where

Rosalind Thomas provides a catalogue of all known examples from antiquity (Thomas 2019: 417-45). It is notable that all of the examples of these logoi, predating the fifth century, come from Ionia. Furthermore, we should note that, for Milesian emigrant communities, there is no evidence until the end of the fifth century for any written local histories, though doubtless oral traditions were in circulation before this time. Nevertheless, this does cast some doubt on Yailenko's thesis, while narratives of the Ionian migration and the establishment of the cities of Ionia clearly had a long history (table 4), it is less certain that such manifestations of local identity were current in the emigrant communities as early as their establishment. Overall, the literary tradition gives a clear indication that the notion of Milesian migration was certainly established by the fifth century.

the foundation of Rhodes is described (Il. 2.653), while Strabo alludes to a poem on the foundation of Kolophon by Mimnermus in the sixth century (Strab. 14.4).

Region	City	Author	Title/Citation	After	Before
Ionia	Kolophon	Mimnermus		-650	-600
Ionia	Smyrna	Mimnermus	Smyrneis	-650	-600
Ionia	Ephesos	Chersiphron–Metagenes	Vitr. De. Arch. 7.12	-550	-500
Ionia	Miletos	Kadmos	Ktiseis Miletou kai tes oles Ionias	-600	-500
Ionia		Bias of Priene	Peri Ionias	-600	-500
Ionia	Samos	Semonides of Amorgos	Archaiologia Samiōn	-600	-500
Ionia	Kolophon	Xenophanes	Ktisis of Kolophon	-550	-470
Ionia	Chios	Ion	Chiou ktisis	-480	-422
Ionia	Chios	Hellanikos	Peri Chiou ktiseos	-450	-400
Propontis	Kyzikos	Deilochus	Peri Kyzikou	-425	-375
Propontis	Lampsakos	Charon	Horoi Lampsakenōn	-425	-375
Aegean	Ikaros	Aristotle	Pol F 69 Gignon	-350	-325
Kolchis	Phasis	Aristotle	Phasianōn politeia	-350	-325
Aegean	Ikaros	Eparchides (of Oine)		-300	-200
Aegean	Leros	Pherekydes	Peri Lerou	-300	-100
Black Sea		Andron of Teos	Peri Pontou (Periplous)	-350	-300
Black Sea		Diophantos	Pontikai historiai (Pontika)	-300	-200
Black Sea		Androitas of Tenedos	Periplous tes Propontidos	-400	-200

Table 4 Ionian and Pontic local histories (adapted from Thomas (2019: 417-45)

Expression of emigrant identity can reflect modes of thought and behaviour of immigrant communities of practice and do not necessarily reflect accurate information of origin. In more recent history this can be seen in the tensions, convergences and dialogue played out for young Haitian migrants between Haitian and African-American identities (Stepick 1998: 59-74). In some cases, Haitian migrants engaged in a "cover-up" of their emigrant origins in order to "pass" as African-Americans (Stepick 1998: 59). We must be open to the possibility that individual's Milesian emigrant identity may also have undergone a similar process, whereby other emigrant identities were effectively covered-up or subsumed by a more "attractive" identity. Thus, the literary tradition, while it may contain clear indications of immigrant origins, must also be treated cautiously and analysed in tandem with other sources of information which may provide alternative evidence for migrant origins, contemporary with the practice of migration.

One such body of evidence is ceramic remains. Pottery is the great diagnostic tool of the ancient world. It is almost indestructible and survives in vast quantities at many sites. Nevertheless, as evidence for identity, we must be extremely cautious in uncritical identification of "pots with people" in the oft used phrase.¹⁴² The presence of a piece of pottery at a location removed from the site of its manufacture presupposes object mobility rather than agent mobility and may obscure a variety of human connections beyond migration (Posamentir 2006: 161). The problem of identifying migrants through material culture is also bound up in the side-lining of migration as an explanatory force for cultural change that pervaded archaeological theory in the 1960's and 1970's (Anthony 1990: 896). Therefore, like the literary evidence discussed above, it can only be taken as part of a matrix of indicators of migrant identity.

The development of scientific provenance techniques applied to East Greek pottery, beginning in the 1970's, has shed new light on the dissemination of Milesian pottery and was able to determine that the pottery styles previously known as "Rhodian-Ionian", "Middle Wild Goat" and "Fikellura" all originated

¹⁴² Vickers (2010); van Oyen (2017). Cf. Burmeister (2000) who argues that migrant's private aesthetic tastes tend to be more homogenous and closely aligned with the material culture of the emigrant society.

in Miletos and were predominantly produced there (Dupont 1983c, 1986). Since then, further work has refined the signature of Milesian made vessels using waste pottery from a manufacturing facility located on Kalabaktepe in Archaic Miletos (Kerschner et al. 1993). An important further development is the creation of a new classification system, by Michael Kerschner and Udo Schlotzhauer, which seeks to the refine the dating of East Greek pottery through stylistic elements using a more neutral terminology (Schlotzhauer and Kerschner 2005).¹⁴³ The ability to identify Milesian made pottery and offer reliable dating means that we are now able to offer an overview of its presence in Milesian migrant settlements (Schlotzhauer 2006). Our interest lies in the earliest appearance of such pottery, the types of vessels (if applicable) and its dating relative to the earliest ceramic material at a given site.

A number of observations can be made on analysing this material. First, Milesian made wares are apparent in the early stages of the majority of the communities established in the seventh century. Orgame (Mănucu-Adameşteanu 1992: 57; 2000: 196, 200), Histria (Avram 2003a: 285; Alexandrescu 2005: 330-31), Berezan, and Olbia (Kerschner 2006a: 231-35) all exhibit evidence for SiA Ic or Middle Wild Goat I style pottery, though in very limited quantities. Towards the end of the century, SiA Id or Middle Wild Goat II wares appear at Apollonia (Reho 1986), Arisbe (Arslan 2017: 136), Amisos

¹⁴³ The designation given here largely follows that indicated in the literature and the large amount of overlap and vague terminologies used mean that these attributions should be taken with caution.

(Summerer 2007: 30), Pantikapaion (Bouzek 1990: 30), Sinope (Bouzek 1990: 34; Hind 1988: 216) and Hermonassa (Finogenova 2003: 1015; 2010: 514; Bondar, Markova, and Ustayeva 2010: 13). In the second half of the sixth century Milesian pottery of the Fikellura/SiA IIa style can be found at Tyritake (Bujskikh 2014b: 65), Odessos (Minchev 2003: 248), Nymphaion (Schaus 1986: 256), Leros (Benson 1963: 54-55), Kepoi (Bouzek 1989: 449; Kuznetsov 2001a: 336 fig. 20), Patraeus (Abramov 2010: 531), and Nikonion (Bujskikh and Sekerskaya 2019: 204).

Site	SiA Ic	SiA Id	SiA II	Monochrome	Туре	After	Before
Orgame	Х				Oenochoe	-640	-630
Histria	Х	Х			Oenochoe	-630	-620
Berezan	Х				Jug	-630	-610
Olbia	Х				Oenochoe	-630	-610
Apollonia		Х			Oenochoe	-610	-600
Arisbe		Х			Plates	-610	-580
Amisos		Х			Oenochoe	-610	-580
Pantikapaion		Х			Cups	-610	-580
Sinope		Х				-610	-580
Tios	Х					-625	-600
Hermonassa		Х				-600	-575
Myrmekion					Amphora	-580	-550
Tyritake			Х		Table Amphora	-560	-500
Odessos			Х		Cups	-550	-494
Nymphaion			Х		Vase	-550	-494
Кероі			Х			-550	-494
Leros		X?	Х			-550	-494
Patraeus			Х			-550	-494
Nikonion				Х	Amphoriskoi	-520	-494

Table 5 Earliest indications of Milesian manufactured pottery at migrant settlements.

While in many cases the quantities of vessels or sherds are not very extensive, the fact remains that nearly 37.5% of the settlements analysed in this study have some evidence of Milesian manufactured pottery, a share which increases to around 58% when we only consider those settlements for which

any archaeological evidence is available. Therefore, at the very least, we can surmise that a sizable number of the communities which we identify as Milesian migrant settlements had at least some connection to Miletos in the innovation migration phase. Furthermore, the nature of these vessels is frequently suggestive of symposiastic contexts. Though it is possible to suggest that these were items for trade or gift exchange, the quantities are probably not large enough to constitute any kind of profitable trade item while the fact that they were found *in situ* at the emigrant communities themselves potentially negates the notion that they were *all* intended for gift-exchange however plausible this explanation may be in individual cases (Tsetskhladze 2010a). Indeed, as we shall show with our analysis of the material from Berezan in the following section, it seems the more likely explanation was that it had a functional use. It may have been an important possession taken by migrants for the purpose of enacting socio-cultural rites. Furthermore, both its place of manufacture and general appeal may have been important indices of social capital and thus formed an important part of negotiation of status in the immigrant community of practice.

When taken as a whole the pottery assemblages found in Milesian migrant settlements illustrate notable changes over time in the origin and quantity of vessels. The pottery of seventh and sixth century Berezan has been studied in-depth by numerous scholars in recent years (Posamentir 2006, 2010; Mommsen, Kerschner, and Posamentir 2006; Ilyina 2017; Chistov 2018). Significant differences between the types of painted pottery appearing at Berezan have been noted between the seventh and sixth centuries. In the former, South Ionian pottery is the predominant imported ware while the latter sees a marked increase in products of North Ionian origin (Posamentir 2006: 161; 2010: 68; Solovyov 2010: 203; 2019: 160).

The seventh century material includes MWG II/SiA Id jugs and plates (Boardman 1998; Posamentir 2006: 163), while the earliest ware consists of a SiA Ic type 2 skyphos, paralleled in Phase 0 in Miletos.¹⁴⁴ The majority of this material probably came from Miletos, though there is a noted absence of Milesian one-handled drinking cups (Posamentir 2006: 161; 2010: 68; Schlotzhauer 2006). This material is suggestive of the symposium, particularly the presence of *oenochoe* and *skyphoi* (Lynch 2011: 75-79). According to Sergey Solovyov, this "specialised equipment" may represent objects of gift exchange (Solovyov 1999: 3-4), and certainly there are contexts where symposiastic material is intended for non-Greek audiences (Dietler 1990). The presence of Greek pottery in steppe-Skythian population centres also seem to indicate the existence of networks of gifts exchange (Tsetskhladze 2010a). Furthermore, the quantities do not seem to be extensive enough to indicate trade in pottery alone. There is no *a priori* reason to assume that this material, forming part of an

¹⁴⁴ Bujskikh (2016). In addition to this Milesian tableware, the archaeologists have also noted that there is a relatively large number of unusual pottery types at seventh century Berezan, including *askoi*, *lydioi*, and *alabastroi*. Posamentir (2006: 163; 2010: 68) has suggested that this may indicate that Berezan was a centre of export in the region, an argument which has also been used to account for the early East Greek pottery found at native settlements in the region.

important social and cultural rite, was not carefully brought by migrants to the immigrant community to allow them to reproduce these practices in their new context. Furthermore, on this reading, there is a high probability that these individuals were Milesians bringing Milesian made objects with them when they migrated.

In the sixth century we begin to see much larger quantities of Greek wares at Berezan predominantly from North Ionian centres of manufacture. This phenomenon has elicited much debate in the literature (Dupont 2007; Posamentir 2006). If, as we have argued, the presence of Milesian pottery in seventh century Miletos is possibly indicative of the presence of Milesian migrants, can we draw an inference from the influx of North Ionian pottery? Furthermore, does a fall in the amount of South Ionian and Milesian wares mirror a falling off of Milesian migration? The answer to the second question is probably in the negative, of 41 Milesian migrant settlements for which we have some dating evidence, either archaeologically or literary attestations, 24 were established in the sixth century as opposed to 17 in the seventh century. As we shall see some of the sixth century settlements can be reasonably adduced to have been established by migrants coming through earlier settlements on the Kerch peninsula This change in the dynamic of settlements may cloud the origin of migrants, but more than likely at least some came from Miletos, while others probably adopted facets of Milesian migrant identity to assimilate into these immigrant communities (Osborne 2016). Another important point that must be borne in mind is that the majority of these settlements, with the

exception of a handful on the Eastern and the Southern coasts, were settled between the first and second quarters of the sixth century. This represents an important concentration of Milesian migration resulting in the establishment of new immigrant communities between 625 and 550.

The first question is more complex, a general increase in the quantity of pottery in the sixth century is clearly observable (Posamentir 2006: 162) and South Ionian wares are by no means absent, indeed numerous pieces of Fikellura/SiA IIa from Miletos were found at Berezan in 2005 (Chistov 2005: 288; Ilyina 2017). The most likely explanation is that trade in the region either came through Northern Ionia or was in the hands of North Ionians (Dupont 2007). This does not necessarily imply, though, that migrants also came from this region in similar numbers, Milesians almost certainly continued to migrate throughout the sixth century. Several scholars have noted the development of local imitations of Fikellura pottery in the sixth century suggesting a conscious attempt to draw parallels between Miletos as an emigrant community and themselves as emigrants.

	1			<u>ا</u>
Miletos	Leros	Patmos	Skepsis	Kyzikos
Ταυρεών				Ταυρεών
Θαργηλιών				Θαργηλιών
Καλαμαιών				Καλαμαιών
Πάνημος				Πάνημος
Μεταγειτνιών	Μεταγειτνιών			
Βοηδρομιών				
Κυανεψιων				Κυανεψιων
Ἀπατουριών				Άπατουριών
Ποσιδεών				Ποσιδεών
Δηναιών			Ληναιών	Ληναιών
Άνθεστηριών				Άνθεστηριών
Άρτεμισιών		Ἀρτεμισιών		Ἀρτεμισιών
Sinope	Apollonia	Odessos	Tomis	Istros
	Аропоша		TOHIIS	
Ταυρεών		Ταυρεών		Ταυρεών Θαουπλιών
				Θαργηλιών
T. La sur			Καλαμαιών	
Πάνημος				
		D 6 '		
		Βοηδρομιών		
·	*	<u>'</u>	3	*
Άπατουριών	Άπατουριών	Άπατουριών	Άπατουριών	Άπατουριών
Ποσιδεών				
Ληναιών Άτοθο στο το ότο				
Ἀνθεστηριών	Άνθεστηριών	Ανθεστηριών		Άνθεστηριών
	1	Άρτεμισιών	1	Ἀρτεμισιών
Tyras	Olbia	Pantikapaion	Gorgippia	Hermonassa
	Ταυρεών		Ταυρεών	
	Θαργηλιών			
Καλαμαιών	Καλαμαιών			
	Πάνημος			
	Μεταγειτνιών			
	Βοηδρομιών	Βοηδρομιών		
	Κυανεψιων			
	Άπατουριών	Άπατουριών		
	Ποσιδεών			
Δηναιών	Δηναιών			Δηναιών
Άνθεστηριών	Άνθεστηριών	Άνθεστηριών	Άνθεστηριών	
 Άρτεμισιών	 Άρτεμισιών			

Table 6 Month names at Miletos and migrant communities (adapted from (Ferraru 2015).

The evidence of shared calendars and month names at Miletos and its migrant settlements has been explored in depth by a number of scholars (Bilabel 1920: 67-80; Ehrhardt 1988; Ferraru 2015). Recently, Robin Osborne has eruditely discussed the potential import in shared calendars between emigrant and immigrant communities stating "Life as the Greeks knew it required account to be taken of the passage of time, and few communities can have worked directly from the stars, in Hesiodic fashion. The calendar with which people had been brought up was the default calendar of their adult life, whether they stayed where they were born or migrated elsewhere ... migrants might well prefer to join a city whose calendar (and other similar institutions) were familiar rather than one where cults and months bore strange names." (Osborne 2016: 25). With this in mind it is surely significant that, in a number of Milesian migrant settlements, we see clear evidence for a common calendar (Table 6) with the religious implications which this entails (Ferraru 2015).

While it must be made clear that no single piece of evidence can definitively identify the presence of an individual Milesian emigrant, between the literary, archaeological, and epigraphic material (table 6) discussed, we can clearly see a convergence towards the presence of Milesian emigrants at these settlements. As we would expect, the major communities at Histria, Berezan, Olbia, Sinope, Pantikiapaion, Odessos and Apollonia all demonstrate at least three of these features; while Abydos, Amisos, Arisbe, Hermonassa, Kepoi, Kyzikos, Lampsacus, Myrmekeion, Naukratis, Nymphaion, Orgame, Parium, Skepsis, Tomoi, Tyras/Ophioussa have two. It is clear, on this evidence, then, that Milesians were very active migrants throughout the Archaic period, moving in substantial numbers and establishing varied communities across a significant geographic span.

In terms of migration trajectories, the evidence presented above indicates that Milesian identity may have conferred a high level of mobile capital (Knight 2019) which allowed Milesians to migrate in the innovator phases. This is not to say that their movement was confined to this phase however, as we shall see when we look in more depth at social and vocational positions, migration opportunities and capital which were available to Milesians throughout the Archaic period.

II.3.1.2 Balkans

Identifying the presence of Balkan immigrants, including Thrakians and Getes, in the Milesian coastal settlements has proved an intractable problem. Several bodies of evidence have been utilised to provide a basis on which claims of local presence can be made, though none, in isolation, can provide firm grounds for locating individuals of a local Balkan cultural background. This section will concentrate on two potential identifiers, material culture and linguistics. Relevant data from funerary contexts will be dealt with briefly in another context and evidence from domestic and religious contexts will be evaluated in depth elsewhere. We will start by analysing the evidence from the earliest Milesian migrant settlements on the west coast, leaving aside those communities established on the Thrakian Chersonese, Propontis and Hellespont, which have not been adequately excavated to provide data for such analysis and whose appellations do not carry traces of non-Greek languages.

Istros

According to Christof Danov, the name of Istros is of local origin which suggests to him that the site was previously occupied by an indigenous settlement prior to the arrival of Milesian immigrants around the final third of the seventh century (Danov 1960: 75; 1976: 355). This claim, however, is not unproblematic. Istros, as the name for the Danube, appears as early as Hesiod (*Theog.* 337-340), and, while it may represent local nomenclature for this feature, there is no reason to assume that the city itself was not named after it. While the distance between the settlement of Istros and its eponymous river has been the subject of some confusion, it is possible that Istria's sphere of influence, by the time it received this appellation, included the Danube delta.

Local pottery has been identified in most excavated sectors at Istros (Coja 1990: 161-62). The earliest such material is dated to phases I and II of the Babadag culture and may indicate some local presence in the area (Ailincăi, Miriţoiu, and Soficaru 2006: 95). Around the time of the arrival of the earliest Greek migrants at Istros, a fragment of a Hallstatt corded ware vessel can be identified in the small *bothros* east of the temple of Zeus excavated in 1979. It was found alongside some of the oldest material from the site and has been dated to between 630-620. Similar material was also found in the 1974 and 1975 seasons in the sacred zone (Alexandrescu 2005: 385, C293-95). In the

residential area on the plateau, a further two handmade vessels of Hallstattian origin have likewise been identified and can be dated to the earliest decades of the settlement (Dimitriu 1966: 55). This area also demonstrates that the quantity of handmade wares significantly increased over time as the settlement developed (Dimitriu 1966: 40, 55-56; Damyanov 2018a: 251).

Another area in which evidence for Thrakian presence at Istros has been sought is city's necropolis. A quartet of early tombs dating, from the middle to the end of the sixth century, exhibited features such as funerary pyres atop platforms and human and equine sacrifices. The original excavators interpreted these as evidence of their Thrakian, Getic or even Skythian character (Alexandrescu and Eftimie 1959; Kurtz 1971: 317; Hughes 1991: 68; Oppermann 2004: 21-22). Nevetheless, more recent analysis has tended to cast these burials as idiosyncratic and, given the differences between them and the rites practices in the Istrian *chora*. The predominantly Greek character of the grave goods, with similarities to heroic funerary practices described in epic poetry, can be placed within a context of cultural dialogue (Alexandrescu 1994; Damyanov 2005; Donnellan 2021; Fowler 2021).

Several sites in the *chora* of Istros contain evidence of indigenous presence leading to extensive discussions on the ethnic identity of the inhabitants of this territory. The earliest settlement in territory of Istros. Nuntaşi I, where the earliest ceramic material can be dated around the middle of the sixth century possibly slightly earlier, contains traces of handmade wares from the Hallstatt D group (Domăneanțu 1980: 265). The earliest tomb at the Histria "Bent" necropolis, Grave no. 3, which can be dated to the early sixth century, contained a handmade dish amongst predominantly Greek ceramic material (Avram 2006: 62; 2007: 491). Towards the end of the sixth century the necropolis at Corbu du Jus — where inhumation without burial mounds was practiced extensively — is thought to exhibit "the persistence of strong older Hallstatt traditions".¹⁴⁵

At Tariverde,¹⁴⁶ some 15 km from Istros, excavations since the 1950's has uncovered a notable amount of material which has been connected to Thrako-Getic and Hallstatt cultures. Handmade ceramics, identified with the "Hallstattian tradition" by the excavators, make up around 10-15% of the overall ceramic assemblage of the site (Preda 1972: 81). In a recent study, Iulian Birzescu has questioned whether this material is indicative of local presence, pointing out that, like the domestic architecture of the site, the predominance of kitchenware amongst the handmade ceramic material is indicative of utility of production rather than ethnic identity (Bîrzescu 2012a: 82). Nevertheless, there are other ceramic and plastic objects which may offer clearer ethnic interpretation. These include a bicontronic shaped urn-like vessel with four small handles around the widest part of its body, unparalleled in the Istrian

¹⁴⁵ "persistența unor puternice trad iții mai vechi hallstattiene" (Bucovală and Irmia 1971: 55). ¹⁴⁶ The use of dugout architecture at Tariverde which has been used by many scholars as an indication of local presence (Avram 2006: 61). This type of dwelling was common in the Milesian migrant communities of the Black Sea and so will not be discussed here as an indicant of local immigrants.

chora, but resembling vessels common in Thrakian contexts (Preda and Berciu 1961: 277 fig. 4; Preda 1972: 81; Bîrzescu 2012a: 82). Another non-Greek find is a fibula of the Glasinac type (Preda and Berciu 1961: 277; Preda 1972: 82). These are are found across the southern Balkans, though they rarely in Greek contexts.

Orgame

Cape Dolosman, on which Orgame stands, was occupied from at least the tenth century by a local community of the Babadag culture. At the turn of the last millennium, excavators uncovered a pit containing human remains and numerous artefacts including materials used for fishing and spinning as well as a knife, a whetstone and various ceramics (Ailincăi, Mirițoiu, and Soficaru 2006). The material from this pit has been dated to the Babadag II culture, around the tenth to ninth centuries (Ailincăi, Miritoiu, and Soficaru 2006: 82). In the late 1960's and early 1970's, excavations at Orgame conducted by Maria Coja uncovered adobe buildings and Babadag ceramics in close proximity to Greek wares. For Coja, the arrival of the first Greek immigrants at the site coincided with the final years of a Babadag culture settlement (Coja 1990: 162). Nevertheless, as Sorin Ailincăi and his colleagues have pointed out, the Babadag ceramics themselves may be dated significantly earlier and their admixture with Greek material may have been the result of contamination through natural causes (Ailincăi, Mirițoiu, and Soficaru 2006: 83). At present, therefore, the consensus interpretation regards the chronological relationship

between the between Babadag and Greek occupation at Orgame as uncertain (Mănucu-Adameșteanu 1992: 58; 2003b: 344-45; Bony et al. 2013: 138-39).

Apollonia

EIA pottery has been identified at a number of places at Apollonia. It predominantly dates from the period before the arrival of the first Milesian immigrants, which some scholars have taken to indicate the existence of a small local Thrakian settlement possibly orientated towards maritime activities such as fishing.¹⁴⁷ Following the establishment of the Milesian immigrant settlement at Apollonia, local wares, in the form of coarse jugs from St. Kirik island, have been found, yet no obvious pre-Greek layer can be identified (Panayotova et al. 2014: 598; Damyanov 2018a: 251). The appearance of Thrakian type fibulae in graves and Thrakian names on funerary monuments from the fifth century, also provides a potential avenue for identifying Thrakians at the site, though beyond the timeframe of the present study. Nevertheless, it does imply that, as the settlement expanded, more indigenous immigrants may have migrated there.¹⁴⁸

¹⁴⁷ Nedev and Panayotova (2003: 95-96); Gyuzelev (2008: 119-20); Baralis et al. (2016: 165-66); Damyanov (2018a: 248-51). This material was found at ul. "Milet" and in an area at the city walls on the southern part of the peninsula as well as at other unrecorded locations in the Old Town.

¹⁴⁸ Panayotova (1998: 103); Vasileva (2014). These fibulae appear in graves from the third quarter of the fifth century at the Kalfata necropolis south east of the town.

The *chora* of Apollonia seems to have been exploited primarily from the urban core until the second half of the sixth century at the earliest (Baralis et al. 2016: 170). The earliest evidence for habitation in this area is the Messarite 3 complex, where the architecture points to a Greek cultural horizon for its inhabitants. Nevertheless, a series of coastal settlements may have been established as early as the first quarter of the sixth century. From its inception, Apollonia was engaged in a networks of mineral resource exploitation, with metal resources coming from the mines at Medni Rid (Panayotova and Damyanov 2020). A significant network of Thrakian mining settlements existed in this area in the Archaic period including at Propadalna Voda (Kunze et al. 2018). While Margarit Damyanov has argued that, "[i]t would be difficult to imagine large-scale mining in the hills, kilometres away from the city, without the consent and the active participation of the local Thrakians (for example, providing labour)" (Damyanov 2018a: 251), it is possible to go further and we would contend that, at least in the Archaic period, the exploitation of these resources was probably exclusively in Thrakian hands. Importation of these metallurgical resources into Apollonia itself would provide an important frame to bring local Thrakians into the city, possibly even as craftsmen themselves in the early foundries on St. Kirik.149

Odessos

¹⁴⁹ The phenomenon of Thrakian itinerant craftsmen can be detected in the Northern Balkans during the Hellenistic age (Berecki and Rustoiu 2014).

Significant local presence is evident around the Gulf of Varna. It has been suggested that Odessos may be a hydronym connected to its proximity to the Varna lakes (Lazarov 1998: 92; Minchev 2006: 61). Most scholars agree that the name of Odessos is most likely of Thrakian origin (Isaac 1986: 255), though Mihail Lazarov also draws attention to the use of -ssos suffixes in Karia (Lazarov 1998: 92), while in Milesia itself we can also see similar non-Greek place names with this suffix including Assessos.

Several handmade vessels, which find analogies in the Thrakian necropoleis of the hinterland, were uncovered in the 1960's in a *bothros* on ul. "8-mi noemvri" (Toncheva 1967: 160). These date from the later part of the sixth century and were found alongside Greek wares, including fragments of a *skyphos* designated "Rhodian-Ionian" by the excavator (Toncheva 1967: 159-60), which may be Milesian Fikellura ware. From the end of the fifth century onwards Odessos maintained close political and cultural ties to neighboring Thrakians tribes (Lazarov 1985: 68; Gočeva 1996: 123).

Tomis

In antiquity, many attempts were made to provide aetiologies for the unusual nomenclature of Tomis. Some writers connected it to Queen Tomyris (Jord. *Get.* 62), while others thought that it represented the knife or blade ($\tau \circ \mu \epsilon \dot{\nu} \varsigma$) used by Medea to dismember her brother Abstyrus (Ov. *Tr.* 3.9.1-34; Apollod. Bibl. 1.9.24). By the Antonine age, at the latest, an eponymous hero, Tomis, appears. According to Alexandru Avram, this character superseded the

older Argonautic foundation stories (Avram 2018). Nevertheless, in reality, Tomis probably derives from a local Thrakian topographical term (Buzoianu and Barbalescu 2012: 116) that some scholars have argued indicates the presence of an earlier native settlement at the site (Danov 1960: 75; 1976: 355).

Excavations in the Cathedral park area of Tomis in the 1970's uncovered indigenous Hallstatt and Getic pottery alongside Greek wares throughout the site (Buzoianu and Barbalescu 2007: 292; 2012: 126). In particular, in the area of the earliest domestic structures, numerous wide mouthed pots were identified belonging to the indigenous repertoire, while elsewhere an incised black luster pot was uncovered which the excavators connected to Babadag III wares (Radulescu and Scorpan 1975: 34).

In general, a strong demographic argument can be made for the participation of terrestrial immigrants at all of the Milesian migrant communities on the west coast of the Black Sea. All of the sites under discussion expanded considerably during the sixth century (Avram 1996: 243-4; Damyanov 2018: 251). This population increase cannot simply be accounted for through in-migration from Miletos. Otherwise we would have to account for significant depopulation at a time when the archaeological and literary evidence demonstrates that it was in fact growing in power and prestige (Greaves, Knight, and Rutland 2020). Bio-archaeological studies from the western Mediterranean have also suggested that, even in the more populated cities of southern Italy and Sicily, the contribution of migrants from the Aegean world need not have been overwhelming, indeed it may have been negligible (Tofanelli et al. 2016). The general scholarly consensus concedes that there must have been indigenous peoples amongst the migrants in the first few decades of migration to these settlements. Yet this still raises the question of why non-Greeks have proven so difficult to distinguish in the archaeological record.

Bio-archaeological studies on remains from the Classical Apollonian necropolis at Kalfata, in use between the fifth and third centuries, may provide a clue. Oxygen isotope analysis performed on the dental remains of 60 individuals there, determined that over 90% of the sample belonged to people who had grown up in the area (Keenleyside, Schwarcz, and Panayotova 2011). This method of study does not determine whether their ascendants were themselves migrants. It does demonstrate, however, that in later centuries, overseas migration made only a small contribution to the demographics of the polis. More importantly, the five individuals who displayed a non-local signature were thought by Keenlyside and her team to have come from the Aegean (Keenleyside, Schwarcz, and Panayotova 2011: 2655). Yet the material contexts of their deposition contain no traces of differentiation from those of Apollonian locals (Keenleyside, Schwarcz, and Panayotova 2011: 2662, 65). In burial practices, but also in the material of day-to-day living, the "pots and people" conundrum will continue to plague attempts at ethno-cultural identification. Furthermore, identifying the origin of migrants based upon material constituents can only ever tell part of the story. That is not to say that evidence of Thrakian or Getic objects or practices do not tout court demonstrate

potential presence of migrants from these ethno-cultural backgrounds. Indeed, it seems quite likely that these can be taken as evidence for some Balkan migration to the Milesian settlements on the western coast of the Black Sea. Yet without more nuanced studies, particular of human remains from Archaic period contexts, their demographic contribution will remain opaque.

II.3.1.3 Eurasians

As we have already noted determining the origin of migrants and their ethno-cultural origins is a task fraught with difficulty (Skinner 2012: 158). In general, scholars who have approached this problem have tended to identify a number of ethnic markers indicative of potential emigrant origin. For the settlements on the northern Black Sea coast these have tended to focus on dwelling typology, burial practices, the presence of apparently non-Greek material culture, religious practices, ideological beliefs and prosopography (Marchenko 2005b: 17; Kryzhitsky 2007: 18-21). First (as we shall see in section III.2), the notion that particular types of domestic dwelling can indicate the origins of the people who inhabit them, is difficult to sustain. Likewise, religious practices and ideological beliefs are often sites of contest and adaption, while the burial practices of the northern Black Sea poleis have been shown to be heterogenous between sites and even in particular necropoleis (Szamalek 2014: 59-69). While onomastic evidence has shown a likely presence of non-Greeks on the western Black Sea coast (Dana 2019a), the majority of this evidence comes later and, even if we are to accept relatively stable naming practices

across the centuries (Avram 2010), the light shone on the Archaic period and the innovator and early uptake migration phases, is limited.

This leaves us with material culture as the primary, but not unproblematic, indicator of migrant origin. While there are many legitimate criticisms of the explanatory force of using material culture in this way, some arguments can be made to support its use as a diagnostic tool, assuming we remain cognisant of potential pitfalls. Pottery, as one of the most numerous surviving categories of object from archaeological sites, has an important role to play. Greek wares, both fine and regular, have attracted vast interest and comment. More specifically, East Greek pottery has been the subject of numerous chronological and typological studies in the past few decades (Cook and Dupont 1998; Schlotzhauer and Kerschner 2005). This means that it is easy to identify and distinguish from other types of wheel-made and hand-made pottery with stylistic and functional links to the non-Greek communities of the forest steppe, Crimean, and north Caucasus regions. Therefore, in this section we will primarily concentrate on the presence of these apparently non-Greek wares in the early levels of the poleis of the northern Black Sea coast as far as the Taman peninsula.

Given the problems in identifying non-Greek Eurasian migrants in the settlements of this region, it is perhaps surprising that many researchers have, in general, accepted their presence to a greater and lesser extent (Tsetskhladze 1998a: 47; 2014: 318; Damyanov 2003: 262), notwithstanding those like Solovyov (1999) who suggest that the settlements were themselves established by Eurasian peoples, with small Greek contingents living amongst them. Nationalising histories and a tendency to lionise Hellenic culture also plays a part in this debate, with some suggesting a conscious downplaying of local elements to satisfy the ideological imperatives of scholars (Marchenko 2005b: 22; Müller 2007: 142; 2013: 47). The reality, at least as far as it can be determined from one class of evidence, non-Greek ceramics, seems to be somewhere between the two extremes.

Berezan

In phase Ia (c. 600-550), between 1961 and 1991, a large volume of handmade wares was identified in dugout houses, pits, depressions and in the general layer of the site (Senatorova 2005: 179-180). These bear some resemblance to the ceramics of the Kizil Koba, forest steppe and Chernyy Les cultures, though many more were without identifiable ornamentation (Senatorova 2005: 170-180; Solovyov 2010: 292; Khrapunov 2018: 355). Estimates of the handmade pottery from this period (excluding amphorae) can be anywhere between 5 and 36 % (Solovyov 1999: 43).

In the following phases (c. 550-500), the quantity of handmade wares increases by around 50% and remains well spread throughout the site (Senatorova 2005: 180-82), though differences can be noted between the share of kitchen utensils and ceramic pots. The former represents a negligible quantity in the preceding phase which increases substantially, while the latter decreases (Chistov et al. 2020: 111). Again, vessels which resemble Kizil Koba wares are present in slightly larger quantities, while Skythian and Thrakian style material also begins to appear (Senatorova 2005: 181; Solovyov 2010: 294-95; Chistov et al. 2012: 71). In phase IIb (c. 500-475), the quantity of stucco wares decreases to between 4 and 11% (Chistov et al. 2020: 161). A recent survey of the material from the sixth to fifth centuries has estimated the relative shares of handmade pottery at Berezan as 8.6% Greek, 14.3% Skythian, 34.4% Thrakian, 3.8% Kizil-Koba, 20.5% forest-steppe and 18.4% pre-Skythian from a total of 224 samples (Gavriljuk and Timchenko 2014: 26 Tb. 1).

Olbia

Extensive work has been undertaken on the local handmade pottery found at Olbia (Marchenko 1976, 1988). Throughout the long history of excavation at the site, only a very small amount of material has been identified which can be dated prior to the second half of the sixth century. In excavation plot A, two fragments of handmade ceramics with geometric designs were found at the bottom of a storage pit which can be dated, through the presence of amphorae fragments, to the middle of the sixth century. Analogous material from Berezan, from the end of the seventh century, suggests a wide period of use prior to their deposition (Kaposhina 1956: 179). In the Hellenistic layers of Olbia, several fragments identified as belonging to the early Skythian period (ca. 750-500), have been found with a variety of decoration and finishing, including black polish, geometric and semi-circular designs are evident on these pieces (Kaposhina 1956: 178).

The quantity of handmade local ceramics seems to increase around the turn of the sixth to fifth centuries. Scholars have posited estimates for the share of non-Greek ceramics between 1-5% of the total assemblage, excluding amphorae fragments (Marchenko 1972: 62-63 Tb. 1; 1987: 105). Recent analysis has afforded a further breakdown of handmade ceramics into cultural origin. From 151 pieces, around half were produced in a Greek style, 33.3% resembled material from the forest-steppe region, 16.7% were identified as Thrakian, and just 0.5% bore a resemblance of Kizil-Koba wares (Gavriljuk and Timchenko 2014:26 Tb. 1). The contrast between Olbia and Berezan in this respect is notable (Marchenko 1987: 105). Furthermore, at various sites in the Olbian *chora*, handmade wares occupied a larger share of the ceramic material including at Beikush – 9-18%, Starya Bogdanovka II – 23-26%, Bolshaya Chernomorka II – c. 25% and Luparevo II – 32-36% (Marchenko 1987: 105-06).

Nymphaion

Handmade ceramics exhibiting features of local styles are evident in domestic contexts from the middle of the sixth century at Nymphaion, notably in dugout no. 1 (Butyagin 1997: 64; Sokolova 2003: 765). By the third quarter of the century, fragments of a small number of cups, bowls and pots with decorations analogous to Kizil-Koba, early Skythian and Thrakian wares can be identified (Butyagin 1997: 67; Senatorova 1999: 61). The quantity of these materials increases slightly in the following layer, dated to the end of the sixth century, and exhibits a similar range of styles and forms. It has also been argued that the presence of local ceramics in the earliest domestic spaces, as well as the presence of middle and late Bronze Age wares admixed into the layers of the Archaic period, implies the existence of a local settlement at the site (Butyagin 1997; Senatorova 1999), but without further evidence of habitation prior to the middle of the sixth century, this hypothesis remains controversial (Sokolova 2010).

Tyritake

While there is little evidence for handmade pottery in the earliest layers of the Tyritake settlement, by the final third of the sixth century, it begins to appear in small quantities making up around 2-4% of the ceramic material (Kastanyan 1981: 111-14; Zinko 2012). Pots, cups, ladles and bowls have all been identified. A number of these exhibit geometric patterns characteristic of Kizil-Koba wares, an intact example of which was found in a burial in the necropolis (Zinko 2012: 7-8; 2014). Other examples find analogies in the material culture of the Kuban and North Caucasus regions, including herringbone, vertical, and diagonal line patterns (Knipovic and Slavin 1941: 40; Kastanyan 1952b: 151-52; 1952a). Recent work in trench XXVII has suggested that up to 34.4% of the ceramic material was handmade by the end of the sixth to the beginning of the fifth centuries (Kotin 2014: 134). Overall, the material culture from the final third of the sixth to the beginning of the fifth centuries, has led Vladimir Zinko to surmise that Taurians, Skythians, Maeotians and Thrakians may all have been resident at Tyritake at various times (Zinko 2012: 8).

Pantikapaion

A number of pieces of pottery with indigenous analogies can be identified at Pantikapaion. Beginning around the middle to the third quarter of the sixth century (Tolstikov 2017b: 18), these consist mainly of open vessels such as bowls, jars and pots (Kruglikova 1954: 80-83; Marchenko 1962: 92-92; Blavatsky 1962); which resemble Kizil-Koba, Kolchian, Maeotian, forest-steppe and early Skythian wares (Kruglikova 1954: 80; Marchenko 1962: 92; Tolstikov and Muratova 2013: 186).

Myrmekion

The number of handmade wares at Myrmekion is relatively small prior to the middle of the sixth century (Gaidukevich, Levi, and Prushevskaya 1941: 128-30; Kastanyan 1952a: 250-52; Vinogradov, Butyagin, and Vakhtina 2003: 808-09). Nevertheless, in some structures, such as dugout No. 11, the proportion of handmade pottery was around 24% (excluding amphorae), somewhat more than finds from contemporary structures (Butyagin 1998: 83). The earliest examples, dating to the second quarter of the sixth century, are found in refuse pits on the acropolis. Around the middle of the century, the quantity of handmade pottery in the central ash pits on the acropolis is around 15%, from a total of 108 fragments (Butyagin 2001: 182). At other times, it reaches as much as 37% (Butyagin 1998: 83-84; 2007b). Analogies to this material can be found in a number of local contexts and represent the material culture of Skythians, Maeotians, the forest-steppe and Kizil-Koba cultures, the pre-Skythian north Caucasus, Sindians and Thrakians (Kastanyan 1952a: 251; Butyagin 1998: 85; 2007a: 24; 2011: 179; Vinogradov, Butyagin, and Vakhtina 2003: 808-09). Overall, this material has led Alexander Butyagin to conclude

that some or all of these people may have settled temporarily or permanently at Myrmekion (Butyagin 2007b).

Varia

In addition to the settlements described above, local ceramics have also been identified at several other Milesian migrant settlements. At Kerkinitis, they appear in the earliest layers, beginning in the early fifth century, and consist of black glazed vessels (Rogov 2005: 177). This material was once thought to have indicated the presence of a local settlement preceding the arrival of the first Milesian migrants in the area, though the simultaneous presence of Greek wares suggests that this was not the case (Kutaisov 1990: 25). At **Porthmion**, a very small number of handmade fragments are evident (Senatorova 2013). Hermonassa presents a similar picture (Zeest 1961: 54). Around the third quarter of the sixth century, handmade ceramics also appear at **Kepoi** though scholars working at the site have tended to assume that these were used by the Greek inhabitants (Sokolsky 1975: 617). Finally, the Alekseevska settlement, near Gorgippia-Sindike Harbour, which some assume to have been an early Greek migrant settlement or emporion (see above) also exhibits local pottery (Novichkhin 2017: 69-73). This indicates a local settlement rather than Eurasian inhabitants in a Milesian one.

A number of ancient sources claim that Karians were present in the Black Sea, particularly its northern and western coasts, during the Archaic period. Pliny the Elder places Karians at the mouth of the river Tanais (NH. 6.7) and Ptolemy names a Karoia kome in the same region (Geog. 3.5.4). On the west coast, Arrian locates a settlement called Karian Limne (Per. Pont. Eux. 24.3), while the appearance of place names ending in -ssos, such as Odessos and Salmydessos has also been connected with the presence of Karians in the region (Besevliev 1981: 266). Along with the inclusion of a Karian entry in Eusebius' list of Thalassocracies,¹⁵⁰ this information has led a number of scholars to suggest that Karians appeared in the Black Sea sometime in the Early Iron age (Minns 1913: 437; Bilabel 1920: 61; Blavatsky 1954: 8; Herda 2013; Solovyov 2013: 71-74; 2020: 377). We should be cautious in accepting these late attestations as evidence for Karian presence in the first half of the first millennium. It seems just as likely that they represent Graeco-Karian interpretations of local place names given the familiarity of Milesian and East Greek migrants with Karian toponyms (Ivanchik 2005).

The appearance of Anatolian personal names in the Black sea, including the graffiti naming Munis from Pantikapaion (Vinogradov 1974) and the Matasus mentioned in the Olbian priest's letter (Solovyov 2013: 73; 2020: 372),

¹⁵⁰ Eusb. Chron. 255 Schoene-Petermann. This entry has been the subject of much debate e.g.Myres (1906); Burn (1927); Miller (1971: 63, 93-96); Ball (1977).

may indicate the presence of a few individuals of Karian origin in the region. Yet, while we see an increase in the number of Anatolian names in the fifth and fourth centuries (Tokhtasev 2007), we cannot rule out the use of Anatolian names at Miletos and elsewhere in Ionia, such as the Kares recorded in a sixth century inscription (*Milet* I.3 133, 30).

A second, potentially more promising body of evidence, is the appearance of Anatolian style wares in the settlements of the northern and western Black Sea, including Istros, Berezan and Pantikapaion. From the former, a *lydion*, dated before 530, has been identified in the excavations of the sacred zone (Alexandrescu 2005: 356 C 149). More recently, a further pair of *lydioi* have also been identified there along with a fragment of a miniature jug in black-on-red style (Dupont, Lungu, and Solovyov 2009: 24-25 fig. 21a, b, 22).

The largest quantity of Anatolian pottery in the northern Black Sea comes from Berezan. A considerable amount of black-on-red wares, including trefoil, jugs have been found dating from as early as the first quarter of the sixth century (Solovyov 2013; Dupont, Lungu, and Solovyov 2009; Dupont 2010b), while a number of *lydioi* and Lydian *askoi* have also been identified (Kaposhina 1956: 230; Dupont, Lungu, and Okhotnikov 2008: 146-47; Dupont, Lungu, and Solovyov 2009: 87-93; Chistov et al. 2012: 33). In addition to these finds, a Phrygian style architectural terracotta dating to the sixth century (Solovyov 2013: 66 fig. 14) and a jewelry punch (Solovyov and Treister 2004) are also thought to have originated in Asia Minor.

The earliest layers on Mt. Mithridates at Pantikapaion have provided a number of Anatolian wares, including fragments of *dinoi*, a *krater* and a pair of closed vessels (Astashova 2017: 149-50). These are identified as south Anatolian Iron Age wares by the excavators (Tolstikov, Astashova, and Samar 2017: 564). The question of the route these wares took to the northern Black Sea has been discussed extensively, whether overland through central Anatolia or via maritime traffic from the Aegean (Dupont, Lungu, and Okhotnikov 2008; Dupont 2018). Gocha Tsetskhladze has argued forcibly that they should be considered as having travelled alongside Milesian migrants (Tsetskhladze 2012a: 350-52; 2018b: 25), and work at Miletos itself is now beginning to recognise the importance of its Anatolian context (Greaves 2010: 50; Knight forthcoming-b) with interesting implications for the potential presence of Anatolian migrants in the northern Black Sea. While the evidence for EIA Karian migration is problematic, in theory at least, there seems little reason to reject the notion that migrants practicing facets of Anatolian cultural identity, potentially alongside more Hellenised or Milesian practices, were amongst the immigrants who populated the settlements of the northern and western coasts of the Black Sea in the Archaic period.

II.3.2 Social Status

The identity, composition and delineation of elite groups in Archaic Greek poleis has undergone significant re-assessment in recent decades (Van Wees and Fisher 2015). Much of the discussion on elites has centred around evidence from the Greek mainland, particularly Attica and Sparta, which has then been extrapolated to create models of development applied to other Greek poleis further afield. At Miletos in particular, stories about the Ionian migration and an early monarchy, which gave way to an oligarchy sometime in the eighth century, have gained particular currency, despite the lack of contemporary evidence (Greaves, Knight, and Rutland 2020: 81-86). It is more than likely that at Miletos, as at most other Archaic poleis and neighbouring city-state settlements (such as those of Karia and Phoenicia), a discrete group of individuals, alongside their families and social circles, strived to limit access to political power and positions (Duplouy 2006). At various times, individual or familial groups may have come into political ascendancy and established systems of power and control, which are normatively termed tyrannies, aristocracies, or oligarchies. Nevertheless, the absolutist nature of such regimes is open to question.

Elite status could be advertised and enhanced through a variety of signification strategies including heroic/mythologizing genealogies, dining and drinking practices, marriage alliances, gift exchange, material culture display – both exoticizing and domestic, including architectural sponsorship and statuary – success in local and panhellenic athletic competition, overseas wealth acquisition, warfare and the foundation of new settlements (Duplouy 2006; Wecowski 2014; Greaves, Knight, and Rutland 2020). Recent scholarship has offered a more nuanced picture of the interaction of these strategies. The role of peer recognition and the ability to access resources and social capital, as opposed to hereditary descent, are now recognised as the

underpinnings of elite status (Duplouy 2006; Van Wees and Fisher 2015; Greaves, Knight, and Rutland 2020). Ancient literary traditions abound with instances of mobile and migratory elite individuals and, while this may in part be an inevitable result of the elite bias of this source material, it surely indicates that in the Archaic period, elite individuals and groups were on the move throughout the Mediterranean and Black Seas (McGlew 1996: 162-66; Rose 2012: 140-41).

To be sure, traditional historical-positivist account of overseas settlement posit an important role for elite individuals, in the role of *oikist* (Malkin 1987: 9, 70, 95, 133, 261; Raaflaub 2004). Others stress the role of *poleis* governed by elites in the establishment of state-sponsored migration settlements (Gwynn 1918; Greco 2011; Figueira 2015). Conversely, scholars applying historical-constructivist approaches, while rejecting the role of state apparatus in the impetus towards migration, have likewise recognised the necessity of the role of elite individuals in organising acts of migration and medium to long-distance mobility (Osborne 1998; Van Wees 2013).

What these approaches have in common is the general recognition of an important role for elite individuals and groups in migration process. In general, they had better access to capital, resources and influences that could be utilised in the actual process of migrating from one place to another. Emmanuel (Greco 2006: 170) describes elites as possessing "the necessary means (ships and crews), including a leader for the expedition (the *oikist*), himself often a member of the aristocracy" while "he and his *hetairoi* formed the nucleus of the

colonising force". Thomas Figueira (2015: 317) uses the term "patronal colonization" to describe Athenian overseas settlements in the sixth century and suggests "this involved an elite person gathering settlers among his *hetairoi*, client-followers, and others dislocated by unsettled agrarian conditions". More succinctly, Osborne (1998: 268) credits "charismatic individuals", presumably from the elite, as the organisers of overseas movement. In essence then, the ability of elite members of society to organise and aggregate resources formed an important element in the mechanics of migratory acts. At the onset of migration processes, the capital outlay for the migrant tends to be at its highest. Therefore, in the earliest migration periods, there was almost certainly a necessity for individuals able to organise transport opportunities and manage human and labour resources to facilitate migratory movements.

This leaves us with the question of what prompted movement by these individuals. The ancient sources almost unanimously attribute the migration of elite individuals to the creation of untenable circumstances in the home community, be it civil discord, external pressure, or as punishment for criminal acts in the form exile (Dougherty 1993, 1998; Bernstein 2004; Tsetskhladze 2006: xxix; Ulf forthcoming). Furthermore, recent studies have also discussed the role of population control and relief from intra-elite competition (Figueria 2015) as key considerations in the migration of elites. Conversely, others have posited the roles of resource acquisition and prestige as motivating the migration of elite individuals and groups (Greaves, Knight, and Rutland 2020: 114-17). In general, then, the migration of elites in Archaic Greece has been accounted for by explanations of endogenous 'push' migration, and exogenous 'pull' motivations.

Exile and Elite Migration

The question, however, remains. To what extent did these periodic social conflicts and agglomerations of power into the hands of individual tyrants or elite groups, act as exogenous driver complexes for the emigration of those whose access to political and social capital was adversely affected by their exclusion from systems of power and capital accumulation? Some tantalizing evidence may be found in the epigraphic corpus, specifically the inscription known to modern scholarship as the 'Milesian Banishment Decree'. Discovered in 1905, during the excavations of the North Market area of the city, the inscription is carved onto the pedestal of a missing stele. The inscription itself appears to be an addition or continuation of a larger text which presumably adorned the lost stele itself.¹⁵¹ It reads:

[.....15......]σ[..5.. τ]ὸ[ς Ν]υμφαρήτο καὶ ἄλκιμ[ον] [καὶ Κ]ρεσφόντην τ[ὸ]<ς> Στρατώνακτος φεύγεν τὴν ἐπ' αἴμ[ατ|ι] [φυγὴν] καὶ αὐτὸς [κα]ὶ ἐκγόνος, καὶ ὄς ἄν τινα τούτωγ κατ[α]-[κτείν]ει, ἐκατὸν [στ]ατῆρας αὐτῶι γενέσθαι ἀπὸ τῶν

¹⁵¹ Slawisch (2011) argues that the surviving text was part of the lost inscription, while others believe that the stele contained an earlier proscription text, possibly as early as the mid sixth century, to which the surviving lines were later added e.g. Glotz (1906: 521); Gorman (2001: 233-34).

[χρημά]των τῶν Νυμ[φαρ]ήτο. τὸς δ' ἐπιμηνίος, ἐπ' ὦν ἂν ἔλθωσ\ιν [οἰ κατ]ακτείναντε[ς], ἀποδοῦαι τὸ ἀργύριον. ἢν δὲ μή, αὐτὸ\[ς] [ὀφε]ίλεν. ν δὲ ἡ πόλι[ς ἐ]γκρατὲς γένηται, κατακτεῦαι [αὐτ]ὸς τὸς ἐπιμηνίος, [ἐ]π' ὦν ἂν λαφθέωσιν. ἢν δὲ μὴ κατα-[κτ]είνοσιν, ὀφείλεν ἕ[κ]αστον πεντήκοντα στατῆρας. τὸν δ' ἐπιμήνιον, ἢμ μὴ προθῆι, ἐκατὸν στατῆρας ὀφείλε[ν] καὶ τὴν ἐσιοῦσαν ἐπιμηνίην ἀιὶ ποιεῦν κατὰ τὸ ψήφισμα· ἦν δὲ μή, τὴν αὐτὴν θωιὴν ὀφείλεν.

[-21- the sons of Nympharetos, and Alki[mos and K]resphontes, [the] sons of Stratonax, shall suffer blood-guilt [banishment,] both they themselves and their descendants, and by whomsoever any one of them might be killed, one hundred staters shall be given to him from the [property] of the family of Nym[phare]tos. The Epimenioi in office when a claim is made by the slayers shall pay the money. If (they do) not, they themselves I shall be liable to pay (the fine). If the city should get (the condemned men) into its power, they shall be put to death by the Epimenioi in whose term of office they are seized. If they do not put them to I death, they shall each be liable to pay fifty 10 staters. The (presiding) Epimenios, if he does not put (the matter) up for decision, shall owe a fine of one hundred staters. Successive boards of Epimenioi shall always proceed according to this decree. Otherwise, they shall be liable to the same penalty."

(Trans. C. W. Fornara)

Due to its stratigraphy and orientation, it was assigned to a pre-Hellenistic period. Numerous attempts have been made to contextualise and date the inscription more accurately. Based on the letter forms, Albert Rehm, suggested an early fifth century date (von Gerkan 1922: 100), while Gustaz Glotz, who made an in-depth study of the inscription, proposed that the small amounts levelled for fines and rewards made more sense in the context of the middle of that century, based on the relative poverty of Miletos illustrated by its small contributions to the Delian league (Glotz 1906: 524-528). Based on the letter forms and content, others have opted for a wider date range from 470-440 (Fornara 1986: 65).

More recently, Anja Slawisch (2011) has proposed a date at the very beginning of the fifth century, during the Ionian revolt from Persia, based on a number of factors. First, she draws attention to similarities between the Banishment Decree and the Aeakes inscription from Samos, in the form of the *theta, kappa, rho* and the oblique *nu*. Yet, as has been observed by Alexander Herda Herda (2019b), there is little resemblance between the *nu*, which does not appear to be especially oblique on the Banishment inscription, and that of the Aeakes text which clearly is. The *sigma* and *omega* also show divergences.¹⁵² Nevertheless, as Slawisch points out (2011: 428), the letter forms of the Banishment inscription do not seem to bear a distinctly close

¹⁵² Slawisch's table of similarities (2011: 426, Tb. 1) acknowledges differing *epsilons*, but her illustration of the other letters questioned by Herda (2019: 92 n.8) i.e. *E*, Σ and Ω do not seem to resemble those on the Banishment decree, though eta does seem similar between the two.

resemblance to those of the *lex sacra* for Poseidon Helikonios of 434/3 (Ehrhardt 2003; Herda 2019b: 98 n. 8). Slawisch further argues that the use of *stoichedon* style may be indicative of an earlier date than previously supposed (2011: 427, 429). Indeed, as Patricia Butz has observed, some of the earliest precursors of this style may date as early as the first half of the sixth century, and it was certainly in use in Attica and Samos by the second half of the century (Butz 2010: 77-103). Based on the letter forms alone then, a possible date for the inscription between c. 540 and c. 434/3 is possible, while the use of *stoichedon* style argues for a similar temporal span.¹⁵³

A more precise chronological marker may be found in the presence of Nympharetos on the decree. Slawisch rightly draws attention to the presence of a homonymous Nympharetos on the Milesian *aisymnetai* list (2011: 428-429; *Milet* I.3 122.24). The dating of the names on this list has been the subject of much debate. In general, there are three plausible frames for the earliest names present. The simplest derives from counting back from the relatively secure date of Alexander the Great's entry in 334/3 (*Milet* I.3 122.81), which results in a date of 525/4 for the initial entries on the list (Kawerau and Rehm 1914: 141-53). Peter Rhodes has argued that Alexander's entry should in fact be dated to 333/2, while the presence of two names in a single line should be taken to indicate the presence of usurping officials rather than as entries for separate

¹⁵³ For the dating of the Aeakes inscription see Butz (2010: 85) with literature.

years. This results in a date of 522/1 for the beginning of the list.¹⁵⁴ The third potential dating arises from the observation that there may have been a break in the list coinciding with the period between the Persian sack of the city in 494 and 479 when a Milesian contingent is recorded at the Battle of Mykale. This would render a date of around 540/39 for the first entries on the list or, following Rhodes and Cavaignac, 537/6. Therefore, we are left with three potential dates for the Nympharetos named on the list, 518/7, 515/4 or 503/2.

The lower date for the Banishment inscription also requires further reanalysis. Most scholars have tended to place it in the context of the Milesian revolt from the Delian league in the middle of the fifth century, mentioned by Pseudo-Xenophon (Ath. pol. 3.11; Glotz 1906: 524-28; Barron 1962; Mac Sweeney 2013: 51). The context of the find, however, gives some cause to question this conclusion. The remaining block was situated in a layer beneath the level of the Hellenistic north market and did not share the alignment of the buildings of this period (Glotz 1906: 518 n.2; Gorman 2001: 233-4; Slawisch 2011: 425, 428). The area of the north market was levelled in the Classical period following the Persian destruction of the city, but the first buildings do not seem to have been constructed there until the fourth century. This means that the lost stele and its base were constructed prior to the Persian sack in 494 (Gorman 2001: 233-4; Slawisch 2011: 428). There is some debate as to whether

¹⁵⁴ Rhodes (2006: 316). It has also been suggested that these may represent suffect officials replacing individuals who had died before the end of their period in office see further Gorman (2001: 114 n.51)

the missing stele contained an earlier proscription decree (Glotz 1906: 519-22, esp. 521; Gorman 2001: 233-4), or whether the remaining text represents the final lines of a larger decree (Slawisch 2011: 425). Taking into account the letter forms, the use of *stoichedon* style, the name of Nympharetos, and the stratigraphy of the find; it seems clear that the Banishment Decree should be dated between c. 517-494. Thus, it can be taken as direct, though relatively late, evidence for the practice of exiling elites at Miletos during the Archaic period.

One of the earliest commentators on the text, Gustav Glotz, observed that it bore a number of remarkable similarities to a fragment of Nikolaus of Damascus (Glotz 1906: 516-524).

"ότι Ἐπιμἐνης μετὰ ταῦτα αἰσυμνήτης ὑπὸ τοῦ δήμου χειροτονεῖται λαβών ἐξουσίαν κτείνειν οῦς βούλεται. καὶ ὃς τῶν μὲν παίδων ἘΑμφιτρῆτος οὐδενὸς οἶός τ΄ ἦν ἐγκρατὴς γενἑσθαι (ὑπεξῆλθον γὰρ παραχρῆμα δείσαντες), τὰ δὲ ὄντα αὐτοῖς ἐδήμευσεν καὶ ἀργύριον ἐκήρυξεν, εἴ τις αὐτοὺς κτείνειεν. τῶν δὲ κοινωνῶν τοῦ φόνου τρεῖς ἀπἐκτεινε, τοῖς δὲ ἄλλοις φυγὴν προεῖπεν1· οἱ δὲ ὥιχοντο. οἱ μὲν δὴ Νηλεῖδαι2 κατελύθησαν ὦδε."

"That after such events Epimenes was appointed aisymnetes by the popular assembly, with licence to put to death whomever he wanted. As he could arrest none of Amphitres' sons (as soon after they had gone away secretly for fear), he confiscated their patrimony and promised a reward for whomever would kill them. He also put to death three of the accomplices of the homicide and condemned the others to exile. And they left. The Neleidai were deposed in this way."

(BNJ 90 F53 trans. A. Paradiso)

These similarities are worth recounting in detail. First there is the role of Epimenes/the *Epimenoi*. In the banishment decree they are a group of city officials, taking office for the duration of a month, while in Nikolaus Damascus, Epimenes is *aisymnetes* voted in by the *demos*. In Nikolaus Damascus, Epimenes is given power to enact death sentences, which he does to some of the conspirators, and also the power to exile others. In the banishment decree the *epimenoi* are responsible for ensuring payment for the killers of the exiled fugitives Alkimos, Kresophontes and the sons of Nympharetos or, if they are caught by city officials, of carrying out the executions themselves. If they fail to do this, they are liable to a fine. In the Banishment Decree rewards are to be paid from the, presumably confiscated, estate of the dead Nympharetos, while Nikolaus Damascus claims that Epimenes confiscated the inheritance of the sons of Amphitres and offered a reward for their execution. Reasonably, we might presume, a reward from the aforementioned inheritance.

These similarities strongly suggest an intertextual relationship between the inscription and the account given by Nikolaos. This fragment is not the only extant part of the story dealing with the early history of Miletos and the Neilidai. It is preceded by the events described in F52 of Nikolaos of Damascus, while even earlier events are described by Konon (*BNJ* 26 F1 = Phot. *Bib.* 186.44). The earlier part of this story, which recounts the murder of the Milesian Basileus Leodamas and the usurpation of Amphitres, takes, as its primary focus, the arrival of two Phrygian youths with relics of the *Kabeiroi*. The implication here, is that this story is primarily aetiological. It is set against the backdrop of the struggles over the kingship of early Miletos, but in reality, it functioned as an explanatory tale for the worship of the *kabeiroi* in historical times.

This may also give us an insight into the relationship between the banishment decree and the narrative recounted in Nikolaos of Damascus. It has been observed that Nikolaos or, more likely, his source, misread or misunderstood the role of the *Epimenoi* in the decree. Their part was subsequently transposed onto a named individual, Epimenes. While this is a common enough name, these arguments rely on complex linguistic explanations which require a series of misunderstandings that remain speculative (Herda 2019b: 178 n.1). It is more likely, in our view, that the transfer of the powers of Epimenes to the *epimenoi* between Nikolaos and the banishment decree, is a deliberate change. It is possible that this represents a mythologising of the events recounted in the decree. There are many examples of mythological precedents being used to justify contemporary actions in the Archaic Greek world. One need only think of the curse of the Alkmaeonidai, trotted out on more than one occasion to justify their expulsion from Athens. Are we dealing with a similar situation here? While it has been observed that reconstruction of Nikolaos' specific sources is an almost impossible task, those

authors who we can say, with reasonable certainty, that he relied, such as Ephorus and Xanthus, may have had access to early traditions regarding Miletos.¹⁵⁵ The latter may even have lived early enough to have seen the inscription *in situ*. In sum then, it seems quite plausible to suggest that both the text of the banishment inscription and the mythologised story found in Nikolaos of Damascus are contemporary. The former records an actual event in late Archaic Miletus, while the latter was used to justify the actions of the community and the role of the *epimenoi* as enforcers of the decree.

This raises the important question of why, then, were the Neilidai connected to this archaising explanation of a late sixth to early fifth century banishment decree? The most obvious explanation is that those named in the decree, namely the sons of Nympharetos, and the sons of Stratonax – Alkimos and Kresphontes – had some connection to the Neilidai. Both Kresphontes and Alkimos have homonymous counterparts connecting them to Neleus. The former is the Heraclid founder of Messenian Pylos (Apollod. Bibl. 2.8; Diod. Sic. 15.66, Isoc. 6.22; Paus. 2.18; 4.3-5; 4.16; 4.31; 8.5; 8.29; Pl. Leg. 6.683d-685d; *BNJ 70* F116 = Strab. 8.4.7.), from where Neleus is supposed to have come, while the latter is named as a son of Neleus (Schol. *Il.* 11.629). Though, neither Nympharetos nor Stratonax imply any Neleid connections. Even so, this offers the tantalising implication that the Banishment decree records the removal of individuals associated with the Neilidai.

¹⁵⁵ See Toher (1989) for a discussion of Nikolaos sources.

The earliest mention of Neileos as Miletos' founder occurs in Herodotus (9.97) and his grave was said to have been located on the left-hand side of the sacred way just outside the gate of the city (Paus. 7.2.6; Herda 2006a). He is said to have established an altar to Poseidon on Cape Monodendri (Strabo. 14.1.3), which may have represented the place where the first migrants to Milesia came ashore (Schilardi 2019: 113). Neileos also seems to have been connected to the cult of Artemis Kithone, whose temple was located on the Archaic Milesian acropolis of Kalabaktepe (Callim. *Hym.* 3.225).

The fullest account of Neileos ancestry is provided by Hellanikos (BNJ 4 F125). His family tree is said to include Poseidon, Deukalion, Neleus and Kodros. There is some debate over the extent to which this family tree was applicable to the figure of Neileos in the Archaic period. There appear to be two competing versions of Neileos origins which are reconciled in Hellanikos genealogy. Allusions to Neileos' Pylian ancestry through Neleus and his Athenian ancestry through Kodros, appear early. The former may be alluded to as early as the late last third of the seventh century by Mimnermus, who claims that Kolophon was settled from Pylos, "Neleus' city" ("Νηλήϊον ἄστυ", F9 Gerber = BNJ 578 F 3). Strabo (14.1.4), also states that Neileos "was Pylian by birth" ("Νηλεύς ἐκ Πύλου τὸ γἑνος ὄν"). No specific source is given by Strabo for this snippet of information, though it is preceded by a fragment of Pherykydes of Leros/Athens (BNJ 3 F155), which may imply that it came from his work. In this passage, Strabo notes that Pherykydes named the leader of the Ionian migration as Androkles son of Kodros of Athens (BNJ F155 = Strabo

14.1.3), yet Neileos is given an explicitly Pylian origin. Is it possible, then, that Strabo or Pherykydes was aware of the existence of a tradition of Neileos' Pylian origins, but also a tradition connecting the offspring of Kodros to the Ionian migration? Indeed, in relation to the Ionian migration, both Neileos and Kodros were featured in the fifth century *Ionika* of Panyassis of Halicarnassus (BNJ 440 T1 = Suda, s.v. $\Pi \alpha \nu \dot{\alpha} \sigma \alpha \varsigma$). As early as the late seventh to early sixth centuries a narrative attributing to Athens a role as metropolis of the Ionian poleis was in circulation (Solon F 4a West). It is impossible to say, as some scholars have claimed, whether the Athenian origin of the Ionians was fifth century propaganda (Hall 1997: 51-53) and, subsequently, whether Neileos' Pylian origins represent a Milesian version of their own foundation. Nevertheless, for the purpose of our argument the important conclusion to draw is, in the words of Naoise (Mac Sweeney 2013: 15), "the antiquity of the stories about Neileos." This confirms the possibility of the existence of a group or groups in Archaic Miletos who claimed descent from the mythic founder of the *polis*. We have established then, that the notion that Miletos was founded by an individual named Neileos can be traced back to the Archaic period, possibly as early as the seventh century. Therefore, it remains for us to explore evidence which indicates the existence of the Neileidai and determine whether such a designation could have been used around the time that the Banishment Decree was enacted.

Evidence for a group which claimed descent from the founder of Miletos is predominantly confined to epigraphic and onomastic documents. There are two inscriptions, first an undated document from Miletos which names the "Nειλεϊδ[ῶν...]" (Milet VI.3 1440), while a monument from Didyma, dated to the imperial period (ca 66 CE), claims that the Neileidai were a Pelagonid phratry from Teichioussa (I.Didyma 229). The term Pelagonid, as has been observed by (Huxley 1966: 165 n.27), may imply a connection with the Pylian Pelagon mentioned in the Iliad (4.295). In addition to these documents, there are also a number of names recorded at Miletos, between the fifth and first centuries, which may have Neilied allusions. The earliest of these is an inscription on a round altar dedicated to Hekate uncovered in the area of the Delphinion. It can be dated to the years immediately prior to the Ionian revolt, around 500-494, and names Leodamas (Milet 1.3 129; (Jeffrey 1961: 343 no. 34, pl 64) a homonym of one of Miletos early basilieus.¹⁵⁶ The second name we have with Neileid allusions appears on the Molpoi inscription, where one of the aisymnetes' proshetairoi is named as Kreuthes of the Boread tribe (Milet I.3 133.3). This name is shared with the husband of the mother of Pylian Nēleus.¹⁵⁷ According to Hellanikos (BNJ 4 F 125), Boros, the eponymous hero of the Boreads, was an ancestor of Neileos (Barron 1962: 4 n.26; Huxley 1966: 32 n. 127). Considering the previous discussion of the dating of the aisymnetai list, we can posit a date of between 449 and 444 for Philtes year of office and the laying down of the Molpoi statutes, and thus Kreuthes. Other Neilied names do

¹⁵⁶ *BNJ* 26 F1, 90 F52. See Herda (1998: 18 n. 36) for the popularity of the name Leodamas at Miletos throughout the Hellenistic period.

¹⁵⁷ According to Od. 11.237, Pylian Nēleus' father was apparently Poseidon.

not appear with any regularity at Miletos until the Hellenistic period, where we find two individuals with the name Nelios in 238 and the first century respectively (Milet VI.2 788; IG II.2 9802) and a Neilostratos in 177 (I.Didyma 464).

In general, Naoise Mac Sweeney (2013: 52) is right to surmise that

"evidence for a Neileid clan in Archaic and Classical Miletus is not overwhelmingly robust. However, it does show that a number of public and official figures in the city had names that were associated with their oikist. It is unsurprising that some leading aristocrats within the city made strategic use of the Neileos myth for their own dynastic selfaggrandisement."

Yet in comparison to the reasonably large number of names we have from Archaic and early Classical Miletos, Neileid adjacent appellations are few and far between.¹⁵⁸ This leads us to question whether there are any other sources of evidence from which we might identify the existence of a Neileid group in the Archaic period.

According to Alain Duploy, a series of Archaic statues uncovered by Olivier Rayet and Theodore Wiegand south of the city wall, may have come from the Heroon of Neileos mentioned by Pausanias (7.2.6; (Duplouy 2006: 223-26). He notes the presence of a number of inscriptions mentioning Artemis and

¹⁵⁸ See LGPN Vb for details of names at Miletos throughout antiquity.

concludes that these statues originally came from the Temple of Artemis Kithone situated on Kalabaktepe. Furthermore, the workshop in which these were made has also been identified in close proximity to the temple, while a further pair of analogous statues, which seem to have been made there, have been identified at Ak-Yenikoy (Duploy 2006: 226-7, 233-4). This leads Duploy to consider whether the dedicand of these monuments may have had a connection to a cult of Neileos in the Archaic period connected to the worship of Artemis Kithone. He also speculates on the existence of a quasi-sacred way between Kalabaktepe and Assessos, along which these statues were dedicated (2010: 232-4). Indeed, Assessos plays an important role in the narrative of the conflict between the Neileid brothers, Leodamas and (Am)Phitres, recounted by Nikolaos of Damaskos (BNJ 90 F52). It also features in the story of the Assessian Antheus and Neleid Phobios recounted by Aristotle (F566 Rose) and the writers of the *Milesiaka* (BNJ 496 F1). According to the latter, Antheus was a hostage at Miletos and, although the circumstances of this detention are not mentioned in any extant sources, we might surmise that the story was connected to a foundation narrative for Milesian control of Assessos which may have been established sometime in the Archaic period.

Both Duplouy (2006) and Slawisch (2011), also connect the group subjected to exile in the Banishment Decree, with the cult buildings and statues at Kokkinolakka.¹⁵⁹ The deliberate destruction of this complex, one which is not mentioned as a stopping point in the Molpoi inscription, is speculated to have

¹⁵⁹ Located just off the sacred way between Miletos and Branchidai-Didyma in the Stephania hills.

been connected to the banishment of the Neileidai (Slawisch 2011). While this argument is speculative, the existence of this complex along with its monumental statues, provides confirmation of Duplouy's thesis that the Milesian elites used strategically placed monumental sculpture as a form of selfaggrandisement, asserting their status within their peer-groups and the wider Milesian populace (2006).

Another form of elite self-definition enumerated by Duplouy, the use of genealogies, offers a further avenue to help us to understand exactly who and what the Neilidai were. Elite groups in the Archaic period were multifarious in their formation and status claims, and the existence of hereditary aristocracies were rare. As van Wees and Fisher observe (2015: 3), of those that are attested, "most of these groups are named after a city-founder or other early king, and the -idai and -adai suffixes are usually taken to indicate descent: 'sons of ... Neleus' ... But the same suffixes were used for fictive kinship groups". The Neilidai need not represent a closed group exhibiting actual descent from the leader of the first migrants to Miletos. Rather this status was a social construct, designed to reinforce and establish status amongst their peers. It is possible that it is this kind of self-aggrandisement that Herodotus criticises in Hekataious, who apparently "made a genealogy for himself that had him descended from a god in the sixteenth generation" (Hdt. 2.143.1 trans. Godley). Indeed, according to Hellanikos (BNJ 4 F125), Neleus himself was descended from a god in the ninth generation, which demonstrates the ways in which these constructions might work in practice. Therefore, when we are talking about the

Neilidai, what we are describing is a community of practice. A group with shared notions of the past and shared practices in the present.

The same could be said for the Molpoi. While the Neilidai were linked to Artemis Kithone and her sanctuary on Kalabaktepe, as well as, probably, the altar of Poseidon at Monodendri and the temple of Athena at Assessos, the Molpoi were intimately connected to Apollo at the Delphinion and Branchidai-Didyma, as well as the other deities at whose rural shrines they performed rites on their procession between the two. We saw in the previous section the plentiful evidence for civil discord between different groups at Miletos during the Archaic period, the Gergithes, Aeinautai, Ploutis and Cheiromacheia. All of these should probably be envisioned in a similar way to the Molpoi and the Neilidai. They were communities of practice, in the technical sense. In other words, groupings of individuals and families with shared practices, not necessarily focused on descent. Furthermore, it seems clear that there must have been some overlap between these groups. For example, as we have seen, Nympharetos acted as aisymnetes of the Molpoi, yet was banished along with individuals with connections to the Neilidai, while we have further evidence for names linked to the Neilidai present in both the aisymnetai list and in the Molpoi inscription. We are not looking at groups in fundamental opposition with one another, as is often imagined by scholars and ancient commentators, in particular, those who see *stasis* at Miletos as an ideological or class-based i.e., the elites or aristocracy against the demos and/or the middle classes (see section II.2.1). This interpretation is anachronistic. Instead, what we seem to

see is overlapping groups trying to assert their power and status amongst themselves and to the wider population.

This has implications on how we conceptualise the interaction between *stasis*, exile and migration. As Sarah Forsdyke (2011) has pointed out, in many Archaic poleis, cycles of elite competition, conflict and exile are impermanent. The exile of today may be the tyrant of tomorrow. If this was the case for Miletos, then would we expect to be able to trace the permanent migration of these elites to the relatively far-flung regions of the Black Sea? Exiles such as the Mytilenian Alcaeus seem to have stayed close to home. Much the same is recorded in the narrative of Leodamas' exile at Assessos and is suggested by Hekataious in Herodotus, when he advise the Ionian rebels to fortify the island of Leros from where they can continue the conflict with Persia (5.125).

Turning to manifestations of elite migrant in immigrant contexts, the earliest evidence we have of burial practices which exhibit a strong message of social status comes from Orgame. Tomb T-A95, discovered in the 1995 excavation season, lies in sector 2 of the Orgame necropolis, not far from the later wall of the citadel (Lungu 2019: 134). The pottery surrounding the funeral pyre all suggests that the funeral of the deceased occurred within the first phase of the settlement. The earliest assemblage includes a Vallet-Villard A2 Ionian cup from Miletos or Samos, a fragmented Vallet-Villard A1 cup, Klazomenian and Lesbian amphorae, three East Greek *oenochoe* and a handmade vessel dated to between 650 and 625 (Lungu 2000-2001: 173-75). The funeral deposition itself consists of a cremation on a wooden pyre surrounded by a ring

of stones, carried out over a 0.8 m deep pit located in the centre of a burned area with a surface area diameter of approximately 8m. Inside the pit was found a layer of ash, bones and ceramic fragments around 0.3m deep, while there is evidence that sheep and goats were sacrificed as offerings to the deceased in front of the pit (Lungu 2000-2001: 173). Little remains of the deceased were found, which has led to speculation that the remains were buried in a chest which was later looted.¹⁶⁰ Following the cremation, the area was covered by a very large tumulus, around 42m in diameter, creating a focal point in the local landscape and for the subsequent development of the necropolis (Lungu 2000).

While the extent of the funeral rites themselves implies that the deceased was part of the early elite at Orgame, evidence for the continuing practice of religious rites at the site demonstrates the importance of their memory to the community and their descendants. The tumulus was surrounded by an offering trench of varying depths in which were deposited fragments of amphorae, *kraters, lekani, oenochoe, kantharoi* and fish dishes amongst other items (Lungu 2000: 70). The first depositions in this trench appear immediately after the construction of the tumulus, in the second half of the seventh century, and imply an important role for consumption of food and drink at the site (Lungu 2019: 136-37). In sum, we can clearly identify at least one individual of a high social status who became an emigrant. Furthermore, there is no reason to assume that this is an isolated case. Indeed, the burial itself and the explicit

¹⁶⁰ Though a small piece of gold shaped like a leaf found in the tumulus has been posited to have once adorned such a chest (Lungu 2000-2001: 173).

connections made between the deceased and those who were able to utilise the resources needed for its construction and depositions, point towards a group consciously portraying their own importance in the early community.

II.3.3 Vocations

II.3.3.1 Craftspeople

Craft production in migrant settlements is another good indication for the presence of migrant groups. First, there is no doubt that, in the ancient world, craftspeople were mobile (Burford 1972: 66-67). Second, in ceramic and metallurgical production, the craftsperson is required to learn and hone their technique over time, acquiring these skills from competent teachers (Hasaki 2013). Only in limited cases, such as ad hoc household production and firing of handmade pottery, is this not required.¹⁶¹ Therefore, in the early stages of migration to the Milesian settlements of the Black Sea and Propontic regions, the presence of local and localised craft production can be seen as a definite indicator of the presence of mobile and migrant craftspeople, of whom at least the earliest individuals must have acquired their skills within an emigrant community context.

Craft production can be undertaken in a variety of contexts, anything from limited household manufacture to large semi-industrialised workshops

¹⁶¹ Peacock (1982: 13-16, 75-77) notes that this type of production is very difficult to identify in archaeological contexts and often involves production by female members of the household using rudimentary technology.

and craft districts (*keramikoi*).¹⁶² Within these fields of practice, different groups might be involved, though by no means exclusively, within the process of production, such as women and children for the former and citizen men and slaves in the latter (Papadopoulos 1997: 452-53). Previous scholarship has also frequently sought to identify specific ethnicities of itinerant, mobile and migrant craftspeople, often associated with widely disseminated regional styles.¹⁶³

Istros

Between 1973 and 1977, a dense concentration of kilns, at a depth of 2.60 m from ground level, was uncovered in Sector G at Istros, immediately to the west of the Archaic wall, suggests that ceramic production began in the area around the middle of the sixth century (Coja 1979: 19-20). This kiln (no. 4), was discovered in 1973, and seems to have been constructed atop a habitation layer which dated to the beginning of the sixth century, probably a continuation of the traces of habitation uncovered in the sectors to the north (Coja 1979: 20). The furnace itself is circular with a maximum diameter of 1.05 m, while the opening of the foyer is orientated east, though this part of the edifice was destroyed by a later pit rendering its dimensions uncertain (Coja 1979: 19f). The

¹⁶² Peacock (1982: 7-51). See Papadopoulos (1997) for the application of Peacock's schema to LBA and EIA Mediterranean. For the social, political and topographic settings of *keramikoi*, see (Hasaki 2002: 285-89) and Stissi (2012).

¹⁶³ i.e. Athenians: MacDonald (1981); Garland (2014: 165-66) and Corinthians: Dunbabin (1950); Papadopoulos (2009).

interior of the pit, which cuts across the eastern side of the oven, consists of black earth with a large amount of carbon and ceramic fragments. The latter, including pieces of amphorae and a fragment of an Attic Black Figure krater, can be dated between 510-500 (Coja 1979: 20). This dating indicates that the kiln itself was in use earlier (Coja 1979: 20).

The number of later facilities and the size of the area in which ceramic production was undertaken, suggests that there may be earlier undiscovered installations (Coja 1979: 20). This is further suggested by the appearance of locally produced Pontic grey ware ceramics in the earliest strata at Istros. Recently, Soren Handberg has noted that, of the most frequent early forms of Pontic Grey ware pottery; grooved rimmed *lekanai*,¹⁶⁴ bowls with in-turned rims¹⁶⁵ and high single handled cups;¹⁶⁶ all appear in layer NA I (c.610-580) at Istros alongside fragments of middle Wild Goat (SiA d) style ware (Handberg 2013: 4-5 with n. 34). This evidence, then, implies that the production of grey

¹⁶⁴ Dimitriu (1966: 99, no. 483). Consisting of a fragment of the lip and wall of a lekane in polished grey-green clay.

¹⁶⁵ Dimitriu (1966: 99-100, nos. 478, 81, 85). All were fragments of the lip and wall of the vessels. Nos. 478 and 484 were made of gray clay, while 481 was brown clay burnt to a gray-blackish hue and 485 is described as gray to brown clay. The surfaces of 481 and 484 were polished. A fragment of a bowl similar to no. 485 has also been identified in a household pit at Berezan (pit 64) alongside a MWG II (SiA d) *oinochoe* which indicates a date contemporary with the Istrian piece (Chistov 2006: 64, 79 pl. 11.20).

¹⁶⁶ Alexandrescu (1978: 113 no. 736). Fragments of the rim and body of a well glossed one handled cup were found in sector X in 1958.

ware pottery may have been undertaken from the time of the arrival of the earliest migrants at Istros, some of whom, no doubt, were practicing ceramicists.

Orgame

The local pottery production of Orgame, in the Pontic Grey Ware style has been identified through archaeometric analysis by Pierre Dupont (2006, 2009). Two kilns associated with this production have been identified in the F-E sector of the site. Discovered in 1987, "Oven 1" is a circular structure similar to types found at Istros between the sixth and fourth centuries (Mănucu-Adamesteanu 1999: 148). It was dug into a layer dating to around the third quarter of the sixth century and seems to have been in use from around the turn of the sixth and fifth centuries (Mănucu-Adameşteanu 1999: 149). "Oven 2", uncovered the following year, was of a similar shape and could be dated to the end of the sixth century due to ceramic fragments of this date which had penetrated the structure (Mănucu-Adameşteanu 1999: 149). No subsidiary artisanal installations were identified in the vicinity of either kiln, though their close proximity led excavators to posit that the area was set aside for craft production (Mănucu-Adamesteanu 1999: 150).

Nymphaion

Ceramic manufacture at Nymphaion is attested from the mid sixth century. Several kilns were discovered in an area attached to the sanctuary of Demeter. The earliest installation, Kiln "*II*" was situated 3m south of the cleft in which early offerings had been placed, 40cm beneath the level of the paved area of the temenos (Khudyak 1952: 256-57). It was an irregular ellipsoid, 1.03 x 0.73 m on its longest axis (Khudyak 1952: 257 n. 2). At the mouth of the kiln a deposit of red mineral paint was uncovered. Slag and wasters were found within the furnace (Khudyak 1952: 256; 1962a: 40).

A second kiln, below the level of the pavement, was also identified (Khudyak 1952: 256). It was located to the south of the sanctuary building, adjacent to wall 25 which is presumed to represent the boundary wall of the Archaic sanctuary. A later installation Kiln "*I*", elliptically shaped with adobe brick walls at the level of the pavement, was also located in this area (Khudyak 1952: 245, fig. 7). These produced votive objects for the sanctuary including vessels, terracotta figurines and lamps (Khudyak 1952: 256; 1962a: 40; Sokolova 2003: 768; Avetnikov and Žuravlev 2017: 215). Ceramic wasters and moulds for figurine manufacture were also identified (Khudyak 1952: 256-57; 1962a: 40). There is very little evidence to suggest that the products of this workshop were widely spread in the settlement — they are mainly concentrated within the sanctuary itself — which has led scholars to suppose that its production was exclusively for ritual purposes at the site, as dedications and paraphernalia for worshippers and officials alike (Avetnikov and Žuravlev 2017: 216).

Apollonia

Evidence of metallurgy appears on St. Kirik Island and across the Sozopol peninsula in the sixth century. The earliest manifestation of this industry is the discovery of large volumes of copper slag in a variety of contexts in the Archaic layers of the residential quarter on St. Kirik. These are used as levelling material and insulation in the floors of houses (Panayotova et al. 2014: 595; Panayotova and Damyanov 2020: 254). The earliest deposits can be dated to the end of the seventh century, indicating that the industry was established shortly after the arrival of the first migrants (Baralis et al. 2016: 159). A metalworking workshop has been identified in the first phase of habitation on the island which consisted of two rooms, and could be dated to the last years of the seventh to the beginning of the sixth century (Panayotova and Damyanov 2020: 254).

On the peninsula itself, from the sixth century, significant quantities of slag have been found during rescue excavations (Nedev and Panayotova 2003: 106; Nedev and Gyuzelev 2010: 37). At excavation parcel UPI XI-XII 515, large amounts of copper suggest that there must have been a foundry nearby, possibly to the north of the excavated area (Baralis et al. 2013; Baralis et al. 2016: 159). A pair of furnaces were identified in 2006 on square 18 of the UPI 226 plot (Nedev and Gyuzelev 2010: 159; Baralis et al. 2016). Both can be dated to the third quarter of the sixth century, though only one is in a good state of preservation (Nedev and Gyuzelev 2010: 37-38). By the second half of the sixth

century an artisanal complex specializing in bronze manufacture¹⁶⁷ had been established outside the city walls in the *Iujna krepostna stena* zone, previously home to the city's necropolis. This area seems to have been specifically designated as an artisanal zone, with pottery production coming slightly later (Panayotova and Damyanov 2020: 259). As Alexandre Baralis and his colleagues have noted, this move away from the intramural settlement indicated a changing use of space within the city, and the concentration of metallurgical activities from their earlier dispersed locations (Baralis et al. 2016: 159).

In 2017, excavations at Apollonia identified a complex of three overlapping kilns, one of which may have been in use as early as the first half of the sixth century (Panayotova, Damayanov, and Bogdanova 2018: 155-56; Nedyalkov 2020: 35). This area, termed "production complex no. 4", was located to the west of the altar of the Archaic temple of Apollo Ietros on St. Kirik island and seems to have formed part of the temenos enclosure (Nedyalkov 2020: 36). The kilns themselves were oval and lay in a heart-shaped brick structure, with the two oldest lying at the arches. A third kiln contained unbaked clay, suggesting that ceramic production occurred at the site. It is thought that the complex functioned at the same time as the construction of the nearby temple, making votive objects and architectural relief decorations

¹⁶⁷ See Nedev and Gyuzelev (2010: 38) who note that the appearance of bronze working implies an export industry due to the rarity of bronze objects in either Apollonia town or its various necropolises.

(Nedyalkov 2020: 35). On the mainland there is evidence for later ceramic production from Morski Skali Street which dates to the second half of the fifth century (Gyuzelev 2008: 127).

Berezan

A significant number of metallurgical installations are evident at Berezan in the Archaic period (Solovyov 1998: 214; Chistov 2012; Chistov and Krutilov 2014: 213-4). Bronze production in the earliest phases of the settlement is evident from the installations in Sector-O (Chistov and Krutilov 2014: 214) and a pair of copper smelting workshops, labelled building complexes 6 and 13, have been identified in this area, representing early examples of this industry (Domanskij and Marcenko 2003: 30). The former was a dugout structure some 1-1.2 m deep with a total area of 19m² (Domanskij and Marcenko 2003: 31-33). The clay floor of this structure exhibited signs of burning with traces of charcoal and copper imbedded in it which contrasts with the flooring and in-fills found in other domestic dugout structures of the same period (Domanskij and Marcenko 2003: 32). Ceramic remains found in the structure indicate a date between the end of the seventh century and the second quarter of the sixth century. These included a MWG II (SiA d) style dinos which may point towards the earlier part of this period (Domanskij and Marcenko 2003: 32). Complex 13 lay to the west, though its state of preservation was poor in comparison. Nevertheless, a significant find here was the identification of a copper ingot weighing 3.5kg which seems to have been produced on Berezan and implies an export industry (Domanskij and Marcenko 2003: 35).

By the second half of the sixth century (period II), iron-smelting facilities become more common on Berezan. By the last quarter of the sixth century, a forge for obtaining purified iron can be identified in Sector T. The temperatures required for this process, as well as the localization of an earlier workshop probably in use around the middle of the century, have lead Dmitry Chistov to suggest that this area must have been non-residential and probably represented an artisanal quarter dedicated to metallurgical production (Chistov 2012). Other craft facilities, including jewellery production may also have existed at Berezan towards the end of the sixth century (Treister 1998: 180).

The earliest data for ceramic production at Berezan dates to the middle of the sixth century, probably closer to the third quarter of that century (Chistov and Krutilov 2014: 215; Krutilov, Smirnov, and Bondarenko 2017: 31). Two complexes of pottery workshops were uncovered in sector "Gsh" to the northeast of the Aphrodite temenos in the 2011-12 seasons. This included 4 kilns in various states of preservation, alongside 22 pits of various purposes including ash disposal (Krutilov, Smirnov, and Bondarenko 2017: 31). The earliest facilities in the area are Kilns 1 and 2, uncovered in 2011 under the floor of a building from the late sixth to the early fifth century. The mouths of these two kilns were connected by a trench which was probably used to lower fuel into their combustion chambers. It has been speculated that Kiln 1 may have been in operation earlier, but the presence of the trench indicates cotemporaneous usage (Krutilov, Smirnov, and Bondarenko 2017: 32). Kiln 2 was the better preserved example with the combustion chamber and central pillar surviving, while a limestone slab covering the opening passage also remained (Chistov and Krutilov 2014: 215; Krutilov, Smirnov, and Bondarenko 2017: 31). Within the remains of the combustion chamber, were several intact lamps which must have fallen through when the kiln collapsed (Chistov and Krutilov 2014: 215; Krutilov, Smirnov, and Bondarenko 2017: 34 fig. 3). These may have been used for domestic lighting, although the proximity of the Aphrodite temenos may imply that lamps were produced to serve nocturnal religious rites.

In 2012, another pair of kilns was identified in the sector 7m northwest of kilns 1 and 2 (Chistov and Krutilov 2014: 35-36; Krutilov, Smirnov, and Bondarenko 2017: 215). These were below the remains of a building which has been dated to the first quarter of the fifth century. Below kiln 3, the remains of a semi-dugout building, from the first half of the sixth century, were identified. The remains of North Ionian imitation table amphorae and jugs remained within its partially collapsed firing chamber. The discovery of this quartet of kilns indicates that this area functioned as a *keramikos* between the middle and end of the sixth century, no doubt supplying the local community, possibly including Olbia, with their day-to-day ceramic wares (Krutilov, Smirnov, and Bondarenko 2017: 36), as well as potentially more specialised objects, such as the imitation North Ionian pottery and lamps, which may have been used respectively as status markers and within religious contexts at the nearby sanctuary of Aphrodite.

Olbia

During the sixth century, metallurgical industries represent one of the most widespread craft production sectors at Olbia. Finds, including casting moulds and concentrations of waste products from metal manufacturing, attest to this (Treister 1998: 179 n.2; Rusyaeva 2006b: 90). Numerous metal workshops were in operation in the central part of the Olbian upper town, including within the temenos areas providing votive objects for worshippers there (Vinogradov and Kryzhitsky 1995: 80). Near the western temenos, archaeologists uncovered a pit containing material which seemed to have come from a bronze foundry including slag, dozens of fragments of dolphins and arrowheads, as well as fragments of amphorae and numerous "Rhodian-Ionian" *kylikes* (Rusyaeva 2006b: 90f). These finds can be dated to the second half of the sixth century. The latest material suggests that the pit was infilled around the final quarter of that century (Rusyaeva 2006b: 91).

Between 2008 and 2010, in the vicinity of the southern temenos, another Archaic period metallurgical workshop was identified in semi-dugout no. 1586 (Bujskikh 2015). Within this structure, a number of bronze objects, including dolphins, arrowheads, fragments of sieves and slag, were uncovered (Bujskikh 2015: 109). Alla Bujskikh dated the ceramic assemblage to the late 530's and proposed that the structure was filled in during the last decade of that century. Although this material found analogies in contemporary domestic structures, the presence of metal ware, in addition to a large fireplace, indicate that the structure represents a bronze casting workshop, similar to those found earlier on Berezan (Bujskikh 2015: 109). In addition to metalworking, there is also evidence for industrial activities, including glass-working, at Yagorlyk from the early sixth century (Bezborodov and Ostroverkhov 1978).

The earliest evidence for pottery production at Olbia can be found in a dugout in sector R-25 in the upper town. It consisted of an intact burnt and deformed red clay plate with painted stripes, as well as numerous fragments of similar vessels (Bujskikh 2005a: 185; Krapivina 2007: 98; 2009: 97). Furthermore, locally produced gray ware ceramics were second only to imported East Greek pottery within the structure, the former allowing archaeologists to date the deposit to the second quarter of the sixth century, probably at the beginning of the 560's (Bujskikh 2005a: 183-85; Krapivina 2007: 99; 2009: 97). In general, local wares at Olbia tend to consist predominantly of tableware items including cups, jugs, *oenochoai, dinoi*, pots, bowls, kraters, *kylikes*, plates etc., demonstrating that production was, at least in part, intended to supply to inhabitants of the settlement for their day-to-day needs.

Pantikapaion

The evidence for metallurgical production at Pantikapaion was localised to an area on the northern slope of Mount Mithridates. There, three workshops have been identified in buildings situation along a side street which branches off from a main road. Further workshops, on the western plateau, have also been identified, based on the remains of furnaces, ores and metal working tools. In general, these installations can be dated to the late sixth and early fifth centuries.¹⁶⁸ Weapons production seems to have formed an important part of the metal production at Pantikapaion though it is unclear to what extent this was aimed exclusively at the inhabitants of the town itself. Some scholars have suggested that it may have been aimed at Skythian customers (Treister 1987: 40-42; 1996: 75). The localisation of these installations implies the existence of a delineated metallurgical quarter, while the size of the associated buildings implies that the number of artisans employed there was relatively small (Treister 1987: 39-40; 1996: 80).

Evidence for pottery production does not appear until the end of the sixth century (Noonan 1973b: 80 n. 34 with literature; Zeest 1966). Pottery kilns have been found in houses 13 and 16 and there is evidence for the production of imitation Ionian banded ware. Finds of loom weights and terracottas, which seem to have shared production methods, also imply differentiated ceramic production (Kocybala 1978: 320).

Hellespont

The development of Neutron Activation Analysis (NAA) has provided a ground-breaking means of determining the origin of ceramic objects without the need for subjective stylistic analysis. NAA analysis of ceramic fragments

¹⁶⁸ Treister (1987: 38-40). Nevertheless, metallurgical production at Pantikapaion probably predates these installations as evidenced by the minting of silver coins from the mid sixth century, and the discovery of a casting plate with heraldic imagery which can be dated to between the second quarter and the middle of the sixth century (Treister 1987: 40, n.18).

from Istros, undertaken by Pierre Dupont and his colleagues at Lyon since the 1970's and from Berezan by Hans Mommsen and his colleagues at Bonn since the 1990's, was able to identify a hitherto unsuspected production centre for some of these wares. The Lyon team termed their class "Sud Ionie 3", due to its resemblance to the wares of South Ionia and Miletos (Dupont 1983b: 35-36). At Bonn, the existence of a chemical signature in their database from samples of raw clay taken during road construction at Intepe south of modern Çanakkale, and found in fragments at Troy, led them to identify their class as TRO-D (Kerschner 2006b: 147; Mommsen, Kerschner, and Posamentir 2006: 166). Both teams now accept that the TRO-D and Sud Ionie 3 production centres are almost certainly one and the same (Kerschner 2006b: 151; Posamentir and Solovyov 2007: 195; Dupont 2016).

Since isolating the chemical signature of this pottery, both teams have worked towards establishing its centre of production with more clarity. Both have argued that Abydos is the likeliest candidate for production (Dupont 2008; 2016: 99; Mommsen, Kerschner, and Posamentir 2006: 167; Posamentir and Solovyov 2007: 182; Arslan et al. 2009: 44). Yet, sampling of relevant sherds found around the Hellespont, independently collected and analysed by both, has led to some interesting results. The Bonn team, working from the smaller sample size, noted that the area between Arisbe – Abydos – Perkote generated the most relevant samples (Arslan et al. 2009: 43-44), Dupont observed that examples found at Lampsakos and Sestos were the best match for those from Istros and Berezan.¹⁶⁹ Nevertheless, given the size, location, origin and importance of Abydos, the general consensus at present is that the Sud Ionie 3/TRO-D wares originated there.

Based solely on stylistic concerns it has proven very difficult to differentiate between the works of the Sud Ionie 3/TRO-D workshops and those imported from Miletos itself. Furthermore, the types of wares made in these production centres, including MWG II style 'fruit stands', Ionian Villard B1 cups and Ionian eye bowls, all have close analogies at Miletos itself.¹⁷⁰ While there is some indication that these workshops were prone to local Aeolian influences later in their working lives (Dupont 2008: 11-14; Posamentir and Solovyov 2006: 117; 2007: 183), in general the stylistic affinities of their products with those made at Miletos itself leads to the conclusion that the craftspeople working there were direct emigrants from the metropolis itself (Dupont 2008: 14; Kerschner 2006b: 151; Posamentir and Solovyov 2007: 206).

Varia

¹⁶⁹ Dupont (2016: 99) notes that there is some doubt over a Lampsakene origin for these wares, due to the lack of testimony for it as a Milesian settlement. It should also be considered that both analyses concluded that the material was produced in at least 2 different workshops within reasonably close vicinity (Dupont 2008: 7f; Posamentir and Solovyov 2007: 116).

¹⁷⁰ Kerschner (2006b: 150); Posamentir (2006: 165-66); Dupont (2008: 1-2, 6, 10-11; 2016: 98). On the other hand the form of fishplates produced at the Sud Ionie 3/TRO-D workshops has Phoenician analogies and is thought to represent a precursor to the common Pontic fish plates found in greater numbers in the proceeding centuries.

In addition to the settlements outlined above there is some limited evidence for metallurgical and ceramic production at a handful of other settlements; the former at **Nikonion** (Sekerskaya 2001: 70) and **Myrmekion** (Treister 1998: 180; contra Butyagin 2021) and the latter at **Hermonassa** (Treister and Shelov-Kovedyayev 1989) and **Tyritake** (Zinko 2014: 54).

Discussion

Overall, the dating of the appearance of the earliest craft working at Milesian migrant settlements is spread across the sixth century. The earliest concrete evidence we have for ceramic production can be localized at Apollonia's St. Kirik Island in "production complex no. 4", which was in use possibly as early as the first half of the sixth century. Nevertheless, ceramic production in the region may have begun at Istros at the turn of the century if the early grey ware types found there were locally produced. Additionally, though the earliest ceramic production workshop can be dated to the middle of the sixth century, the quantity of installations in the immediate area and its limited excavation leaves open the possibility that earlier workshops may exist in the area (Coja 1979: 20). Production may have also been undertaken at Olbia by the 560's and at Hermonassa and Nymphaion around the middle of the sixth century, though the evidence for the former assumes the conical clay object found there was used as a firing support (i.e. Treister and Shelov-Kovedyayev 1989). There is no evidence for ceramic manufacture at Berezan prior to the third quarter of the sixth century, while at Orgame and Pantikapaion the first workshops appear at the end of the century. The extent of production at Istros

may indicate one of the reasons why facilities do not appear in the settlements to the north and northeast until sometime after their establishment (Lungu 2009: 13-40; Handberg 2013: 7-10).

It seems likely that potters can be numbered amongst the earliest migrants to Istros during the innovator and early adopter phases of the settlement. The need for ceramic objects in the earliest settlement must have included the replacement of day-to-day objects that the migrants brought with them, as well as catering to an increasing populace.¹⁷¹ The learned skills of the potter form an important source of social capital, convertible to migrant capital. While most scholars tend to see the role of craftspeople in the Aegean emigrant communities as one of lower social status, these skills could be effectively transferred to an important socio-cultural role in migration fields. For example, the potter could become an indispensable part of the migrant community through their ability to provide their fellow migrants with the accoutrements of their day-to-day lives. In addition, they could also provide a material focal point for manifestations of iterational agency, the 'choice' to continue patterns of social and cultural behaviour between emigrant and immigrant contexts, which provide an important part of the maintenance of the community of practice.

The development of Pontic Grey ware seems to have antecedents in Aeolis, which must be regarded as a subsidiary emigrant area, from which the migration of ideas and cultural manifestations may have played as much of a

¹⁷¹ Though see Guldager Bilde and Handberg (2012) for evidence of pottery repair from Olbia.

role as that of individual migrants. The exogenous geopolitical and historical contexts which resulted in the migration of Aeolian styles, potentially alongside the movement of craftspeople, are difficult to quantify. Yet the endogenous spread of Pontic Grey ware, which seems to have created a resilient stylistic *koine* in the medio-historical frame,¹⁷² demonstrates the potential heterogeneity of migration flows of people and objects.

The production of Pontic grey ware at Istros and Olbia seems to have supplied and inspired not only the inhabitants of their immediate locale (Lungu, Dupont, and Simion 2007), but further afield, to the settlements on the banks of the Dniester and Lower Bug rivers, possibly as far the Taganrog settlement (Dupont 2008: 42; Kopylov and Andrianova 2009: 42). This phenomenon may have had an additionally important role in defining the parameters of social to migrant capital transference, its relative utility at different points in the migration trajectory, and, indeed, within different trajectories themselves. At Istros and Apollonia, the archaeological evidence seems to indicate the migration of potters was facilitated and made easier through the importance of their attendant social capital to the nascent community. The proliferation of their activities may have acted to increase the required social to migration capital required for migrants at other sites. Therefore, the reach of Istrian pottery production reduced the utility of the potter's social capital at other places, negatively affecting the balance of

¹⁷² Handberg (2013: 4 n.27, 5, n. 36) quoting his unpublished Ph.D. dissertation (i.e. Handberg 2010 *non vida*).

transference into migration capital. In short, at locales such as Berezan, there was less need for individuals functioning in these roles, due to the endogenous effect of the previous successful migration of ceramicists elsewhere.

Broadly speaking, evidence for metallurgical production appears slightly earlier at the sites discussed above. At Apollonia, the identification of copper slag within the residential structures of the earliest phase of the settlement on St. Kirik, indicates the importance of this industry from the beginning of the settlement; an industry which seems to have performed a primary role in the economic activity of the settlement throughout the sixth century. Similarly, on Berezan, metallurgy is evident early and played a prominent role in the life of the Archaic settlement. At Olbia, metal production can be identified during the second half of the sixth century, with the ceramic remains in the southern workshop making a date of around 530 possible, while the early residential structures at Nikonion, dating to around the middle of the sixth century, contain evidence for metalworking in the form of objects and slag. It is more difficult to ascertain the beginning of metal production at Pantikapaion. The earliest installations cannot be identified until the end of the sixth century, yet a casting mould has been found which may date as early as the second quarter of the sixth century, though it may have come from elsewhere and, subsequently, not have been used at Pantikapaion before the emergence of the first identifiable workshops.

Some important conclusions can be drawn about the junctures at which craftspeople migrated to the Milesian settlements in the Black Sea. It is clear that at least some of the earliest migrants were craftspeople. Potters and metalworkers almost certainly migrated to Apollonia during the innovation and early adoption phases. It seems likely that the latter group were motivated by the ability to obtain the resources for their craft being mined in the Copper hills of Meden Rid.¹⁷³ As to the ceramicists, the creation of a nascent industrial economy at Apollonia may have acted as an endogenous driver for their movement to provide not only items for day-to-day living, but also more specialized objects required by the former group.

The case of the migration of metal workers to Berezan and Olbia may be more complex. While there are few native sources of ores in the region, the settlements on the lower Bug quickly tapped into exchange networks which stretched from central, eastern and north-eastern Europe across the grass and forest steppe regions.¹⁷⁴ These connections may also have been facilitated from Istros, though the beginnings of Istrian movement and settlement into the surrounding region seem to date from a slightly later epoch. It seems unlikely, then, that metal workers appeared amongst the innovator migrants at Berezan and Olbia. More probably the initial settlement of these sites acted as an endogenous driver, opening the possibility for skilled migrants to settle there.

¹⁷³ Panayotova and Damyanov (2020: 251); Panayotova et al. (2014: 595). For mining in this area see Kunze et al. (2018) and the papers in Krauss et al. (2020).

¹⁷⁴ The source of ores worked at Berezan seems to have been the Carpathian-Danube basin (Domanskij and Marcenko 2003: 35).

The extensive evidence for metalworking in Archaic Milesian migrant settlements also raises the question of where the finished objects ended up. At Apollonia there is little evidence of the kinds of bronze objects being produced in its foundries in either the urban area or its numerous necropolis (Nedev and Gyuzelev 2010: 37-38), while at Berezan, the quantities of copper being processed "seems to have exceeded the needs of the inhabitants" (Domanskij and Marcenko 2003: 35). Furthermore, they note that the discovery of a 3.5 kg ingot, in addition to the lack of copper articles discovered in the contemporary settlements of forest-steppe Skythia, imply that export was primarily aimed at the metropolis (Domanskij and Marcenko 2003: 35; see also Bujskikh and Bujskikh 2019: 185), though we cannot discount other Pontic destinations. Nevertheless, a number of scholars have suggested that the metallurgical industry in the northern Black Sea may have played a role in the development and dissemination of Skythian 'animal style' (Treister 1998: 191). 'Olbian' bronze mirrors, which are found over a wide geographic area, as well as in the necropolis of their eponym, are thought to have been manufactured either there or at another Northern Pontic settlement (Meyer 2013: 119). Furthermore, the Vettersfelde/Witaszkowo hoard, discovered in 1882 in, what is now, western Poland, has recently been identified as coming from a single originating workshop. Denis Topal has recently hypothesised that this was at Kyzikos. His argument is based on comparisons between the iconography of the hoard

objects and Kyzikene coinage.¹⁷⁵ Overall, while Skythian markets probably did not play much of a role as an exogenous driver for the migration of metal workers to the Black Sea migrant settlements before the early fourth century,¹⁷⁶ the availability of resources in the region, through local production (i.e. Apollonia), or regional exchange mechanisms (i.e. Berezan), may have had a role in creating favourable conditions for the migration of specialist metalworkers to the region.

A second important factor concerning the mobility and migration of craftspeople to the Milesian migrant settlements of the Black Sea and Propontis is ethnicity. There is clear evidence at Miletos for pottery production during the Archaic period in the form of a number of kilns uncovered in an industrial area on Kalabaktepe from the seventh century, which were overlain by domestic structures in the following century (Seifert 1991; Kerschner et al. 1993: 197-98; Senff 1995; Greaves 2002: 79, 90-91; 2010: 81). Furthermore, the discovery of ceramic wasters at the site has allowed researchers to pinpoint the production of Middle Wild Goat style (MileA Id) and Fikellura (MileA II) pottery to the kilns of the city (Dupont 1986; Cook and Dupont 1998: 33-46; Schlotzhauer and

¹⁷⁵ Topal (2020); (Topal 2022). The hoard itself was first published by Adolf Furtwängler (1883) and reevaluated by David Redfern (2000; 2012: 110-47), amongst others. See also Meyer (2013: 119-20).

¹⁷⁶ Meyer (2013: 120) though cf. Tsetskhladze (1998b: 64-65) who notes that the concurrent emergence of the Skythian, Odyrsian and Colchian kingdoms in the fifth century may have encouraged the development of styles fashionable in these places.

Kerschner 2005; Kerschner and Schlotzhauer 2007; Senff 2007; Greaves 2010: 81). During the seventh and sixth centuries, the industrial quarter on Kalabaktepe was also home to metalworking, evidenced by finds of furnaces, manufactured objects and slag (Yalçin 1993; Senff 1995; Greaves 2002: 92).

In light of the evidence for craft production in the emigrant community, is it possible to discern the presence of emigrant Milesians amongst the migrant craftspeople of the Black Sea and Propontic settlements and if so, was the combination of identity and vocational capital more easily convertible into migrant capital aimed towards these immigrant communities? In general, there is limited evidence for the presence of Milesian migrant potters. Few imitations of MWG style can be found, while there is slightly more imitation Fikellura, mostly at Istros (Dupont 1983b: 36; 1999, 2010a; Cook and Dupont 1998: 66-67, 89-90; Tsetskhladze 2012a: 342; Handberg 2013: 10). Conversely, some scholars have also identified Milesian potters in the western Mediterranean at Incoronata (Denti 2000: 818; 2001: 44-45; Handberg 2013: 11 n.88) and the swallow painter in Etruria (Cook 1981; 1992: 260; Giuliano 2000).

Nevertheless, the clearest example we have of Milesian migrant potters is almost certainly those from the Sud Ionie 3/TRO-D workshops on the Hellespont. The close correlation of the wares produced there with Milesian examples, argues strongly for the case that the potters operating from these workshops developed their skills and were active at Miletos in the late seventh and early sixth centuries (Kerschner 2006b: 151; Dupont 2016: 99-101; Posamentir and Solovyov 2007: 201). A second point to take into account, in reference to this, is that the workshops did not seem to come into operation until the end of the seventh century at the earliest, at least half a century after the establishment of the majority of the Milesian Hellespontine communities (Dupont 2008: 14). Therefore, we cannot count these migrant craftspeople amongst the innovator or early adopter stage. The early majority phase provides a more likely context. While there is little a priori reason to argue that this applies to all or even most migrant craftspeople, it can tell us something about the potters of the Ionie Sud 3/TRO-D workshops. Namely that these fine ware potters, who must have been active within Miletos itself, either did not have suitable transferable social to migration capital or were relatively unaffected by proximate driver complexes prior to ca. 600. The first proposition, that they lacked suitable capital for migration, may at first glance seem contradictory given the important role of ceramics in day-to-day life, yet as fineware producers, they may not have had the same market for their wares in the nascent settlements of the Hellespont as they did in the metropolis. Their ability to transfer these skills, as capital, into migration positions may have been limited prior to the establishment of wider networks of exchange. Pierre Dupont has suggested that increasing geo-political pressure from the Lydian Kingdom, at the turn of the seventh and sixth centuries, may have acted as a precipitating driver, creating conditions for the migration of these potters to the established Milesian communities of the Hellespont (Dupont 2008: 14). While we must necessarily treat such a specific correlation between text and artifact with caution, it seems reasonable to suggest that changing geo-political circumstances and their concurrent effects in the micro- and medio- historical ranges may have played a part in the complex of drivers which enabled and encouraged the migration of fineware potters from Miletos to the Sud Ionie 3/TRO-D Hellespontine workshops at the end of the seventh century.

The wide dissemination of Pontic grey ware, which has its closest analogies on Lesbos and in the Troad, has led some scholars to propose that Lesbian and Aeolian potters were at the forefront of craft mobility in the Black Sea and Propontis.¹⁷⁷ Furthermore, the firing stand from Hermonassa (above) has been attributed to a potter trained on Crete on account of the graphology of the n in the inscription (Treister and Shelov-Kovedyayev 1989: 292-95). Similarly, Treister has discerned to presence of metal workers operating in Milesian, Ephesian and even Lydian styles in the settlements on the Northern shore of the Black Sea during the period in question (Treister 1998: 190-92). At Miletos itself, it is likely that craftspeople came from many different backgrounds and some may have trained and operated in eastern as well as Ionian contexts (Treister 1995). All this demonstrates that ethnic affiliation, such as it was, did not form a barrier to migration for craftspeople. The social capital that they embodied through their skills, could be transferred into migration capital more easily at certain points in the migration trajectory. In sum, a certain heterogeneity is to be expected amongst craftspeople in these

¹⁷⁷ Alexandrescu (1990: 58); Handberg (2013). Though a small amount of Grey ware ceramics from Miletos, bowls in particular, have been identified at Istros and Berezan (Dupont 2008: 43 fig. 5).

communities, possibly on a wider scale than may be true for other positionally situated migrants.

Finally, it is worth looking at the topographical situation of craft working installations in the urban environments of Milesian migrant communities to gain an insight into the role of craftspeople in migration trajectories and flows. Ceramic and metallurgical industrial installations in the ancient world, particularly the latter, were not conducive to domestic habitation. The noise, smell and required temperatures would have had a relatively unpleasant sensory effect, meaning that they were often located at a remove from domestic quarters (Hasaki 2002: 286). However, this is not always the case in the settlements under investigation. At Apollonia, for example, where we have some of the earliest evidence for metallurgical production on St. Kirik island, the traces of waste products are found within what appear otherwise to be domestic settings (Panayotova et al. 2014: 595). We should, nevertheless, take into account that their appearance does not necessarily pinpoint the industry within these structures themselves, but may still imply a relatively close localisation. At Orgame too, kilns 1 and 2 are in close proximity to dwellings of the Archaic period, at least one of which, "Archaic Dwelling 2" seems to have been concurrently inhabited (Mănucu-Adameșteanu 1999: 145, fig. 2). Thus, while the location of the two production facilities may imply that the relatively small area in which they were located was designated for craft production (i.e. Mănucu-Adamesteanu 1999: 150) this does not seem to have been spatially distinct to any great degree from the habitation area.

From the current archaeological data, it may be possible to ascribe greater differentiation between production and domestic space at Istros. While the majority of the excavated domestic quarters at the site are situated in the north-western part of the plateau, the evidence for ceramic production is located further south. The multiplicity of installations in this area over a prolonged period of time, as well as its location hard against the Archaic fortifications of the site, and thus its boundary, can be interpretated to represent a deliberate distinction between habitation and industrial zones (Coja 1979: 19-20; 1990: 161). The nucleation of metallurgical workshops on the northern slope of Mount Mithridates and on the western plateau of Pantikapaion also indicates the existence of differentiated industrial quarters there (Treister 1987: 38-39).

At a handful of sites that we have discussed, the localisation of ceramic production seems to have been strongly connected to the functioning of sanctuaries. This observation is important given that this situation is rarely found in the Aegean or mainland Greece. Indeed, a study of this material by Eleni Hasaki identified only two pre-Classical examples of sanctuaries with ceramic production facilities, at Amorgos and Prinias (Hasaki 2002: 290, table VI.8). Yet, in the Black Sea both Nymphaion and Apollonia clearly exhibited pottery production in their earliest sanctuaries, while the short distance between the two at Berezan may suggest a similar relationship. At Nymphaion, the three kilns found in the mid sixth century sanctuary of Demeter are clearly identifiable within the boundaries of the temenos, immediately adjacent to its walls (Khudyak 1952: 245, 56-57; 1962a: 40). Furthermore, the production of these facilities is generally recognised as being exclusively for dedication at the sanctuary (Khudyak 1952: 256; 1962a: 40; Sokolova 2003: 768; Avetnikov and Žuravlev 2017: 215). The two kilns uncovered at Apollonia on St. Kirik have also be recognised as lying within the area of the early temenos, here dedicated to Apollo Ietros, and seems to have been used to produce architectural decorations as well as votives for the temple (Nedyalkov 2020: 25-36). At Berezan, pottery production, which seems to date to around the same time as the functioning of the sanctuary of Aphrodite, was undertaken at workshops less than 50m northwest of the temenos' boundary (Krutilov, Smirnov, and Bondarenko 2017: 31). In these cases, it may be possible to posit a link between the development of designated sanctuary areas and the development of ceramic production. There are certainly both spatial and temporal parallels between the two. The opportunities created by the creation of these sanctuaries may have, in turn, provided an endogenous driver, creating opportunities for potters to transfer their technical capital into migration capital and back again, establishing production to meet demands for votives and decorations at the sanctuaries.

Overall, we can see that there are a number of registers of potential mobility and migration for craftspeople between Miletos and its migrant settlements. While literary sources often decry the role of the craftsperson in ancient Greece,¹⁷⁸ their elite perspective elides the importance of these

¹⁷⁸ E.g. Arist. *Pol.* 1.1258b-1260b, 3.1277b-1278a; Hdt 2.166-7; Pl. *Resp.* 3.415c; Xen. *Oec.* 4.2. See Balme (1984); Anastasiadis (2004) for discussion.

individuals for the functioning of day-to-day life in providing the material constituents for basic and more complex human, social and cultural practices. Therefore, there was almost certainly a need for craftspeople in most nascent communities when demographic expansion took place within the early innovator and early majority phases of a migration trajectory. The evidence above suggests that craftspeople possessed the transferable social and technical capital to migrate at most stages of a migration process, though in the earliest eras the needs of the migrants could also be met by migrant transferred objects or imports. Endogenous developments, such as population increase, the creation and development of markets, and the establishment of religious facilities; could all feed into the creation of conditions which eased the migration process for the potential migrant craftsperson.

II.3.3.2 Fishers

Scholars have long suspected that artisanal fishing may have played a central role in the initial establishment of the first Milesian migrant settlements in the Hellespontine, Propontic and Black Sea regions.¹⁷⁹ The renowned Russian historian Mikhail Rostovtzeff was one of the first to claim that the earliest Ionian voyages into the Black Sea were aimed at the exploitation of marine resources (Rostovtzeff 1922: 61-62). Not long after, Max Cary and Eric Warmington observed that the weather and current patterns exhibited in the spring, which encouraged nautical travel along the Northern coast of Asia

¹⁷⁹ Most modern scholars in agreement with this view follow Curtis (1991: 114; 2005: 31), often with little or no comment e.g. Dumitrache (2015: 75).

Minor where they believed the earliest migrant settlements lay, were probably noted by earlier fishing expeditions (Cary and Warmington 1929: 27). This activity, according to A. J. Graham, was a "natural extension" of maritime activities in the Propontis and Bosporus (Graham 1958: 38), while the sites on which migrant communities were established, riverbanks, capes, islands and peninsulas, are thought to reflect these concerns (Roebuck 1959: 128; Vakhoneev 2011: 52; Butyagin 2017: 95).

Before considering the evidence for fishing at the Milesian migrant settlements of the Archaic period, it is necessary to briefly outline the types of material that are indicative of its practice. Different types of material culture have been used by scholars as markers of fishing practice, but the extent to which they can be seen as definitive indications differs. In the first place, fishing hooks, nets, net weights, harpoons, needles for weaving, icthyoarchaeological evidence and processing facilities all fall within the primary category of evidence.¹⁸⁰ These items clearly point to the utilization of different techniques for the exploitation of marine resources. Unfortunately, for the Archaic period in the Black Sea, they tend to be in the minority. Thus, we are often reliant on more indirect sources of evidence including sinkers, fish plates and numismatic evidence (Gaidukevich 1952a; McPhee and Trendall 1987; Stolba 2005; Dupont and Lungu 2007; Butyagin and Kolosov 2019; Bekker-Nielsen 2016: 289-94).

¹⁸⁰ For fishing equipment, see Kruglikova (1975: 208-14); Højte (2005); Bekker-Nielsen (2005; 2016: 294) and for nets see Alfaro Giner (2010). For icthyoarchaeological evidence see (Lebedev and Lapin 1954) and (Morales et al. 2007).

The problem with these is that they either have other primary of secondary uses, or they can only be taken to indicate the consumption rather than exploitation of marine fauna. Finally, we have literary references but, while these abound, many post-date the period under discussion and therefore must be used cautiously (Dumitrache 2015; Bekker-Nielsen 2016: 289-92). Nevertheless, the accumulative evidence still points towards some fishing activities at a number of Milesian. Given the discrepancies in volumes of evidence from different sites and areas, these will be presented regionally by geographic area, starting with the Hellespont and Propontis, before continuing on to the southern, western, and northern coasts of the Black Sea.

The Hellespont and Propontis

As with so many areas of life in the Milesian migrant settlements of the Hellespont and Propontis during the Archaic period there is almost no archaeological evidence for fishing. Yet, the fame of their fisheries in later times makes it very likely that these were productive during the early years of their existence.¹⁸¹ At **Abydos**, by 500 at the latest, the city's coinage bore an image of a dolphin on their reverse (Head 1875: 265). Later issues show the same animal being speared which seems to suggest that it was hunted as early as the Archaic period (Zeuner 1963: 101). For **Lampsakos**, a fragment of the sixth century poet Hipponax implies that its inhabitants were infamous for their consumption of tuna (Hipponax F. 26 Gerber = Ath. *Deip*. 7.304). We have a

¹⁸¹ For a general discussion see Tozeren (2009: 247-51). For fish migrations through these areas in antiquity, see Tekin (1996).

small cache of later evidence for fishing at **Parion.** There, migrating mackerel were caught (Ath. *Deip*. 3.116), and in the second century CE an association of fisherman was established (*I. Parion*. 5). Furthermore, Polyaenus reports the presence of fishers on the road between Parion and Lampsakos (Pol. *Strat*. 6.24.1). By the second half of the sixth century at the latest, **Kyzikos** had begun to advertise its thriving tunny fishing industry on its coinage (Stolba 2005: 116). Finally, a fragment of the comic poet Hermippus, dated between 428-425, makes reference to the trade in mackerel and salt-fish between the Hellespont and Athens (F 63 Storey).

South Coast

At **Sinope**, later famed for its Pelamydes and Mullet (Strab. 7.6.2, 12.3.11; Ath. Deip. 3. 118c; Doonan 2002: 187-88), there is evidence to suggest a settlement with an exclusively maritime outlook in the Early Iron Age. This community had connections across the Black Sea, and it has been identified as a pre-Greek fishing village (Doonan 2006: 52; 2010: 180; 2016; Doonan et al. 2016). Remains of anchovies, sardines and bonito, have been found in the Archaic layers at Sinope Kale. These may have been salted and processed onsite (Sökmen, Piskin, and Santangelo forthcoming). In later epochs, fish also featured on Sinopean coinage (Stolba 2005: 124), while the amphorae of the city were used to transport preserved fish products which may have originated there (Højte 2005: 139; Lund and Gabrielsen 2005: 164). **Trapezus** and **Tium** were also located on the pelamys migration route and were later well regarded for their catches of these fish, both adult and young (Ath. Deip. 8.331b; Strab. 7.6.2; Ael. NA. 15.5; Öztürk 2013: 333).

West Coast

Istros

It is difficult to quantify the role of fishing and fishers at Istros during the Archaic period. Early scholars argued that access to fishing grounds formed one of the central reasons for the establishment of the settlement (Parvan 1923: 26-27), while others refer to "large quantities of shells or fishbones ... hooks of all sizes and ... weights for nets that have appeared at any point and at all depths in the excavations of the city."182 Yet the publication of this material in the available literature is limited. A few finds of fishing hooks are mentioned, but by and large these date from much later periods (i.e. Condurachi et al. 1959: 278; Dabîca 2013: 160). From around the same time, a Roman era inscription records the rights of Istrian fishers in the Danube delta (SEG 24.1108-1109). Finally, the maritime imagery on the coinage of Istros from the Classical period, has also been thought to allude to the importance of fishing industry there (e.g. Pippidi 1971: 31). It seems more probable that these coins, which depict an eagle with a dolphin in its talons, have some mythological and/or religious connotations rather than this more prosaic explanation (Stolba 2005: 115 with n.2; Hind 2007: 9-16). Nevertheless, it seems likely that fishing was undertaken from Histria throughout the existence of the settlement, given the close

¹⁸² Pippidi (1971: 31). "Grandi quantita di conchiglie o di spine di pesce, in ami di tutte le grandezze e in pesi per le reti apparsi in qualsiasi punto e a tutte le profondita negli scavi della citta".

proximity of the Danube delta, the Black Sea itself and the numerous lakes and lagoons which dotted the coast throughout antiquity (Avram 1990: 16),

Orgame

Like Istros, the quality of information regarding the practice of fishing at Orgame is limited. Evidence from the pre-Greek levels, including the presence of fishing hooks and the overwhelming predominance of fish bones amongst the archaeozoological material, indicates that a fishing village of the Babadag culture probably existed on Cape Dolosman in EIA (Ailincăi, Miriţoiu, and Soficaru 2006; Radu 2006). Fish was also consumed by the inhabitants of the later settlement. Bones have been found in domestic waste pits in sector B (Baralis and Lungu 2015: 382), while hooks and ceramic sinkers are also present in various contexts across the site in the Archaic and Classical periods (Mănucu-Adameşteanu 2003b: 369-70). Simultaneously, some 16 km across Goloviţa lagoon, the small site of **Açic Suat/Caraburun** also contains evidence for fishing in the Archaic period. Half a dozen discoid fishing net weights, made from fragments of amphora and vases as well as stones, were found there, in addition to icthyoarchaeological remains, mostly of freshwater species (Baralis and Lungu 2021: 114).

The Dniester Estuary

Ichthyofaunal remains of catfish, perch and various other freshwater species in the layers of the Archaic and Classical periods, are testament to the practice of riverine fishing and consumption at **Nikonion** (Sekerskaya 1989: 34; 2001: 70, 77; Zaginailo and Sekerskaya 1997: 23). Two meters northeast of dugout number 196, a small hollow has been identified, probably a pit for domestic waste, which contained various fish bones (Mielczarek 2016: 89-90). In addition to the remains of fish, a number of fishing tools have also been uncovered at Nikonion. The earliest layers of the site, from the middle of the sixth century, have yielded 28 fishing weights of which 26 are ceramic and 2 are made of stone. Only two examples of fishing hooks can be identified from the same time period (Sekerskaya 1989: 35). A pair of sinkers for fishing nets, made of clay and stone respectively, were also identified in the early levels of the cult complex at Nikonion, dating to the middle of the sixth to the first half of the fifth century (Sekerskaya 1987: 28). As at Nikonion, the potential for the presence of fishers at **Tyras** can be assumed (Samoylova 2001: 85). Certainly, it seems to have had its own fish market by the Roman period (Ps-Skym. F9 Diller).

Apollonia

Apollonia Pontica has often been noted for its access to good fishing grounds in ancient and modern times, both freshwater, in the nearby Ropotamo River, and oceanic in the Black Sea (De Boer 2006: 271; Baralis et al. 2016: 153, 76). Nevertheless, the published evidence for the practice of fishing in the Archaic period is lacking. Underwater archaeological investigations of the reefs between the Sozopol peninsula and St. Ivan island have identified an area just off the coast of the former which seems to have been used as a port during the sixth century.¹⁸³ Ten fishing net weights (three stone and seven ceramic) were identified in this area, which may tentatively be dated to the Archaic period (Gyuzelev 2008: 251). Anchors and stocks, some of which are dated as early as the beginning of the sixth century, have been located off the eastern shore of St. Kirik (Gyuzelev 2008: 254).

The evidence for the consumption of fish at Apollonia becomes much clearer in the following centuries. By at least the fifth century, stable isotopic analysis on remains found in the Kalfata cemetery demonstrates the importance of marine food sources in the Apollonian diet (Keenleyside, Schwarcz, and Panayotova 2006; Keenleyside 2008). Various bronze fishing hooks and net weights can also be identified from around the fifth to fourth centuries onwards (Baralis, Panayotova, and Nedev 2019: 329-30, Cat. 328-332b), while clay loom weights from the same time have been found on the peninsula and St. Kirik Island (Gyuzelev 2008: 247-48, 53)

Another piece of evidence, which attests to the consumption of fish in Classical Apollonia, is the widespread presence of 'fish grills' found in the Kalfata necropolis (Donnelan 2008: 45; Panayotova and Hermary 2010: 253; Claquin 2015). These objects consist of an elongated ceramic outline in the shape of a fish, with gaps cut out of the base to form a grill.¹⁸⁴ These fish grills are exclusively found in funereal contexts and probably had a role in particular

¹⁸³ Gyuzelev (2008: 251). Its lifespan is thought to have encompassed between the ninth and sixth or sixth and second centuries

¹⁸⁴ Panayotova (1998: 105). For the identification of them as fish grills see Seure (1924: 334-35)

rituals relating to the consumption of food at the grave (Hermary 2010: 171-73; Nedyalkov 2020: 35-36). They may even have been used as part of the rites for deceased individuals with ties to fishing practices (Panayotova 1998: 105). Their spatial and temporal range is limited to Kalfata in the second half of the fourth century (Nedyalkov 2020: 35-36). Recently, however, Laurent Claquin has identified another grill, found in a context dating to the sixth century during the excavation of plot UPI XI-XII-515 (Claquin 2015: 485). In the same paper, he also noted the resemblances between a fish grill found at Apollonia and those found at Archaic Miletos (Aydemir 2005; Claquin 2015: 487-88, fig 8.3).

In addition to the material at Apollonia, there is some meagre evidence to suggest fishing activities along the northern and southern coasts beyond the city. At **Kiten**, **Primorsko**, and **Antheia**; numerous anchors, and stone and lead anchor stocks, have been found during underwater investigations (Gyuzelev 2008: 230, 34-6, 67). In the city of Burgas, discoid fishing net weights can also be identified (Gyuzelev 2008: 193-95). Nevertheless, it is impossible to firmly date this material. In antiquity and modern times, salt was harvested from Lake Pomorie on the northern side of the bay of Burgas, where an ancient settlement, **Anchialo**, is thought to have been located (Kristchev, Georgiev, and Tchotchov 1982; Avram, Hind, and Tsetskhladze 2004: 929). Lead and stone anchor stocks have also been found of the Pomorie peninsula dating from the Archaic period at the earliest (Gyuzelev 2008: 227-28).

North Coast

Berezan/Olbia

Evidence for the practice of fishing at Berezan is plentiful, with ichthyofaunal remains, fishing sinkers and hooks turning up during the investigation of most areas of the site and at all levels of occupation (i.e. von Stern 1908: 37; 1910: 74; Lapin 1963: 37; 1966: 228-29; Chistov 2006: 59, 63). Yet it is difficult to quantify these materials and place them chronologically due to the paucity of information on their contexts offered in earlier reports. Nevertheless, recent publication of the material uncovered on Berezan between 2005 and 2014 (Chistov et al. 2012; Chistov et al. 2020), may allow us to sketch a picture of the relative quantities and chronology of this material from which some tentative conclusions may be drawn.

During these excavations, from the earliest period of settlement at Berezan, (I-A, roughly from the last decades of the seventh to the first half of the sixth century) twenty five stone fishing sinkers were identified (Chistov et al. 2020: 47). The majority of these materials were uncovered in utility pits in the excavated area, though a handful came from semi-dugout structures and a well, while a few appeared in the occupation layer.¹⁸⁵ In addition to these

¹⁸⁵ Chistov (2011: 454); Chistov et al. (2012: 39); Chistov et al. (2020: 47). *Pit 151* - E9 2010
37/529 (Chistov et al. 2020: Table 31.1); *Pit 161* - E9 2010 49/431, E9 2010 49/433 (Chistov et al. 2020: Table 31.4, 6), E9 2010 49/429. E9 2010 49/430, E9 2010 49/432, E9 2010 49/434
(Chistov 2011: fig 4.17, 18, 20, 22); *Pit 169* - E9 2010 44/375, E9 2010 44/377, E9 2010 44/372
(Chistov et al. 2020: Table 31.2, 3, 5); *Pit 194, 202* (Chistov et al. 2020: 47); *Well 126* - E9

weights and sinkers, a fragment of the tip of a bronze fishing hook was also found in pit number 117 (Chistov et al. 2012: 40).

During the second period of occupation (II-A, from the third quarter to the beginning of the final quarter of the sixth century), a further 43 sinkers were found. In this period, they are more evenly distributed between refuse pits, semi-dugout and above-ground residential structures and in the deposition layer itself.¹⁸⁶ This may represent a more in-situ example due to the destruction event which occurred at the beginning of the last quarter of the sixth century (Chistov and Krutilov 2014: 220; Chistov et al. 2020: 116-17). The assemblage also contains lead and iron sinkers, as well as the ubiquitous examples made of

^{2007.45/598,} EƏ 2007.45/599 (Chistov et al. 2012: Table 52.2, 3); *Semi-dugout 30* - EƏ 2005 39/241 (Chistov et al. 2012: Table 52.1), *Semi-dugout 47* (rm. 18), 66 (Chistov et al. 2020: 47). ¹⁸⁶ Chistov (2011: 453-54); Chistov et al. (2012: 70); Chistov et al. (2020: 114). Pit 154 - EƏ 2010 39/316 (Chistov 2011: fig. 4.8); *Pit 159* - EƏ 2010 47/402, EƏ 2010 47/403, EƏ 2010 47/404, EƏ 2010 47/405 (Chistov 2011: fig. 4.12-15); *Pit 164* - EƏ 2010 53/489 (Chistov 2011: fig. 4.9); *Pit 218* - EƏ 2014 38/331 (Chistov et al. 2020: Table 84.2); *House 2* - EƏ 2011 29/376 (Chistov et al. 2020: Table 84.9); *House 7* - EƏ 2012 24/158 (Chistov et al. 2020: Table 84.15); *House 8* - EƏ 2013 43/232 (Chistov et al. 2020: Table 84.10); *House 9* - EƏ 2014 15/97, EƏ 2014 15/96, EƏ 2014 16/116, EƏ 2014 15/098, EƏ 2014 13/76 (Chistov et al. 2020: Table 84.7, 8, 14, 16, 17); *Semi-dugout 51* - EƏ 2013 51/465; EƏ 2010 51/466 (Chistov 2011: fig 4.8; Chistov et al. 2020: Table 84.13); *Basement 16* - EƏ 2011 34/390 (Chistov et al. 2020: 84.6); *Deposition layer* - E℈ 2011 16/431, E℈ 2011 16/430, E℈ 2011 10/428, E℈ 2010 25/618, E℈ 2010 20/155, E℈ 2010 25/515 (Chistov et al. 2020: Table 84.1, 3-5, 11, 12), E℈ 2010 20/155, E℈ 2010 25/515, E℈ 2010 44/372 (Chistov 2011: fig 4.1-7, 23).

of different types of stone (Chistov et al. 2020: 114). The concentration of finds in the "O" Eastern sector has led to the suggestion that this represented a fishing quarter of the settlement in this period. The finds from house 9 may indicate that it was the residence of a fisher (Chistov 2011: 453-54). In addition to sinkers, a harpoon made of worked bone was also found in the destruction layer (Chistov et al. 2020: 115).

Period II-B1 (last quarter of the sixth century), contained limited evidence for fishing equipment with a single bronze fish hook found in semidugout 41, and 11 unpublished sinkers (Chistov et al. 2012: 81). The final Archaic layer of the Berezan settlement, II-B2 (end of the sixth to the beginning of the fifth century) exhibited a significant increase in fishing related finds, compared to the previous layer. A further 43 sinkers and weights are noted, of which 13 have been published, found in building complexes, pits and wells.¹⁸⁷

Recent analysis of the ichthyofaunal remains from Berezan, has concluded that the consumption of fish at the site fluctuated significantly across

¹⁸⁷ Building Complex 1 (courtyard) - EƏ 2014 12/061 (Chistov et al. 2020: Table 112.5); Building Complex 2 - EƏ 2010 12/580 (Chistov et al. 2020: Table 112.7), (courtyard) - EƏ 2010 24/172, EƏ 2012 27/169, EƏ 2012 27/170 (Chistov et al. 2020: Table 112.1-3); Building Complex 9 - EƏ 2014 09/041 (Chistov et al. 2020: Table 112.4); Well 89 - EƏ 2006.25/161; EƏ 2006.25/162 (Chistov et al. 2012: Table 115.1,2); Pit 82 - EƏ 2005.10/113, EƏ 2005.10/114, EƏ 2005.10/258 (Chistov et al. 2012: Table 115.3-5); Courtyard 2 - EƏ 2006.15/95 (Chistov et al. 2012: Table 115.3-5); Courtyard 2 - EƏ 2009.16/161 (Chistov et al. 2012: Table 115.7).

the sixth and early fifth centuries.¹⁸⁸ From the first half of the sixth century, roughly congruent with period I-A, remains of fish made up 20.3% of the faunal remains. In the third quarter of the sixth century (period II-A), they account for 5.3%, before rising to 36% in the final quarter (Kasparov 2015: Table 1, 2, fig 3). This data presents an interesting counterpart to the evidence for fishing equipment, which will be analysed in the discussion section.

Like Berezan, the fishing industry played an important role in the diet and economy of **Olbia** in the Archaic period (Braund 2015). Sinkers, harpoons and hooks are widely mentioned in the literature (Kryzhitsky et al. 1989: 76; Vinogradov and Kryzhitsky 1995: 75; Odrin 2008: 73; 2010: 332), but the lack of systematic publication, or notification of the location of finds, makes chronological analysis difficult.¹⁸⁹ Epigraphic evidence attests to a fishing market in the third century (IOSPE I² 32).

Beyond the main centres of Berezan and Olbia, there is evidence that the practice of fishing in the surrounding region may have begun as early as the first quarter of the sixth century (Bujskikh and Bujskikh 2010). Three settlements, which seem to have originated around this time show, evidence of fishing: Viktorovka-1, Malaya Gernomorka-2 and Kutsurub-1. At Viktorovka-1, which is located on the left bank of the Berezan river , a large number of fishing sinkers and weights, made of stone and ceramic, have been identified in dugout

¹⁸⁸ Kasparov (2015). See also Ivanova (1994) for a discussion of species and size of ichthyofaunal remains from Olbia and Berezan.

¹⁸⁹ Information on sinkers from later periods is available in Lespunskaja et al. (2010: 471, 515).

structures dating from the second half of the sixth century (Kryzhitsky, Bujskikh, and Otreshko 1990: 12-13; Odrin 2008: 71; Bondarenko and Smirnov 2013: 35; Bondarenko 2018a: 263). Fishing sinkers have also been identified in an area of the settlement which seems to have had a sacred character, leading Denis Bondarenko to suggest that these represent the dedications of local fishermen (Bondarenko 2018a: 264).

At Malaya Chernomorka 2, on the opposite shore, fishing weights have also been discovered which were previously thought to date to the middle of the sixth century (Kryzhitsky, Bujskikh, and Otreshko 1990: 16), but may in fact be earlier (Bujskikh and Bujskikh 2010). Finally, at Kutsurub 1, some 10 km from the mouth of the Dnieper Gulf on its northern coast, fish remains were found in layers which seem to represent the second half of the sixth century (Marcenko and Domanskij 1999: 51, 60). The redating of these sites by Sergey and Alla Bujskikh, offers the possibility that fishing began around the time of their establishment in the first quarter of the sixth century (Bujskikh and Bujskikh 2010). This has further led scholars to opine that they may represent an early *chora* for Berezan (e.g. Bujskikh and Bujskikh 2019: 185). If we are to place fishing activity at these settlements, it seems significant that they were all permanent sites of habitation.

Other sites with evidence for fishing practices, such as Andreevo Zorino 2 and Mys 2, further up the Berezan river, date between the middle and end of the sixth century. Their remains suggest a more ephemeral character, possibly indicating that they were temporary or seasonal fishing camps (Kryzhitsky, Bujskikh, and Otreshko 1990: 14, 33). It is possible then that the earlier sites, particularly Viktorovka-1 and Malaya Chernomorka 2, began life as temporary or seasonal settlements, used for a variety of reasons including equipment repair or catch preservation.¹⁹⁰ By the middle of the century, they developed into permanent settlements, a process which, we would suggest, failed to occur at the later camps of Andreevo Zorino 2 and Mys 2, possibly in connection with the destruction level at Berezan from the last quarter of the sixth century.

Kerkinitis

A large amount of material points towards the existence of a fishing industry at Kerkinitis, though unfortunately most of it is undated. In the second and third quarters of the fifth century small metal images of fish, supposed by researchers to be coins similar to the arrowheads and dolphins of Istros and Olbia, appear at the site. In the final third of that century, the image of a fish appears on the obverse of Kerkinitian coinage (Kutaisov 2004: 170; Smekalova and Kutaisov 2019: 376). In terms of fishing equipment, disc weights for fishing nets are reported, while a pyramidal sinker dated to the fourth century has been identified (Kutaisov 2004: 172; 2011: 31; Smekalova and Kutaisov 2019: 397). The hunting of dolphins is also attested by the presence of numerous bones thought to represent an individual specimen — as well as the find of a barbed harpoon made of iron (Kutaisov 2004: 171; Smekalova and Kutaisov 2019: 397-98). Finally, the name of Kerkinitis may roughly be translated as "Crab Town",

¹⁹⁰ According to Herodotus salt for fish preservation could be harvested from the mouth of the Borysthenes (4.53).

implying the presence and potential exploitation of crustaceans at the site (Smekalova and Kutaisov 2019: 399). While none of this material can be specifically dated to the Archaic period, the convergence of evidence would suggest that fishing was practiced at Kerkinitis around the time of the arrival of the first settlers towards the end of the sixth century.

Kimmerian Bosporus

Despite the fame of the Kimmerian Bosporus for its fish products from the fifth century,¹⁹¹ evidence for fishing in the region in the Archaic period is limited. At **Kimmerikon**, fish plates are attested from the fourth century, while mussels seem to have been consumed there throughout the settlement's history (Golenko 2007: 142, 252). At **Nymphaion**, remains of fish, pyramidal sinkers and fish plates are attested from the fifth century.¹⁹² In the Roman era and late antiquity, **Tyritake** was one of the most important centres of fishing and fish processing in the Bosporus (Marti 1941; Gaidukevich 1952c; Højte 2005: 142-48). Yet the evidence for earlier fishing practices is minimal. A small cache of unfired clay sinkers has been dated to the sixth century, but whether these were intended for weighting fishing nets, or weaving textiles, is unclear

¹⁹¹ See Wilkins (2005) and Dumitrache (2015) for references.

¹⁹² Khudyak (1962a: 62); Kasparov (2017); Sokolova (2019b: 213-4, 24). For fish remains in subsequent centuries, see Chistov and Domzalski (2001: 126); Kasparov (2017); Sokolova (2019a: 258), for hooks: Chistov and Domzalski (2001: 124), and for sinkers: Chistov and Domzalski (2001: 124-29); Sokolova and Bujskikh (2012: 116); Namoylik (2018); Eremeeva (2019: 157).

(Gaidukevich 1952c: 81; Zinko 2010). Potentially they could be used for weaving fishing nets. In the following epochs, a fish dish from the fourth century and a limestone sinker for a seine net found in a layer dated to the third century, can be added (Gaidukevich 1952c: 97, 109).

Like Tyritake, the evidence for fishing at Archaic Pantikapaion amounts to a handful of objects.¹⁹³ A number of damaged and misfired pyramidal sinkers, thought to have been primarily for weaving, have been identified in 2 kilns, one of which dates from the end of the sixth to the beginning of the fifth century (Zeest 1966: 18; Marchenko 1967: 151). A number of fish plates can also be assigned to the turn of the sixth century, while they are relatively common in the fifth century, including examples made locally and imported from Ionia and Megara (Blavatsky 1962: 30; Loseva 1962: 176; Tolstikov 2017b: 34). Finally, the name of Pantikapaion is thought to derive from the Iranian **panti-kāpa*, which Vladimir Stolba translates as "fishy-way" (Stolba 2005: 123 with references). Whether we should read this to indicate that there was an existing settlement there prior to the arrival of the innovator migrants, has yet to be solved by archaeological investigation. Nevertheless, it does suggest some connection between the bay of Kerch and the practice of fishing. Icthyoarchaeological evidence suggests a preference for pikperch and sturgeon at Pantikapaion (Lebedev and Lapin 1954; Odrin 2010). Sevruga are depicted on coinage from the fourth century, attesting to the importance of

¹⁹³ For a general overview of fishing practices at Pantikapaion see Ishchuk (2012).

their exploitation for the economy and identity of the city (Stolba 2005: 121-23).

Myrmekion represents another settlement at which fishing clearly played an important economic role during the common era (Gaidukevich 1952b; Kruglikova 1984: 158; Højte 2005: 149-52; Curtis 2005: 28). Despite this, earlier evidence is not forthcoming. Nevertheless, it has recently been speculated that the settlement was established as a fishing settlement by migrants from Pantikapaion (Butyagin 2017, 2021). This identification is based on the utility of the site, on a high cape overlooking the bay of Kerch, for the observation of migrating schools of fish (Butyagin 2017: 95-96). Despite this, isotopic analysis and palaeozoological investigations thus far are inconclusive as to the role of fishing in the early settlement (Butyagin 2021: 79).

Kepoi, located by the river Antikeites — a Hellenised name for the Iranian Antakaios or sturgeon according to John Hind (2019: 286, 89) displays little evidence for fishing before the fourth century, at which time fish plates can be identified (Sokolsky 1960: 57). In the Roman era and late antiquity, sinkers, net weights and hooks were used there (Sokolsky 1960: 86-89; Koshalenko and Kuznetsov 1992: 28; Zhuravlev and Kuznetsov 2010: 549). Fish plates are found at **Hermonassa** from the sixth century and the industry seems to have been important there until at least the Roman era (Korovina 2002: 46; Bondar, Markova, and Ustayeva 2010: 27; Finogenova 2015: 95). A handful of sinkers from the fourth century have been found at **Gorgippia/Sindike** but there is little evidence to locate any fishing activity at the site during earlier epochs (Kruglikova 1977: 49).

Discussion

It is clear from the foregoing analysis that there are marked differences in the quantity and quality of evidence for fishing in Milesian migrant settlements. It is worth asking then, to what extent marine fauna played a role in the diets and economies of these settlements. One of the central debates regarding fishing in the ancient world centres on the former. While Thomas Gallant's (1985) claim that fish played only a minor nutritional and economic role in ancient Greece may have been comprehensively disproven,¹⁹⁴ regional and temporal variations remain important (e.g. Vika 2011; Lagia 2015; Reitsema and Vassallo 2020). For the Archaic period, fishing can only be reliably attested at a handful of sites including Istros, Orgame, Nikonion, Berezan, Odessos (Minchev 2003: 216), Olbia and Sinope, while the evidence from Kyzikos and Lampsakos, numismatic imagery and literary evidence respectively, can reasonably be accounted for by the existence of fishing there. Less secure is the presence of sinkers, which may have been used as net weights for weaving nets, or more generally textile production (Gaidukevich 1952a; Butyagin and Kolosov 2019). These are found atPantikapaion, Tyritake and

¹⁹⁴ Wilkins (2005: 22); Bekker-Nielsen (2005: 84-94); Jacobsen (2005); Bresson (2016: 186-87). Though Cf. Lund and Gabrielsen (2005: 166-67) who agree with the suggestion that Pontic fish exports were predominantly for elite consumption.

Date	Sinkers	Hooks	Coins	Harpoons	Remains	Processing	Literature	EIA	Ceramics
-650								Sinope Orgame	
-625									
-575	lstros Berezan Olbia	lstros, Olbia		Olbia	Istros Berezan Olbia				
-550	Caraburun Orgame Nikonion	Orgame Nikonion	Kyzikos		Sinope, Caraburun Orgame Nikonion	Sinope?			Apollonia
-525							Lampsakos		Hermonassa
-500	Tyritake Pantikapaion		Abydos						Pantikapaion
-475	Nymphaion				Nymphaion				Nymphaion

Nymphaion, while fish plates and grills from Apollonia, Hermonassa, Pantikapaion and Nymphaion points towards consumption.

Table 7Evidence for fishing in Archaic Milesian migrant settlements.

Several caveats are important when drawing conclusions from this material. First, as we have noted several times, publication of material relating to fishing is not always extensive (Bekker-Nielsen 2016: 296). We are often reliant on extensive site publications for references to fishing material (e.g. Gaidukevich 1952c, 1952b; Blavatsky 1962; Baralis, Panayotova, and Nedev 2019; Chistov et al. 2012; Chistov et al. 2020). Even articles which purport to discuss fishing at certain sites often fail to give chronological markers for material remains, either due to achronological treatments, or because of the difficulties of dating objects such as hooks or fish weights without contextual dating material (Ishchuk 2012; Kutaisov 2004; Kulikov 2005; cf. Molev 2011). The second problem is evidence survival. Recent studies have demonstrated the necessity of sifting with very fine mesh sieves to identify the bones of many smaller species of fish, the absence of which has tended to result in a bias

towards larger species identification (Flaux et al. 2016; Morales-Muñiz and Roselló-Izquierdo 2016: 32-33). The third issue is with the location of fishing practices. At sites such as Pantikapaion, only a small area of the acropolis on Mount Mithridates can be extensively studied. The modern city of Kerch precludes extensive analysis closer to the shore. Thus, we may be missing the opportunity to uncover material related to fishing located there. The same can be said for Apollonia Pontica. Alexander Butyagin has proposed a model for Myrmekion which may be applicable across the Black Sea, in that fishing and the processing of catches may have occurred away from the settlement, at the shore line, and thus material remains are less likely to be found (Butyagin 2021). Indeed, in the Olbian chora we see numerous small riverine settlements where fishing occurred. It is also notable, in this regard, that the sites where we have early material, such as Istros, Orgame, Berezan and Olbia, were never overbuilt and thus have been more extensively studied, though the lower town of the latter is largely submerged and the remains which have survived are predominantly from the fifth century onwards (Lespunskaja et al. 2010).

Problems with the evidence aside, it remains worth asking what the role of migrant fishers, or migrants practicing fishing, was during the different stages of Milesian migration trajectories. Despite the lack of evidence, it seems difficult to believe that fishing was not being practiced from the settlements of the Propontis during the earliest periods of their settlement, given the later importance of fishing there and the migration of numerous species through the region, it seems particularly improbable. From there, fishers followed the the migrations along the north Anatolian coast to Sinope, where the topography had offered good opportunities for seasonal fishing since EBA (Doonan 2016; Doonan et al. 2016), while salt for catch preservation could be obtained from the Halys delta (Strab. 12.3.12).

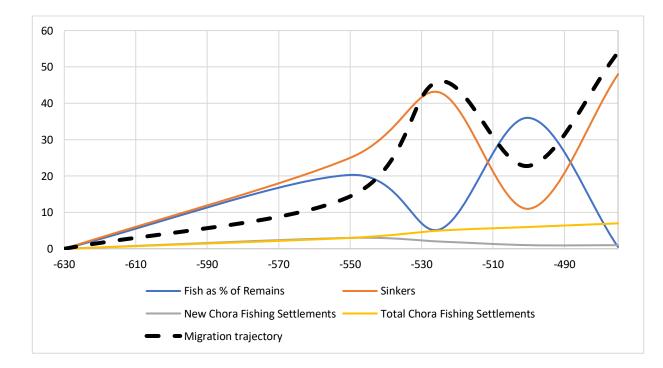
There is also some evidence to suggest an awareness of the rivers of the region beyond its southern coast from an early date. Hesiod enumerates both the Ister (m. Danube) and Phasis as offspring of Tethys and Ocean (Theog. 335). Even the latest estimates for the date of Hesiod fall no later than the middle of the seventh century (Koiv 2011; Koning 2018: 21-24), precisely around the time Milesians were migrating to the Proportic region. This makes it possible that knowledge of the region was being developed during this time. We would be hesitant to call this pre-colonisation, or in our terminology pre-migration. There are other ways in which information could travel without the need for what are often termed 'reconnaissance' voyages (e.g. Petropolous 2005: 216-17). In terms of knowledge of the Ister, the movement of fishers could provide one such information line. The extensive riverine and lagoonal fishing resources in the region are well known, indeed the location of both later settlements, controlling the passages into and between lagoons, may further point towards this conclusion (Vespremeanu-Stroe et al. 2013; Preoteasa et al. 2013; Bony et al. 2013; Romanescu 2013, 2014; Bivolaru, Giaime, et al. 2021). This environment may have also been conducive to the processing of salt, a prerequisite for any seasonal fishing settlement, though other forms of preservations, including smoking and air drying, cannot be discounted

(Kryzhitsky, Bujskikh, and Otreshko 1990: 61; Højte 2005: 141-42; Odrin 2008: 71 n. 8). Indeed, the ability of fishers to preserve their catches is an essential requirement if we are to suggest early fishing activity in the Black Sea region from the Propontic settlements. Otherwise, the distances covered, difficulties of navigation, and seasonal restrictions would not be worth the effort (Castelli 2019). It seems unlikely that, if this was the case, we are dealing with direct migration from Miletos itself. More probable, these hypothetical early fishers would have come from the cities of the Propontis, where fish migration routes could be followed into the Black Sea.

In the regions where it is possible to theorise the presence of early Greek fishers, it is also important to acknowledge the activities of local populations. In the Danube delta fishing was practiced by the inhabitants of the region from the Mesolithic period (Ardeleanu 2016), and it is clear that the inhabitants of the Babadag cultural settlements, including the community pre-dating Orgame, also engaged in fishing activities (Ailincăi, Miriţoiu, and Soficaru 2006). Fishing also seems to have also been undertaken by the Early Iron age inhabitants around the bay of and Burgas in modern Bulgaria (Gyuzelev 2008: 193-95), while Sinope existed as a temporary fishing station prior to the arrival of the first Milesian migrants (Doonan 2016; Doonan et al. 2016). Furthermore, on the lower courses of the Bug and Dnieper rivers, the local Skythian population also practiced mariculture, though whether this pre-dated the establishment of the migrant communities at Berezan, Olbia and the surrounding region is uncertain (Gavriljuk 2005). Therefore, knowledge of the aquaculture of the Black Sea and its rivers need not have been transmitted exclusively by mobile or migrant individuals and groups from the Aegean and Propontis but may also have come from interactions with local mobile fishers.

In general, opportunities to exploit the fish resources of the Black Sea and Propontis existed as early as the first migration and movement of Milesians in these areas. However, it is worth taking a closer look at the trajectories for fisher migration on a smaller scale. At Berezan, for which we are able to provisionally offer a quantified migration trajectory, we see a correlation between the presence of evidence for fishing, fish consumption and the wider trajectory of migration to the site. This lasts until the beginning of the second half of the sixth century, precisely the time of the urbanization of the site (Chistov and Krutilov 2014). The evidence for consumption of fish diverges sharply from the general migration trajectory and the number of fishing sinkers uncovered at the site. There are a number of potential explanations for this. First, as the trajectory moved into the early majority phase, it is possible that new migrants took advantage of the lowering of mobility capital requirements to begin to exploit other sources of meat, primarily caprids and bovids (Kasparov 2015). Mariculture, which entailed less in the way of capital outlay to exploit, was preferred by the inhabitants of the site during the innovator and early uptake phases. Second, it is possibly that the widening of trade networks, an endogenous feature of the expansion of migration to the region during the early majority phase, helped to stimulate the export of maritime resources to other regional centres. Furthermore, given that the reverse situation can be

detected around the period of the first destruction of the settlement, it may be that, in times of economic hardship, the inhabitants of the settlement were more likely to turn to fish consumption as a larger proportion of their calorific intake (Kasparov 2015: 415). The lack of sinkers in this period may imply that alternative fishing techniques were employed such as line and hook, which required less supplementary production effort (i.e. sinker production and net weaving), and could be more easily undertaken by individuals. While only one hook has been found in this layer (Chistov et al. 2012: 81), the recycling of metal objects, common in antiquity, may explain this (Thommen 2012: 9).





Like Berezan, we can detect fishing activities from an early stage at Olbia, Istros, Orgame and Nikonion. By way of contrast, the Kimmerian Bosporus, later famous as a source of fish exports, presents little in the way of evidence for fishing prior to the end of the sixth century. Even the material which appears at this point is hardly definitive (see Table 7). Many of the settlements in this region were established at least three quarters of a century prior, and with the exception of Pantikapaion and Gorgippia, most do not have overlying settlements. The lack of evidence for fishing in the sixth century layers may merely be an illusion conjured by gaps in the publication of these sites, but a thorough review of the literature yields limited evidence from the Archaic period in comparison with the early Hellenistic and Roman imperial eras (Knight forthcoming-a). The reasons for this are difficult to discern. The location of sites such as Myrmekion was ideal for the observation of passing fishing shoals. Yet investigation of the early levels there has revealed no material to support this (Butyagin 2017, 2021). The belated appearance of fishing evidence at these sites points to the beginnings of fisher migration, and the practice of fishing by earlier migrants around the early and later majority phases. This may be connected with the instability caused by Persian expansion in western Anatolia and the Propontis, conflicts with the Greek communities in these regions (Hdt. 5.117, 6.26; Greaves, Knight, and Rutland 2020: 113-14), or as a result of the migration of fishers from Berezan and Istros to the Kimmerian Bosporus towards the end of the sixth century, when destruction levels are recorded at both (Alexandrescu 1990: 67-68; Chistov and Krutilov 2014: 220).

A final explanation for the movement of fishers and the uptake of fishing by the inhabitants of the Kimmerian Bosporus towards the end of the sixth century might be found in increasing production for export. Indeed, this might also explain the discrepancy between net sinkers and fish consumption evident at Berezan around the third quarter of the sixth century. Tønnes Bekker-Nielsen places the beginning of Pontic fish exports at the start of the fifth century but holds out the possibility of an even earlier date (Bekker-Nielsen 2020, 2016). The literary and archaeological evidence generally seems to support a date in the fifth century. In a fragment of Cratinus' *Dionysalexandros* (F44 Storey = Ath. *Deip.* 119b), produced some time after 440, a character mentions a basket of "ταρίχους Ποντικούς" (Pontic salt-fish),195 while Hermippus' Phormophoroi (F 63 Storey = Ath. Deip. 27d-e), in a passage enumerating the cargo of a ship with items from across the Mediterranean, includes "Έλλησπόντου σκόμβρους" (Hellespontine Mackerel).¹⁹⁶ Finally, Herodotus, as noted above, mentions fish salting at the mouth of the Dnieper (Hdt. 4.53). Two observations can be made regarding the first two fragments. Both attest to the export of fish products from the Propontis and Black Sea by the second half of the fifth century. This may be connected to increasing Athenian influence in the region following Pericles Pontic expedition,197 as it can be implied that both fragments refer to these products being exported to Athens. Secondly, the fact that these early references occur in Athenian Old

¹⁹⁵ For the dating of Cratinus see Storey (2014: 96). For *tarichos* see (Wilkins 2005: 155-61) and (Bekker-Nielsen 2016: 289-305).

¹⁹⁶ For an extended discussion of this fragment see Gilula (2000).

¹⁹⁷ Plut. *Vit. Per.* 20. For a discussion of the context of Pericles in the Black Sea, see Surikov (2001) with references to earlier scholarship, and de Boer (2004-2005, 2005).

Comedy fits in with the satirising of Athenian epicures, and the consumption of fish amongst the elites there, as a sign of decadence (Davidson 1997: 3-35; Wilkins 2000). For the comedic effect of this satire to work, these references must have been firmly implanted within the minds and frame of reference of the audience. Therefore, we should assume a longer history for Pontic and Propontic fish products, probably going back at least to the beginning of the fifth century. The increasing presence of evidence for fishing in Milesian migrant settlements in the early majority phase, can be placed in this context. The increasing demand for preserved fish products acted as an endogenous driver of fisher migration and the uptake of fishing practices amongst Milesian first, second and third generation migrants.

Overall, is there value in positing a role for fishing as an exogenous driver for Milesian migration? In the innovator and early uptake stages of Milesian migration, fishing seems to have played a peripheral role in the economic landscape of the migrants, though as a source of calorific intake it gained some importance. The evidence would suggest that it was not until later phases of the migration process, that the expansion of endogenously developed trade networks and demand began to intensify fish production and processing, creating conditions favourable to larger scale fisher migration, above all, to the Kimmerian Bosporus. During this period, the cost of converting the technical capital of experienced marine, lagoonal and riverine fishers to mobility capital was lowered by increasing inter-regional demand. Thus, the role of fishing as a driver of migration, attained a greater importance at the end of the sixth century, eventually resulting in the considerable expansion of fishing activities and processing, first in the late Classical and Hellenistic periods and then again in the first centuries CE.

II.3.3.3 Traders

The role of traders as migrants in the Archaic period has, traditionally, been bound to wider discussions of ancient trade and the ancient economy. The latter, in particular, has tended to cast a wide shadow over attempts to understand the extent of trade in the early stages of these migration movements,¹⁹⁸ defined by the divide between primitivists and modernists, or formalists and substantivists.¹⁹⁹ Scholars can roughly be divided into two camps based on which economic model they subscribe to.²⁰⁰

¹⁹⁹ The literature on this debate is vast. Its genesis is normatively situated in the so-called Bücher-Meyer controversy which erupted in German academia in the late nineteenth century CE (for the canonical statements of the main participants, see Bücher (1893) and (Meyer 1893), for the primitivist and modernist positions respectively. Moses Finley arguably settled the debate in favour of the primitivist/substantivist side, at least until the early 1990's with his seminal book *The Ancient Economy* (1973). For recent overviews of the debate, see Bresson (2016: 2-14); Harris and Lewis (2018); Wang (2018); Blanton IV and Hollander (2019). ²⁰⁰ For general overviews of the role of trade in ancient migration in German and Anglophone

¹⁹⁸ In recent years the emergence of approaches based on NIE (new institutional economics) has sought to supersede the old debates e.g. Bresson (2016: 15-25).

scholarly traditions, see Mauersberg (2020: 75-77); Urquhart (2020: 42-45).

At the beginning of the 20th century, Julius Beloch argued that "Handelsinteressen kamen dabei zunächst kaum in Betracht, schon darum, weil es in Griechenland eine Industrie noch nicht gab, die für den Export gearbeitet hätte" (Beloch 1912: 231). Aubrey Gwynn, despite characterising the Greeks as, "by instinct a race of traders" (Gwynn 1918: 92), followed Beloch's lead in arguing that the earliest migrants were "peasants", not of the "seafaring class", and they migrated in search of land rather than commercial gain (Gwynn 1918: 93). This position was further expounded by Johannes Hasbroek, in his monograph on trade and politics originally published in German in 1928, where the view was taken that overpopulation was the key to Greek migration which took the form of either imperial conquest or agricultural exploitation (Hasebroek 1933: 106-10).

Probably the most influential statement for the modernist/formalist argument, at least in the anglophone tradition,²⁰¹ arose in direct opposition to Hasbroek. In the *Annual of the British School of Athens* for 1932-33, Alan Blakeway famously argued that "the flag followed trade" (Blakeway 1932: 202). By the late 1950's, a number of works arguing for a commercial underpinning for Greek migration followed Hasebrook's model. These included the important monograph of Carl Roebuck (1959) on the relationship between the trade and colonisation in East Greece and its emigrant communities, and by Thomas

²⁰¹ Mikhail Rostvostveff (1922) had already argued for a commercial motivation and is often placed alongside Eduard Meyer as a progenitor of the modernist viewpoint (Blanton IV and Hollander 2019: 15-16; Wang 2019: 3).

Noonan's (1973a) article arguing for the importance of the grain trade for the establishment of settlements in the Black Sea. The latter was heavily influenced by the development of the theorised "emporia phase" in mid early 20th century Russophone scholarship.

Though the importance of trade, as a precursor to full "colonisation", had a long history in Russian scholarship dating back to the works of Ernst (von Stern 1909), its full realisation was expounded by Vladimir (Blavatsky 1954). Using the available archaeological evidence, he argued that the presence of seventh century Greek ceramics on the lower Dnieper and in the Crimea implied the existence of a series of heterogeneously inhabited emporia. These he located at at Berezan, Mt. Mithridates and Geroevka (Blavatsky 1954: 16-18). In his view, these emporia, established for trade with the local peoples, were founded by Milesian traders, probably the *aeinautai* (Blavatsky 1954: 18). When larger numbers of Aegean immigrants arrived from the middle of the sixth century onwards, they expelled or enslaved the indigenous populations and founded *poleis* on the sites of the former emporia (Blavatsky 1954: 18-19).

Despite Lapin's (1966) challenge to this theory in the 1960's, it continued to receive support in Russian scholarship.²⁰² It seems likely that emporia had a role to play in the facilitation of Black Sea trade in the Archaic period (Hind

²⁰² E.g. Yailenko (1982: 147), contra Vinogradov (1989: 62), who describes the cities of the Black Sea as "ready-made poleis", and recently Povalahev (2008). For a discussion of the development and continued influence of the emporia phase theory, see Marchenko and Domanskij (1999).

1997). Yet the discovery of the earliest layers of Pantikapaion, as well as the redating of Olbia, clearly demonstrate that the seventh century pottery we find in non-Greek settings, could have come from already established quasi-urban settlements rather than trading ports, though the Taganrog settlement may prove an exception. Nevertheless, Gocha Tsetskhladze, a leading opponent of trade as an exogenous driver of Black Sea migration, sees the presence of early Greek material in non-Greek contexts as a manifestation of elite gift-giving, and has stated on numerous occasions that trade itself should be viewed as "one of the outcomes of colonisation, not one of the reasons for it" (Tsetskhladze 1998a: 9-10; 2012a: 344-45), echoing A. R. Burn's earlier claim that "Greek commerce was essentially a sequel, not a cause, of the colonial movement" (Burn 1936: 231).

Nevertheless, the subject of trade as a precursor to settlement has again come to the attention of Black Sea scholars and is receiving new adherents. In a recent wide-ranging article focusing on the southern Black Sea, but with implications for the whole region, Manolis Manoledakis has argued for the importance of trade, commerce and exchange as the precursor to settlement and migration in the region (Manoledakis 2018). He contends that Greek voyages into the Black Sea, from at least the eighth century, laid the framework for beneficial economic relations through the transfer of goods and ideas. This resulted in the acquiescence of indigenous groups to Greek settlement in the region (Manoledakis 2018: 196-201). These ideas owe much to Iessen's (Iessen 1947) bilateralism and Blavatsky's (1954) emporia phase. He argues that a combination of literary and archaeological evidence supports his conclusions. Yet, myths such as that of Autolycus at Sinope²⁰³ and the identification of the Argonautic voyage in the Black Sea (Manoledakis 2018: 185-187, 208-211), do not necessarily predate the arrival of the first archaeologically attested migrants in the seventh century, let alone describe earlier voyages in the region (West 2005: 40-41, cf. BNJ 451 F2a-c).

He does, however, offer an interesting picture of the potential nature of the arrival of the first Aegean peoples in the Black Sea, noting that, if the sites that were settled with exchange systems in mind (Greaves 2007: 7), then this presupposes voyages the object of which, he argues, must have been economic in some sense (Manoledakis 2018: 198-206). In this model, those early travellers would have brought supplies for their voyages, but also "articles that they thought might have appealed to local populations" (Manoledakis 2018: 191). While this is an attractive supposition, it still leaves the question of what precisely these articles might have been.

In terms of ceramics, there is very little material which predates the arrival of the first migrant communities. The examples cited by Manoledakis on the Halys River bend consist of LBA fragments, a small number of pieces of protogeometric ware at Kaman-Kalehöyük in central Anatolia, and east Greek and Corinthian wares from no later than the middle of the seventh century (Manoledakis 2018: 175-182). While this does seem to imply that the Halys was

²⁰³ On the foundation myths of Sinope, see Braund (2010).

an artery for movement across central Anatolia, to and from the Black Sea coast, the chronological disparity between these examples does nothing to imply the practice of exploratory or cabotage voyages on the southern Black Sea coast, prior to the seventh century.²⁰⁴

A second potential body of evidence for pre-seventh century Greek voyaging in the Black Sea comes in the form of fibulae. The presence of fibula in the northwestern and eastern Black Sea regions, with clear Aegean and Mediterranean prototypes, has often been used to support early Greek presence (Voronov 1983; Bouzek 1990). Examples from the northwestern coast are thought to appear by the ninth century (Kashuba 2006; 2013: 174-75), while the earliest Kolchian type fibula may be as early as the eleventh century (Voronov 1983; Kashuba 2013: 177). This presents an interesting counterpart to the Proto-Geometric wares at Kaman-Kalehöyük which, likewise, may date from the tenth or even eleventh century (Matsumura 2000: 217; Gimatzidis and Weninger 2020). This may imply a certain level of movement between the Aegean, Anatolia, the Balkans, and the Black Sea in the post-Mykenaean period of the type which seems evident at EIA Sinope. The lack of material evidence

²⁰⁴ Evidence from shipwrecks seems to suggest that, at least in the few cases we have from the Archaic period, trading vessels tended to homogenous cargoes. See for example the large amount of marl blocks presumably jettisoned from a vessel at Cape Tuzla on the coast of the Taman peninsula (Petrovskiy 2021), other examples come from the coast of Southern Anatolia e.g. Greene, Leidwanger, and Özdaş (2011); Greene (2018) Cf. Greaves 2010: 84-85 for a discussion of the role of cabotage voyages and Archaic trade.

for Greek-Native exchange or commerce prior to the seventh century, across both the Black Sea and Propontic regions, suggests that the kind of cabotage voyaging imagined by Manoledakis, while based on attractive "logical inferences" (2018: 191), does not yet find support in the archaeological evidence.

Transport Amphorae in the seventh century²⁰⁵

To begin to explore the question of the roles of trade, commerce, and exchange in the innovator period of Milesian migration, it is necessary to explore quantifiably, if possible, the presence of the one type of evidence which denotes these activities,²⁰⁶ transport amphora. Consequently, we need to identify Aegean and Anatolian containers in the seventh century Black Sea and Propontic regions. This can allow us to approach several questions regarding the role of trade, and thus traders, in the innovator phase. First, if we can identify a significant quantity of material originating prior to the accepted era

²⁰⁵ N.B. The dates given for amphorae in this section are based on those that appear in the published literature. For more recent scholarship, this has been aided by the publications of material from Berezan (Chistov et al. 2012) and Histria (Bîrzescu 2012b) as well as the more general catalogues of Monakhov (1999b, 2003); Sezgin (2012) and synthesis of Cook and Dupont (1998) allow for comparisons to be drawn between different sites and more accurate chronological bracketing to be achieved. Nevertheless, as will be clear, some of the chronological ranges are still rather wide and this must be borne in mind when quantifying material into date ranges of less than 25-50 years.

²⁰⁶ Monakhov and Kuznetsova (2017: 59). For invisible evidence, see Greaves (2007: 12-13).

of the earliest settlement migrations, we can argue that trade was an important exogenous driver. Furthermore, this might indicate the existence of heterogeneously inhabited emporia as a location for exchange. Second, while the origin of amphora does not equal the origin of its carriers, it can still indicate the trade networks of which these early communities were a part. Furthermore, it can shine a new light on a few well-worn topics. Were individuals engaged in economic exchanges amongst the innovator migrants? Where were their markets located? Was trade an exogenous or endogenous driver of Milesian migration to the Black Sea? Following this, we shall briefly turn to another type of evidence which can shine some light on the role of traders in migration to the Black Sea, written correspondence, often inscribed on lead tablets, which has been found at a number of sites on the northern Black Sea coast. This material offers an insight into the machinations of trade on the ground, the individuals participating in it, and the means of exchange.

Apollonia

The earliest transport wares from Apollonia come from the Archaic necropolis area outside the later Byzantine fortifications. They consist of a pair of Chiot, a Lesbian and a Samian amphorae dated to the end of the seventh century (Nedev 2019: 334-37). Between the end of the seventh and the first half of the sixth centuries, amphorae from Klazomenae and Rhodes (Nedev and Panayotova 2003: 99) as well as at least seven Milesian, three Samian and four Chiot vessels were imported (Stoyanova and Damyanov 2021: 27).

Berezan

Despite extensive excavation for over a century, quantifying the seventh century transport amphora at Berezan presents a difficult task. The nature of the earliest dugout dwellings, frequently cutting through previous structures, means that stratigraphic observations for uncovered objects can rarely be more precise than with reference to the main phases of the settlement, in this case phase Ia which stretches from the end of the seventh to the first half of the sixth centuries (Dupont 2005: 41). Nevertheless, the oldest transport amphora from the site that we were able to identify in the literature consists of a painted Klazomenian fragment which has been dated to 630-600 (Bujskikh 2014a: 92 fig. 7.1). In addition to this a further nine fragments of Chiot transport amphorae can be dated between 630 and 590 (Bujskikh 2014a: 90 fig. 2.1-7, 10, 12). A second Klazomenian piece (Dupont 2005: 41, 48 no. 16) and a fragment of Samian ware (Monakhov 2003: 26, 244 Tbl. 14.1), can be dated to the end of the seventh century. Furthermore, a pair of fragments of Rhodian (?) amphorae can also be situated around 600 (Chistov et al. 2012: 24). Finally, we have a number of fragments whose dates range from the last quarter of the seventh century, at the earliest, to as late as the first half of the sixth century. These include at least four Chian (Dupont 2005: 41, 46 no. 1; Chistov et al. 2020: 30, 294 Tbl. 1.6-8), three Klazomenian (Chistov et al. 2020: 30, 295-96 tbl. 2.2-3, 3.7) and a Milesian example (Bujskikh 2014a: 94 fig. 9.1).

Istros

We are much better informed about the transport amphorae from Istros around the seventh century, thanks to the work of Iulian Bîrzescu (2012b). From the second half to the end of the seventh century, we can point to imported amphorae from Miletos (Bîrzescu 2012b: 328 nos. 1175-8), Klazomenae (Bîrzescu 2012b: 293 nos. 743, 45), Chios (Bîrzescu 2012b: 265-7 nos. 429, 41) and Attica (Bîrzescu 2012b: no. 1359). Lesbian (Bîrzescu 2012b: 231 nos. 2, 3, 40-41 nos.106, 10, 11, 250 no. 31, 64-65 nos. 419, 21, 27) and Samian (Bîrzescu 2012b: 336-37 nos. 1275, 87-90) wares do not appear before the end of the seventh to the first third of the sixth century. During this time we can observe a clear increase in the quantity of amphorae from all centres including Chios (Bîrzescu 2012b: 265-66 nos. 427, 33, 38), Klazomenae (Bîrzescu 2012b: 293 nos. 742, 44, 307 nos. 906-08), Miletos (Bîrzescu 2012b: 328-35 nos. 1179-81, 92, 95-97, 233, 270) and Attica (Bîrzescu 2012b: 344-46 nos. 1360, 75, 76, 82).

Orgame

Orgame necropolis offers us our earliest examples of Greek transport amphorae in the Black Sea as a whole. Dated between 650 and 620, two pairs of Chiot (Lungu 2000: 69, 81 fig. 4) and Klazomenian (Dupont and Lungu 2021: 71 fig. 8) amphorae are found there, in addition to a single Milesian example from the settlement itself (Mănucu-Adameșteanu 2000-2001: 216; 2003a). Lesbian (Dupont and Lungu 2021: 72 figs. 9a-c; Mănucu-Adameșteanu 1999: 148 fig. 4e; 2000-2001: 215) and Samian (Mănucu-Adameşteanu 2000-2001:216) wares appear between the last quarter and the end of the seventh century.

Pantikapaion

Thanks to the recent publication of the works undertaken by the Bosporan archaeological expedition of the State Pushkin Museum of Fine Arts, on Mount Mithridates, of the earliest layers so far discovered at Pantikapaion, we are in a good position to understand the chronology and origin of much of the seventh century transport amphorae discovered there (Astashova and Lomatadze 2017). Examples with the earliest terminal date (i.e. from the end of the seventh to the beginning of the sixth centuries) include nine Lesbian (Astashova and Lomatadze 2017: 79-81 nos.109, 10, 16-23), four Milesian (Astashova and Lomatadze 2017: 75 nos. 76-79), two Chiot (Astashova and Lomatadze 2017: 65 no. 1, 69 no. 37) and two Klazomenian vessels (Astashova and Lomatadze 2017: 72 nos. 56, 57). The remaining material, including the first attestation of Samian amphorae (Astashova and Lomatadze 2017: 86-87 nos. 158-72) and increasing quantities of Chian (Astashova and Lomatadze 2017: 65-66 nos. 3-8, 68 no. 24), Klazomenian (Astashova and Lomatadze 2017: 70-71 nos. 38-46, 73 no. 59-61), and Milesian wares (Astashova and Lomatadze 2017: 77-79 nos. 88-104). At the same time there is a reduction in Lesbian vessels (Astashova and Lomatadze 2017: 80 no. 117), though this should probably be accounted for through greater dating precision (Clinkenbeard 1982).

Taganrog

The Taganrog settlement is unique amongst the sites analysed. It is the only place where we have relatively extensive evidence for unquestionable seventh century transport amphora in significant quantities. The earliest examples, five Klazomenian vessels, can be dated to between 650 and 630 (Dally et al. 2012: 174, 82 figs. 57, 58), while another has been identified as belonging to the years between 630 and 590 (Dally et al. 2012: 183 fig. 59). The third quarter of the seventh century sees the appearance of a small cache of Attic wares (Kopylov 2007: 67), while the final quarter testifies to the introduction of Lesbian amphorae (Dally et al. 2009: 80 fig. 4). Finally, between the end of the seventh and the first half of the sixth centuries, a significant number of Milesian wares (Kopylov 2007: 67 figs. 3.11, 13; Dally et al. 2009: 83-84 fig. 20; Dally et al. 2012: 180 figs. 45-49, 52) and a small quantity of Chiot pottery, appear (Dally et al. 2012: 182 fig. 55, 56).

Indigenous Settings

Finally, it is worth exploring the extent to which seventh century transport amphorae are found in non-Greek settings (Plate 12). The earliest of these are a series of Klazomenian (Zadnikov 2009: 17-18 fig. 2; 2021: 222-23 figs. 1.1-5) and Lesbian (Zadnikov 2009: 17 figs. 3.1-6; 2021: 222-23 figs. 2.1-5) amphorae from **Belsk**, which have been dated to the third quarter of the seventh century. By the last quarter of the seventh century, at the earliest, we see the appearance of Milesian (Zadnikov 2006: 107 figs. 2.1-3, 3.1-2; 2010:

130-1 fig. 1.15, 19; 2013: 367-69; 2021: 222-24 figs. 3.4, 7-10) and Chiot wares (Zadnikov 2021: 367-69). At **Nemirov**, on the Bug river, a series of Aeolian amphorae, which are dated between the second half of the seventh and first half of the sixth centuries, have been identified in the recent catalogue of finds from the site (Vachtina 2018: 276-77 nos.1.1-4, 10-11). Several other examples of transport amphorae can be identified at necropoleis in the Southern Bug region, including Chiot from the end of the seventh to the beginning of the sixth centuries at Kolomok (Monakhov 1999b: 34 fig. 1; 2003: 13, 231, table 1.4)m and Milesian from the end of the seventh century at Novoalexandrivka and Repyakhovatye Mogila 2 (Zadnikov 2006: 105-06). Around the same time, at the mouth of the Don, Samian and Chian transport amphorae are known from the burials at Krasnogorsky (Monakhov 1999b: 34-35 fig. 2; 2003: 13, 231, table 1.3), while a Klazomenian vessel was found at **Khapry** necropolis (Monakhov 1999a: 165). Finally, an amphorae, thought to have originated at Teos, has been identified at the **Lebed V** burial ground in the Krasnodar region (Monakhov 1999a: 166 fig. 1). Recent work at **Tarasova Balka**, situated on the Laba, a tributary of the Kuban, has uncovered at least 100 sherds of Lesbian and Klazomenian amphorae from the seventh and sixth centuries (Rybakova 2019). However, publications give no indication of the relative distribution by type or chronology. This precludes its inclusion in the dataset for this study.

Discussion

Several observations can be made on the basis of this data. First, very little material has been identified which can reliably be attributed to a phase prior to the establishment of migrant settlements. Even if we follow the suggestion that the identification of the beginning of these settlements (primarily obtained through small numbers of pottery fragment) can be compared with solitary finds elsewhere, there is still nothing to indicate trading activities prior to the start of the final third of the seventh century. Given that these appear in sites that were concurrently occupied by Milesian migrants, there is little sense that we are dealing with trading relationships with locals. Indeed, the earliest finds, those from around 650-620 which appear at Orgame and Taganrog, may represent goods brought by the migrants for their own usage.

By the end of the seventh century, trade had begun between the western Anatolian poleis and the migrant settlements of the Black Sea. Yet to return to the late seventh century, we must further note that, despite their being evidence for Greek tableware in numerous settlements and necropoleis of forest-steppe Skythia and on the Don and Kuban estuaries (Tsetskhladze 2021a), transport amphorae only appear in any quantity at Belsk and to a lesser extent at Nemirov during the seventh century. If there were commercial relationships between these regions and the Pontic coastal cities, they did not include bulk goods moving in amphorae on a regular basis.²⁰⁷ Indeed, The concentration of vessel types with similar dating at Belsk and Nemirov could indicate that they came as

²⁰⁷ Though other options exist for wine and olive oil, such as transport in skins as it was in other regions as late as the first century, i.e. (Brun 2020: 10). On the potential goods imported into the region, see Rusyaeva and Odrin (2001: 48).

part of single cargoes or as single occasion commercial activities (Tsetskhladze 2012a).

If we turn to the origin of the material under discussion, we can see that the transport amphorae of this period are dominated by wares from Miletos, Lesbos, Samos and Klazomenae.²⁰⁸ The bulk of the earliest material is Klazomenian, with only two Milesian and a single Chiot example. Nevertheless, this cannot be taken to indicate an ethnic origin of the earliest migrants. It is notable that, despite the large reach of Klazomenian amphorae, only one migrant settlement is said to have been settled by emigrants from there, Abdera in Aegean Thrake (Hdt. 1.168). While this location might have participated in the spread of amphorae from the emigrant community, it seems more likely that the location of Klazomenae itself, at the northern end of a land based transshipment route from Teos in the south (Koparal and Vaessen 2020: 119), played an important role.

²⁰⁸ On the identification and classification of Black Sea amphorae from these locales, see Onaiko (1966); Zeest (1966); Dupont (1983b, 1983a); Bouzek (1990).

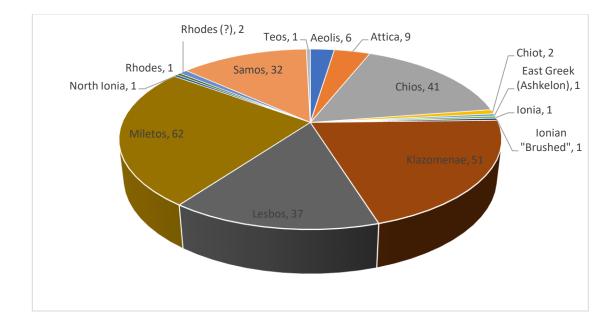


Figure 14 Seventh century transport amphorae in the Black Sea by place of origin.

Two further points can be made regarding the role of traders in mobility and migration in the Black Sea in the Archaic period. The evidence we have for individual traders seems to imply that they were agents in the employ of wealthier individuals who were not necessarily resident in the importing community or region (Wilson 1997a; Chistov and Pavlichenko 2019). This has implications for the ability of those engaged in commerce to utilise social capital as a proxy for mobile capital, in the sense that they were engaged by others to undertake its practice. Their statuses, whether free or enslaved, remains a contentious issue (Parmenter 2020). Nevertheless, migration was possible for individuals who, by fulfilling this proxy role, could increase their own mobility capital, though the degree to which they themselves determined this movement, remains opaque. Furthermore, trade on such a geographically extended scale, if we are to suggest that at least some vessels carried goods from as far afield as southern Ionia to the northern Black Sea, created opportunities for transport for other migrants in the early uptake and early majority phases. In sum, while trade probably played a role as an endogenous driver, perpetuating migration trajectories to the Black Sea, its role as an exogenous driver in the innovator phase seems to be, at best, limited. The opportunities which this activity presented, however, acted to lower the capital costs of migration in relation to mobility capital through lowering the cost of transport. Increasing external movement, between emigrant and immigrant communities, provided opportunities for individuals to increase their social status and economic capital within the immigrant community. This was achieved through the formation of transnational links with capital rich individuals and groups. These individuals could be found in both the emigrant and immigrant communities, and beyond. Their agents may have, thus, settled in non-migrant or limited migrant communities.

II.3.3.4 Agriculturalists

Whether we accept the role of land shortage as the primary driver of migration from Miletos (i.e. Greaves 2007), there is no doubt that the production and/or acquisition of foodstuff represented a necessity. Miletos was no different in this respect and despite the heavy focus on the role of trade in its economy, the agricultural potential of Milesia and the surrounding areas were undoubtedly important to the prosperity of the city (Greaves 2002: 15-30). The expansion of the Lydian and Persian empires in the sixth century may have impinged upon the landholding of some Milesians, particularly in the

areas around the mouth of the Maeander, and later with the confiscation of the fertile lands around the city and on the southern and eastern borders of the peninsula.

In eastern scholarship, the notion of "agrarian colonisation" was first put forward by Vladimir Lapin in the 1960's, who, taking Berezan as a case study, railed against commercial motivations for migration, instead positing an agrarian-handicraft profile for the site (Lapin 1963: 35-36; 1966: 128-29, 234-37). He argued that the first migrants consisted of disaffected subaltern groups fleeing harsh economic conditions within the emigrant community (Lapin 1966: 33). Both aspects of Lapin's model have come under sustained criticism (Marchenko 1994). In truth, the evidence Lapin used to argue for an agriculturally focused Berezan was rather tenuous. He cites the discovery of a ploughshare in the backfill of a fifth century house, the presence of chthonic cults, the discovery of bovine remains and Berezan's peninsular location to advance its agrarian profile (Lapin 1963: 35-36; 1966: 128-29). Yet, as he himself admits, the ploughshare was found with Roman and Slavic pottery so may date considerably later, while, of the "agricultural deities" he notes, the earliest evidence for Artemis at Berezan gives the epithet Ephesian (Ehrhardt 1988: 153), not Brauronian as he claims (Lapin 1966: 127-28). Furthermore, both the Kabeiroi and Mother of the Gods appear at Olbia in the sixth century, not Berezan (Rusyaeva 1979: 93f; 2003: 100 fig. 4; Alexandrescu Vianu 1980: 264).

While the Berezan settlement, in its early instantiation, does not appear to be distinguishable as a primarily agriculture focused community, migrants in the innovator phase must have undertaken some cultivation. While a strictly agrarian phase, at any point in the migration trajectory, and its theoretical attendant, "spontaneous" migration (Kryzhitsky 2006a: 99-100), places too much emphasis on monocausal drivers, this does not preclude us from exploring the role of agriculturalists in the migration trajectory.

From the perspective of the immigrant communities, then, to what extent can we posit an "agricultural colonisation"? To what extent did the migration of people, whose primary vocation was related to exploitation of crops and animal husbandry, influence the formation and development of immigrant communities, settlements and trajectories? These questions are not so easy to answer and entail a number of avenues of enquiry. In short, how do we identify agriculture? How do we distinguish the identities of those migrating and working the land at different times? Are they wage labourers seeking new employment opportunities? Are they dispossessed landowners? As Robin Osborne has pointed out, we need to be careful about what it is we are looking for when we are seeking farms or farmsteads in the land (Osborne 1992). Here, instead of focusing on farms per se, a broader picture will be presented taking into account three main types of evidence where they are available; archaeobotanical and zooarchaeological evidence, evidence for cultivation of landscapes, and trends in rural land usage over time.²⁰⁹

West Coast

The region around **Istros** was well suited to cultivation in antiquity (Romanescu 2014; Alexandru 2021: 179). Yet, despite this, very little evidence has been published to substantiate this picture (Krebs 1997; Andrews 2020: 392). Within the urban area, a grinder was found in a *bothros* in the sacred area near temple A, dated to the final quarter of the sixth century (Domăneanţu 2003-2005: 91). Perhaps the only clear evidence for agricultural production in the Istrian *chora* comes from Tariverde. There, a number of pits for storing grain, as well as millstones, have been identified from the Archaic levels (Preda 1972: 78-79; Bîrzescu 2012a: 12). Though we cannot necessarily identify other specifically agriculturally orientated settlements in the Istrian *chora* through such evidence, it is generally accepted that most of the settlements there were of an agrarian character (Avram 2006: 62). Therefore, it is possible to look at the development of land occupation in the Archaic period as a proxy sign for the expansion of agriculture and the migration, terrestrial or maritime, of those engaged in its practice.

²⁰⁹ See McHugh (2017: 44-98), for an extended discussion of the potential archaeological indicators of agricultural settlements and practices.

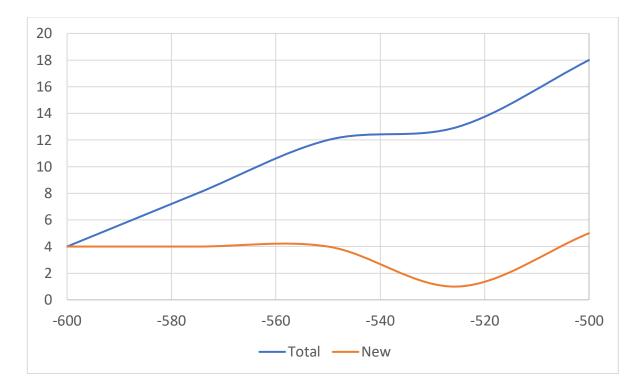


Figure 15 New and total Settlements in Dobrogea from 635-500 (see appendix G for data)

Even taking into account the fact that not all of these settlements were agriculturally focused, and not all the inhabitants practiced agriculture, we can see two phases of expansion (fig. 15). A gradual rise in the total number of settlements between the beginning and middle of the sixth century, followed by a plateauing in the third quarter of the century, before another similar rise in the final quarter. It is therefore possible to suggest the movement of people practicing agriculture into rural territories, in each of these two phases. There are two potential drivers of this movement. The first is demographic expansion, in which respect we can see a correlation between the number of houses in sector X, on the western plateau, and the number of settlements in the *chora*. The second possibility, in the second half of the sixth century, is that the systematic allotment of land and territorial organisation began to occure. This might account for the development of radiating roads in the tumular necropolis (Krebs 1997), and could have been for the benefit of larger landowning elites. Thus, smaller cultivators may have needed to move further afield.

Little evidence is available from the other Milesian migrant communities of the region. Settlement in the *chora* of **Apollonia** seems to have begun in the first quarter of the fifth century, though there is evidence to suggest that the area was being exploited earlier, probably by people dwelling in the urban area (Baralis et al. 2016: 168-70). Some scholars argue that **Odessos** was located favourably in terms of its agricultural potential (Isaac 1986: 254), with the bay of Varna providing easy access to an extensive area (Preshlenov 2002: 14; Damyanov 2010: 265). However, the nature of the topography around the city was more suitable for viticulture and pomoculture and, as noted by Margarit Damyanov, it "did not have the conditions to develop as an important agrarian polis" (Damyanov 2004-2005: 295).

Dniester Estuary

The existence of grain storage pits, seeds and animal bones including sheep, goats, pigs, cattles and horse points to significant agricultural undertakings in the sixth century (Sekerskaya 2001: 70). Simultaneously a series of small agricultural settlements, developed on the right bank of the Dnieper both up and downstream from **Nikonion** (Okhotnikov 2001). These are divided into rural settlements which includes Nikolaevka II, Nadlimanskoe VI, Nadlimanskoe V, Nadlimanskoe (II), Nadlimanskoe III, Mayaki, Mayaki IV, Belyaevka and Ovidiopol VI. Isolated farmsteads have been identified at Bugaz IV, Bugaz VI and Roxolany I.²¹⁰ Most of these settlements and dwellings are characterised by homogenous material culture, including *oikoi* complexes consisting of nucleated dwellings comprising individual households, and pits of an agricultural character (Okhotnikov 1990: 10-54; 2001: 86, 101).

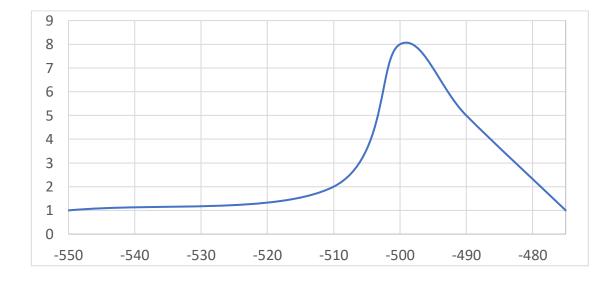


Figure 16 Archaic settlements in the Lower Dniester (data from Okhotnikov 2001)

A number of agricultural implements have been discovered at these settlements including mealing stones, with incisions to improve performance — one example had developed a recess through long-term use, as well as a number of sickles with analogies in forest-steppe Skythia and Nikonion (Okhotnikov 1990: 37). The settlement trajectory on the Dnieper estuary is distinctive. First, apart from **Tyras**, no settlements appeared on the left bank

²¹⁰ Okhotnikov (1983: 109-18; 1990: 6-10; 2001: 86). Stray finds of Archaic material have also been identified at Gradenitsy III, Chobrugi, Slobodzeya and Tirasapol.

of the river in the Archaic period. Secondly, the settlement of the Nikonion *chora* happened within a very short period of time. Almost all rural settlements appeared around the turn of the sixth and fifth centuries. As we have noted there is some controversy as to the date of the appearance of Nikonion itself. Nevertheless, in this area, we are looking at a concentrated short-term migration of groups who predominantly undertook cultivation.

Dnieper-Bug Estuary

The area between the Berezan and Bug rivers was one of the most intensively settled rural regions of the Black Sea in the Archaic period. Survey work carried out in this area has identified a wealth of evidence for agricultural practices (Kryzhitsky, Bujskikh, and Otreshko 1990). Amongst the material indicating the growing and processing of foodstuffs there, are a number of examples of metates (mealing stones) from Beikush, Kozyrka 9, Kozryka 14, Kozryka 16, Kozryka 19, Mykolaiv, Limany 3 and Luparevo 3 (Kryzhitsky, Bujskikh, and Otreshko 1990). At Shirokaya Balka 1, as many as 18 pits for grain storage, and an oven which may have been used for drying grains, have been identified (Rabichikin 1951; Noonan 1973a). Almost all of the sites surveyed had some evidence of 'utility' pits, that may have been for used for grain storage. We must be cautious, however, in attributing exclusively agricultural functions to these settlements.

#	Name	Date	Metate	Ное	Storage	Grains
17	Beikush	-575	Х			Х
40	Shirokaya Balka 1	-575			Х	
55	Kozyrka 9	-500	Х			Х
58	Kozyrka 19	-505	Х			
62	Kozyrka 16	-520	Х			
67	Kozyrka 14		Х			
69	Starya Bogdanovka 2	-550	х	Х		
89-92	Nikolaeva 1-5	-510	Х			
95	Limany 3	-510	Х			
100	Luparevo 3		Х			
36	Adzhigol 1	-500				Х

Figure 17 Evidence for agriculture in the Olbian chora (data from (Kryzhitsky, Bujskikh, and Otreshko 1990)

For example, at Starya Bogdanovka 2, as well as evidence for mealing stones and an object which may be part of a hoe, there are also finds which suggest the inhabitants were involved in fishing and weaving (Marchenko and Domansky 1983). Nevertheless, of the nine settlements identifiable in the Olbian *chora* from the first half of the sixth century, over half show evidence of food production in the form of agriculture or fishing. Kutsurub 1 contains evidence for fish consumption, Yagorlyk is clearly an industrial site and both Kaborga 1 and Bolshaya Chernomorka 2 have evidence for utility pits which may have been used to store grain. Furthermore, while we have less direct evidence for agriculture in the subsequent period, setting aside the ubiquitous "utility pits", there still seems little reason to question its primacy amongst the rural communities of the region (Kryzhitsky 2007: 105).

Animal husbandry is also attested in the **Olbian** chora. A number of settlements, including Mys 2, Smidtovka 2, Izhetskoe 4, Bolshaya Chernomorka

3, Malaya Chernomorka 4 and Adzhigol'saya Balka 7, are thought to have been only seasonably inhabited by shepherds and herders (Kryzhitsky, Bujskikh, and Otreshko 1990). It is useful to compare the overall settlement patterns in the region with the more specific faunal remains identified and analysed by Aleksei Kasparov at Berezan (Kasparov 2015). He demonstrates that, until the end of the third quarter of the sixth century, caprids predominated (50-60%) before falling in the last quarter (39.5%) and rising again in the first quarter of the following century (62.1%). Simultaneously, the number of bovid remains fluctuates from 13.4% to 21.8% and back to 14.9% in the first period, before rising in the fifth century to around 30%. It is interesting to note that, of the finds of bovid remains at Starya Bogdanovka 1, bulls appear to be in the majority. This suggests their importance for drafting rather than meat or dairy produce (Marchenko and Domansky 1983: 71). At least at this site, it seems that cultivation took primacy over husbandry.

Paleobotanical studies have also identified remains of foodstuffs at some Archaic settlements including Beikush, Kozyrka 9 and Adzhigol 1 (Pashkevich 1990). At the first, naked wheat and emmer predominated, with some husked wheat and barley, while the last showed only evidence for millet. Kozyrka 9 stands out in the variety of cereals and legumes found there, in descending order: - naked wheat, husked wheat and millet, followed by emmer with smaller amounts of einkorn, peas and peavines. It has been noted that the production of the region bore a similarity to the cereals grown further north, more than the emigrant communities of the Mediterranean. Apparently the agriculturalists of the region adopted local farming techniques and crops (Braund 2015).

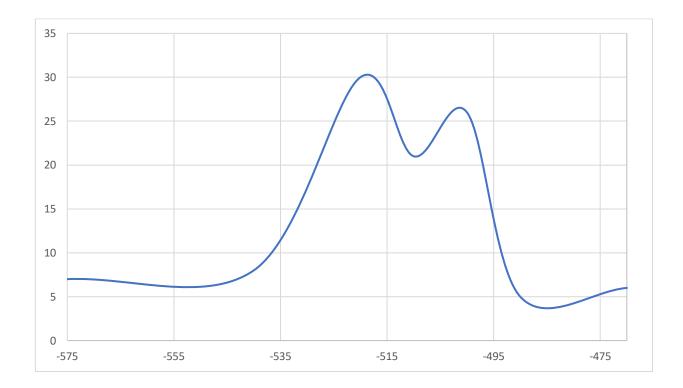


Figure 18 Archaic Settlements in the Olbian chora

A large expansion of settlement in the region occurred in the final third of the sixth century (Kryzhitsky 2006a: 100), before signs of depopulation appeared in the first third of the following century. It has been estimated that, at the acme of its settlement, the region may have been home to as many as 10,000 to 16,000 people (Kryzhitsky 2000: 174). The populations of Olbia and Berezan could not have settled the region through internal migration and demographic growth alone (Vinogradov 1989: 74). We have to assume a reasonable number of maritime migrating agriculturalists in this key period.

Kimmerian Bosporus

For the area around the Kimmerian Bosporus, we are best informed about the types of cultivated plants and land use. Despite extensive excavation and discussion on the agriculture of the area, finds of agriculture implements and installations remain limited for the Archaic period.²¹¹ A sixth century grain pit has been identified at **Hermonassa** (Kruglikova 1975: 182), while a number of sickles have been found in sixth century layers around Mt. Opuk (**Kimmerikon**) (Kruglikova 1975: 27, 34, 39), and a mealing stone comes from Strelka 2 (Zhuravlev et al. 2010: 172). During the sixth century, evidence for the storage of a variety of grain types can be identified at **Myrmekion**, **Nymphaion**, **Kytaia** and **Tyritake**. These include naked wheat, probably brought by the immigrants, as well similar crops to those cultivated in the local area (Pashkevich 2016).

Survey work undertaken on both sides of the straits allows us to plot the use of rural land in comparison to urban coastal settlements. Despite the discovery of the Kuban Bosporus and the subsequent repositioning of a number of settlements to the coast, the difference between the Taman and Kerch peninsulas is striking, and relates primarily to the different settlement strategies engaged in differing historical and geographical contexts. Nevertheless, it is important to note that, for both, the use of rural land, more than likely for agriculture, increased significantly in the final quarter of the sixth century. This implies a significant expansion in land cultivation and

²¹¹ Though later finds are more extensive. Blavatsky (1953: 105-15); Kruglikova (1975: 161-79).

exploitation at this time, which may be both a contributor and response to demographic growth and immigration.

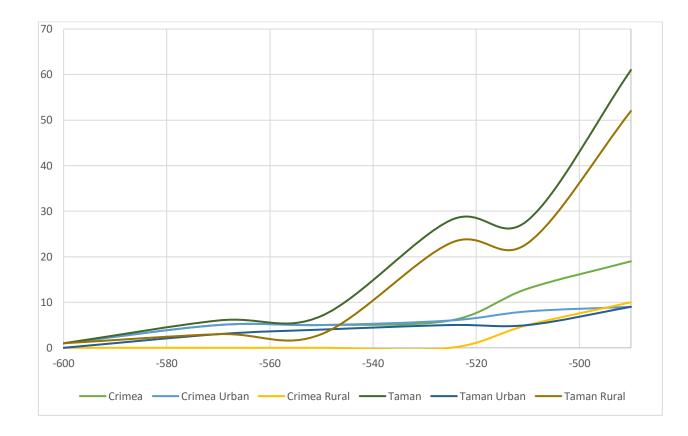


Figure 19 Overall settlement trajectories on Kimmerian Bosporus (see appendix F for data)

Discussion

A few considerations need to be taken into account when discussing the migration of agriculturalists. First, it is difficult to ascertain who exactly is working the land, and what the relationship was between landowners and agriculturalists. The latter may be local peoples (Vinogradov 2012: 74), slaves (Odrin 2018), small land owners working allotted pieces of land (Paramov 2000) or itinerant wage labourers (Silver 2006). Indeed, there is still much debate as to the identity of agriculturalists at Miletos itself, with some scholars

positing the existence of a dependant class of Karian farmers (Zurbach 2019). In the case of landowners, be they large or small, the capital required to migrate, apart from in the case of dispossession, is high. Their livelihood is tied to their land holdings and so migration is unlikely to have been an option apart from in very specific, and likely onerous, conditions. For the wage-labourer, however, the capital costs of migration are much lower. Indeed, apart from the initial outlay, the drivers of wage-labour migration tend to ensure a degree of improvement in capital and potentially social status through the act of migration. Therefore, though the use of land and appearance of the tools of agriculture indicate a growing movement of those involved in cultivation and animal husbanding, in the first half of the sixth century on the west coast of the Black Sea and in the final third of the century in the regions of the Dniester, Dnieper-Bug and Kimmerian Bosporus, we must be cautious as to their ultimate origins and vocations.

II.3.4 Conclusions

In the same way that we have demonstrated a need to avoid monocausal drivers of migration, so too is it necessary to understand the multi-focal, overlapping, identities of migrants, to appreciate the undercurrents of their movement in specific time-space contexts. In this section we introduced the notion of position practices as a heuristic tool to place individuals and, more often, groups of migrants, in their historically contingent socio-cultural contexts. It is important then, in doing so, to establish the extent to which it is legitimate to speak of Milesian migration, as an historically occurring process, at all. In other words, if we are to reject a statist model of emigration and understand the "Milesian" label as both a lived reality and historical construct, then we must establish the extent to which citizens of the Archaic polis of Miletos actually migrated.

As we have shown, three bodies of evidence can prove useful in this undertaking. First and foremost are literary attestations, in other words that a particular immigrant settlement was "founded by Milesians". While the earliest of these references does not appear until the fifth century, that it does so in the first century of the Classical period for the major settlements of Istros, Olbia and Abydos, in addition to a tradition of Ionian foundation literature, which may stretch back as early as the second half of the seventh century, gives us some grounds for confidence in its veracity. The material evidence is more contemporary but less explicit. Nevertheless, the appearance of Milesian symposiastic wares in the earliest levels of 60% of excavated sites (40% overall), is again grounds to accept the early presence of Milesian migrants. Finally, epigraphy attests the use of the Milesian calendar at nearly a third of the communities included in our study. This convergence of evidence (as well as religious practices discussed below), clearly points towards an important role for Milesian citizens in the migration processes we have been discussing.

Nevertheless, Milesians were just one ethnic group involved. Across the sites of the west coast, Hallstatt, Thrakian and Getic material culture can be found early and in reasonable quantities. This demonstrates strong interactions between the nascent communities of the region and local population groups. Furthermore, the growth of these settlements and the appearance of extensive exploitation of the surrounding areas, the chora and further hinterland, points towards a demographic role for the local people of the area. Likewise, on the northern Black Sea coast, there is a wide variety of non-Greek material and cultural forms, including from the forest-steppe region, Skythia, the Kizil-Koba culture and some Thrakian wares. In the lower Bug area this appears reasonably early, though local material from the Kimmerian Bosporus is not attested in any notable quantities until the middle of the sixth century. This implies that the movement of the Skythian tribes into the Crimea and further afield at this time strengthened economic and cultural interactions with the coastal immigrant settlements. A further effect of these population movements may have been the settlement of terrestrial emigrants on the shores of the Bosporus. Finally, Anatolian migrants are a more nebulous grouping. Given Miletos' Anatolian cultural context, distinguishing between Milesians and Lydians or Karians, for example, may be misleading. Anatolian Iron age pottery does appear at a number of sites and Anatolians almost certainly settled in the Southern Black Sea immigrant settlements, but their presence further afield, alluded to in the literary tradition, remains uncertain.

Despite this, migrants cannot be merely reduced to their ethnic affiliation. Social roles, and particularly social status, play an important role in potential migrants' access to mobility capital. During the Archaic period, the Milesian elite was characterised by conflict and cooperation between different elite groups, normatively termed *hetairoi*. These corporate bodies owed their shared identity to differing cultural manifestations in the emigrant community, such as descent myths and religious practices, though there is little doubt that there was some overlap between them. The Banishment Decree is a particularly important document indicating the relationship between this malleable matrix of power relations, and emigration. Alongside the narrative provided for it by Nikolaus of Damaskos, it demonstrates that, towards the end of the Archaic period, a group claiming descent from the mythical Milesian founder Neleus were forcibly expelled from the city and emigrated as a result. In addition to this, tomb T-A95 at Orgame gives us an insight into elite practices in the immigrant community. The individual/s inhumed there clearly commanded wealth and respect in the early community. Furthermore, the group or groups who undertook the burial and construction of the tumulus, were making a statement of their own authority, through explicit links with the deceased, including the practice of feasting and ritual deposition at the tomb in the years and decades that followed. Overall, there is good reason to reject the "poverty" of immigrants to the Milesian migrant settlements of the Black Sea posited by Marxist scholars (e.g. Lapin 1966). Instead, the evidence shows an important role for elites centred around organisational abilities, access to resources and transport, and personal authority which encouraged other migrants to follow.

The identity of non-elite migrants is more difficult to pin down. The best way to understand their specific migration contexts is to conceptualise them through vocations. Not only does this allow us grounds to approach the traditional "causes" of Archaic emigration in a more nuanced way, but it also allows us to understand the specific contexts in which they migrated. Probably the best attested of these groups are craftspeople, if for no other reason than their migration can reasonably be inferred by the appearance of craft installations which would require learned skills to operate. While the earliest of these appear in the Hellespont through the "Ionie du Sud/Tro-D" imitation Milesian pottery around the end of the seventh century, craftspeople may have emigrated earlier at other locales without leaving the archaeological traces which would allow their identification. Both pottery production and metallurgy are present at numerous sites from the middle of the sixth century at the latest. At Apollonia, with its convenient access to raw materials, they can be identified in the innovator period. The skills of the craftsperson, and the need for production in innovator and early uptake migrant communities, gave them a high level of potential mobility capital, while it seems that the urban development of these sites, particularly the appearance of monumental architecture, drew in skilled migrants from Miletos and across the Aegean.

The products of craftwork in the immigrant settlements did not just fulfil the needs of the migrants but seem to have moved across the region and beyond. The role of traders in this movement, and the development of economic ties with local communities, has proven a controversial topic. While there is no doubt that traders were present from the early majority phase at the latest, their initial role in the innovator phase of migration has been the subject of vociferous debate. There is some evidence for the movement of material culture and objects prior to the innovator phase, though its sporadic and disjointed nature, and the lack of any evidence for temporary migration as part of its movement, suggests that economic activities did not provide the initial base network through which migrants began to move, at least not exclusively in any case. Yet the way in which the migration trajectory unfolded in space and time, first in the Hellespont and Propontis, then at key points in the western, southern, and northern Black Sea, suggests that traders did have some role to play in the movement of migrants particularly in the early uptake phase. The appearance of transport amphora in both immigrant and local contexts — such as the city's of the forest-steppe region and the Kurgan burials of the Don valley — attest to this. In terms of the identity of traders, evidence from lead letters also indicates that trade in the region was in part conducted by proxy agents, probably of wealthy individuals who may have been immigrant residents of the Propontic or early Pontic settlements.

The position of fishers in the innovator and early uptake phases is problematic. First, it is impossible to differentiate from them as a specific vocational group and fishing as an activity undertaken by migrants with other vocational interests. Secondly, while in the lower Bug region there is ample early evidence for fishing activity, on the west coast limited publication makes quantification more difficult, while in the Kimmerian Bosporus, the heart of the later Pontic fishing industry, the evidence seems to appear later than expected. Nevertheless, the liminal social position of fishers and their access to maritime transport provided them with a relatively high degree of mobility capital (Pollnac 1988: 32-35). Due to the extensive maricultural resources of the Pontic and Propontic regions, it seems reasonable to posit the migration of fishers throughout the trajectory of Milesian migration.

The final group of positionally practicing migrants we discussed, were agriculturalists. Again, this is an area of much controversy throughout the literature. It is often dependent on the political or ideological contexts of scholarly treatments. Like craft production, agriculture often requires a special set of skills, even at the level of subsistence, though there is no doubt that these were present amongst large numbers in the emigrant community. Nevertheless, across the Black Sea area, agriculture, like most other aspects of the economic lives of the settlements in the innovator to early majority phases, played a small role, consistent with serving the needs of the immediate community. By the middle majority phase, around the middle of the sixth century, extensive rural settlement occurred which can be connected with the need to feed larger numbers of people, incoming migrants, but also potentially the beginning of export to the Aegean, particularly in the aftermath of the Persian conquest of Egypt in 525 (cf. Greaves, Knight, and Rutland 2020: 76 & n.54 for references).

Overall, the introduction of position practices, as tool for conceptualising the discrete social and cultural lives of individuals, can improve our understanding of proto-historical migration at a micro-level. While we may still desire the appearance of a first-person account of migration in the Archaic period, we have shown that there are alternative ways to overcome this gap in our evidence. Again, it must be stressed that these identities are socially constructed and the groups to which they refer are malleable and overlapping communities of practice. Any individual migrant could fit into numerous positionally practising categorisations. The important point is that, by conceptualising position practices and their relationships with access to mobility capital and wider migration trajectories, we are then able to construct a more nuanced model of Archaic migration.

Part III Migration Practices

Thus far, we have demonstrated that, by approaching migrant groups through position practices, we can elucidate a more nuanced analysis of their migration contexts. Furthermore, this approach also illustrates the variety of social, economic, and cultural identities enacted by migrating individuals and groups, belying simplistic mono-cultural analyses of migration from an exclusively ethnically determined perspective. If we are to envisage migrants on a multi-focal scale, this has important implications for the ways in which we understand the social and cultural practices of immigrant communities. Therefore, to gain a clearer understanding of immigrant communities as malleable communities of practices, rather than simply reproductions of an imagined homogenous emigrant community, we shall now explore the ways in which these practices disseminated amongst immigrant communities, and the ways in which new social and cultural paradigms were formed through the interaction of the varied migrating positionally practicing groups.

III.1 Domestic Space

Domestic space functions as an important signifier of migrant activities and practices in Milesian immigrant settlements, particularly on the western and northern coasts of the Black Sea. Remains of domestic architecture form one of the most abundant categories of evidence in these settlements. For the Archaic period, they can be detected in 19 of the 55 settlements under investigation. In general, concepts such as home, household, dwelling and domesticity, frequently treated as synonymous, can be used to describe very different processes of human activity and relations (Brandon and Barile 2004: 1f). In the field of migration studies, this heuristic group takes on added meaning. For the migrant, where is home? What is the relationship between home and dwelling? How do migrants reconcile present circumstances with idealized notions (Ralph and Staeheli 2011: 523)? For the migrant, home and dwelling exist in a spatial and temporal continuum.

Home, as "an 'affective construct', where homely feelings can encompass a combination of security, familiarity, comfort, and belonging" (Ratnam 2018: 1), is a vast semantic field and informs all aspects of migration and its study. Home, especially for migrants, exists on several relational, experiential and conceptual axes (Ralph and Staeheli 2011: 552; Dufty-Jones 2012: 212). The ideal of home may not necessarily correspond with past or present instantiations of the phenomena, yet inevitably it still entails enaction within a spatial field; the dwelling (Levin 2016: 28-30). This chapter will explore the role of the spatial element of dwellings in the experiences of external and internal migrants to the shores of the Black Sea.

The study of dwellings has a long and fruitful history in scholarship. It has been approached from numerous disciplinary viewpoints which have bearing on the study of EIA and Archaic housebuilding and occupation behaviour. The determinative aspects that structure a dwelling as a site for behaviour, and the structuring nature of architecture as a container and boundary of social activity, forms an important part of our understanding of the interactions between agents, objects and communities in space and time (Sanders 1993: 44).

Amos Rappaport uses the concept of 'activity systems' to analyse dwellings as fixed physically bounded spaces and the discrete and complex interplays, between objects and people, which take place within (Rappaport 1993: 13). A change in the flexible levels of the model can engender changes in the interaction with the fixed level. Thus, the study of architecture as a social phenomenon, consists of uncovering the patterns of use in a spatial and temporal contexts (Rappaport 1993: 12-15). This approach has provided a fruitful tool for Classical archaeologists studying artifactual assemblages within the built environment, yet its proper application is reliant on extensive and detailed publication of the artifacts uncovered within buildings, which cannot always be assumed, where publication is limited or obscure (Tsakirgis 2016: 24-28). In such cases, our interpretative abilities are limited to analysis of those features which can be traced in the archaeological record, such as semiotic function and delineation of space. The former sees the built environment as, at least in part, a reflection of social standards and mores. In short, it is a manifestation of the values of communities of practice (Rappaport 1993: 11). In feminist studies, architecture can be analyzed as a sphere in which the hidden voices of subaltern groups, such as women and children, can be heard (Morris 1999). Yet we must be equally cautious is equating the dwelling and household with 'female' spaces (Goldberg 1999: 142-49).

The household, a wider heuristic category than the dwelling, has often been seen as a key social functionary, defining and delineating individual personhood (Beaudry 2004: 254). This may be conceptualized as the 'family', a "suitable vehicle for the examination of the relations between physical and mental worlds" (Deetz 1982: 719). Yet in both antiquity and migration contexts, it may be more or less than a membership group defined narrowly by genetic inheritance (Noy 2017). A closer heuristic category, with which the ancient Greeks conceptualized this, notion is the *oikos* (Nevett 1999).

Contexts of mobility and migration, however, add a new dimension. Mobile agents both reconstruct imagined 'home' spaces and communities, and construct new spatial environments, which may or may not be understood as impermanent reflections of this process (Levin 2016: 30). Indeed, when their understanding of their 'home' environment is less reliant on specific architectural manifestations of dwellings, a new level of complexity is added. Under these circumstances dwellings may embody a discrete or redundant semiotic language, rendering their interpretation opaque.

Though there are few explorations of the relationship between migration and domestic spaces, those that do approach the topic have often sought to reconcile the importance of 'home' as understood above, with that of movement. In this sense, 'settlement' has provided a useful heuristic tool as a recursive process between "being, and being otherwise" (Ilcan 2002: 2). Other explorations have sought to situate the physical setting of the migrant's house as a form of 'home-making' through everyday practice (Boccagni 2016). Iris Levin's study of these physical aspects of the domestic, in the lives of migrants, noted that rarely was the emigrant house replicated in the immigrant house (Levin 2016: 182). Migrants create home spaces through strategies designed to create feelings of "security, familiarity, community and a sense of possibility or hope" (Hage 1997: 102). The physical manifestations of these strategies in lived space may be diverse and, by definition, involve different processes of negotiation from those used to create home spaces in the emigrant community.

In practice this can include the use of non-dominant cultural manifestations across wider migrant groups. This makes the identification of 'ethnicity' through culture difficult. However, as we have noted above, the lack of monocultural immigration in the area under study, renders the need to identify ethnic identities as a starting point for migration practice less important than approaching the diverse strategies used by communities of practice to order their migration experiences (O'Reilly 2012: 30-31). In this sense, a significant parallel can be found in the use of Fenno-Scandinavian house types in North America, despite the limitations of the group's demographic contribution to immigration (Burmeister 2000: 541). Despite these observations, there remains a tradition that 'Greek' urban areas and 'Greek' houses must look Greek (Solovyov 1999: 42). Often, scholars have looked towards the excavated houses on Kalabaktepe in Miletos for examples of what 'Milesian' migrant architecture *should* look like (Kuznetsov 1999: 551), though this fails to take into account the topographically contingent nature of these constructions (Greaves 2002: 78). As we have seen, above, the formation of migrant domestic space is far more complex, involving an ongoing process of creation and reevaluation that may little resemble emigrant communities.

III.1.1 Case Studies

Dwelling spaces make up one of the most important and much discussed aspects of the 'Milesian' migrant communities in the Black Sea. Over a third of the settlements considered showed some evidence of domestic architecture, ranging from one or two dwellings in a specific time period, to a multitude of examples spanning across the Archaic era. We are still left with the problem of how these should be approached. As noted above, complete artifactual assemblages are rare, though where evidence of activities occur these will duly be afforded extended discussion and generalisation. Spatial syntax will also form an important consideration, in so far as it is evident, as will social embodiments. We shall undertake this analysis, first, through extended consideration of those case studies exhibiting evidence of domestic architecture. Following this, we shall discuss the interpretations of selected previous scholarship on the problems presented by our evidence, before discussing it in light of some of the theoretical considerations outlined above, and within the larger sphere of migration studies.

III.1.1.1 Istros

The majority of the domestic architecture uncovered at Istros is situated at the western end of the plateau on which the city stood. The earliest structures, from the Archaic I Layer (620-600), were uncovered in Sector X by Susan Dimitriu in the mid to late 1950's (Dimitriu 1966). Two building phases were apparent. The first consisted of structures designated numbers 9/1956, 10/1956, 5/1957, 11/1958, 12/1958, 13/1958. The second phase contained structures 9/1958 and 10/1958 (Dimitriu 1966: 21-24; Timofan 2010: 356). The remains of these dwellings mostly consisted of preserved floors at ground level, frequently made of clay, though we may surmise that their walls were constructed of wattle and daub (Dimitriu 1966: 22; Timofan 2010: 356).

More extensive evidence of habitation was uncovered from the Archaic II level (600-550). Overlying the older levels in sector X were houses 7/1956, 8/1956, 8/1958. In trench XVI, two phases, represented by dwellings 8/1960 and 3/1960 were identified (Dimitriu 1966: 25). All the dwellings uncovered in the Archaic I and II periods had foundations at the level of the ancient ground with one exception. A dugout structure, 0.55 m deep, from the Archaic II level

was uncovered in Sector X. It had an area of roughly 8 m² and seems to have been destroyed by fire (Dimitriu 1966: 35).

The Archaic III level contained the most extensive remains on the western part of the plateau. It covered three main building phases labelled 'A', 'B' and 'C'. In sector X, the initial phase was represented by 6/1956, 6/1958 and 7/1958; trench XNV contained house numbers 14/1959 and 15/1959; trench XV₁: 9/1960 and 10/1960, and sector S contained house 4/1959 (Dimitriu 1966: 27-32; Timofan 2010: 356-57).

Phase 'A' of the Archaic III level demonstrates increasing architectural complexity. Here we can see, for the first time, evidence for internal divisions of space through the use of partition walls in houses 4/1959 and 6/1958 (Dimitriu 1966: 32). Though we should remain aware that other archaeologically invisible materials, such as curtains, may have been used to perform this function elsewhere (Lang 2005: 22).

Evidence for Phase 'B' is more limited in Sector X, with only 5/1956 being attributable to it (Dimitriu 1966: 28; Timofan 2010: 356-57). Trench XNV provides far more dwellings of this period, including, 2/1958, 5/1958, 6/1959, 7/1959, 8/1959, 9/1959, 10/1959, 11/1959, 12/1959 and 13/1959 (Dimitriu 1966: 35; Timofan 2010: 357). Trenches XV₁ and S1 contained houses 7/1960 and 3/1959 respectively (Timofan 2010: 357).

The final Archaic phase ('C') was only present in two locations. Sector X contained houses 1/1956, 2/1956, 3/1956, 4/1956, 1/1958, 2/1958, 3/1958,

4/1958 and 1/1960. Dwellings 2/1960, 4/1960, 5/1960 and 6/1960 appeared in trench XNV (Dimitriu 1966: 28-29; Timofan 2010: 357). This phase also provides scattered evidence of internal features, such as the kiln uncovered in 1/1958 and a central square hearth with clay vents on a base of ceramic fragments and small stones, found in 1/1960 (Dimitriu 1966: 35).

Other evidence of habitation during this period was present in the Basilica Parvan sector of the acropolis. In the excavations conducted there in the early 2000's, three dwellings, GB ("Greek Buildings") 2, 4 and 5 were uncovered. GB 2 was constructed of adobe walls atop a yellow clay floor, similar to the construction techniques used in Sector X (Bottez 2015: 364). GB 4 was in a better state of preservation, allowing for a number of observations to be made. It is rectangular with two rooms. The northern room measured 2.7×3.3 m and contained an unusual central feature which may have been the base for a supporting wooden pillar (Bottez 2015: 364). GB 5 seems to have been constructed at a similar date. It too is rectangular, and the surviving walls may have contained a window (Bottez 2015: 366).

Some general observations can be made regarding the domestic architecture of Istros based on the available evidence. In the initial period of settlement, single room structures dominate the surviving material, though transient internal division may have been possible. The development of permanent divisions in Archaic III suggests an increase in domestic stratification, whereby occupation and activities were performed in conceptually distinct spheres. Yet the lack of multiple entrances suggests that at least one of these rooms would have remained as a through-space, where interactions could occur. Only the back room was a truly private space. Furthermore, these structures were in the minority (Alexandrescu 1990: 47).

Single-room dwellings imply mixed usage of space. All household activities would have been undertaken in a limited space, yet such features as hearths in the corners of rooms, imply that there may still have been a conceptual division of space for different activities, such as food preparation and sleeping, though it is very difficult to discern this on the ground. (Dimitriu 1966: 35-37).

In general, most structures were relatively small, between 16 and 24 m² with clay floors. Roofs were probably made of reed or thatch, easy materials to find in the immediate locale (Alexandrescu 1990: 57-58). Judging by comparative size alone, we may surmise that these were occupied by relatively small family units (Nevett 2010: 29). Those hearths that were discovered, with one notable exception, were predominantly placed in the corners of rooms (Timofan 2010: 357).

III.1.1.2 Orgame

In comparison to its near neighbor Istros, very little evidence for domestic dwellings has survived from Orgame (Mănucu-Adameşteanu 1992: 58). The Archaic period is particularly poorly represented. The earliest, uncovered in sector FE, is a single-room 8.5 m^{2,} dwelling from the second quarter of the sixth century. It was constructed of wattle and daub with a clay floor and a fixed hearth in the northwest part of the room (Mănucu-Adameșteanu 1999: 147-48; Rogobete 2012: 182). A second dwelling, from the last half of the sixth century measuring just 3.75 m², was also discovered (Rogobete 2012: 182; Mănucu-Adameșteanu 1999: 1148).

The area of both these structures falls below the 10 m² thought to provide the minimal living space required by an individual (Nevett 2010: 29). We may infer from this that family groups at Orgame lived in complexes of distinct buildings rather than single structures. The limited evidence, however, means that such conclusions must remain speculative and incomplete, barring the further excavation and new discoveries of domestic architecture in the earliest period of the settlement.

III.1.1.3 Tomis

Despite lying under the modern city of Constanţa, some domestic structures were excavated in the Cathedral Park area during the early 1970's CE (plate 7). The structures, dated to the second half of the sixth century, were uncovered in the F, C2 and O2-South sectors (Radulescu and Scorpan 1975: 29). Sector F contained dwellings F1 and F2, both dug 0.6m into the virgin soil (Radulescu and Scorpan 1975: 29-30). Also present in this area was a structure termed F3, dug down 0.3 m, and faced with adobe walls. It also exhibited a series of adjacent pits that may have served some household purpose (Radulescu and Scorpan 1975: 31). Sector C2 contained another hut-like dwelling dug into the ground, though information on its construction and contents is limited (Radulescu and Scorpan 1975: 31). Structures in the O2 south section showed better levels of preservation. Dwelling 1, dug 0.3 m into the ground, contained a yellow-gray clay floor, while dwelling 2, a rectangular structure with vertical edges and slightly rounded corners, sat 0.7 m deep (Radulescu and Scorpan 1975: 31-32).

III.1.1.4 Berezan

The evidence for domestic architecture at Berezan is the most complete, both in excavation and publication, in the region (see appendix E for full details). The development of dwellings can be divided into four periods; Archaic I-A (late seventh – first quarter of sixth century), Archaic I-B (second quarter to mid sixth century), Archaic II-A (mid – last quarter sixth century) and Archaic II-B (end of sixth century – second quarter of fifth century) (Chistov 2016: 7-8). The first phase is categorized by the extensive quantity of structures dug into the ground. We will not discuss each individual structure, over 230 have been found on the island (see appendix E), but instead focus on some of the distinctive features of this type of dwelling.

Dwellings dug into the virgin ground have been found across the whole area of settlement. Their forms were either rounded or rectangular. The former probably sported conical roofs, judging by the position of central and surrounding postholes. The roofs of the latter were gabled, based on the positioning of post holes across their centres (Solovyov 1999; Chistov 2005: 289). They vary from depths of around 0.25-1.0 m, and cover areas stretching between 3 – 16 m² (Solovyov 1999: 33-35; Chistov 2005: 289). At the bottom end of this scale, these structures would be too small for habitation. Yet, as Dmitry Chistov has observed, clusters of dugouts in close proximity may in fact represent agglomerated complexes belonging to *oikoi* family groups, and should not necessarily be considered as singular multifunctional dwellings (Chistov forthcoming). The existence of household clusters indicates a certain level of social stratification, access could potentially be controlled, and members of the household assigned to different spaces (Kent 1993: 147-48).

The complexity of the use of interior spaces in these structures also seems to have increased over time (Solovyov 1999: 38). Several had features, termed "couches" or "tables" in the literature, that were platforms 0.15-0.5 m high, 0.3-0.9 m wide and 0.7-1.0 m long, mostly located in the southern part of the dugout and which seem to appear around the middle of the sixth century (Solovyov 1999: 35). While various interpretations have been proffered to explain these, it is probable that Solovyov is right to assign them multiple functions (Solovyov 1999: 38). The small size and lack of internal division in these structures points towards flexibility in activity spheres. Nevertheless, some structures still exhibited fixed features. Many have depressions or small pits excavated into the floor level that were probably used for storage of objects and foodstuffs (Solovyov 1999: 36-37). A number of dwellings also contained evidence for fixed hearths and, more rarely, ovens (Solovyov 1999: 36). Moreover, in a few cases, evidence was uncovered to suggest the use of portable braziers instead (Solovyov 1999; 2007b: 534). Domestic finds are limited, though East Greek tableware, and numerous amphorae, have been found (Chistov 2015b: 109). Taken together with the features already identified, this suggests that cooking, consumption and storage of food represented an important everyday activity within many of these structures.

Contemporary with some of the later pit-houses in the second and third quarters of the sixth century, were the so-called "Colonist's Houses" (Chistov forthcoming). These partially sunken dwellings tended to be single-room structures built of stone, mudbricks and/or wattle and daub (Chistov 2016: 10). They frequently contained hearths and stoves, similar to earlier and contemporary dugouts (Solovyov 1998: 216). House 41, in sector O-Western, is a rectangular shaped edifice with an internal area of 27.72 m², dated to the second quarter of the sixth century (Vinogradov and Domanskij 1996: 293). Its clay floor was relayed multiple times, and a multitude of hearths made of upturned amphorae necks suggests that its lifespan was considerable, up to four decades, in the opinion of (Solovyov 1999: 62). Its entrance was via a small stone staircase on the southern side, and it seems to have been divided into two areas based around different household activities, with the hearths clustered in the northwestern part (Solovyov 1999: 62). The increased spatial complexity demonstrated in this structure may be indicative of a hardening social stratification, whereby some migrants were afforded the opportunity to improve their living standards vis-à-vis others (Westgate 2015: 48).

Above-ground dwellings began to appear on Berezan in Archaic II-A, around the third quarter of the sixth century (Solovyov 1999: 64). These were often multi-roomed structures, some of which contained internal courts and drainage channels (Chistov 2016: 14-26). Many had wells and domed clay ovens, stoves and braziers. The latter two features were similar to those found in "Colonist's House" type dwelling (Chistov 2016: 25). These dwellings were accessed "from the street through the fence into the courtyard, which functioned as the main transitional zone" (Chistov 2016: 20). This controlled access, unlike that of the earlier house types, seems to indicate a hardening of the boundaries between public and private. The largest of these buildings, House 3 in the O-Western sectors, covered an area of 380 m², and in its first phase (Archaic II-A) contained five rooms radiating around a courtyard, containing numerous large and small pits (Chistov 2016: 15-20). Room 5 contained a fireplace with two round stoves and may have been the dwelling's kitchen (Chistov 2016: 15, 25). The radial layout of the rooms in House 3, and the use of a central courtyard, suggests an increased desire to distance members of the household from the outside world and control access through the dwelling, possibly as a way of setting social boundaries on its inhabitants.

III.1.1.5 Olbia

The development of domestic architecture at Olbia bears a strong resemblance to its near neighbor Berezan. The earliest evidence of habitation dates to around the second quarter of the sixth century (Bujskikh 2017: 5). Submerged dwellings are found across the upper part of the site (Kryzhitsky and Krapivina 1994: 188). Based on available publications, we shall discuss two such dwellings from sector ATD in depth, though many others were discovered in this and other areas.

The dwelling labeled Semi-Dugout No. 5 is rectangular and was constructed some time in the first half of the sixth century. Only part of it could be excavated with the surviving area just over 5.42 m² (Kryzhitsky and Rusyaeva 1980: 74). It contained the remains of an oven and, at some point after its construction, had an annex built into it with numerous cavities containing amphorae, the bottom of a handmade storage container and a pot, which indicated its probable function as a storage area for items related to the consumption of food and drink (Kryzhitsky and Rusyaeva 1980: 745) The absence of obvious areas for activities outside the dwelling meant that most domestic life was probably contained within (Kryzhitsky and Rusyaeva 1980). If this is the case, it may reveal a pronounced private/public dichotomy and possibly regulation based on gender roles (Souvatzi 2012: 178).

In semi-dugout No. 6, a notable internal feature was a raised couch, 35 cm off the floor with dimensions of 1.1 x 0.75 m, which, it has been conjectured, represented some form of food preparation area. Its low height would imply this was done by the inhabitants sitting on the floor (Kryzhitsky and Rusyaeva 1980: 76). Of the material recovered from this dwelling, amphorae dominate, though a single plate, identified as 'Rhodian-Ionian', was also uncovered (Kryzhitsky and Rusyaeva 1980: 76). Generally, domestic structures at Olbia

seem to be clustered into separate *oikoi*, many with adjacent rubbish pits (Kryzhitsky and Krapivina 1994: 190; Kryzhitsky et al. 2003: 429).

In the final quarter of the sixth century we begin to see a change in practice at Olbia, with the introduction of dwellings which represent a "middle stage" between below ground and above ground dwellings (Bujskikh 2017: 8). These houses, built on the southeastern terrace of the upper city, are relatively small in size and may have, in fact been several rooms or units of a single dwelling (Bujskikh 2017: 8). There is evidence for a hearth and some scattered finds including local tableware and Attic cups (Bujskikh 2017: 8-12). Until the relationship between these structures can be clarified, it is difficult to come to conclusions about its function, or the status and practices of the inhabitants.

At the turn of the sixth century, habitation seems to have spread to the lower city. Two dwellings, Earth Houses 730 and 730a, were uncovered in the excavation of Sector NGS. 730a was the earlier edifice and contained some scattered table ware fragments, suggesting a domestic purpose (Lespunskaja et al. 2010: 31). 730 was superimposed on top of it after a brief period of use and contained a "couch" in the southwest corner, similar to those found in dwellings in the upper town (Lespunskaja et al. 2010: 31).

III.1.1.6 Nikonion

Prior to the second half of the fifth century, the remains of domestic architecture at Nikonion consist almost exclusively of below ground rectangular structures (Zaginailo and Sekerskaya 1997: 23; Mielczarek 2016: 84). They were stabilised with internal mudbrick walls and may have been inhabited by between three and five individuals (Sekerskaya 1978; 2001: 68). Adjacent pits were found attached to a number of dwellings, in addition to niches in the structures themselves, which contained half amphorae and animal bones which may have been used for storage or refuse, though we must imagine the internal pits were predominantly for the former (Sekerskaya 2001: 68; 2007: 489). The agglomeration of each dwelling with its adjacent pits, seems to represent individual households, and we may surmise that the *oikoi* of Nikonion tended to be small domestic units with little differences between them (Sekerskaya 2007: 489).

House number 1, covering an area of around 40 m², contained a sizeable hearth, 1 m in diameter, set against its northern wall (Sekerskaya 2007: 489f; Mielczarek 2016). The structure underwent significant repair and expansion during its life span (Sekerskaya 2007: 489). Houses 9 and 197 in the southwestern and central parts of the city respectively, also show evidence for use over an extended period, with their floors being re-laid in several phases (Sekerskaya 2007: 489; Mielczarek 2016: 85).

III.1.1.7 Kerkinitis

The earliest domestic architecture from Kerkinitis consists of a small number of dugout dwellings (Kutaisov 2003: 376). These were built in the third quarter of the sixth century (Vnukov 2001: 153). They were dug into the ground to a level of approximately 0.7 m. Unfortunately, the availability of publications on these structures precludes more detailed discussion, as had been noted by others (Tsetskhladze 2004: 236).

III.1.1.8 Pantikapaion

Some debate has occurred over the date and typology of the earliest structures at Pantikapaion. Some scholars had suggested that the 'Emporia House' represented the earliest type, though it has been demonstrated that this structure was built in the final quarter of the sixth century (Tolstikov 2017b: 14). Following this, consensus then assumed that the earliest dwellings at Pantikapaion were subterranean structures which appear around the second quarter of the sixth century (Treister 2002: 152; Tsetskhladze 2004: 236). Nevertheless, in 2014 a rectangular surface structure was unearthed on Mount Mithridates, pre-dating the earliest dugouts by a generation. This edifice, labelled building D-3, covering an area of 19.2 m², constructed of mudbricks atop stone socles. On the basis of pottery finds, it has been dated to the last decades of the seventh century (Tolstikov 2017b: 14; Tolstikov, Astashova, and Samar 2017).

Subterranean architecture seems to have developed on the site around the second quarter of the sixth century. Dugouts 1 and 5, situated on the western plateau of Mount Mithridates and dating to the second half of the century, are circular with adobe brick walls. Both are excavated 1.4 m into the virgin soil and cover areas of 7 and 6.4 m² respectively (Tolstikov 1992: 59; 2003: 716). Features such as postholes and a 1 m wide entrance were also identified in dugout number 5, the latter dug into the natural clay (Tolstikov 1992: 59). Fragmentary material, including painted and handmade pottery and terracottas, was also uncovered in this area (Treister 2002: 152). Towards the end of the sixth century, larger above-ground buildings began to appear on the northern and western slopes of the hill (Treister 2007: 568). These contained one or two rooms and included the aforementioned 'Emporia House' (Tolstikov 2003: 715). Furthermore, another building, labelled D-4, with an area of 24 m², was uncovered with a preserved entrance around 1.3 m wide and a clear threshold (Tolstikov 2017b: 26).

III.1.1.9 Nymphaion

The earliest dwellings at Nymphaion consist of two dugouts constructed towards the end of the first half of the sixth century. The first, Dugout 1, consisted of a circular structure around 14 m², with an adobe hearth or oven in its southwest corner (Butyagin 1997: 61-63). The artifacts uncovered are of interest. They include a terracotta female figurine which may have been part of a household shrine, and pottery from the local Kizil-Koba culture. A second dugout with similar dimensions, No. 2, was also excavated. The appearance of Kizil-Koba ware in this structure led Alexander Butyagin to surmise that both dwellings were used by the local population, and constituted a pre-Greek era at Nymphaion (Butyagin 1997: 67). By the end of the century, the domestic architecture at Nymphaion is more characteristic of Aegean types (Tsakirgis 2016: 15). In sectors B-C and G we find courtyard buildings with two or three rooms attached (Chistov 2017: 145-55). In two of these, B-C 3 and G 6, hearths were uncovered in the northwest corner of the western room and in the southern room respectively (Chistov 2017: 146, 54).

III.1.1.10 Myrmekion

The earliest domestic architecture at Myrmekion dates to the period between the second quarter and the middle of the sixth century. Nine dugout structures were identified during the last decade of the 20th century CE in the western part of the site (Vinogradov, Butyagin, and Vakhtina 2003: 807). Both rounded and rectangular structures are present in this sector, each covering an area of between 4 and 12 m² (Vinogradov, Butyagin, and Vakhtina 2003: 807). The pit structures towards the smaller end of this scale may have had economic or domestic purposes other than habitation (Butyagin 2017: 87). The excavators estimated the lifespan of these dugouts to be around four decades based on modifications and the successive relaying of the clay floor (though the basis on which this can represent such a time period is not clear). Within them, handmade ceramics were unearthed (Vinogradov, Butyagin, and Vakhtina 2003: 807; Butyagin 2007a: 23).

During excavations conducted between 2006 and 2013, around the area of Ash-Hill 2, dugout C-XVI was uncovered dating to around the third quarter of the sixth century. Parts of this structure were sunk into the bedrock and it seems to have existed until the turn of the fifth century, undergoing significant alteration during its lifespan (Butyagin 2015: 128; 2017: 91). C-XVI was sunk around 0.6 m into the ground and the area of its floor plan measures just 6.5 m^2 (Butyagin 2017: 91).

A third period of construction at Myrmekion dates between the last quarter of the sixth and the beginning of the fifth century. It contained structures identified as residential and, in Vinogradov and his colleagues ambiguous phrasing, "utilitarian" edifices, with evidence of postholes (Vinogradov, Butyagin, and Vakhtina 2003: 807-08). The dugouts of this period had stone foundations with evidence of mud-brick walls, although evidence for internal features is limited (Butyagin 2007a: 23). In one, a portable brazier, consisting of the inverted neck and shoulder of an amphora, was found in situ. Alexander Butyagin suggests that this method of providing heat and light would have been used across the settlement during this period (Butyagin 2007a: 23).

III.1.1.11 Tyritake

During the joint Russo-Polish expedition to Tyritake in the 21st century CE, a number of early subterranean dwellings were identified (Zinko 2014). In trench XXVI, a trio of dugouts were uncovered which belonged to the second third of the sixth century. These consisted of a rectangular and two rounded structures, identified as 1, 2 and 3 respectively. House 1 covered an area of less than 8 m² and was sunk roughly 0.86 m into the ground. An entrance and vestibule-type area were identified in the northwest corner (Zinko 2014: 51). House 2 was significantly deeper, with a floor level 1.69 m below the ground, though its overall area was very similar and it too sported an entrance vestibule area, with a set of descending steps (Zinko 2014: 51). The third house from this period, built at a depth of 0.68-0.73 m, was slightly larger with a floor plan of over 10 m². Like the others, it too had an entrance vestibule with some evidence for stairs (Zinko 2014: 53). By the final third of the sixth century, above ground habitation began to appear at Tyritake. Investigations in Trench XXVI uncovered several houses, of which two were in a state of relatively good preservation. Houses C-XXXIV and C-XXXIII both consisted of multiple rooms around a courtyard and each covered an area of around 163 m², with furnaces preserved in the northwestern and western parts respectively (Zinko 2014: 53).

III.1.1.12 Theodosia and Kytaia

Evidence for domestic architecture at Theodosia dates only as far back as the fifth century (Katyushin 2003: 647). It consists primarily of above ground structures constructed of dressed stone blocks (Katyushin 2001: 140). At Kytaia, the only available evidence is extremely difficult to interpret. There, a dugout structure, excavated into the natural rock, was found, but its position on the edge of a precipice leaves it uncertain whether it was of a domestic character or fulfilled some other purpose (Vinogradov, Butyagin, and Vakhtina 2003: 848).

III.1.1.13 Gorgippia

Debate surrounds the exact dating of the earliest domestic structures at Gorgippia (Alekseeva 1997; Novichkhin 2017). It seems probable that the structure containing rooms 22 and 23 represents the earliest building phase, yet the material present there stretches from the middle to the end of the sixth century (Novichkhin 2017: 77). Houses 1 and 2, both classified as semi-dugouts, can be dated to the end of the sixth century. These structures were reasonably well preserved and contained entrances with a threshold and conical roofs of reed or rush with clay (Alekseeva 1997: 13-16; 2003: 897).

III.1.1.14 Hermonassa

The excavated domestic architecture from Hermonassa consists of a small number of structures dating from the end of the sixth to the beginning of the fifth century (Finogenova 2007: 59). These consisted of mudbrick superstructures atop stone foundations, a number also had ovens present (Tsetskhladze 2004: 259).

III.1.1.15 Kepoi

At Kepoi, over forty pits, dug into the ancient ground level were discovered, though their excavator Kuznetsov did not believe them to be dwellings due to their size and marked difference from Aegean domestic dwellings (Kuznetsov 2001a: 340). Contemporary with these pits are the remains of a number of mudbrick dwellings, the earliest of which potentially dates to the first half of the sixth century (Kuznetsov 2001a: 341). The best recorded of these edifices was a mudbrick house with dimensions of 4.2 x 3.6 m, and an area of over 15 m², it was divided into four rooms by two walls. One of these rooms contained around thirty amphorae (Kuznetsov 2003: 896). This discovery is believed to be the basement of a house, of which the upper layers do not survive, yet there is reason to question this interpretation (see below).

III.1.1.15 Patraeus

A number of surface dwellings have been uncovered from Patraeus, ostensibly beginning in the second half of the sixth century. Yet, we must be cautious in assigning dates or even domestic functions to these buildings, as they are located in a submerged area of the lower town and frequently exhibit assemblages spanning several centuries (Abramov and Zavoykin 2003). In the central group, Building 1 is a relatively large edifice divided into two rooms measuring 12 x 6.8 m and 9.4 x 6.8 m respectively, with a total area of 145.52 m². Conversely, Building 15 was less than 35 m² (Abramov and Zavoykin 2003: 1126). Three further structures were identified in the western group: Building III, an elongated rectangular shape measuring 4.6 x 13.8 m, Building V with dimensions of 5.1 x 7.2 m and a square structure labelled Building IV with an area of 86.48 m² (Abramov and Zavoykin 2003: 1128).

A further three suspected dwellings were uncovered with ceramic material dating from the end of the sixth century. Building XIII, in the lower town, was the largest at 124.8 m², with Building IX in the western group slightly smaller at 84.66 m². Building VIII, in the same area as the latter, was less than half the size of the former at 59.28 m² (Abramov and Zavoykin 2003: 1128). Although very few subsidiary details are available, we may tentatively conclude that, through the second half and towards the end of the sixth century, there

were either significant inequalities in housing at Patraeus, resulting from a heavily stratified society, or that large economic or communal constructions were being undertaken by its inhabitants. However, we must not discount the possibility that the earlier material was not necessarily connected to the structures uncovered.

III.1.1.16 Apollonia Pontica

The last few years have seen the discovery of some of the earliest domestic structures at Apollonia Pontica. These consist of two building phases on St. Kirik Island in the area of the temenos of Apollo Ietros. House 1 represents one of the best-preserved examples from this location. The structure formed a 25 m² rectangle, exhibiting a series of stone benches along the walls. Tools and ceramics, from the first half of the sixth century, were present in its fill (Panayotova et al. 2011: 238). Adjacent pits and a scatter of domestic and industrial detritus, including seashells, leave room for interpreting the structure as multi-functional or exhibiting more than one phase of use (Panayotova et al. 2011: 238). A second dwelling, House 6, was also partly uncovered to an area of 4 x 2 m, though its original size may have been nearer 12 m² (Panayotova et al. 2011: 238). In other areas mud-brick dwellings were noted on a North-South axis. The excavators suggest that they may have had tiled roofs based on the discovery of tile fragments, but it is unclear whether these were discovered within the dwellings themselves or whether their mudbrick walls would have been able to support such a superstructure (Nedev and Panayotova 2003: 99; Nedev and Gyuzelev 2010: 34).

Very little information is available on the domestic architecture of Odessos, due to its location beneath the modern city of Varna and unavailability of publications. Between 1983 and 1985, at San Stephano Street, some wooden huts were revealed which represented the earliest evidence of habitation discovered thus far (Lazarov 1998: 91). They were relatively small rectangular structures, constructed of wooden posts covered with clay, containing some Archaic pottery, from the second quarter to the middle of the sixth century (Minchev 2003: 245).

III.1.2 Discussion

Previous studies of domestic spaces in the Black Sea have been dominated by discussions of ethnicity, typology and function. The existence of dugout dwellings, in particular, has raised numerous questions about the location of the emigrant communities from where the first inhabitants of these settlements came (Kryzhitsky 2007: 18). Much of the debate surrounding dugouts as ethnic signifiers relates to the presence of handmade pottery. Sergey Solovyov, a prominent advocate of this view, has suggested a correlation between different wares and the shape and location of dugout architecture at Berezan (Solovyov 1999: 43-49). In "Quadrangular/Oval" structures, he notes that forest-steppe pottery forms a larger proportion than either Steppe Skythian or Thrakian wares, while in "Circular" dugouts, Thrakian pottery predominates (Solovyov 2019: 170 fig. 11.8). Yet the seeming correlation between layout and pottery typology, which Solovyov translates into ethnic terms, ignores one salient fact: the percentages of unlocated pottery in each stand at 44% for "Quadrangular/Oval" structures, and 29% for "Circular" structures. The potential change in his correlations presented by this undetermined group undermines his thesis. If it could be identified to any one of his categories, in both case it could decisively alter the results.

It is not even necessary to see dugouts as a potential indicant of 'barbarian ethnicity' (Kryzhitsky 2007: 23). As has been demonstrated by various scholars, architectural analogies can be found in a variety of cultural and temporal contexts. In the period under investigation, subterranean dwellings have been uncovered in the Black Sea at Tariverde and Visina near Istros (Krebs 1997: 53-54), Bilske Horodyshche (Tsetskhladze 2004: 244-48), in the Skythian settlements of the Vorskla river valley (Bylkova 2019: 149) and in the settlements of the Kizil-Koba culture of the southern Crimean mountain range (Khrapunov 2018: 349). They were also used by the inhabitants of Gordion in Phrygia (Tsetskhladze 2000), in the *chora* of Metapontum in southern Italy (Carter 2006: 62-73), and central and western Europe (Dupont 2002: 285-88). This type of architecture is not unique to the Black Sea or Milesian migration.

It is generally accepted that this form of architecture was inhabited by Greek immigrants (though most scholars allow room to suggest the presence of non-Greeks in addition). This has given rise to an important question of why, then, did these Greek inhabitants chose to reside in dwellings so different from the Aegean region from which they emigrated? The most frequent explanation is climactic difference (Lapin 1966: 156; Kryzhitsky 1982: 29). Yet this view is reliant on an "Old-Greece" perspective, and fails to take into account analogous architecture elsewhere, or the predominance of Anatolian Greeks, who may have been used to very different climactic conditions in their own emigrant communities (Kuznetsov 1999: 540). It has also been suggested that poverty or pragmatism may have accounted for this architectural form in the early stages of a settlement (Lapin 1966: 156).

Apart from discussions of typology by shape, there is also the issue of what exactly is meant by a dugout or semi-dugout. According to Kryzhitsky (1982: 12 n. 1, 2), the former should be more than 0.3m deep, while the latter should be less than this with an entrance at ground level. However, as Kuznetsov (1999: 533) points out, some scholars use different criteria which "wipes out the difference between these two types". Finally, an important source of debate has surrounded the function of these structures. In 1999, Kuzentsov laid out the thesis that the dugouts could not be assumed to represent dwellings. He based this assertion on a number of factors. These are, the relatively small time-frame of a "several" weeks required to fully construct an above-ground mud-brick dwelling, the destruction of the earliest phases of the settlement by later activity, and the lack of internal walls (Kuznetsov 1999: 533; Tsetskhladze 2004: 255 n. 4, 68; Dupont 2002). However, we may point to "Dugout 1" at Panticapaeum at a depth of 1.4m which had clay adobe walls, "House 1" at Gorgippia with mudbrick walls at a depth of 1.1-1.4 m, and

"Western house 1868" at Olbia which had stone foundations and an adobe brick superstructure, but was dug 1.3m into the ground; as evidence to suggest subterranean structures could potentially have facing walls.

Underlying these debates about ethnicity, function and typology, seems to be a pervasive sense of Hellenocentric thinking. To put it another way, Greeks should look like Greeks and live in Greek style houses. Kuznetsov's claims, that there are "no reasonable grounds to think that the immigrants were not capable of building for themselves houses usual for their culture" (1999: 541), and that it is unlikely that "immigrants [would] abandon their house-building traditions" (1999: 539), speak loudly to this tendency. As we have already noted, British and Irish migrants to North America infrequently ended up residing in wooden houses of Fenno-Scandinavian types, rather than the brick-built dwellings of their homelands. This was due to the exigencies of their migration experiences, in particular the ready availability of timber in the forested areas of the northern United States (Burmeister 2000: 541). Our analysis of the domestic space of "Milesian" emigrant communities shall therefore focus on two other aspects of dwelling spaces which functioned in important ways in the development of migratory communities and migrant's "homemaking" strategies: the use of hearths, and divisions of space.

The Hearth

The role of the hearth in ancient domestic contexts has prompted much discussion. Despite its primacy in literary contexts of the Archaic and early Classical periods, from Homer to Euripides (Nevett 1999: 38), archaeological investigations have turned up only limited evidence for their presence in houses (Tsakirgis 2007). Summaries of the literary and archaeological evidence, however, have tended to focus on a few case studies, most frequently from Athens or Olynthos, and thus cannot be taken as representative of the wider Mediterranean and Black Sea worlds (Greaves 2019). Our investigation has uncovered a relatively large number of examples of hearths found *in situ* in Black Sea sites.

For the ancient Greeks, the domestic hearth had a number of very important semiotic and practical functions. In addition to its obvious purpose, providing heat, light and cooking fire, the hearth was also the embodiment of the goddess Hestia (Vernant 1983: 159-74; Jameson 1990: 192). It was the symbolic centre of both the domestic dwelling and the kinship group occupying it (Gernet 1981: 325; Vernant 1983: 163f). Important rites were conducted there to initiate new members into the group such as newborns, brides and enslaved peoples (Vernant 1983: 163). The hearth fire also seems to have played an important part in Skythian and Thrakian religious culture. According to Herodotus, the most important deity in the Skythian pantheon was Tabiti, who he equates with Hestia (Hdt. 4.59, 68). This goddess had an important role as protector of family and clan, with the king's hearth holding a place of special significance in Skythian society (Ustinova 1999: 68-73). It is reasonable to assume that domestic hearths had an important social and cultural function for those agents who migrated to the new coastal communities of the Black Sea coast in the seventh and sixth centuries.

Prior to the second quarter of the sixth century, we have almost no evidence for fixed hearths at any of the sites under consideration. It has been suggested that, in many contexts where fixed hearths are absent, portable hearths or braziers, constructed from a variety of materials, may have formed a perfectly adequate substitute (Nevett 1999: 176). The opaque nature of Hestia ensures that these could quite conceivably have formed entirely acceptable receptacles for her fire (Jameson 1990: 105; Tsakirgis 2007: 230). Evidence of handheld braziers, made from fragments of amphorae, found at Berezan (Solovyov 1999: 36-37, 58-59) and Myrmekion (Vinogradov, Butyagin, and Vakhtina 2003: 808; Butyagin 2007a: 23), offers one possible solution to the lack of a fixed internal hearth.

The earliest evidence we have for fixed hearths begins to appear between the end of the seventh and second quarter of the sixth century. The earliest layers, uncovered in Sector S at Istros, provided evidence of a stone floored building with two hearths (Timofan 2010: 356). At Orgame, the earliest dwelling at the site, discovered in Sector FE, contains a rectangular hearth in its northwest corner (Rogobete 2012: 182). From around the same period, Building 18 and Dugout XLI at Berezan also contained traces of fixed hearths, in the latter case comprised of the inverted top half of an amphorae fixed into the ground (Chistov 2013: 532). Prior to the middle of the sixth century, there is also evidence for a fixed hearth in dugout number 1 at Nymphaion, consisting of an adobe slab roughly 0.3 m² in the northwest corner of the building, with some evidence for an adjacent chimney (Butyagin 1997: 61-63).

The number of fixed hearths seem to increase during the second half of the sixth century (Chistov 2013). From the beginning of this period, we find a fixed hearth in the southwestern part of house 5, situated in Sector ATD in the upper town of Olbia, measuring just 0.2 m² (Kryzhitsky and Rusyaeva 1980: 74-6). The same building, along with No. 15, also contained an oven, in the latter case made of baked clay and fragments of amphorae (Kryzhitksy and Rusayaeva 1980: 77-8). In the third and fourth quarters of the same century, there is evidence for a fixed hearth in Room 5 of the multi-room House No. 3 in the O-Western sector at Berezan (Chistov 2015: 15; 2016: 10). Eastern House No. 1786, from the southeast terrace of the upper city at Olbia, also seems to have had one near its eastern wall (Bujskikh 2017: 12).

Between the final decades of the sixth century and the turn of the fifth, in contrast to patterns observed elsewhere in the Greek world, a marked increase in the installation of fixed hearths is evident in dwellings in the Black Sea. The subterranean dwellings, Nos. 1 and 4 at Nikonion, both exhibited these structures. In the case of the former, its hearth, situated by the north wall, is notable both for its unique (amongst the cases studied) circular shape and its large size, covering an area of around 0.8 m^2 (Sekerskaya 2007: 489; Mielczarek 2016: 84-5). Evidence for a hearth has also been unearthed at a site identified with Gyenos in Colchis (Tsetskhladze 2004: 264). In addition, furnaces and ovens from this period have been located at Istros (Timofan 2010: 357), Myrmekieon (Butyagin 2007: 24), Nymphaion (Chistov 2017: 146, 54) and Tyritake (Zinko 2014: 53-4), though whether these shared the cultural and religious characteristics of fixed hearths remains uncertain.

The hearths discussed here are predominantly located on the edges or in the corners of rooms and dwellings. It has been suggested that such a location indicates a predominantly practical use for cooking rather than a symbolic or ritual function (Tsankirgis 2007: 226f). This is contrasted with circular hearths located in the middle of a room or dwelling which are seen to represent the female Hestia in there omphalic shape (Vernant 1983: 158). Yet of the latter type, the closest parallel we can find is at dwelling 1/1960 in Sector X at Istros, which exhibited a rectangular shaped central hearth (Timofan 2010: 357). This highlights the differences between literary treatments and the realities of dayto-day life.

What, then, is the connection between domestic hearths, whether static or portable, and the migration of agents? We would be remiss to ignore the practical purposes of the domestic hearth in its numerous forms (Nevett 1999: 38). In the northern and western coasts of the Black Sea, to which the surviving evidence pertains, temperatures in the winter months are frequently just a few degrees above freezing and often much colder. The inhabitants of the settlements under discussion would, by necessity, have had to deploy some means of heating their dwellings. Yet fixed hearths are not exclusive to the Black Sea, they are found across the ancient Mediterranean world, and so cannot be attributed to purely climactic considerations (Tsankirgis 2007: 226). In the Greek cultural area, or at the very least Athens, the hearth played an important role as a site of a number of rituals aimed at delineating individual members of kinship groups and welcoming new members into the group (Nilsson 1961: 72f, 76). It has also been proposed that members of the kinship group returning from abroad would be reintegrated through similar rites (Gernet 1981: 333).

In addition to the domestic hearth, many settlements also had a civic hearth, held in the prytaneion, which functioned as a centering device for the whole community. Allusions in literature from the Classical period onwards suggest that this fire was taken by the initial group of migrants to a given site in the form of cinders held in a *chytra*, to ignite the sacred fire of the new settlement, and thus provide a concrete link between the emigrant and immigrant communities (Malkin 1987: 115-24). Nevertheless, this practice may not have existed in the period under investigation (Malkin 1987: 121f). We are yet to see any evidence of a fixed prytaneion, in the early layers of any of the sites under discussion. Despite this, we may still draw a link between the hearth and migration in the domestic rather than public sphere.

The private domestic world of the kinship group needed to be reestablished by migrants. Whether the rites discussed by later authors were themselves deployed in the Pontic region is not important. The salient point is that the installation of a hearth in a migrant domestic dwelling would provide a point of fixity, of ownership and permanence, embodied by Hestia or Tabiti, regardless of whether that hearth was fixed or mobile (Vernant 1981: 158-9). This practice can be connected to the idea of migrant home making. By lighting a hearth in their dwelling, the migrant is transforming a utilitarian structure into a symbolic manifestation of themselves and their kinship group (Boccagni 2016: 14-15). The migrant house, therefore, becomes a fixed point in which this kinship group can propagate itself, and in which it becomes connected to the hitherto alien space to which the migrant has come. The hearth, fixed or portable, "ties the house to the earth" (Vernant 1983: 158). Its transformative capacity allows space to undergo a change from emigrant to immigrant space. Regardless of the practices in the emigrant community, be it within the Thrakian, Skythian or Greek cultural milieu, in the immigrant community, the hearth can be perceived as embodying the migrants' old and new identities.

Division of Space

The division of space in the domestic sphere is frequently understood to represent a differentiation in activity spheres and the roles of different members of the kinship group (Kent 1993). For single-room dwellings, activity spheres may be spatially and temporally flexible, one part of a room need not always contain the same everyday practices (Rappaport 1993). As we have seen in the case of fixed hearths, even an installation such as this, representative of permanence and stability, would in practice fulfil a number of roles. The link between differentiation of kinship group roles as manifested in domestic space is more complex.

Traditional views of the Greek house, based mostly on literary references, have been almost completely overturned by archaeological excavation in the Archaic period (Nevett 1995). The idea of definitive male and female spaces has been demonstrated to represent an elite mode of thinking that probably relied on idealist notions of gender roles and the organization of space. These were rarely possible in practice before the mid fifth century at the very earliest (Antonaccio 2000). This kind of approach has been replaced by the use of artifact assemblages to attempt to reconstruct the use of domestic space (Tsakirgis 2016). This approach, if afforded the luxury of available publications with detailed artifact catalogues and, more importantly, indications of their findspots, can produce impressive results (Ault 2016).

We are rarely afforded this level of information on the dwellings of Milesian migrants. There are a number of reasons for this. In the first instance, at the end of its functional life, a subterranean dwelling would be filled in with material from the surrounding area. This could contain any number of ceramic fragments of widely differing origins and uses, rendering it extremely difficult to differentiate between material coming from the dwelling's lifespan, and that of other contexts. Furthermore, as has been noted the availability of original excavation reports for the areas under investigation in this study is often patchy. We are reliant on secondhand information in many cases, where cataloguing full material assemblages would be inappropriate, or in older publications where ceramic assemblages are treated separately from reports of dwellings.

We were only able to uncover eight instances in which some information was available about the material assemblage of individual dwellings. At Apollonia, in House 1 on St. Kirik island, a bone handled iron knife and axe were discovered (Panayotova et al. 2011: 238). The use of bone for tools had a long history in the region in both coastal and inland settlements, including Olbia and Istros (Beldiman et al. 2014). The publication of the two earliest dwellings at Nymphaion provides a useful note of the material came from these dwellings (Butyagin 1997). Dugout number 1 contained objects which points towards two aspects of domestic practice. The presence of spindle whorls suggests that textiles were made there. This points towards the presence of at least one female individual within the dwelling. Secondly, a terracotta statuette of a women wearing a himation and chiton sat on some sort of throne, would seem to provide a very rare instance of the presence of a domestic cult object (Butyagin 1997: 63). Similar figures found across the Black Sea region predominantly depict Demeter (Damyanov 2016: 120), who may have had a special significance in the early migrant coastal settlements across the region. Dugout number 2 contained Chian, Lesbian and Thasian wares, a fragment of an Ionian cup and local Kizil-Koba pottery, which led Butyagin to identify both dwellings as belonging to the local populace (Butyagin 1997: 64, 67).

The available material also gives us a good idea of assemblages at a number of Olbian dwellings from the end of the sixth century. House No. 6 in Sector ATD contained Rhodian, Samian and Klazomenian ware, in addition to a "Rhodian-Ionian" plate from the third quarter of the sixth century (Kryzhitsky & Rusyaeva 1980: 76-7). Also, in the upper town, Western House No. 1868 on the southeast terrace contained Attic Black Figure cups, Ionian ware and locally made Olbian tableware (Bujskikh 2017: 10). Finally, from the turn of the century, in the lower town, earth Dwelling 730a had an assemblage consisting of East Greek bowls, turn of the century Black Figure wares, a black glossed *kylix* and a krater from the first quarter of the fifth century (Lespunskaja et al. 2010: 30). It is surely notable that the material from these dwellings all seems to indicate similar functions. The combination of drinking and tableware with amphorae certainly points towards consumption. In addition to this, the nature of the structures might, at the very least, indicate a domestic function.

Aside from these few examples, our approach to the differentiation of space will focus primarily on spatial division. Between the establishment of the first migrant settlements on the Black Sea coast in the last third of the seventh century and the second quarter of the proceeding century, we have no evidence of multi-room dwellings at any of the sites under discussion. In this period, dwellings at most sites were single-room subterranean or above ground structures. It has been suggested that in small communities, as the nascent Pontic settlements of the later seventh and early sixth centuries undoubtedly were, that social differentiation could be enforced by symbolic rather than physical boundaries (Westgate 2015: 50). It seems likely that this form of spatial organization may reflect the lack of necessity for strict spatial differentiation for the earliest migrants. However, we must be cautious in linking this phenomenon to social complexity and egalitarian principles. Complexity and hierarchy could have been displayed in different and possibly unrecoverable forums. Just because the division of space in Aegean houses had become widespread by the seventh century, does not mean we need to resort to the idea that these migrant communities, with their culturally heterogenous populations, were in anyway more primitive and less complex than those of the Aegean.

Within the dwellings of the earliest migrants, the most frequent form of fixed space comes in the form of features variously termed "couches", "benches" or "tables" in the literature. In reality, as has been pointed out on numerous occasions, the dimensions of these features in the dwellings studied, between 3 and 30 cm high and half a metre to a metre in length, suggests that they may have functioned as a flexible space for food preparation, storage and in some cases as furniture, though it must be emphasized that none is of sufficient size to fulfill the role of a bed (Solovyov 1999: 38). These features are found in the early layers at a number of sites including Berezan (Solovyov 1999: 38), Olbia (Kryzhitsky & Rusyaeva 1980: 76-8); Apollonia (Panayotova et al. 2011: 238) and Nymphaion (Butyagin 1997: 61-6).

The space in Building 18 at Berezan, identified as a 'Colonist's house' type dwelling, seems to have been divided by internal walls made of wattle and daub (Chistov 2015b: 109). A second, relatively early, instance of the division of space in a domestic context can be seen at house No. 5 in Sector ATD in the upper town of Olbia. This building dates from the second half of the sixth century and contained a slightly raised apsidal annex in which a number of original features, such as cavities with storage amphorae *in situ* and kitchen wares, were preserved (Kryzhitsky and Rusyaeva 1980: 74-6). This area seems

to have been used as a storage area, implying that the space for this function in the dwelling was fixed. The need to establish this differentiation between living and storage space implies some degree of sophistication in the domesticeconomy and the importance for the inhabitants of the dwelling of securing both perishable and permanent objects throughout the dwelling's lifetime.

In the second half of the sixth century, the number of multi-room dwellings begins to increase markedly. Houses 4/1959, 6/1958 and the slightly later 2/1956, the first in Sector S and the latter two from Sector X at Istros, all contained dividing walls bisecting their internal space (Timofan 2010: 356-7). In the third quarter of the century, at Berezan, House No. 3 in the O-Western sector not only had five separate rooms. In one, the bottom parts of Lesbian and Klazomenian storage amphorae were found in situ (Chistov 2015: 15; 2016: 10; 2017: 131). In the last decades of the sixth century, there is also evidence of internal division in trench XIV at Tyritake, where a tripartite dwelling has been unearthed (Zinko 2014: 48), and at Patraeus, where Building I is divided into two rooms, though the size and underwater location of this edifice means we should be cautious about identifying it as a domestic structure (Abramov 2003: 1126). The turn of the fifth century saw a sizable increase of multi-room houses in the archaeological record at Gorgippia (Alekseeva 1997: 16; Zavoykin 2007: 23; Novikchin 2017: 77), Nymphaion (Chistov 2017: 145-5, 154), Tyritake (Zinko 2014: 53-4), Panticapaeum (Tolstikov 2017: 26) and Olbia (Kryzhitsky and Rusyaeva 1980: 76-77; Bujskikh 2017: 10). By this time, domestic architecture bore a much greater resemblance to Aegean examples with defined

internal and external spaces including central and adjacent courtyards (Tsetskhladze 2004: 265).

Another feature of the organization of domestic space is the extent to which individual structures represent single households. By analogy, Lisa Nevett has suggested that 10 m² represents roughly enough space in which one or two individuals could reside (Nevett 2010: 29). Yet between the second and third quarters of the sixth century, many of the dugouts we have identified as dwellings for example at Myrmekeion (Butyagin 2007: 23), Orgame (Rogobete 2012: 182), Panticapaeum (Tolstikov 1992: 59; 2003: 716; 2017: 17, 19), Apollonia (Panayotova et al. 2011: 238) and Tyritake (Zinko 2014: 51), only cover between 3 and 8 m². At Olbia and Berezan, it has been observed that dugout structures tend to be found in clusters with space between each. This has led to the convincing suggestion that, in some of the early settlements, households consisted of a number of adjacent dugouts and pits rather than a single dwelling forming individual oikoi (Chistov 2013). This also implies that outdoor spaces may have been used for a variety of activities which are now unrecoverable, while cautioning us against implying the absence of activity from the absence of evidence within the excavated dwellings. The earliest migrants did not immediately coalesce into conglomerate settlements, but seem to have laid out their living spaces individually, establishing kinship or small group spaces prior to communal ones (Handberg and Jacobsen 2011: 184). The exact basis for membership of the groups occupying these spaces is illusive, but it may incline us towards envisioning the earliest migrant arrivals as haphazard.

Establishing dwelling spaces represented an important step for migrants, whether they intended to reside indefinitely or not, and the evidence points towards this occurring without a fixed plan of settlement. Instead, it seems that small groups, possibly even individuals, organized their own space at the beginning. This has implications for how we view the arrival of the earliest migrants. Instead of the proverbial 'boatload', in the case of Aegean migrants, or 'cartload' in the case of local migrants, setting out from emigrant communities to establish a new settlement and political community, it seems that we are dealing with smaller groups migrating sporadically. The stimuli that structure migration, and the capability of individual agents to take migratory decisions, goes some way to explaining why this might be the case. As we have discussed, it is only rarely that one specific event or factor fosters migratory decisions. A combination of factors, some uniform others individually and contextually specific, informed the decision of small groups of individual agents to migrate. Intermittent migration should be seen as the root cause of these settlement patterns. In the earliest stages of migration, coalescence into urban political communities was of little importance to migrants whose immediate priority was to reestablish their daily lives in an immigrant space.

This increasing spatial complexity may be linked to patterns of growing urbanization across the immigrant settlements on the Black Sea coast, which occurred towards the end of the first half of the sixth century (Knight 2021). We have discussed some of the suggestions by modern scholars as to why this happened, but if we are to accept the destabilising effect of Lydian and Persian interventions against Miletos and Ionia, it is still worth contemplating why this influx of new migrants facilitated new practices. One possible suggestion is that their makeup included not just individual males, but other sections of society: females, children and the elderly. In modern migrations it has been demonstrated that this last group are more likely to have engrained notions of the constituent elements of dwelling as home. It is possible that the division of space comprised an important element of this that needed to be recreated in the immigrant community. As has been demonstrated amongst modern migrants, little necessity exists to create *simulacra* of domestic spaces in the immigrant community (Levin 2016: 203-4). While certain aspects of the emigrant culture, such as the hearth, may be recreated or reimagined, it does not follow that what we should be looking for are exact parallels between emigrant and immigrant domestic spaces.

III.2 Religion

Religion is often seen as a central element in Greek migration. According to the influential accounts of Irad Malkin and John Graham, it mediated and structured relations between the leader of the migration, the migrants and the immigrant and emigrant communities, principally through the god Apollo (Graham 1964; Malkin 1987). It has also been used as an identifier of emigrant identities. This has been particularly prevalent amongst scholars working in the vein of constitutional history, who have sought to equate religious practices and pantheons between the emigrant and immigrant communities (Bilabel 1920; Ehrhardt 1988). Nevertheless, as is evident from our case studies, much of the evidence for religious practice post-dates the first few centuries of migration. Therefore, it must be considered cautiously. Furthermore, retroactive immigrant-emigrant identifications could also play a role in the establishment of cults imported from the metropolis at later periods (Braund 2019).

Irad Malkin's *Religion and Colonisation in Ancient Greece* (1987), set a benchmark for the study of religion in the context of movement and migration and, in terms of its coverage and detail, has yet to be superseded. Nevertheless, Malkin drew some problematic conclusions about the role of religious institutions and in relation to settlement. For Malkin, Apollo was *the* god of overseas settlement. Almost every action concerning a migration action was mediated through the god, his oracle, or his proxy the *oikist*. Apollo's oracle played an important role in establishing cults, while the *oikist* mapped out the space of the settlement, setting aside specific areas for religious installations and temene (Malkin 1987). While Malkin's exhaustive study has rightly proven extremely influential, there are some significant drawbacks. The evidence on which his conclusions are based is almost exclusively literary, which results in two major problems. Firstly, there is no instance of contemporary Archaic evidence for the religious practices alluded to in his book. This means that we cannot necessarily be sure that the patterns he elucidates are representative of behaviour preceding the fifth century. Secondly, there is very little discussion of religion in the Black Sea. He rightly points out that, the lack of evidence for foundation oracles for East Greek settlements means that it is difficult to elucidate an oracular role (Malkin 1987: 17 n.1). Thus, the settlement model, which he concludes was followed by most overseas communities, cannot be applied, *tout court*, to the settlements of the Black Sea (Knight 2021),

In migration studies, religion can be approached as a belief system (Hagan and Ebaugh 2003), an immigrant social institution (Chafetz and Ebaugh 2000) and/or a transnational practice (Levitt 2004). All these roles can be identified, to some degree, in the practice of religion in Milesian migrant communities. Furthermore, in the personifications of deities and worship practices, elements of hybridity and adaption may be evident. This implies dialogue between the religion of transmarine migrants from the Aegean, and terrestrial migrants from the Eurasian, Balkan, Caucasian and Anatolian regions (Ustinova 1999, 2009; Braund 2018).

III.2.1 Case Studies

III.2.1.1 Abydos

Only two deities of the Abydean pantheon are known. Apollo can be detected, in the theonym Apollophanes mentioned by Herodotus,²¹² and on fourth century coinage (Ehrhardt 1988: 134). In addition, Artemis' image appears on coinage from the same period (Ehrhardt 1988: 151).

III.2.1.2 Amisos

In 2009, during a rescue excavation in the Samsun suburb of Atakum, a religious complex, dating at the earliest to the last decades of the sixth century, was uncovered.²¹³ It consisted of, a building with three rooms and a porch on the southern side, an older building built in two phases, and a *bothros* (Summerer 2018). A wealth of terracotta objects were uncovered, predominantly dating to the end of the sixth century, while graffiti indicated that the complex was probably a sanctuary to Kybele (Summerer 2018: 166). The sanctuary was located at the bottom of a ridge and was probably originally built on the shore (Summerer 2018: 167-68).

²¹² Hdt. 6.62. Apollophanes is the son of the Abydean tyrant Bisaltes, left in command of the Hellespont region during the Ionian Revolt. See further, Knight (2019) and Greaves, Knight, and Rutland (2020) for the Ionian campaign in the Hellespont.

²¹³ The location of this complex, along with the nearby early Classical necropolis, suggest to Summerer (2018) that Kuurupelit represents the original location of Amisos which was subsequently relocated to Toraman Tepe by Mithridates VI.

In the second half of the fifth century, coins bearing an image of Artemis with bow and quiver were minted at Amisos (*SNGvA* No. 7318). At the turn of the following century, Tyche also appears on coinage, though minted on the Persian standard (Grose 1929: 4). From the third century, a pendant bearing an image which has been identified as Nike, has been uncovered (Atasoy 2018: 135). Also, of particular note, is an inscription naming Apollo Didymeus, uncovered on Kale-Key dating to the first of second centuries CE (Ehrhardt 1988; Saprykin 2010: 476). We also have earlier evidence for Apollo (though without epiclesis), on a first century coin of Mithridates VI (Saprykin 2010: 476).

Further deities attested at Amisos include, Poseidon, who appears on a coin dated to 132/3 CE (*RGMG* 1.1: 62 no. 82); Dionysus, attested by a large number of terracotta protomes and masks dating from the Hellenistic period (Summerer 1999); and Hermes, whose statues are found (Summerer 1999: 34). Isis (Saprykin 2010: 493-94) and Leto can also been identified (Saprykin 2010: 476). According to Mukerrem Anabolu there was probably also a temple of Demeter somewhere in the city.²¹⁴

III.2.1.3 Apollonia

The sanctuary of Demeter, situated on the Skamni peninsula in the Northeastern corner of the peninsula, is the earliest known cultic complex at

²¹⁴ Anabolu (1987: 269, 70 n. 9). Anabolu references his PhD thesis (1949, unpublished) for this information, which unfortunately was not available to the present author.

Apollonia. Its earliest deposits date to the second quarter of the sixth century.²¹⁵ Uncovered during rescue excavations in 2011, almost no architectural remains from the Archaic period survived, with the exception of a pair of lined votive pits dug into the bedrock (Damyanov 2016: 119). The sites' cultic significance was inferred from the quantity of small ceramics containers and terracotta statuettes (Damyanov 2016, 2018b; Damyanov and Panayotova 2019). Its attribution to Demeter is based on the presence of seated female figurines which typically represent Demeter in Black Sea contexts (Damyanov 2016: 120).

Beginning in 2009, archaeological explorations²¹⁶ around the Marine School, on the island of St. Kirik, uncovered evidence that, in the last years of the sixth century, a significant restructuring of residential and urban spaces began to take place (Panayotova 2019). The changing function of this space was related to the construction of an in-antis temple of the Ionic order. This has been identified as the long-sought temple to the eponymous Apollo Ietros.²¹⁷ The identification of the complex with Apollo Ietros was secured through the discovery of numerous fragments inscribed with the letters "IH" (Panayotova

²¹⁵ Damyanov (2018b: 141-42). This dating was based on the discovery of numerous fragments of "Knickrandschalen" Ionian cups with analogies dating back to at least the second quarter of the sixth century.

²¹⁶ See also Panayotova (2019); Panayotova, Damayanov, and Bogdanova (2019); Damyanov and Stoyanova (2019)

²¹⁷ Strab. 17.3.19 located the temple on the island, see Konova (2006) with references.

2019; Panayotova, Damayanov, and Bogdanova 2019; Damyanov and Stoyanova 2019). The ceramic materials and terracotta architectural elements found within the structure point to a construction date around 525-500 (Panayotova 2019; Damyanov and Stoyanova 2019). Other finds from the area suggest the worship of Apollo Ietros going back as far is the earliest days of the settlement (Panayotova, Damayanov, and Bogdanova 2019).

Pit 23, close to the site of the later temple, contained an assemblage of material which can be dated as early as the last quarter of the seventh century.²¹⁸ The nature of the material uncovered in this pit, such as *aryballoi*, *dinoi*, *olpai*, lamps, cups, bowls with small holes for hanging, animal bones and horns and terracottas, all point to its function as a *bothros* (Panayotova, Damayanov, and Bogdanova 2019). Furthermore, the large stone structure in the vicinity of the deposit may have been an altar (Damyanov and Stoyanova 2019). The most important find, however, was an inscribed cup, dedicated to Apollo Ietros, by a Knidian individual. This object dates to the first half of the sixth century (Panayotova et al. 2014: 596). This find demonstrates that the worship of Apollo began at least half a century before the construction of his temple. Indeed, given the dating of the earliest material in the pit, it seems almost certain that it can be traced back as far as the very beginning of the

²¹⁸ Panayotova, Damayanov, and Bogdanova (2019). Amongst the early objects are some notable finds such as a Milesian or Rhodian *aryballos* in the shape of a head wearing a Corinthian style helmet and fragments of a Corinthian *pyxis*.

settlement at the turn of the seventh and sixth centuries (Panayotova, Damayanov, and Bogdanova 2019).

Ancillary finds from the *bothros* might also shed light on cult practices in the earliest years of the settlement. A terracotta Aphrodite holding a rabbit, the second such found at the site after Degrand's discovery in 1904, was uncovered in this deposit. Alongside the presence other terracotta figurines, this means that pit 25 can be dated to the first half of the sixth century. Thus, the excavation team has proposed that an Aphrodite sanctuary may have been located in the vicinity (Baralis 2019; Hoddinott 1975). Epigraphic evidence from the turn of the fifth century, suggests that Ge Chthonia (*IGBulg* 1² 398; Ehrhardt 1988: 165) and Hekate (Ehrhardt 1988: 175), were also worshipped at Apollonia. These may present alternative identifications.

III.2.1.4 Arisbe

A single architectural terracotta, of a type known across the Troad in the Archaic period, was uncovered at Çiğlitepe, the presumed site of ancient Arisbe. According to Nurettin Arslan, such a find is indicative of a public building which, he conjectures, may have been a temple (Arslan 2017: 140). No other evidence for religious practices or complexes has come from Arsibe, so it is impossible to offer further interpretation at present. At Berezan, there are a handful of early indications of religious practices between the establishment of the settlement at the end of the seventh and the first half of the sixth centuries. First, there is evidence to suggest the worship of Artemis, with the epithet Ephesos, in the form of a statue and inscription, the former purportedly from the second quarter of the sixth century (Ehrhardt 1988: 153). An inscribed salt cellar of the fifth century also attests to her worship (Braund 2018: 116). Secondly, a recently discovered Ionian rosette bowl from storage pit no. 232 exhibits a votive inscription which names Hermes. This can be dated between 575 and 550 (Chistov 2019a: 103-04 fig. 6.2; 2019b: 274). Finally, there is a fragment of a Rhodian-Ionian *kylix* from the archives of Vladimir Lapin, which attests to the worship of Apollo Ietros in the first half of the sixth century (Rusyaeva 1986: 39 n. 77; Dubois 1996: 107-08 n.54; Chiekova 2008: 25-26).

In the last decade of the 20th century, Vladimir Nazarov discovered the first evidence for an exclusive sacred area at Berezan. Located in excavation sector "T", this temenos stood at a the central and most elevated point on the island (Kryzhitsky 2005: 261; Nazarov 2007: 548; Chistov and Krutilov 2014: 211; Chistov 2015a: 405; Bujskikh and Chistov 2018: 16-17). Prior to the construction of the temenos in the third quarter of the sixth century, the area had been occupied by a number of dugout structures and household pits which were filled in simultaneously (Kryzhitsky 2005: 262; Nazarov 2007: 545). This demonstrates that the early settlement (c. 615-550) was not planned by the

migrants. It almost certainly developed haphazardly. They did not feel the need to set aside a sacred space in their early community, as models of planned centrally directed "colonisation" would require. Instead, they seem to have conducted their early religious practices either within their homes or in open spaces.

Two building phases are evident in the temenos. In the first, it was surrounded by a stone and mudbrick wall. In the second phase, the space was reduced (Nazarov 2007: 548). The temple itself may belong to either phase, though Sergey Kryzhitsky inclines towards the second due to the placement of the temple vis-à-vis the first phase peribolos wall. The altar is aligned with the second wall. Nevertheless, both phases are found within a single stratigraphic layer and the time difference between them is thought to be negligible (Kryzhitsky 2005: 270).

The temple itself is a small (5.72 x 4.25 m) in-antis structure in the Ionic style with a naos and pronaos facing the southeast (Kryzhitsky 2009; 2010: 97-98; Nazarov 2007). The upper courses were made of mudbrick on a stone socle base which has survived (Kryzhitsky 2005: 271). The pronaos seems to have been floored with a stone pavement, while it is thought that the area at the front of the temple was paved with crushed ceramic material (Kryzhitsky 2005: 274). The absence of roof tiles was noted during the excavation. It seems probable, therefore, that the roof of the temple was made of reeds covered with adobe (Nazarov 2007). The sanctuary's altar, made of a circular single limestone block with analogies in the eastern temenos at Olbia, was situated to the east of the temple (Kryzhitsky 2005: 261).

The identification of Aphrodite as the focus of worship is evidenced in the epigraphic record, small finds, and paleozoological material. This can usefully be compared with the material found at the temple of Aphrodite Oikous on Zeytintepe at Miletos (Kryzhitsky et al. 2003: 468). Numerous pieces of pottery were painted or inscribed with the legends "A" and "AE", denoting Aphrodite, while the evidence for animal sacrifice is "almost identical" between Berezan and Zeytintepe (Kryzhitsky 2005: 263; Nazarov 2007: 547).

Amongst the small finds uncovered in the temple and temenos area there were numerous fragments of terracotta statuettes, including a seated goddess, a goddess with a bird, a fragment of a horse's head and turtle figurines, all of which find analogies at Zeytintepe (Kryzhitsky 2005: 262; 2009: 13-14; Nazarov 2007: 546-47). Other finds, including figured vessels, a Bronze Age knife, a bronze necklace, a lead pigeon figurine, and numerous pieces of pottery, including Ionian amphorae and a *kylix*; also find analogies within the Zeytintepe material (Kryzhitsky 2005: 262; Nazarov 2007: 546-47).

III.2.1.6 Dionysopolis

Religious evidence from Dionysopolis can almost exclusively be dated to the Hellenistic period. Firstly, Aphrodite is named on an inscription from the fourth century (*IGBulg* 12 19; (Damyanov 2007: 6). Then there is the apocryphal tale of its eponym, whereby a statue of Dionysus was reportedly washed up on the shore near the town formerly known as Krounoi (Ps-Skymnus 751-7), which may date back to this period (Damyanov 2007). The only cultic structure extant at the site is the impressive temple dedicated to the Pontic Mother which was uncovered in 2007 (Lazarenko et al. 2013). Its construction is dated to between 280-260 (Lazarenko et al. 2013: 27) and the complex may have hosted other deities such as Poseidon (Lazarenko et al. 2013: 58) A sole third century inscription attests to the presence of Demeter at Dionysopolis (*IGBulg* 1², 21; (Damyanov 2007: 7).

III.2.1.7 Dioskourias

Our knowledge of the religious landscape of Dioskourias is restricted to observing the eponymous nature of its name. This may lead us to suggest some worship of the Dioskcuri at the site (Avram, Hind, and Tsetskhladze 2004: 953). David Braund notes that the Dioskouri were also identified at the Kabeiroi, who had links to Apollo at Branchidai-Didyma (Braund 1994: 98). This may imply a Didymaian foundation oracle for Dioskourias.

III.2.1.8 Hermonassa

The range of deities worshipped at Hermonassa is attested to by a range of fourth century inscriptions. A pair of inscriptions, dated to the reign of Leukon I (389-349), name Apollo with the epithets Ietros and Delphinius.²¹⁹ Ephesian Artemis is attested in the reign of Leukon's successors, Spartokos II and Paerisides (349-310) (*CIRB* 1040; Ehrhardt 1988: 154; Braund 2018: 102-04). Finally, Aphrodite, bearing the epithets Ourania and Apatouria, can also be dated to the fourth century (*CIRB* 1041, Braund 2018: 223).

III.2.1.9 Istros

Evidence for cult activities in Istros during the Archaic period are concentrated in the area known as the "sacred zone".²²⁰ The earliest religious structures in this area consists of a small *bothros* (1979/1), around 2 meters west of the later site of the temple of Zeus. It contained ceramic materials from the last decades of the seventh century (Alexandrescu 2005: 66). These included Middle Wild Goat ware, dating between 630 and 620, and some fragments of a Lesbian amphora from the last quarter of the seventh century (Alexandrescu 2005: 202).

Two further early deposits (1976/1 and 1981/1), both dated to the first quarter of the sixth century, have also been identified in the "sacred zone". *Bothros* 1981/1, located just north of 1979/1, contained a pair of North Ionian Wild Goat style amphorae of which one, in the "Levitsky" style, can be dated to

²¹⁹ *CIRB* 1037, 1038. See also Ehrhardt (1988: 141) and Avram, Hind, and Tsetskhladze (2004: 945).

²²⁰ Most scholars are of the opinion that this area represents the Acropolis of Istros e.g Alexandrescu (2005: 61)

the first third of the century. In addition, a Middle Corinthian skyphos, 3 East Greek bowls, a turn of the century Samian cup, and two small convex lamps, were amongst other finds (Alexandrescu 2005: 66). The second *bothros*, 1976/1, was underneath the platform of the future Aphrodite temple in the southern part of the site. It contained a Milesian "type a" cup, as well as numerous East Greek amphorae, a Hallstatt pot and a lamp (Alexandrescu 2005: 66).

While these *bothroi* may represent the earliest evidence for cult activity at the site, it is almost certain that the large natural feature excavated between 1998 and 2004, known to scholars as the "sacrée fosse", located south east of the Aphrodite temple, can be identified as a prime motivation for locating the religious life of the city here (Zimmerman 2000: 249; Alexandrescu 2005: 62-62, 85; Alexandrescu Vianu 2011: 26). Yet the pit itself, which was artificially deepened and given supporting and dividing walls, contains no material predating the fourth century (Avram, Margineanu-Cârstoiu, and Zimmerman 2007: 243). The excavators have raised the possibility that this is the result of periodic removals of material (Avram, Margineanu-Cârstoiu, and Zimmerman 2007: 243). In our view, this explains why a nearby *bothros* (1972/1) contained material stretching from the end of the seventh century to the third quarter of the sixth.²²¹

²²¹ (Avram, Margineanu-Cârstoiu, and Zimmerman 2007: 66, 79). This *bothros* contained the lid of a North Ionian Late Wild Goat *deinos*, a Chiot "Animal Style" cup, a middle Corinthian

The "sacrée fosse" was linked to the various cult buildings of the sacred zone through a series of installations. East of the temple of Aphrodite, a set of stone steps, which led down to the edge of the sacrée fosse, may have been used as a viewing platform for observing depositions and rituals at the pit (Alexandrescu 2005: 87; Avram, Margineanu-Cârstoiu, and Zimmerman 2007: 243). Furthermore, a sacrificial block, labelled monument " η ", located in front of the future temple of Zeus, and an adjoining gutter " ω ", which ran down towards the sacrée fosse, indicated that the blood of sacrificial animals, probably dedicated to Zeus, was intended to travel down the channel and into the sacrée fosse, an unusual practice which has few contemporary analogies (Alexandrescu 2005: 89; Alexandrescu Vianu 2011).

Beneath the podium of the future Aphrodite temple, fire altar "b" was discovered in 1963. Its location and alignment suggest that the worship of the Goddess belonged to the earliest period of the settlement (Alexandrescu 2005: 68). Furthermore, overlying fire altar b, a small structure, termed the "oikos" in the literature, was uncovered. It was built on a limestone foundation and prefigured the alignment of the subsequent temple (Alexandrescu 2005: 68). It has been theorized that this structure, constructed from an ephemeral material, may have been an earlier temple (Zimmerman 2000:249). This argument was

aryballos and a number of other materials. The latest deposit is an Attic cup from the third quarter of the sixth century.

substantiated by the discovery of an inscribed Archaic roof calypter in 1976.²²² According to Zimmerman, the inscription, rendered *boustrophedon* in the Ionian alphabet, exhibits some characteristics of the early decades of the sixth century (Zimmerman 2000: 250 n.27). It suggests that the tile was dedicated to the goddess, though whether during its manufacture, or before its deposition, is unclear.²²³ At any rate, the worship of Aphrodite in the context of the sacrée fosse, ritual fire "b", and the "Oikos" building, seems to have begun at the very beginning of the settlement at Istros. A strong tradition of worship, centred around the natural features of the site, was well established prior to the construction of the Archaic temple.

Aphrodite's temple itself, monument "I-J", was constructed between the middle and third quarter of the sixth century (Alexandrescu 2005: 73-74), possibly around 540 (Avram, Margineanu-Cârstoiu, and Zimmerman 2007: 241). This, in-antis, structure faced south and its foundation platform overlapped the western edge of the "sacrée fosse". Excavation of the Archaic structure uncovered a large number of votive objects presumably comprising

²²² Zimmerman (2000: 247-50). The layer in which the tile was found contained material predominantly from the first half of the sixth century including a fragment of a North Ionian LWG style plate, a fragment of a Chiot amphora and a terracotta statue representing Aphrodite. Zimmerman also notes that the context of the finds suggests a ritual burial of inventory from the old temple.

²²³ (Zimmerman 2000: 251). The practice of dedicating architectural elements may also have occurred at Olbia, see Zimmerman (2000: 248 n.44).

the inventory of the building. These included terracotta statues, East Greek style shields, fragments of lamps amongst other objects (Alexandrescu 2005: 75-78).

Like Aphrodite's temple, the temple of Zeus (monument "A") was also prefigured by a small fire altar ("a"). This was discovered in 1951, underneath the temple's adyton (Alexandrescu 2005: 67, 202). Its remains have been dated no earlier than the second quarter of the sixth century, though the stratigraphy of the area is difficult to untangle (Alexandrescu 2005: 202). Nevertheless, its location and date strongly suggest that, like fire altar "b", it represents the nascent beginnings of the cultic activity relating to the deity for whom a temple would later be constructed. According to Alexandrescu, the temple itself can be dated to roughly the third quarter of the sixth century (2005: 82). Its identification with Zeus is based on several inscriptions bearing the legend " Δ I" in the Ionian dative. The earliest attestation can be found on an Attic blackglazed cup from the third quarter of the fifth century (Bîrzescu 2006: 169). Despite the relative lateness of attestations for the presence of Zeus worship here, the continuity of worship of Aphrodite strongly indicates that we should identify the earliest structures as relating to his cult.

The third main temple structure in Archaic Istros, monument A', was constructed around the same time. Situated on the eastern side of the Zeus temple, only a small part of it has been excavated due to the encroachment of Lake Sinoe on the eastern part of the Sacred Area. It has been tentatively identified as belonging to Apollo due to a number of *kouroi* uncovered in the vicinity, though, to date, no epigraphical evidence has been able to confirm this identification (Alexandrescu 2005: 83-84).

III.2.1.10 Kardia

Demeter is depicted on Karian coinage from around 350 (Tzvetkova 2009: 38). Moreover, images associated with Apollo, found on numismatic evidence, have been compared to contemporary Milesian coinage (Ehrhardt 1988: 34, 134, 302 n. 200; Tzvetkova 2009: 41).

III.2.1.11 Kepoi

The worship of Aphrodite at Kepoi can be traced back to the Archaic period. During the 1970 season, excavation in the northwestern coastal part of the site uncovered the foot of a black-glazed Attic *kylix*. This object bore a dedication to Aphrodite, dated to the last years of the sixth century (Sokolsky 1973; Tsetskhladze and Kuznetsov 2000: 353). Furthermore, in the immediate vicinity, a number of ceramic materials, including plates and other wares without handles, were uncovered with small holes drilled in them to facilitate their display (Tsetskhladze and Kuznetsov 2000: 354). Therefore, it has reasonably been concluded that an Archaic sanctuary and/or temple to Aphrodite lay somewhere in the vicinity. Her worship can potentially be dated as early as the second quarter of the sixth century, based on the of the ceramic materials uncovered (Sokolsky 1973; Tsetskhladze and Kuznetsov 2000: 353-

54).²²⁴ Furthermore, it has also been suggested that the name of the dedicand of the *kylix*, Molpagoros, indicates a connection with Apollo Delphinius and his priesthood at Miletos the Molpoi (Ehrhardt 1988: 141-2). However, given that this name is also attested at Miletos and Olbia in the late sixth and early fifth centuries,²²⁵ it is just as plausible to view these individuals as migrants from Miletos as it is to suggest an analogous institutions in Kepoi and Olbia.

III.2.1.12 Kerkinitis

The earliest evidence of religious practices at Kerkinitis consists on an in-antis temple on the shores of Lake Moinaks'ke, for which evidence for roof tiles and architectural terracottas have been identified (Kutaisov 2003: 576; 2013: 149). While the deity to which this edifice was dedicated is unclear, it is possible to distinguish a number of potential cults in the city. An Attic black-glazed cup, inscribed "APTEMI $E\Phi E\Sigma H$ ", and dated between 480-460, provides the earliest definitive evidence for a named goddess, Artemis Ephesia (Kutaisov 2003: 166; 2013: 150). In the fifth century, Athena is identified through a graffito, while three skyphoi bear the legend "AII", almost certainly designated Apollonine worship (Kutaisov 2013: 151). By the fourth century, Zeus is attested on coins and Attic ceramics, while a gray clay jug inscribed "EPM" suggests Hermes was worshipped there (Kutaisov 2013: 155-6).

²²⁴ Previously a Hellenistic temple to Aphrodite, dated to the middle of the second century, was discovered on the eastern edge of the excavated area. See Sokolsky (1963).

²²⁵ Miletos: Hdt. 5.30; Milet I (3) 122 I, 29, 35; Milet I (3) 122 I, 40; Milet VI (3) 1360 I, [14]. Dubois (1996: no.44).

Evidence for Demeter and Aphrodite is less secure. The former appears to be represented on protomes and terracottas around the end of the sixth century, while a terracotta Aphrodite holding a pigeon has been dated to the second half of the fourth to the beginning of the third centuries (Kutaisov 2013: 152, 56).

III.2.1.13 Kios

Apollo Delphinius was probably worshipped at Kios, judging by the list of donations to the temple of Apollo at Didyma in 276/5, where mention is made of a "*phiale* from the Kians".²²⁶ An undated inscription also attests to the presence of Demeter Karpophorus at Kios (Legrand 1893: 540).

III.2.1.14 Kromna

Depictions of both Zeus and Hera appear on coinage from Kromna from around 340 (Avram, Hind, and Tsetskhladze 2004: 959). Poseidon was also referred to as "Lord of Kromna" in the Hellenistic period (Lycoph. *Alex*. 522 schol.; Ehrhardt 1988: 173).

III.2.1.15 Kyzikos

Kyzikos was said to be home to the oldest temple to Athena in Asia (*Anth. Pal.* 6.342). Many scholars have associated this with the temenos for Athena

²²⁶ IDidyma 427; Avram, Hind, and Tsetskhladze (2004: 982-83). This tradition was evidently a periodic commitment as we hear of the Kian's attempted to be exempted from their obligations to dedicate *phialae* in an inscription from 228 (*Milet* I 3, 141).

*Polias.*²²⁷ This may indicate the transfer of the cult from Miletos in the early years of the migrant settlement. Kyzikos retained a close connection with its metropolis, possibly from an early period (i.e. *Milet* I.3 137), yet Athenian interests in the region in the Classical period may also have contributed to the presence and prestige of this cult.

A temple to an unidentified deity is attested in the sixth century. An inscription has been found, which records the method of funding used to pay for the construction of its roof - through income from temple estates and the sales of the skins of sacrificial victims (Ruzé and Van Effenterre 1994: 288 n.74). Whomever this temple was dedicated to, the inscription provides us with useful information on the organization and resources of cultic associations in the city, at a relatively early period.

There is good evidence to suggest the presence of Apollonine cult at Kyzikos.²²⁸ The earliest mention of Apollo in relation to Kyzikos comes from Hekataious, who notes that his worship was pronounced on the border between Alazone and Kyzikene territory (*BNJ* 1 F217). Whether this should be taken to indicate that his cult had come to the Alazones from Kyzikos, or whether a local god of the region was interpreted as Apollo by Hekatious or his informant, cannot be answered. In any case, by the end of the sixth century, Apollo was

²²⁷ SEG 28 943; Sève (1979: 359). See also Hasluck (1910: 236); Avram (2004: 985).

²²⁸ See Herda (2016: 100-10), for an overview.

present in the region around Kyzikos, probably at the city itself (Avram 2004: 985).

Numerous epithets are attested for Kyzikene Apollo. These include Patrous (Aris. *Or.* 11), Ekbasios (Ap. Rhod. *Argon.* 1.960), Iasonius (*BNJ* 471 F5) and Cyzikenos (Schol. Ap. Rhod. *Argon.* 1.960); though many inscriptions carry no epithet.²²⁹ Apollo also seems to have been known as *archegetes* at Kyzikos (Aris. *Or.* 16), which may imply that the city was established by an Apollonine oracle. However, this view is rejected by Hasluck, who cites numerous examples of *archegetes* cult from Anatolia which do not relate to oracular foundation (Hasluck 1910: 228-30).

A handful of other deities can be identified at Kyzikos in the Classical period. Those appearing on the city's coinage and in inscriptions from the fifth to fourth centuries, include Ge *Karpophorus (SGDI 2970)* and Poseidon (Hasluck 1910: 235-36; Ehrhardt 1988: 173). Kore is also attested by literary sources (App. *Mithr*. 75). Around this time Kybele/Metros also seems to have been an important tutelary deity of the Kyzikenes (Hdt. 4.76; Hasluck 1910: 214-22). By the late Hellenistic to Roman Imperial periods, there is evidence for Aphrodite (Hasluck 1910: 236) and Zeus (*CIG* 2017).

²²⁹ See (Ehrhardt 1988: 135, 428 n. 16, 18), for further inscriptions, some with alternative epicleisis.

Very little is known of the religious life of Lampsakos in antiquity. An inscription from the second century identifies Dionysus and Asklepius (IMT NördlTroas 4), while Pausanias (9.31.2) claims that Priapos was held in high regard there.

III.2.1.17 Leros

According to the fourth/third century writer, Klytos of Miletos, there was a temple to Parthenos on Leros (*BNJ* 490 F1). It may have been located at the site of the convent of Parthenia, on the island's northern tip. In the vicinity of the temple were numerous *meleagrides* (guinea-fowl) which may have been considered sacred.²³⁰ Their presence may have been connected to Artemis role as huntress, but whether they were kept by the priests of the sanctuary is uncertain. The site remains unexcavated, leaving any attempts to date it uncertain, though some religious function may go back to the Archaic period.

III.2.1.18 Myrmekion

The earliest religious structure at Myrmekion is a large building, discovered in sector I. It contained an altar overlain with a later ash mound in the middle of the fifth century (Butyagin and Chistov 2006). Attic black-glazed cups, with graffiti reading "EPM", dating from the first half of the fifth century, have been found there. However, given that a black-glazed *kylix* reading

²³⁰ According to a fragment of Istrus BNJ 334 F 60), they were left untouched by birds of prey.

""[I]EPH AΦPO Δ I[H Σ]" (Heiron, for Aphrodite) was also found there. This suggests that the previous inscription may actually be the name of a dedicator (Vinogradov and Tokhtasev 1998: 22; Vinogradov, Butyagin, and Vakhtina 2003: 815-16).

Several objects with dedicatory graffiti have also been found at the foot of the Myrmekion acropolis, confined to an area around 4 m². They probably came from sanctuary or temenos, serving a variety of deities, located above (Vinogradov and Tokhtasev 1998: 25). The earliest is a black-glazed bowl from the end of the sixth to the beginning of the fifth centuries inscribed "NYM Φ H" (Vinogradov 1998: 32-34 no.5). A black-glazed kylix on a high stand dedicated to Apollo Ietros ("AONEITP"), and a black-glazed skyphos dedicated to Herakles ("IEPHPA"), both date between 475 and 460 (Vinogradov and Tokhtasev 1998: 25-29 no. 1, 34-37 no. 5). Another black-glazed cup, found elsewhere, attests to the worship of Zeus between the end of the sixth and the beginning of the fifth centuries (Vinogradov 1998: 37 no. 6), while the Mother of the Gods appears on an Attic bowl from the end of that century (Vinogradov 1998: 22). Finally, despite the ash hill mentioned above being labelled the "Demeter sanctuary" (Butyagin and Chistov 2006), the first attestation of her worship does not appear until the fourth century, in the form of " Δ H" graffiti and a number of statuettes (Vinogradov and Tokhtasev 1998: 23; Vinogradov, Butyagin, and Vakhtina 2003).

Milesian migrants at Naukratis seem to have been involved in the establishment of the city's cults to Apollo and Aphrodite (Knight 2019). The sanctuary of the latter is as one of the oldest in Naukratis (Möller 2000: 102-04). It has been convincingly proposed, based on the prevalence of Aphrodite sanctuaries in other Milesian migrant settlements as well as the importance of her extramural cult in the emigrant settlement, that worship of Aphrodite at Naukratis was instituted by Milesian migrants (Greaves 2004: 30; Knight 2019).

Likewise, Apollo was probably worshipped there from the beginning of the settlement in the late seventh century, first in an open temenos, followed by the construction of a temple at the beginning of the second quarter of the sixth century (Möller 2000: 79-80). While the earliest dedications indicate no epithet (Ehrhardt, Höckmann, and Schlotzhauer 2008: 170), large numbers of later inscriptions testify to the epithet 'Milesios' (Petrie 1886: 60-62, Nos. 2, 99, 110, 218, 19, 33, 34, 37, 341). The use of this title may have been a conscious attempt to invoke connections with the emigrant community, while also representing a form of self-aggrandisement aimed at other Naukratite immigrant communities (Knight 2019). The cult itself seems to be characterized by tutelary elements regarding youths and warriors (Ehrhardt, Höckmann, and Schlotzhauer 2008: 172), while communal dining also seems to have taken place there (Villing 2006: 35-36). Two cult buildings have been identified in the central and southwestern areas of Nikonion. The former, contained a number of terracotta statuettes of female deities which have been identified as Aphrodite (Sekerskaya 1987: 27). These included the head of an enthroned goddess of Rhodian-Milesian type, part of a seated figure in a hieratic pose with analogies from Berezan and Olbia in the sixth and fifth centuries, and the upper part of an enthroned female dated to the end of the sixth century. While N. M. Sekerskaya has identified all three as depictions of Aphrodite (Sekerskaya 1987: 27), it is also possible that they may represent Demeter. The difficulty of differentiating between the two goddesses at Nikonion is further emphasized by the material discovered in the southwestern cult building.

This edifice, labelled semi-dugout no. 6, seems to have been constructed around the middle of the sixth century (Sekerskaya 1987: 28; 2001: 71). It consisted of a two chamber room, with a partition clearly visible on the floor surface (Sekerskaya 1987: 28). It was dug 1.25 m into the ground and covered an area of 25.48 m² (Sekerskaya 2007: 490). The northwestern portion of the structure, measuring 8 m², included two square platforms which seem to have held portable braziers (Sekerskaya 1987: 29; 1989: 98-99; 2007: 490). In the southeast corner, a small niche was cut into the wall and the space in front of it showed evidence of burning and was delineated by a small mudbrick fence. A hollow in front of this feature contained fragments of small ring-shaped glass beads (Sekerskaya 2001: 71). It is likely that a *xoanon* or statuette stood in the niche, and the traces of burning came from ritual activities there.

A metre to southeast, a second structure, which seems to have been connected, was uncovered. It contained the skeleton of a tortoise laid out in anatomical order and several "rounded stones" (Sekerskaya 1987: 29; 2001: 71; 2007: 500; Savelyeva 2018: 41). These features have led scholars to propose that the deity associated with the structure was worshipped in a chthonic guise, most likely Aphrodite or Demeter (Sekerskaya 1987: 29; 2007: 499-500; Savelyeva 2018: 41). There is also the possibility that Dionysus was worshipped at the site (Sekerskaya 1987: 33-35; 1989: 99; Savelyeva 2018: 43). Nevertheless, both goddesses are well represented in the assemblage of Nikonion.

Numerous terracotta figures, including a standing goddess and a goddess with a pigeon, both dating from the fifth century, are interpreted as images of Aphrodite (Sekerskaya 1989: 104-05; Savelyeva 2018: 41, 44-45). Furthermore, a series of ceramic cones, dating from the sixth or fifth centuries, may also represent votive dedications of Aphrodite (Savelyeva 2018: 43). A number of terracotta statuettes have also been identified as representations of Demeter (Sekerskaya 1987: 29). Amongst these are a fragment of the torso of a seated female from the second half of the sixth century (Sekerskaya 2007: 481 fig. 9.6), an enthroned goddess from the late sixth to the early fifth centuries, and a number of squatting statues which, according to Sekerskaya, may also point to links between Demeter at Nikonion and the Kabeiroi (1987: 32-33). An

Attic protome from the same period, may represent Kore/Persephone (Sekerskaya 1987: 30). Graffiti reading "K", on numerous pieces of ceramics from the sixth and fifth centuries, may also support the view that Kore/Persephone was worshipped alongside her mother at Nikonion (Sekerskaya 1987: 30). Other graffiti found across the site may also shed light on the cults of Nikonion. The legend "H", inscribed on a fragment of black-lacquered Attic pottery from the sixth or fifth centuries, has been taken to demonstrate the worship of Hera or Herakles (Golovko 1966: 79 no. 16; Sekerskaya 1987: 36), though the material from the site offers several other interpretations, including marks of ownership (Golovko 1966).

On a black lacquered vessel from the fifth century, "AOI" is found, indicating that it was possibly a votive dedication to Athena (Golovko 1966: 79 no. 18; Sekerskaya 1987: 36; 1989: 110). The combination of a fifth century bone carved image of Kybele, and the presence of graffiti reading "ME", may also indicate the worship of Kybele/Metros (Sekerskaya 1987: 31; 1989: 103-04). Finally, "AP" is also found inscribed on a number of objects, particularly fishdishes. Sekerskaya suggests that this means Artemis was worshipped, as Agrothea, with a particular connection to the settlements fishing industry (Golovko 1966: 79 no. 10; Sekerskaya 1987: 32; 1989: 107-08).

Overall, most scholars have tended to view the pantheon of Nikonion as heavily influenced by agrarian deities, principally concerned with fertility and "colonisation" (Golovko 1966: 79; Sekerskaya 1987: 36; Savelyeva 2018: 43). While this is true to an extent, there also seems to be a significance to the chthonic elements of the cults there in the sixth and early fifth centuries. The importance of chthonic manifestations of deities such as Demeter, Aphrodite and Dionysus; may indicate the need to appease those deities inhabiting the earth, on which the first migrants constructed their homes and settlements, as much as to propagate the fertility of the soil required for successful agriculture.

III.2.1.21 Olbia

The combination of extensive excavation over a century, and the nature of the architectural and material finds from Olbia (Rusyaeva 2003: 94), ensures that we are able to reconstruct its religious life in more detail than any other Milesian migrant community. The earliest religious activities at the site can now be dated between the end of the seventh and the beginning of the sixth centuries (Bujskikh 2015: 223 n.5). Contemporaneous with the arrival of the first migrants, a sacred area was mapped out conventionally termed the "Western temenos" (Rusyaeva 1995: 97-98).

The main excavations in this area were conducted under the aegis of Anna Rusyaeva in the latter half of the 20th century CE (Rusyaeva 2003: 93). In the earliest layers, she uncovered evidence for a number of ephemeral cult constructions, including bonfires, wooden altars, votive materials and several *bothroi* (Rusyaeva 2003: 95). This indicates that the initial migrants were practicing religious rites in a defined space, but did not feel the need to implement strict differentiation between different deities or cult practices (Rusyaeva 2003: 95). The use of fire rituals throughout the life of the temenos, particularly in the early period, have been interpreted by Rusyaeva as being closely connected to Apollo Ietros. They provided, in her words, a "life basis in a new land" Rusyaeva (2010: 72). In the first half of the sixth century, half a dozen pyres ranging in diameter from 1.2 to 1.8m can be identified. These contained some of the oldest votives to Ietros uncovered at Olbia (Rusyaeva 2003: 96). Therefore, the earliest identifiable deity in the Western Temenos is Apollo Ietros, "le dieu protecteur par excellence des colons", by Rusyaeva's reckoning (1999: 76). By the second half of the sixth century, a small mudbrick temple on limestone foundations seems to have been constructed (Rusyaeva 1995: 82). Its orientation and design have drawn parallels with the temples of Miletos, while the presence of coloured terracotta tiles, similar to those adorning the temples of the emigrant settlement, have encouraged the excavators to suggest that it was constructed by Milesian craftsmen. They may even have brought these architectural decorations with them during their migration (Rusyaeva 2003: 98).

By the end of the sixth century, this edifice had been replaced by a new sanctuary to the god.²³¹ This building contained inscriptions identifying it as the *Ietroon* (Rusyaeva 1995: 84). A small patch of burning, noted on a paving stone, has been conjectured to represent the remains of Olbia's public hearth (Rusyaeva 1995: 84; 2010: 70). This further strengthens the argument that

²³¹ Rusyaeva (1999: 83; 2010: 69). See Kryzhitsky (1997), for a discussion of the surviving architectural elements and a reconstruction.

Ietros functioned as the patron and tutelary deity of the community and that the *Ietroon* played the same role as the Delphinion at Miletos.

Alongside the sanctuary to Ietros, the Mother of the Gods seems to have received significant worship in early Olbia.²³² Her sanctuary was identified by the presence of votive graffiti reading "MHTPOΣ", found on fragements of fifth century pottery, found southeast of the Ietros sanctuary (Rusyaeva 1995: 87). Furthermore, a late sixth century votive stele bearing her image, with parallels at Miletos and other Milesian migrant communities, has been identified in a disturbed layer dated to the Hellenistic period (Rusyaeva 1995: 87-89; 2010: 74). Scholars have also suggested Metros may be an alternative title for Rhea, Hera, or Kybele (Rusyaeva 2010: 75). Even so, the Metros temple at Istros provides a clearer analogy.²³³

In the third quarter of the sixth century, Apollo was worshipped under the epithet Boreas in the Western temenos. An inscription, on the neck of a Klazomenian amphora from this period, details a dedication of honey to the god in this form, by one Anaperres son of Anacharsis.²³⁴ According to Rusyaeva, this cult was instituted as a form of "sacral protection" in the lands of the Northern

²³² Rusyaeva (2003: 96; 2010: 69) places the earliest votive around 560-550, though the redating of the early material at Olbia by Alla Bujskikh (2015: 223 n.5) may indicate a date in the first decades of the sixth century.

²³³ See also Ustinova (1999: 63-64), for the worship of Kybele in the Bosporan Kingdom.

²³⁴ Rusyaeva (2003: 97; 2010: 100). The suggestion that this Anacharsis is the well-known Skythian remains speculative.

Black sea by the early migrants (Rusyaeva 1999: 76-77; 2003: 96). This tutelary role is certainly one that Apollo fulfilled in a number of guises in the region, but it may be a more generic representation of the Apollo present at the source of the north wind and linked to his visitations of the Hyperboreans.

Aphrodite also seems to have received worship in the western temenos in the form of a small enclosed sanctuary.²³⁵ This is evidenced by an inscription found on a fragment of Attic red-figure pottery from the first half of the fifth century which reads "A Φ PO Δ I[T'H Σ]|ABAT[A]" (SEG 30 975; Dubois (1996: 120 no. 71b). Aphrodite was also worshipped in tandem with Hermes and there is evidence for a shared sanctuary to the pair from the first half of the fifth century.²³⁶

Just outside the boundary of the western temenos, a fifth century blackglazed Attic cup was uncovered in a *bothros* with an inscription which may allude to the existence of a sanctuary for Demeter (Rusyaeva 1995: 102). The exterior inscription reads:

$`` \Xi A N \Theta I \Pi \Pi \Omega \Sigma | \Delta H M H T P I | \Pi E P \Sigma E \Phi O N H | I A K \Xi \Omega I | \Delta H M H T P I O N"$

²³⁵ (Rusyaeva 1995: 90-91). Rusyaeva (2003: 96; 2010: 76) suspects that Aphrodite was probably worshipped at Olbia from the beginning of the settlement but, thus far, excavations have failed to provide support for this argument.

²³⁶ Rusyaeva (1995: 90). For the role of the pairing of Aphrodite and Hermes in initiation rituals, see Marinatos (2003) and Schindler (2007) for their cult at Epizephyrian Lokri.

(Dubois 1996: 127-28 no. 79).

While some scholars have interpreted the use of the accusative " $\Delta \eta \mu \dot{\eta} \tau \rho \iota \sigma$ ", as indicating a temple to the goddess (e.g. Rusyaeva 1994: 102), Laurent Dubois has argued that this is a mistake by the scribe who intended to write " $\Delta \eta \mu \dot{\eta} \tau \rho \iota \sigma$ " or " $\Delta \dot{\eta} \mu \eta \tau \rho \iota$ ", the latter simply repeating the deity's name in the dative (Dubois 1996: 128). Nevertheless, the absence of a specific sanctuary to Demeter at Olbia,²³⁷ stands in contrast to other Milesian migrant communities, and, indeed, the emigrant community itself. It is, therefore, reasonable enough to assume that a shrine or altar to her was present in the sacred area by the fifth century.

Finally, in the western temenos, there is evidence in the form of numerous scattered inscriptions which attests to the worship of the Dioskourai there, possibly as maritime gods (Rusyaeva 1995: 93; 2010: 69). A votive Black Figure bowl with an iconographic scene depicting the birth of Athena, is also thought to attest to her worship in the western temenos, but a lack of further evidence leaves this claim uncertain (Rusyaeva 2003: 100; 2010: 77).

In the second half of the sixth century, a second temenos was laid out adjacent to the western one (it is called the eastern or central temenos in the literature). The two temene were separated by a street, 10 to 11 m wide, which was likely used for processions, festivals and sporting occasions (Rusyaeva

²³⁷ Though she was worshipped in the Chora at Cape Hippolaus by the fifth century at the latest (Hdt 4.53).

1999: 76; 2003: 94; 2010: 66). The early temenos seems to have consisted of "primitive" cult buildings and sacred groves, which were replaced by a temple in the final third of the sixth century (Rusyaeva 2010: 67). According to Rusyaeva, the early layout may have been reminiscent of the Delphinion at Miletos, as a bounded open-air sanctuary with a central altar.²³⁸ Material from the final quarter of the sixth century, also indicates that Athena and Zeus were probably worshipped in the eastern temenos (Rusyaeva 2010: 67).

A third temenos, on the south eastern tip of the city, has recently been excavated, though some scholars had suspected its existence prior.²³⁹ The location itself would have made the buildings of the temenos visible as one approached the entrance to the Bug river, while the existence of secular structures pre-dating its construction demonstrates that its construction was not anticipated at the time of the settlements establishment (Bujskikh 2015).

The southern temenos seems to have been constructed around the end of the sixth to the beginning of the fifth centuries. It was principally dedicated to the worship of Aphrodite. There was a small temple at this time, though no enclosure or altar has yet been identified (Rusyaeva 2015: 234, 38). Its

²³⁸ Rusyaeva (2010: 67). This notion seems to be predicated on Rusyaeva's theory that the sanctuary was established by a second wave of Milesian migration fleeing the Persian invasion who established the Delphinios sanctuary in opposition to the earlier migrants Ietros worship. ²³⁹ Bujskikh (2015: 225). The earliest finds, at the beginning of the 20th century CE, included part of an altar of likely Milesian origin dated to 520-510, a fragment of a marble kouros and painted terracottas similar to those found in the western temenos.

identification with Aphrodite is based on graffiti bearing the goddess' name. The earliest appears in a *bothros* dated between the last quarter of the sixth and the first quarter of the fifth centuries (Bujskikh 2015: 226-28). A fragment of a black-glossed cup, dated between 525 and 500, is adorned with the inscription " $[A\Phi PO\Delta]ITH\Sigma|\Phi[or \Omega?]$ ".²⁴⁰ A black-glossed *kylix*, found in 1938, attests to the presence of a shrine. The inscription, " $[A\Phi PO]\Delta ITH\Sigma|H|KY\Lambda I\Sigma$ " indicates that the cup was a possession of the goddess and thus that we are dealing with her sanctuary (Dubois 1996: 121 no. 72). Aphrodite in the southern temenos may also have been worshipped under the epithet "Demia" according to the epigraphic evidence.²⁴¹

Olbia also seems to have controlled a number of extra-urban cults which may have marked the sacred boundaries of its *chora* (Rusyaeva 2010: 77-78; 2007: 96). These included the racecourse to Achilles, the grove of Hekate (Ptol. *Geo.* 3.5.2), the sanctuary of Demeter on Cape Hippolaus (Hdt. 4.53) and the

²⁴⁰ Rusyaeva (2015: 260). The second word starting with a phi or omega could either represent an epithet of the goddess or the contents of the dedication.

²⁴¹ See Rusyaeva (2015: 259, 64-67), who draws attention to the parallel with Pausanias, where Aegeus and Theseus are said to have brought different forms of the goddess to Athens. She speculates that "Heros Angelos", who seems to have been worshipped in the southern temenos alongside Aphrodite, was thought to be an "Olbian citizen" who introduced Aphrodite's cult. Thesus' cult introduction of Aphrodite Pandemos is said to have occurred in the context of the synoikism of Attic and she wonders whether the Aphrodite Demia cult was likewise introduced during a period of nuceleation and widespread migration to Olbia.

shrine to Herakles, Borysthenis and the Mother of the Gods at Hylaia (Rusyaeva 2010: 77-78).

III.2.1.22 Odessos

Two structures of the turn of the sixth century, uncovered at the site of the later Roman baths of Odessos, have been identified as sanctuaries. The first, identified through the remains of a wall and the base of a Doric column, is thought to have been a temple to an unidentified deity, while the second has been identified as a temple to Demeter (Hoddinott 1975; Isaac 1986: 257; Preshlenov 2002: 22). The pottery remains found there, include Fikellura, Corinthian, East Greek ceramics, and Attic Black Figure *skyphoi* and *lekythoi* (Toncheva 1967).

There also may have been a temple to the city's patron deity Apollo as early as the fifth century.²⁴² Two Ionic columns, dated to the 480's, and a fifth century inscription, are thought to have come from this structure, while a head of an Apollo statues has also been dated to this period. (Minchev 2003: 243-45; Damyanov 2004-2005: 296; Girtzi 2015: 98; Isaac 1986: 257).

By the fourth century, there is evidence to suggest Dionysus was worshipped at Odessos (Girtzi 2015: 98). Athena can be identified on the city's

²⁴² Gočeva (1980, 1996, 1998). A Hellenistic temple to Apollo is more securely identified through the find of an architrave with the inscription "A $\Pi O\Lambda\Lambda$ " and nearby fragments which seem to have been part of decrees of the boule.

coinage from the third century (Girtzi 2015: 99). Poseidon is attested in the second century CE (*IGBulg* I² 67). In the Hellenistic era, other deities which are unattested in Archaic times also seem to have been worshipped, including Theos Megas and Phosphorus, possibly an epithet for Artemis-Bendis or Hekate (Hoddinott 1975: 50). The latter is further attested by the theonym Hekataious (*IGBulg* I² 89; 46), though this name is common and does not necessarily indicate the worship of Hekate.

In 2017, a number of ritual pits from the Archaic period were discovered during rescue excavations at 3-5 Tsar Ivan Shishman Str. These dated from the sixth to fifth centuries and contained Greek and Thrakian painted and coarse ware pottery, amphorae, roof tiles, charcoal, shells, animal bones and other small finds (Manolova-Voykova, Tenekedjiev, and Mircheva 2018). In addition to the *bothroi* found around the supposed temple of Demeter, which included the remains of sheep, goats, fish and shellfish (Toncheva 1967; Minchev 2003: 216), we get the impression of extensive religious practices in the early years of the settlement. The use of ritual pits may have been influenced to some extent by Thrakian practices. Finds such as imported pottery and roof tiles, which had another life before their deposition in these pits, suggest significant renewal of religious spaces in the first half century of the settlement's existence. This may have been due to increased migration to the site requiring more extensive cult spaces, though we must not rule out that it may also reflect the changing needs of the immigrants themselves, undergoing spiritual and ritual adaption to changing and potentially more settled conditions.

The earliest temenos at Pantikapaion seems to have been laid out on the upper plateau on the eastern side of Mount Mithridates. It was constructed a destruction event at the beginning of the third quarter of the sixth century (Tolstikov 2017b: 16-17). The evidence suggests that this temenos was principally dedicated to Apollo, Artemis and by inference their mother Leto (Tolstikov and Muratova 2013: 85). The earliest material, though limited in quantity, all points towards the worship of Artemis rather than her more distinguished sibling. First, there is the handle of an Etruscan strainer, discovered in 1949, with the inscription " $\Sigma \tilde{\omega}$ v 'Apteur 'Eqeo".²⁴³ The context of this discovery is not unproblematic. The layer in which it was found seems to have been subject to significant disturbance and contained other traces of metalwork which, as David Braund has pointed out, may suggest it contained scrap metal (2018: 106). Mikhail Treister tentatively suggests that it may have come to Pantikapaion as the personal possession of the leader of a group of

²⁴³ SEG 36 721. Braund (2018: 106-11) provides a thorough up to date treatment. For the object's identification, see Treister (1990), who also provides an assessment of previous discussions (165 n. 1-8). It is difficult to know what significance to place on Braund's ingenious suggestion that the vaguely anthropomorphic shape of the strainer handle, with its elongated "head" reminiscent of Ephesian Artemis' *polos*, may have engendered a pareidolic reaction in the dedicant and thus encouraged its use as a votive to the goddess (2018: 108-09). For further discussion, see Treister (2002: 154; 2007: 574-75); Tolstikov (2017b: 16).

Ephesian migrants around 540.244 We have already discussed the presence of multiple identity groups in Milesian migrant settlements and, while it is entirely feasible that these included Ephesians. Yet the institution of Aretmis Ephesia's cult at Pantikapaion need not be viewed as an "official" act. It is equally likely that the goddess had a personal meaning for an individual migrant who dedicated the strainer handle on this basis. Furthermore, the size of the object (9.7 cm long), and its complicated history, may suggest that it functioned at as a personal charm or amulet with tutelary functions, a context for small portable objects with analogies in other migration contexts, as well as in the Archaic Black Sea.²⁴⁵ The second piece of evidence to support the early establishment of Artemis Ephesia's cult, is a marble lamp uncovered in the 2011-12 excavation season. Analogous objects of this type are mostly found in sanctuaries of goddesses, particularly Artemis, which has led the excavators to conclude that it formed part of the votive or functional inventory of the Artemision at Pantikapaion.²⁴⁶ Similar material predominantly dates between the last quarter of the seventh and the first quarter of the sixth centuries, offering the possibility

²⁴⁴ Treister (1990: 167-68). Though cf. Braund (2018: 111-17) who argues that Artemis of Ephesos had a pan-Ionic role in the Archaic period and thus sees no need for Ephesian migration as a mitigating factor in her presence at Pantikapaion.

²⁴⁵ E.g. the Berezan Bone tablet. Cf. Onyshkevych (2002).

²⁴⁶ Tolstikov and Muratova (2013: 183-85); Tolstikov (2017b: 17). Similar lamps have been uncovered at shrines to Artemis at Ephesos, Samos and Brauron; as well as at Demeter's temple at Selinus, the Athenian Acropolis and Miletos.

that it was connected with rites to Artemis or another female deity in the predestruction city (i.e. before c. 550).

The earliest evidence for Apollonine worship at Pantikapaion, is an inscribed black-glazed *kylix* dedicated to Apollo Ietros, discovered in 1989, (Tolstikov 1992: 95 n.9). Between the end of the sixth and beginning of the fifth centuries, a monumental temple to Apollo was constructed on Mount Mithridates. Its identification is based on finds of architectural and decorative elements (Tolstikov 2010: 336-43; 2017b: 21-25). This structure would have been visible from anywhere in the bay of Kerch and was likely a significant landmark for travelers by sea (Tolstikov 2010: 350; 2017b: 25). Similarities in style and layout have been noted with the temple of Athena at Miletos. This led Tolstikov to surmise that its construction was funded by wealthy Milesian immigrants fleeing from the circumstances surrounding the Ionian revolt, It may even have been built by the self-same craftsmen as the Athena temple at Miletos (Tolstikov 2010: 351; 2017b: 25).

Other cult structuresm from the end of the sixth century, may have included the Tholos (Treister 2002: 152), and a rectangular "sacred" building from the last third of the century, which contained a number of statuettes (Tolstikov and Muratova 2013: 186 fig 10). We might tentatively identify the latter as connected to the cult of Artemis, while the Tholos' location, amongst a cluster of civic buildings, might lead us to speculate its function as a *hestiatorion*. In the Hellenistic period there may also have been a temple to Aphrodite.²⁴⁷ Other deities worshipped at Pantikapaion include Zeus (Tolstikov 1992: 95 n.11), Dionysus (Tolstikov 2003: 719), Demeter (*CIRB* 8), and Poseidon (*CIRB* 30).

III.2.1.24 Parion

According to Norbert Ehrhardt, Apollo can be identified at Parion, through epigraphic and numismatic evidence (1988: 134).

III.2.1.25 Phasis

Our knowledge of the religious landscape of Archaic and early Classical Phasis is largely informed by a single votive inscription.²⁴⁸ In 1899, a silver, mesomphalic, *phiale* was uncovered in a Sarmatian grave, barrow no. 1, at Zubov farmstead near the river Kuban.²⁴⁹ The burial itself dates from the first century, while the phiale is thought to have been manufactured sometime in the

²⁴⁷ (Tolstikov 1992: 85) and (Chistova 2016). Cf. Treister (2002: 161), who expresses doubts about the identification. Aphrodite is also attested in the epigraphical record in later periods (*CIRB* 12; 75).

²⁴⁸ Later texts indicate that Artemis (Zos. 1.28) and Rhea (Arr. *Peripl. M. Eux.* 9) were also worshipped there.

²⁴⁹ The find was first published by Dumberg (1901). For the findspot, see also Braund (1994: 96f; 2018: 115); Tsetskhladze (1994b: 199); Boltryk and Treister (2012: 15). For an English language discussion of the material uncovered alongside the phiale, see Minns (1913: 230-32). Tsetskhladze (1994b: 199) provides a comprehensive list of multilingual 20th century CE scholarship.

second half of the fifth century.²⁵⁰ The inscription is dated between 420 and 400 (Jeffrey 1961: 368). This gap, of at least three decades between manufacture and dedication (Braund 1994: 97), strongly implies a functional or decorative life prior to its use as a votive object. It seems that it was not manufactured with immediate dedication in mind.

The iconography of the phiale itself has prompted much discussion of its context (Lordkipanidzé 1999: 135-36). David Braund and Gocha Tsetskhladze have observed that the snake on the omphalos, and the row of thirteen stag heads near the rim, are appropriate for a piece dedicated to Apollo, and have wider parallels in Colchian art (Braund 1994: 97; 2018: 115; Tsetskhladze 1994b: 206-10). Nevertheless, Otar Lordkipanidzé sees both aspects as "concepts religieux purement hellenes" (1999: 140-41).

The inscription, which runs around the outside face of the phiale is in the Ionic dialect (Dumberg 1901: 99-100; Jeffrey 1961: 368). It reads, "AIIOAAONO Σ HFEMONO Σ EIMITOM Φ A Σ I" ("I belong to Apollo Hegemon of Phasis) (Dumberg 1901: 99). It clearly implies the existence of a cult to Apollo Hegemon at Phasis from at least the fifth century (Braund 1994: 97). Gocha Tsetskhladze believes it to be a "direct indication of a temple" as, in his view, the phiale was part of the inventory of said temple (Tsetskhladze 1994b: 204, 06; Lordkipanidzé 1999: 148). He offers two possibilities for how the phiale may

²⁵⁰ Braund (1994: 96-97); Tsetskhladze (1994b: 199) though Cf. Lordkipanidzé (1999: 133, 36) who notes that similar items were in use over a relatively long period.

have come to be buried in Barrow no. 1 including Pharnakes expedition against Colchis in 49, or a raid by Caucasian tribes and subsequent sale to a Sarmatian customer via the Bosporan Kingdom (Tsetskhladze 1994b: 212). An alternative means of transference is suggested by Braund. He notes that the phiale need not have been dedicated *in* the Phasian temple to Apollo Hegemon, but rather *to* the god of Phasis, possibly somewhere in the Bosporan Kingdom (Braund 1994: 97). This possibility must be taken seriously, for it would not be an isolated example of a geographical epithet for a deity being present beyond the area specified. At Naukratis we find evidence for Apollo Milesios, while we have already discussed Artemis Ephesia in the Black Sea. It cannot be ruled out that a Phasian or an individual with links to Phasis, made a dedication to the tutelary deity of their home city.

There is little doubt that the phiale indicates the existence of a cult of Apollo at Phasis, yet the epithet of the god remains unique (Tsetskhladze 1994b: 204). In the human sphere, hegemon, as an official title, seems to function synonymously with *oikistes* and *arkhegetes*. It is a quasi-technical term for the leader of a group of migrants (Malkin 1987: 246-48). This has led scholars to conclude that the cult of Apollo Hegemon of Phasis was a foundation cult (Lordkipanidzé 1999: 144), established by edict of the oracle of Branchidai-Didyma and set up by the first Milesian migrants there (Braund 1994: 97-98; Tsetskhladze 1994b: 204-05).

Very little information has survived on the nature of religious practices at Priapos. Aphrodite seems to have been worshipped there (Ehrhardt 1988: 165), while a *scholion* to Lycrophon's *Alexandra* suggests that a local Apollo "Priepenaos" existed (Schol. Lykro. 29). According to Plutarch, the temple and *xoanon* of Artemis of Priapos were plundered by the Pontic army during the Mithridatic wars at some point before 86/85 (Plut. *Luc.* 13.4), though the antiquity of this shrine cannot be determined.

III.2.1.27 Prokonessos

A handful of deities are known to have been worshipped at Prokonessos. Aphrodite seems to have received worship there (Ehrhardt 1988: 166-67), while Hekate is identified through the presence of theonyms (Ehrhardt 1988: 174). However, we must regard the latter identification as tenuous based on the relative popularity of Hekate names. Similarly, the supposition that Apollo was worshipped there, while likely in itself, cannot be definitively determined through theophoric naming practices at Prokonessos (e.g. *IG* II² 10111). Finally, Pausanias mentions the theft by the Kyzikenes of a chryselephantine statue of Kybele from Prokonessos during an unidentified conflict (Paus. 8.46.4).

III.2.1.28 Sesamos

Images of Apollo, Demeter and Zeus all appear on fourth century coinage from Sesamos, inferring that they were worshipped there (Bilabel 1920: 112; Ehrhardt 1988: 136; Avram, Hind, and Tsetskhladze 2004: 960). Though there is evidence for a wide variety of deities at Gorgippia, none can be dated earlier than the fourth century. Amongst those that can be identified through epigraphy are Poseidon, Herakles, Hermes, and Zeus; while temples were dedicated to Aphrodite, Demeter and Artemis (Kruglikova 1977: 52-54; Alekseeva 1997: 213-30). Less secure attestations, in the form of images and figurines, account for the Mother of the Gods, Kybele, Dionysus and Athena (Alekseeva 1997: 231, 37, 40).

III.2.1.30 Sinope

Despite the importance of Sinope, little evidence survives to illuminate cultic life there, and that which we can call upon exclusively dates from post-Archaic contexts. A pair of fourth century inscriptions identify the worship of Poseidon Helikonios²⁵¹ and Hestia Prytaneion.²⁵² The latter implies the existence of a prytaneion at Sinope, though whether its functions were analogous with known examples is uncertain. The inscription to Poseidon, which concerns the sale of a priesthood for the deity may, by use of the Helikonios epithet, indicates a history predating the fourth century. Possibly his worship can be dated as early as the Archaic period when this epicleisis was present in the cult of the tutelary deity of the Ionian league.

²⁵¹ I. Sinope 8. Doublet (1889: 299-302); Robinson (1906: 322 n.63); French (1994: 100 n. 2).

²⁵² I. Sinope 7. Robinson (1906: 312 n.40); French (1994: 100 n.1)

There are two other notable deities attested at Sinope, Apollo Ietros and Athena Polias (*I.Sinope* 111). The former, based on the interpretation of a theonym, is problematic and may only indicate secondary transmission of the god's name rather than his definitive worship. Athena Polias offers an interesting case. This particular deity is attested at Miletos and Priene, though the Archaic heritage of the epithet is unproven. Furthermore, the inscription attesting to her presence at Sinope is late, between the first and second centuries CE. Therefore, like Poseidon Helikonios, we cannot rule out the introduction of her cult in the post-Archaic period for reasons of geo-political aggrandizement and identity construction.

III.2.1.31 Skepsis

A temple and sanctuary to Athena existed on the acropolis of Skepsis (Xen. *Hell*. 3.1.21), in the fifth century (Munro 1899). Apollo also seems to have had a temple there from at least the fourth to third centuries, mentioned in a decree (Munro 1901: 236-37 no. 6). Images of Dionysus appear on the coinage of Skepsis around the second to first centuries, while Aphrodite and Zeus Idaeus appear on coinage during the Roman Imperial period (Head 1911: 574).

III.2.1.32 Tomis

We hear little of the religious life of Tomis prior to the end of the fourth to the third century. Images of Kybele have been identified at the beginning of this period (Chiekova 2008: 130, 41), though whether they represent the worship of this deity cannot be definitively stated. Apollo begins to appear on coins in the third century (Pick and Regling 1910: 598), and a second to first century inscription identifies his priest as the eponymous magistrate of the city (*ISM* II 5). A second inscription, from the same period, provides the epithet Paian for Apollo (*SEG* 19 462). It has been noted that this manifestation of the god has much in common with Ietros (Ehrhardt 1988: 138), particularly in its associations with healing and medicine (Graf 2009: 81-84). Asklepius, Hygeia and Telesphorus are all represented in a statuary group, likewise dated to the third century, and may have undertaken some of the functions of Apollo Ietros in other settlements (Chiekova 2008: 237).

This raises an interesting question, was Apollo worshipped under the epicleisis Ietros at Tomis? Certainly, the Tomitans would have been aware of this Apollonine epithet, and it is possible that the god took this form originally. Yet, at some point before the second century, these attributes were transferred to Paian, Asklepius and Hygeia. Alternatively, while the idea of a healing god was important at early Tomis, unlike in neighbouring communities, Tomitan immigrants conceptualised a different notion of Apollo and his healing powers which was flexible enough to undergo a transfer to new popular deities, in particular Asklepius and Hygeia. This phenomenon seems to have occurred at other locations on the western Pontic coast, including Istros and Odessos, and may have been a response to some unidentified local conditions (Chiekova 2008: 237-39). Indeed, Hygeia has been identified as an Apollonine epithet in the high imperial period at Tomis (i.e. *ISM* II 116; *SEG* 37.633).

Hermes appears on coinage of the era (Pick and Regling 1910: 640-42). Of note is the fact that we have no evidence for Demeter (*SEG* 19 459; *ISM* II 36 = SEG 40 603) and Aphrodite (Chiekova 2008: 220; Buzoianu and Barbalescu 2007: 312), two popular deities in the many Milesian migrant communities, until the turn of the millennium. Furthermore, Poseidon Helikonios, the tutelary god of the old Ionian league, seems to have been worshipped at Tomis in the Roman period (*ISM* II 151).²⁵³

III.2.1.33 Theodosia

Y. A. Katyushin speculates that the name of Theodosia reflects a "tradition of special worship of Apollo", but there is no evidence to support this identification (Katyushin 2003). His assumption is based on traditional notions of Apollo's role in overseas settlement, and it is reasonable to follow his argument that the name suggests that the area was given by a god. Athena is present on a silver Theodosian coin dating to the beginning of the fourth century so we may surmise she was worshipped there (Kovalenko and Molchanov 2005: 17). Demeter has also been identified in two graffito/diptini from the fourth and third centuries.²⁵⁴

²⁵³ *ISM* II 151; Ehrhardt (1988: 171). For the debate on the location of the Panionion sanctuary to Poseidon Helikonios in Ionia, see Herda (2006b); Lohmann (2012).

²⁵⁴ Emec and Peters (1993: 78-80, 83 n. 6, 8.). The fourth century example (n. 6) reads " ΔA " which Emec and Peters suggested is Demeter in the form " $\Delta \dot{\alpha}$ [µ $\alpha \tau \rho \iota$]" (78f). The third century graffiti reads " ΔE ".

There is only limited evidence to indicate the cults of Tios before the Roman period (Öztürk 2013). Zeus, in his local form of Stratios, was important from at least the fifth century, and likely significantly earlier (Engin 2019: 89-91, 101-02). In later centuries, many deities including Aphrodite, Athena, Ares, Demeter, Dionysus, Hera, Hermes, Hestia, Poseidon, Kybele and the Mother of the gods appear, predominantly in the numismatic record, though the latter is attested on a small number of inscriptions (Engin 2019: 74-105).

III.2.1.35 Trapezus

Very little is known of the religious life of Trapezus. According to Arrian (*Peripl. M. Eux.* 9) there was a temple to Hermes there in the time of Hadrian, though how far we can project this cult back is impossible to determine.

III.2.1.36 Tyras

The evidence for religious practices at Tyras is late and limited. Herakles may have been worshipped there in the fifth century (Samoylova 2001: 106), while images of Aphrodite appear in the Hellenistic period (Samoylova 2007: 447). An inscription dedicated to Apollo Ietros also appears. Its dating is debated, some ascribe it to end of the fifth century (Karyshkovskij and Klejman 1994: 44) while others prefer a date in the early third century (Ehrhardt 1988: 139; Ustinova 2009: 249; Chiekova 2008: 24). From Tyritake we have evidence of one of the earliest cultic structures on the Bosporus (Zinko 2007: 828). Built sometime in the second half of the sixth century, it consists of a large rectangular mudbrick structure around 70.5 m^2 divided into three rooms designated "A", "B" and "C". Room "A", on the western side of the structure, contained 2 hearths built into its clay floor. Next to one of these hearths, a significant number of terracotta objects and a clay altar were found (Zinko 2007: 827-28). The identity of the deities worshipped in the complex may be illuminated by these objects. First, a painted amphora was found with a two-letter graffito reading "A Φ " which may signify that the vessel and/or its contexts were dedicated to Aphrodite. The worship of Aphrodite at Tyritake is further confirmed by the discovery of a bronze mould for making gold platelets with the image of Aphrodite, which is dated between the end of the third and the beginning of the second centuries (Zinko 2007: 831).

Second, a trio of statuettes of an enthroned goddess found in the cult complex may represent Demeter. The sitting-type Goddess is a common representation of Demeter in the Black Sea (Rusyaeva 2009: 118). Another statuette which may represent Demeter, is of a goddess wearing a *polos*, dated to the middle of the sixth century, though this attribute is also seen in representations of Kore/Persephone.²⁵⁵ Indeed, the latter may also be represented by a standing female figurine holding a flower or a piece of fruit from the fifth century (Kotina 2014: 182-83 no.9).

Finally, by the first half of the third century, a marble statuette of Dionysus indicates his worship at Tyritake. The style and craftsmanship of this piece has led Viktor Zinko to propose that it came from a temple inventory, though, to date, no such structure has been identified (Zinko 2007: 831).

III.2.2 Deities of Milesian Migration

There is little doubt that Milesian migrants brought their gods from home (Greaves 2004). A brief overview of the deities worshipped in Milesian migrant communities, particularly in the Archaic period, attests to a series of gods which we know received significant attention in the *metropolis*. Two important exceptions should be noted. Athena, for whom a series of important temples existed in Archaic Miletos, culminated in the late Archaic structure that was the focal point of the southwestern part of the city, seems to have received relatively little attention within the immigrant communities.²⁵⁶ During the Archaic and early Classical periods her worship is attested from a votive inscription from around 560-550 found in the western temenos at Olbia (Rusyaeva 2010: 69, 77), while graffiti also attests to her presence among the

²⁵⁵ Zinko (2007: 828). For the *polos* as a characteristic of Demeter and Kore, see Clinton (2007: 352)

²⁵⁶ See Ehrhardt (1988: 162-64) and Chiekova (2008: 223-24), for overview and discussion.

pantheon of Nikonion from at least the fifth century (Sekerskaya 2001: 80; Zaiginailo and Sekerskaya 1997: 20). Later attestations occur at Amisos in the fourth century (Summerer 1999: 64) and at Kyzikus, where her temple may have contained an anchor stone attributed to the Argo (Ap. Rhod. 1.955; Hasluck 1910: 236). By the Hellenistic and Roman periods her worship can also be attested at Histria, Tyras and Odessos.²⁵⁷

The worship of Artemis is also well attested at Miletos, with an important temple to her in the guise of Artemis *Kithone* located on Kalabaktepe (Senff 1995; Kerschner and Schlotzhauer 1999), and evidence for her worship, probably in relation to Apollo, also evident at Didyma (Fontenrose 1988: 123-32). Nevertheless, from the Archaic period, she can only be identified from a mid-sixth century statuette which Ehrhardt (1988: 163) identified as of "milesischen Typus", though whether this is also equated with the unpublished inscription to Ephesian Artemis on a fifth century salt cellar remains uncertain.²⁵⁸ In the Archaic period, worship of Artemis may have been focused on her role in the "kultefamilie" of the Apollonine triad with her sibling and

²⁵⁷ See Chiekova (2008: 223-24), with bibliography.

²⁵⁸ Braund (2018: 96-133) provides an extended discussion of the evidence for Ephesian Artemis in the Black Sea with particular reference to the Bosporan Kingdom. His acute observation, that the evidence for this deity, which is mostly dated to the late fourth century, may indicate a connection with the destruction and reconstruction of the Artemision outside Ephesos, merits serious consideration.

mother Leto.²⁵⁹ Thus, we should not, perforce, reject the idea that she received some religious attention within Milesian emigrant communities in the early centuries of their existence, despite the lack of clear evidence.²⁶⁰

If we look at the relative dearth of evidence for these two important emigrant deities in the wider context of the role of religion in migration, there may be a further reason for their relative absence within the immigrant communities. First, Athena seems to have gone by the epithet *Polias*, at Miletos. Following Parker (2003), if this can be taken to indicate the amplification of this particular aspect of her cult at Miletos, her role in civic society, it may simply be that this aspect was not viewed as so important to emigrants from Miletos (Held 2000). As a protectress goddess of the Milesian civic community, she may not have been thought to provide appropriate protection for those emigrating from the community, nor offered significant benefits within the nascent immigrant community, at least during its formative years where its civic society was, in effect, "under construction".

²⁵⁹ See Ehrhardt (1988: 129-54) and Avram, Bîrzescu, and Zimmerman (2008), for a discussion of these relationships.

²⁶⁰ Cf. Chiekova (2008: 165-67, 297-99) who observes the relative popularity of Artemisian theonymns in the Archaic period at Istros and Odessos.

III.3.1 Apollo Ietros

The earliest incarnations of Apollo bear a novel epicleisi, Ietros/Iatros.²⁶¹ The earliest attestation of the word ietros itself appears in the Iliad referring to Machaon and Podaleirios, sons of Asklepius and the leaders of the contingent from Thessalian Tricca, Ithome and Oichalia (*Il.* 2.729-731). By the fifth century at the latest, genealogies of Asklepius generally placed him as a son of Apollo (Hes. fr. 239, *Cat.* fr. 53, 54 Most; Pind. *Pyth.* 3), though whether this was also the case at the time of the composition of the Iliad is uncertain.

The first explicit attestation of Apollo as Ietros appears on a Rhodian-Ionian *kylix*, which is generally dated between 600 and 550 and was found in the personal archive of Vladimir Lapin (Rusyaeva 1986: 39 n. 77; Dubois 1996: 107-08 n.54; Chiekova 2008: 25-26). The words "[AII]OAA Ω NI IHTP Ω I" appear in faint painted letters on the right-hand side of the fragment, and it seems likely that the vessel was a votive gift dedicated to the god. Another early inscription (c. 575-550), with the words "[A]IIOAA Ω NI IHTP Ω I" rendered on the inside of a fragment of a Rhodian-Ionian cup, was found in the remains of a ritual pyre in the western temenos at Olbia (Rusyaeva 1986: 42 n.86; Dubois 1996: 108-09 no. 56; Rusyaeva 1995: 81). Berezan affords a further two examples of Iatros graffiti which makes clear its votive character, a fragment of

²⁶¹ The *LSJ* (s.v. ἰατρός) defines the term as meaning Doctor or Physician. The Ionian (and this Milesian) spelling is ἰητρός. According to Chiekova (2008: 25) the Ionian version is the older form of the word.

a black glazed vase (c. 550-525) with the inscription "[1]HTPO EIMI" (*SEG* 30 880 = Dubois (1996: 108 no. 55), and a fragment of a Fikellura *Dinos* (c. 560-495) reading "[$\Lambda\PiO\Lambda\Lambda\Omega$]NO Σ EMI IH[TPO]" (Yailenko 1982: 289).

Between the third quarter and the end of the sixth century, there is evidence to suggest successive temples to Apollo Ietros were constructed in the western temenos at Olbia (Kryzhitsky and Krapivina 1994: 188-205; Rusyaeva 1995: 80-102; 2003: 95; 2010: 69-70; Kryzhitsky 1997; Kryzhitsky et al. 2003: 427). The earlier temple seems to have been a mudbrick structure on a stone plinth for which some limited architectural materials have been identified.²⁶² One of these, a fragment of a terracotta tile, bears the inscription "[A]IIOAAΩNI IHTPΩI BOPYΣΘENE", which not only gives the identity of the deity to which the structure was dedicated, "Apollo Ietros", but provides a second epiclesis, "Borysthenes", which links this manifestation of the god specifically with the Olbia-Berezan region.²⁶³

The second temple was a stone structure, constructed around the turn of the sixth century. A circular graffiti, possibly representing a solar disk, with seven sections, containing the letters "I|H|T|P|O|O|N", was found on a

²⁶² See Rusyaeva (1995: 81), who suggests that a number of these features may have been imported directly from Miletos.

²⁶³ Rusyaeva (1986: 42-43 fig. 4.6; 1995: 82); Vinogradov and Kryzhitsky (1995: 111 pl. 05.1); Dubois (1996: 109 no. 57). See Parker (2003), for a discussion of geographical references in cult epithets.

rectangular calypter belonging to this structure.²⁶⁴ According to Anna Rusyaeva, this represents the name of the building, the "Ietroon" (Rusyaeva 1995: 85; 2010: 69). She also suggests that a small burnt area on a paving stone in the centre of the naos was the remains of the cities sacred hearth (Rusyaeva 1995: 82f; 2010: 70).

The numerous sacred fire pits from the first half of the sixth century also seem to have been connected to the worship of Apollo Ietros.²⁶⁵ These demonstrate the importance of fire to the practice of Apollonine worship at Olbia. According to Anna Rusyaeva (2010: 72), they can be interpreted symbolically as "a life basis in a new land" and a "symbol of purity and strength". Yet this interpretation betrays a colonialist outlook. It relies on the notion of the community as conscious of its propagation of a new political community, whereas, as we have already discussed, the role of the hearth for migrants, at least in the private sphere, was most probably a way of making unfamiliar surroundings more homely. If they were conducted after sunset, these rituals may have been as much about appeasing the gods and carving out a small ephemeral space in an existentially threatening environment, than as an assertion of self-confident superiority over a foreign land.

²⁶⁴ Rusyaeva (1986: 45 fig. 4.7); Dubois (1996: 110-11 no. 59). The seven letters may be meant to invoke Apollo's sacred number 7.

²⁶⁵ Rusyaeva (1995: 81) notes that one contained a trio of inscribed dedications to the God (see above).

Nevertheless, the cult of Apollo Ietros was of particular importance to the inhabitants of Olbia and Berezan. The fact that some of the earliest ceramic materials found in Olbia came from the area of the western temenos further indicates that both the space and deity held an important role there for the initial migrants (Rusyaeva 2003: 97). Yet, it is not until the turn of the following century, that we begin to see evidence from other locations testifying to the worship of Apollo Ietros. In 1989, at Pantikapaion, a fragment of a black-glazed *kylix*, bearing the inscription "IHTP", was found in the central zone on Mount Mithridates; (SEG 56 925; Tolstikov 1992: 95 n. 9). At nearby Myrmekion, another fragment of a black-glazed *kylix*, dating from the first or second quarter of the fifth century and probably made in Attica, is also inscribed with a dedication in an unusual form, reading "[AΠΟΛ] $\Lambda\Omega$ NE IHTP[Ω I]" (*SEG* 48 1006; Vinogradov and Tokhtasev (1998: 25-29).

Apollo Ietros was both the patron and eponym of Apollonia. Epigraphic material recovered from the Archaic temple discovered on St. Kirik, indicates that this was the famous and long sought temple of Apollo that gave the city its name. The epithet Ietros does not appear in the epigraphic record at Apollonia before the Hellenistic period, where an inscription reads, "HTPO".²⁶⁶ Though the possibility that Apollo was originally worshipped without an epiclesis at

²⁶⁶ Seure (1924: 346). Seure suggested that the inscription actually recorded a proper name begining "*Metro-*". Nevertheless, analogous readings of other Ietros inscriptions (e.g. *SEG* 30 880) suggest the final omicron could indicate that "[1]HTPO" was prefaced or followed by "EIMI" and the jar was thus a votive dedication.

Apollonia must remain open, the balance of probabilities suggests this was probably not the case and Apollo was worshipped as Ietros from the early period of the settlement's existence.

The first glimpse we see of Apollo Ietros outside the north and west coasts of the Black sea comes from an inscription at Olbia from around the second quarter of the fifth century, the honouree of which is an individual named Ietrokles of Sinope (*I.Olbia* 1). This evidence is not unproblematic for the worship of Apollo Ietros at Sinope. Theonyms are not always confirmation of the worship of a specific deity at a location, and the fact that Ietrokles was being honoured at Olbia, offers the distinct possibility that he or his family had some connection to the city. There are numerous examples of individuals in the Archaic and Classical periods being given names meant to invoke some special connection with a particular deity (see appendix H). Ietrokles may have been a descendant of a citizen of Olbia. It is possible that his father, named Hekatious in the inscription, came from Olbia, and thus gave his son a name meant to invoke the tutelary deity of his home city. Nevertheless, we cannot rule out the possibility that at Sinope, as a Milesian and Black Sea migrant settlement, Apollo Ietros was worshipped in some form.

The clustering of evidence for Apollo Ietros in the Milesian migrant settlements of the Black Sea has raised the question of the origins of this deity.²⁶⁷ Some scholars have sought to identify his characteristics and genesis in Ionia and Western Anatolia (Ehrhardt 1988: 144-47; 1989). Ehrhardt cites the use of Iatro-/Ietro- names in Ionia, Karia and Attica as evidence that the epithet comes from an Ionian context and thus was probably first worshipped in the communities of these regions. In other words, Apollo Ietros was an Ionian deity (Ehrhardt 1988: 144; 1989: 116; Benedicto 2019). Furthermore, he draws attention to the parallels between Ietros and other epiclesis of Apollo, such as Oulios²⁶⁸ and Termintheus, seeing it as a new term referencing older Ionian characteristics of the god (Ehrhardt 1988: 144; 1989: 117-20). The third parallel drawn by Ehrhardt focuses on role of a plague in the foundation of Branchidai-Didyma (Callim. *Lyr*. 229; Ehrhardt 1989: 117-18). Thus, Apollo's association with disease and healing was already prominent there, at least in the seventh century, and it is this aspect of the god which was carried to the Black Sea by Milesian migrants.²⁶⁹ Furthermore, the presence of Ietros on the Berezan bone tablet, an inscription with intimate links to the oracle at Didyma (Rusyaeva

²⁶⁷ Ietros/Ietros also is also attested at Hermonassa in c. 389-349 (*CIRB* 1037); Istros c. 4th century (ISM I 144; SEG 55 789; but cf. Dubois 1996: 109-110 no. 58); Lepsia c. 285-247 (Lycoph. Alex. 1207); Tyras c. 3rd century Ustinova (2009: 249) and Gorgippia c. 150-200 CE (CIRB 1148).

²⁶⁸ See the discussion in Masson (1988).

²⁶⁹ See Graf (2009: 79-102), for a discussion of Apollo's healing attributes across the ancient world.

1986; Burkert 1994), may recount its transfer between their and Berezan-Olbia (Ehrhardt 1988: 145-47).

Nevertheless, Ehrhardt's arguments are not unproblematic. If we look at the chronological distribution of the onomastic evidence for Ietros we can see that, while Ehrhardt is right to identify its commonality in Ionia, Attica and Karia, in both date and format they do not seem to offer clear evidence for the presence of a cult there (1989). Most of these attestations identify one name type only, *Iatrokles*. While the *-kleos* suffix may indicate some role for the gods (or even a doctor, real or mythological) in the child's birth,²⁷⁰ it is by no means clear that we are dealing with the same Apollo Ietros attested in the Milesian migrant settlements of the Black Sea. The few attestations for Iatro-/Ietro-names before the middle of the fifth century also display some interesting patterns. The earliest cases, again naming *Iatrokles*, are a pair of seventh century inscriptions from the Island of Thera (*IG* XII³ 598, 788), while the name also appears in an inscription uncovered on the Athenian Acropolis around 530-510 (*IG* I³ 614). Again, it is difficult to determine whether there is a connection between Apollo Ietros and the name Iatrokles.

Yet when we turn to names using the prefix Ietro-, we see an interesting pattern emerge. Prior to the last quarter of the fifth to the first half of the fourth

²⁷⁰ See Parker (2000), for a discussion of theonyms in the ancient world. Cf. Graf (2009: 86) who suggests an intimate connection between the name Iatrokles and Apollo Ietros/Ietros.

centuries,²⁷¹ Ietro- names, like evidence for Apollo Ietros, appears exclusively in the Black Sea and at Miletos in the form Ietrodorus at Istros in the second half of the sixth century (*SEG* 46 889), and at Olbia in the fifth century (Dubois 1996: 167-68 n. 01). Ietrokles and Ietragoras appear at Sinope in the fifth century and Miletos at the turn of the sixth century (*Hdt*. 5.37). Given the distribution of this prefix, there seems little reason to doubt that it related to Apollo Ietros. Yet we should not suppose that its appearance in Miletos necessarily points towards the worship of Ietros there, certainly not prefiguring the earlier Pontic material. Instead, this naming convention may point towards continuing interactions and movement between the emigrant and immigrant communities and might represent a product of a feedback mechanism between the two.

As Ehrhardt has pointed out, there is still some evidence to connecting a healing Apollo with Miletos (Ehrhardt 1989). According to Strabo:

"Οὔλιον δ' Ἀπόλλωνα καλοῦσί τινα καὶ Μιλήσιοι καὶ Δήλιοι, οἶον ὑγιαστικὸν καὶ παιωνικόν· τὸ γὰρ οὕλειν ὑγιαίνειν, ἀφ' οὖ καὶ τὸ οὐλὴ καὶ τὸ οὖλέ τε καὶ μέγα χαῖρε· ἰατικὸς γὰρ ὁ Ἀπόλλων."

'Both Milesians and Delians invoke an Apollo "Ulius," that is, as god of "health and healing," for the verb "ulein" means "to be healthy"; whence

²⁷¹ During this period Ietro- names appear at Erythrai (I.EK 152, 4); Miletos (Milet I³ 122 I, 107) and Xanthos (TAM I 38) before the prefix disappears from the record almost completely.

the noun "ulê" and the salutation, "Both health and great joy to thee" for Apollo is the god of healing.

(Strab. 14.465. trans H. L. Jones.)

Furthermore, the fourth century Milesian historian, Maeandros, also claimed that the Milesians worshipped Apollo Oulius as a healing deity (*BNJ* 491 F2). Thus, we can be reasonably certain that some form of healing Apollo was worshipped in the emigrant community by at least the fourth century, possibly even earlier. Yet this still leaves us with two problems. First, are Apollo Oulius and Ietros essentially the same deity by different names? And second, where did the form of Apollo as 'healer' or 'doctor' come from? If, as Ehrhardt argues (Ehrhardt 1989: 117-21), we are to suppose a link between these attributes and the foundation story for Didyma presented in Callimachus (F 299), without an Archaic version of this story, the evidence strongly points towards the Pontic Ietros as the earlier version of the 'healing' Apollo (conta Benedicto 2019).

The reasons for the emphasis on this attribute of Apollo in the Black Sea have been explored in depth by Yulia Ustinova (2009). She sees the use of Ietros as an attempt to "add a new facet" to Apollo in Black Sea contexts (Ustinova 2009: 266). Nevertheless, it may be the case that the novelty of Ietros comes from the *emphasis* on Apollo's healing attributes, rather than this being a wholly original aspect of the god's character (Ustinova 2009: 286). Furthermore, she convincingly argues that the importance of healing and doctors in Greek conceptions of Thrakian, Getic and Skythian religion had an important role in the development of Apollo as a healing deity in the Black Sea (Ustinova 2009: 266-86). Her detailed analyses of the importance of immortality,²⁷² and the role of healers in Thrakian and Skythian culture (Ustinova 2009: 273-78) strongly supports this claim.

Two inscriptions from Istros, dating from the second half of the sixth century and the first half of the fifth century, can also shed light on Apollo Iatros origins (Dubois 1996: 109-110 no. 58). The latter, found in the 1979 season of excavations at the Western Temenos of Olbia is inscribed on a circular statue base and reads:

"ΞΑΝΘΟΣ ΠΟ[ΣΙΟΣ]
ΑΠΟΛΛΩΝΙ ΙΗΤΡ[ΩΙ]
ΙΣΤΡΟ ΜΕΔΕΟΝΤΙ
ΟΛΒΙΟΠΟΛΙΤΗΣ"
"Xanthos son of Posios
To Apollo Ietros
Ruler of Istros
Olbiopolites."

SEG 42. 712; 50. 701 (Dubois 1996: 109-10 n. 58)

²⁷² According to Ustinova (2009: 267) immortality was the "quintessential cure" in Greek culture.

Clearly the dedicand, Xanthos, was an Olbian citizen as evidenced by his selfdesignation as "Olbiopolites" in the final line. Yet his Apollo Ietros is described as *Medeonti* of Istros, meaning ruler or possibly guardian.²⁷³ While some scholars seek to place this inscription in the context of the introduction of Delphinius at Olbia, and its relations with Istros (Rusyaeva and Vinogradov 2000), this historical reconstruction is implausible. Alternatively, the implications of the inscription point towards the importance of Istros for the development of the Ietros epithet (Ustinova 2009: 286). She places particular emphasis on the relations between Istros and the neighbouring Getic tribes, whose religion focused on Zalmoxis and was interested in questions of healing and immortality. In this context, the third quarter of the sixth century inscription on the lid of a krater of lekane, uncovered on the plateau area at Istros, naming Ietrodorus, may also attest to earlier worship of Ietros in the vicinity (Johnston 1996: 19-24; 2013; Chiekova 2008). Later evidence from Istros implies that the eponymous magistrate of the city was also the priest of Apollo Ietros, and that this was a hereditary role kept within a priestly family (SEG 55.789; 793, ISM I: 54.28). According to some scholars, this tradition may go back to the initial establishment of the settlement and parallels the role of the Branchidai at Didyma in the Archaic period (Pippidi 1971: 60; Alexandrescu Vianu 1989; Avram 2003b; Chiekova 2008: 16-19).

²⁷³ See Rusyaeva and Vinogradov (2000: 230-31), for the arguments supporting this reading.

While the evidence strongly suggests a Pontic, perhaps Istrian origin for the cult of Apollo Ietros, it is worth exploring the implications of the worship of this deity in a migration context. Religious manifestations in local cultures, translated, adapted and creolized by incoming migrants; played an important part in the development of cults. For the migrants themselves, Ietros also seems to have had an important tutelary role, one that religion seems to fulfil in differing contexts of migration. In terms of the spatial element of Black Sea migration, Fritz Graf has observed that, "settled so far north in a climate that is much harsher [than Ionia] ... the settlers must have felt an acute need for divine protection of their health" at settlements located around the "swampy mouths of the great inland rivers" (Graf 2009: 85-86). Chiekova agrees with this suggestion but sees another important purpose of the cult of Ietros, as "le protecteur par excellence de la communauté politique" (Chiekova 2008: 37). Ietros, for Chiekova, is as much a metaphorical doctor protecting the civic community, as a literal physician.

Yet if we are to assume, as Chiekova does, that worship of Apollo Ietros went back as far as the initial settlements at Istros and Olbia, it raises the problem of the existence of a civic-political tutelary deity being worshipped in nascent settlements, whose political communities were in their infancy. This analysis falls into a colonialist way of viewing the purpose of religion in these nascent settlements. They are seen primarily as transplanted political communities rather than coalescences of small groups of migrants or individuals. In a migration approach, it seems more likely that Apollo Ietros, while probably both metaphorical 'healer' and literal 'physician', was in fact a protective deity for individual migrants. His introduction suggests a concern with protecting both the bodies and psyches of individual migrants undertaking harsh journeys and settling in potentially unforgiving regions.

III.3.2 Aphrodite

While Apollo has traditionally been viewed as the god of Greek overseas settlement *par excellence*, the settlements attributed to Milesian migration exhibit evidence for the worship of a number of other deities from an early period. Aphrodite seems to have had a long tradition of worship in Milesian migrant communities. She was also worshipped in Milesia itself, at the periurban sanctuary of Aphrodite Oikous on Zeytintepe hill west of the city (Greaves 2004). Around the mid sixth century, there is evidence to suggest her worship at Kepoi and Istros, where the fragment of a tile dedicated to the goddess, which seems to derive from the pre-550 *Oikos* structure, and the even earlier presence of *bothroi* and fire altar "b", place her worship in the first decades of the settlements' existence. Furthermore, the importance of the sacrée fosse to her worship and the siting of the sacred zone indicates that Aphrodite worship began with the first migrants to the area. By the last quarter to the end of the sixth century, we can also identify Aphrodite worship at Berezan, Olbia, and Nikonion (see appendix H).

We must also be alive to the possibility that the survival of evidence for Aphrodite's cult at other Milesian identifying migrant settlements can be back dated to their earliest incarnations. In this category can be identified Apollonia, Myrmekion, Dionysopolis, Kytaia, Hermonassa, Gorgippia-Sindike, Kyzikos, Pantikapaion., Priapos and Prokonessos (see appendix H). While the evidence for Aphrodite at a number of these locations fall into categories which do not definitively point to worship of cult institutions, such as theonyms, numismatic evidence and material representations. There is some significance in the fact that Aphrodite can be identified, in the Archaic period, at around 25% (14/56) under discussion. Clearly, as Alan Greaves (2004: 31) has previously pointed out "Aphrodite should now be considered as one of the most important gods of the Milesians and their colonists".

While traditionally viewed as a goddess of love and sex, Aphrodite in fact had a number of other attributes, some complementary to these roles, others contradictory. As a goddess intimately tied to Milesian migration, her role as a marine deity may have been important as a protector of those undertaking maritime journeys (Greaves 2004), The earliest attested epiclesis for Aphrodite comes from Berezan where a sixth century graffito refers to her as " $\Sigma vpi\eta$ i", Syrian Aphrodite (Rusyaeva 1992: 104; Dubois 1996: 122-23; Alexandrescu Vianu 1997: 15). A similar epiclesis is attested at Olbia in the first half of the following century, though here she is " $\Sigma vpi\eta$ i Mητρώ", Syrian Mother (Tolstoy 1953: no. 25; Dubois 1996: 122 no. 73; Alexandrescu Vianu 1997: 15). How much should be read into this epiclesis? The survival of these two early testimonies, in addition to the Ionian-Syrian conjuncture parsed from material found in the same context, has lead Marie Alexandrescu-Vianu to state "nous sommes en présence d'un culte oriental et non pas seulement de quelques objets" (1997: 24, see also 17-22). Furthermore, if we are to follow Dubois' reconstruction of the Hermes/Aphrodite graffito from Olbia to read, "[Μητρό Θε]ών Έρμέω Άφροδίτη[ς" (Dubois 1996: 128, no. 78), it may be possible to see the worship of Aphrodite at the temple of Kybele in Olbia as well (Alexandrescu-Vianu 1997: 16).

On balance then, if, as seems reasonably likely, the worship of Syrian Aphrodite in Olbia and Berezan towards the end of the sixth century, took place within an organized cultic setting, why was such a cult, which has significantly non-Greek overtones, instituted there? One school of thought posits a simple matter of cult transference from the metropolis (Dubois 1996: 123 *contra* Braund 2018: 197-201). For others, it is a manifestation of the multi-ethnic nature of the original migrants.²⁷⁴ There is another possible explanation. The identification of Aphrodite as Syrian, may have been intended to emphasize this goddess' links to the marine environment, and mobility upon it (Alexandrescu-Vianu 1997: 15; Greaves 2004: 31; Braund 2018: 189, 200-201).

It is possible that features of these cults, relating to the maritime sphere, were integrated into the worship of Aphrodite in her Syrian form. Indeed,

²⁷⁴ See Alexandrescu-Vianu (1997: 24), who identifies the presence of Rhodians and Cretans in migration to the Northern Black Sea. However, she fails to explain why mixed settlers, and particularly Dorians, would be more likely to transfer the cult of Syrian Aphrodite than Ionians. Furthermore, she proffers little evidence to link the mixed ethnicities of the migrants to this particular cult.

Atargatis, the eastern goddess usually equated with Syrian Aphrodite and introduced by Syrian traders, demonstrates an interesting connection with the para-piscine figure Derceto, who was worshipped alongside Astarte at Ascalon (Ustinova 1999: 217). However, as David Braund has observed, there is no evidence to support the presence of Atargatis in the Greek world prior to the third century. Therefore, it is most likely that we should view Syrian Aphrodite as a manifestation of Astarte alone (Braund 2018: 192-192). He uses this observation to determine that Syrian Aphrodite at Berezan and Olbia, as a reflection of Astarte, can be identified with Aphrodite Ourania, who appears in a number of inscriptions from the Bosporan Kingdom, though the earliest certain mentions of Ourania do not appear before the second half of the fourth century.²⁷⁵

Only Syrian Aphrodite, and possibly Ourania, were present amongst the migrant communities established between the end of the seventh and beginning of the fifth centuries.²⁷⁶ The earliest evidence for Aphrodite worship, at Istros, Berezan, Kepoi and Nikonion, shows no sign of a specific cult epithet. While Aphrodite, given her concerns with legitimacy, reproduction and order,

²⁷⁵ CIRB 971, 972 from Phanagoria. See *CIRB* 1234, for the lost inscription of alleged fifth century date. For a discussion of the epigraphic evidence for Aphrodite Ourania, see Braund (2018: 192 and esp. 223-234).

²⁷⁶ A third Aphrodite, "of the Gardens" has been supposed by some scholars based on the perceived differences between this cult and other manifestations of Aphrodite worship e.g. Braund 2018: 199.

is often seen as an apt goddess of colonial processes (Braund 2018: 187-255), there may be other factors at play in her adoption by the earliest Milesian migrant settlements. We have already discussed the importance of Aphrodite's marine character for these exclusively coastal settlements, dependent on maritime and riverine transport for communication and exchange with the wider Pontic and Mediterranean worlds. A third element, which has received far less attention in studies of Aphrodite. is the chthonic aspect of the goddess. The locations settled by Milesian migrants in the Black Sea and Propontis were frequently riverine, punctuated by marshes and lagoons in antiquity, as they are now. Istros may have originally been situated on the open sea (Romanescu 2014), but frequent changes in the landscape mean we cannot discount it being surrounded by marshes and waterlogged ground in antiquity (Bivolaru, Bottez, et al. 2021). Orgame, where we cannot identify an Aphrodite cult, was located on the shores of a lagoon (Baralis and Lungu 2015), while the settlements on the Taman peninsula also lay on changing terrain. The Kuban Bosporus may even have already been closed to maritime traffic by the end of the period under study (Tsetskhladze 2016). In Greek culture, the underworld was a place of rivers and marshes, much like the areas of Milesian migrant settlement (Mackin Roberts 2020: 26-27). It seems possible then to interpret these chthonic aspects of Aphrodite as suitable for a landscape in which the chthonic element was

pronounced. In Strabo's story of Aphrodite Apatouria, the giants killed by Herakles are lured into a κευθμῶνἱ (a cave or hole).²⁷⁷

Overall, we have a confusing scenario regarding Aphrodite's worship in Milesian migrant communities. There is evidence to suggest that she was simultaneously a goddess of the heavens, the underworld, and the sea; while also carrying facets of Anatolian and Eastern mother goddesses, in addition to her traditional facets in the Hellenic world. How then are we to account for this multi-facted nature? Christine Sourvinou-Inwood has suggested an "open and interacting" element in Greek migrant religion which may provide an explanation for the seemingly disjointed nature of Aphrodite worship (Sourvinou-Inwood 2000: 48). As opposed to trying to view either a unified "character", or many different Aphrodites, based on syncretism or hybridity, we should view her role in migration as being open-ended. As Parker has demonstrated (2003), epithets tend to emphasise location or characteristics and there is evidence to suggest that multiple epithets could be used at a single location (Knight 2019). It is precisely Aphrodite's versatility that ensured her prominence in Milesian migrant communities. For migrant groups in small settlements, religious practice was no less important than in the *poleis* of the Aegean communities. Indeed, analogies suggest that the uncertainty of

²⁷⁷ Strab. 11.2.10. See also the discussion in Braund (2018: 187-255). It may be significant that this term is used by Hesiod to describe the underworld (*Theog.* 158)

migration, even over extended periods of time, can act to reinforce and reinvigorate religious practices.

III.3.3 Demeter

earliest pantheons of Milesian migrant settlements also The demonstrate evidence for worship of Demeter, a more traditionally recognized chthonic deity. The earliest evidence of Demeter cult comes from Apollonia Pontica, where her sanctuary on the Skamni peninsula exhibits ceramic material which can be traced back to the second quarter of the sixth century (Damyanov 2018b, 2016). It may also be possible to identify her worship at Amisos on the Southern Black Sea coast around the same time (Anabolu 1986: 269). Demeter worship may also have been practiced relatively early at Nikonion and Nymphaion. At the former, it has been proposed that a *bothros* in the west of the city, containing terracotta fragments and the remains of a tortoise, is connected with Demeter (Sekerskaya 2001: 74, 80). Yet given the prominence of Aphrodite in Milesian migrant settlements, and her cultic connections with tortoises, the deposit may in fact be linked to her. At Nymphaion a cleft in the coastal rock containing early dedications has also been tentatively identified with Demeter, though difficulties in accessing the material. due to environmental instability, mean that this must remain conjectural (Sokolova 2001: 97; Sokolova 2003: 767; Avram et al 2004: 948; cf. Tsetskhladze 1997: 50 n.29).

By the turn of the fifth century, Demeter worship has also been identified at Kytaia and Myrmekion. At the latter there is evidence to suggest a cult complex to the goddess on the Acropolis by the middle of the century (Butyagin and Chistov 2006). At Kytaia, terracottas uncovered in the Ash Hill indicate her worship, though it is difficult to determine the original location of these practices (Molev 2010). She also received worship at Kios, as Demeter Karpophorus, around this time (Legrand 1893: 540). Demeter was also worshipped at Miletos, but we must be cautious in assuming a simple case of transference. At Apollonia and Nymphaion the location of Demeter's worship is in coastal, rocky and difficult to access landscapes; a feature of her cult places also found in Ionia (Karatas 2019). It is possible that, like Aphrodite, this represents the malleable nature of the deity. While she was traditionally associated with agriculture, she could also be worshipped at a location defined by the sea.

III.3 Conclusions

In the previous two parts we have established the broad unfolding of the process of Milesian migration in time and space and its drivers. Following this, we began to explore more specific cases of individual and group migration, seen through the interaction between position practices, migration trajectories and mobility capital. In this final part we have moved the focus from migration processes to immigrant practices. This represents an important part of our model by grounding immigrants within their specific historical and cultural contexts, in much the same way as our discussion of position practices was able to place them in an emigrant-migrant-immigrant continuum. Practices, broadly understood, are the fundamental building blocks of day-to-day life, the actions, representations, and semiotic language which make up the lives of individuals and groups and allow them to structure their experience of the world in both general and specific ways. Immigrant practices, thus conceived, are composed of a further level of meaning, in that they occur in a liminal space between emigrant and immigrant cultural conceptualisations, what are known in contemporary migration studies as transnational spaces (Faist, Fauser, and Reisenauer 2013). The ways and extent to which the practice of daily life can change or be reinforced through the unfolding of a migration process allows us a window into the ways in which migrants both understand their worlds and (un)intentionally seek to structure their experience of movement and relocation (Burmeister 2000). This has allowed us to approach a number of issues, including why, despite the heterogenous nature of the migration processes, they

are represented post factum as a homogenous movement involving emigrant social reproduction, how migrants themselves experienced and negotiated the dislocating effects of migration, and, finally, the ways in which different cultural practices interacted to produce an outcome which we have termed a Milesian migrant *koine*.

This migrant experience of day-to-day life forms an important component of our understanding of immigrant practices and manifests itself across the spectrum of social life, in particular within the spheres of domestic space and religious practices. These fields of practice allow us to analyse and begin to understand the essentially negotiated basis of immigrant practices between and within migrant communities. One of the most important elements of this process is the ameliorating effect of day-to-day practices, which can be seen to act in a reconciliatory way between the essential tensions at the heart of the migration act and the physical and mental experiences, of dislocation, discontinuity and disconnection, involved in movement from a site of habitual and dispositional learned behaviours — in other words an established community of practice — and a new site where practices and social dispositions may be contested.

This disputed and discontinuous manifestation of practice is evident in the tension between architectural forms and the syntax of domestic space evident across much of the area of Milesian migration. The use of dugout architecture, small basic houses built below ground level, initially appears anomalous, given that we are considering a group of migrants for whom the emigrant experience of residential architecture displays a more complex form. Yet, in the first instance there are simple issues of practicality. Dugout dwellings are easy and quick to construct and can be done so with materials at hand and they do not require specialist organised quarrying activities, the agglomeration of time and labour necessary to manufacture mud bricks, or the expertise needed to build robust wattle and daub structures. While this might serve to explain their use in the initial innovator stage of the migration trajectory, it fails to account for their persistence for over half a century as the primary manifestation of domestic architecture particularly in the northern Black Sea. Nevertheless, this form of architecture is common to many times and places across world history. Near at hand it is evident in both the settlements of the forest-steppe region of modern Ukraine as well as at various sites across Anatolia, in central Europe and in a handful of Greek immigrant communities in the western Mediterranean. Its apparent incongruity in the latter, in addition to the sites under study here, may primarily be a case of Hellenocentric bias. In other words, we tend to associate the Greeks with civilisation, in the west this is *our* civilisation, and thus extraneous explanations are sought for practices which do not line up with this self-serving cultural model. Yet we are still faced with the question of their persistence given the marked differences, even by the early majority phase, of architectural practices between immigrant and emigrant communities. Practices and communities of practice can be used as an important heuristic tool to understand this phenomenon. Through this lens the use of dugout architecture can be viewed as an established and establishing component of social cohesion within the practice community. The

manifestations of this form of dwelling, appearing in large quantities at both individual sites of immigration and across the region of immigration, place it firmly within the remit of community practice. In other words, the likelihood of deviation from this norm becomes less as earlier uptake and early majority migrants conform to the practice. As we noted earlier, this is paralleled in the use of Fenno-Scandinavian style houses in North America. Despite the fact that this group made up only a small proportion of immigrants, the establishment of the practice of building wooden houses became ingrained within the community of practice. For subsequent immigrants, with different emigrant architectural traditions – such as those from central and northwestern Europe who tended to use stone or brick - the likelihood of deviating from the established community practice and introducing new architectural forms diminished with each phase of migration in which migrants conformed to the established practice. Thus, we should avoid categorising this form as deviant, foreign, hybrid or bastardised, based on reductive ethnic conceptualisations. Instead, it is better understood as a manifestation of a developing community of practice, where ideas of space developed in different ways than in the emigrant community.

At the same time, however, the internal features of domestic architecture show more of an inclination towards reproduction of emigrant values (Burmeister 2000: 542). While in the innovator and early uptake/majority phases fixed hearths tend to be absent in domestic architecture, there is still some evidence for the use of braziers and portable hearths made of amphorae. While these do not conform to the expectations we have from literary contexts about the role of Hestia in terms of a fixed point, there is much reason to consider that they could still undertake these functions. The same can be said for divisions of space. While in idealised notions of the Greek house these represent distinct spheres of activity, in the architecture of the Milesian migrant settlements mixed use spaces are more common. Yet, even then, there is tantalising evidence for ephemeral partitioning and, in those dwellings large enough to be divided, this may have been more common than assumed. In general, then, we can see the ways in which migrants adapted to the particular contexts of immigrant spaces to recreate some features of emigrant cultural practices.

We can see a similar duality in religious practices. It is becoming clearer that Aphrodite was one of the most important deities in the Milesian pantheon and this phenomenon seems to have travelled with Milesian migrants (Greaves 2004; Greaves et al. forthcoming). Her appearance as the earliest deity at several communities, including Istros, Berezan, Kepoi, Nikonion and Tyritake, shows that her ritual worship was brought by the innovator and early uptake migrants at these settlements. Furthermore, in her Milesian manifestation, the maritime and foreign aspects of the goddess were particularly suitable for immigrants finding themselves in unfamiliar situations and moving across extended distances (Knight 2019). The importance of religion and ritual as a protecting and cohesive factor in immigrant communities, beyond institutional networks, is well understood (Hagan and Ebaugh 2003). Worship of Aphrodite accords well with this observation in the ways in which it was able to provide common links and meditation across the spectrum of emigrant-migrantimmigrant contexts.

Conversely, in the worship of Apollo, the traditional tutelary god of migration in the wider Greek emigrant and immigrant worlds, there is significant divergence in the Milesian migrant world. Whereas Delphic Apollo is generally thought to have been the main tutelary god of emigration and was established particularly in western Mediterranean contexts, in the Milesian migrant sphere, at least until the middle/late majority phases, Ietros – the Doctor or Healer – was Apollo's primary epithet. While this may be seen as a particular manifestation of Ionian, Didymaian Apollo (Ehrhardt 1989; Benedicto 2019), given that the god could also appear as Delphinios, Didymeus and even Milesios in immigrant contexts (Rusyaeva 1986; Ehrhardt, Höckmann, and Schlotzhauer 2008), Ietros seems to have had a more particular immigrant origin. Links between this manifestation of Apollo and Balkan and Eurasian religious practices and ideas offer a potential solution. Healing, medicine and immortality appear often in Greek conceptions of these groups' religious thoughts and practices, and this seems to form the basis upon which Apollo was conceptualised as Ietros (Ustinova 2009). This mediation between understandings of local religious practices and transference to immigrant religious practices demonstrates the ways in which religion could be used to negotiate immigrant identities, and the uncertainty surrounding the practice of migration. Furthermore, the worship of Demeter, another deity

present in emigrant contexts may also be linked to this phenomenon. The geography and topography of the immigrant area bore the features of a liminal space in Greek cultural conceptions, between land and sea and more particularly between the living and the dead. Demeter worship may have been intended to negotiate these fluid boundaries and ensure both the implantation of the migrants within the immigrant area and their protection from the uncertainty surrounding their migration.

In broad strokes, immigrant practices allow us to better understand the socio-cultural outcomes of migration and the ways in which migrants structure their experiences of immigration as a negotiation of the tensions inherent in movement and resettlement. These are not simply a reproduction of emigrant practices. There are clear signs of mediation between the practices of maritime and terrestrial migrants. Yet, to reduce the results to post-colonial epistemological concepts, such as hybridity or middle ground interactions, is to obfuscate their importance, both to their practitioners and in more general historical terms. Migrant practices are both responsive and adaptational. For innovator and early uptake/majority migrants they can be practical responses to the exigencies of the immigrant experience, but their persistence over time demonstrates the ways in which they become their own individualised and unique socio-cultural manifestations and act as an 'in' for subsequent migrants later in the migration trajectory. The result of this is to create a new cultural manifestation, a *koine* so to speak.

Understanding Milesian migration as an emic and etic designation allows us to explore one of the most contentious issues surrounding the notion of Archaic migration. The number of emigrants needed to populate these communities was well beyond the sustainable capacity of Miletos as an emigrant community. Furthermore, as we have seen, there are good grounds to consider the presence of heterogeneous maritime and terrestrial migration there. This begs the question; why, then, the notion of Milesian emigration persists? It is in these shared practices and values, some similar, some considerably divergent from the designated emigrant community, that this sense of shared culture is born. Milesian migration, as we understand it, represents a duality, encompassing both literal and historical emigration from Miletos, but also the cultural manifestations of the immigrant settlements themselves. In other words, it is both an historical and synthetic construction, indivisible by itself. Claims such as those of the Olbians who "say they are Milesians" (Hdt. 4.78.3), or the Milesians "inhabiting the apoikia" of Istros (Hdt. 2.33.4), demonstrate both the historical memory of early emigration and the fixed day-to-day cultural manifestations of religion, time and material culture, while at the same time exhibiting the development of new cultural manifestations, linked to emigrant experiences, but grounded in multifarious heterogenous immigrant experiences for which the label "Milesian" became a common denominator. The cultural and political use of this imagined hegemonic role developed throughout antiquity. By the end of the second century CE, this allowed the emigrant community to make the grandiose claim that Miletos was, "The first of the Ionians, founder and mother-city of a great many cities on the Pontus, in Egypt and many places across the inhabited world" (CIG 2878: 1-6). Thus, Milesian emigration is both the construct of later generations within their specific historical and cultural contexts, while simultaneously recognising the role of Archaic Miletos as a generative emigrant community.

Part IV Conclusions

This thesis initially set out to re-examine Greek colonization through the lens of migration studies. Longstanding debates in both eastern and western academia have attempted to understand this phenomenon from a variety of etic and emic perspectives. Traditional approaches in western European scholarship drew analogies with the contemporary world of great powers and, later, emerging notions of the nation state. In the Soviet Union, economic models, influenced by Marxist thought, attempted to fit the topic within wider struggles between the capital and labour, envisioning ancient Greeks as bourgeois traders setting up emporia to satisfy the demand of the metropolis or, alternatively, an oppressed proletariat of farmers and artisans seeking to flee oppression at home.

By the 1970's these notions were being effectively questioned and in the following decades the overarching notion of colonization came under sustained and effective criticism. In part I.1, we identified the ways in which these criticisms have failed to result in changes to the overarching paradigms of migration, which remain stubbornly embedded in twentieth century concepts of colonialism and Marxism. Approaches rooted in post-colonial studies have effectively problematized much of the discourse, but the application of interpretative tools such as network analysis, hybridity, and diaspora have, in our view, so far failed to overturn many of the longstanding methods and categories of analysis inherent in the subject. Previous attempts to utilize migration theory itself have also had little impact on the established discourse.

Therefore, from the outset, we sought to develop a theoretical model with which to explore some of these problematic areas, through the application of approaches developed in the last few decades in the field of migration studies. There is no doubt that, whether it was 'colonization' or not, the phenomenon we are dealing with is a form of migration and, therefore, there is no reason that the techniques and frameworks developed in the study of other historical and contemporary migration contexts should not be applicable to the Archaic Greek world as another example of the human experience of migration.

Nevertheless, several methodological problems in the model needed to be addressed before it could be applied to an ancient historical/archaeological dataset. Most studies of migration deal with well attested historical periods or contemporary communities, in which individual participants can be given a voice. In prehistory, migration is identified through bio-archaeological and stylistic analysis but, while the former tells us who moved from where, it tells us little of the wider context in which they did so, and the latter may not indicate migration at all, merely cultural diffusion. The Archaic period falls somewhere between these two and we have adopted the designation of proto-historic to reflect this. Furthermore, the liminal nature of the evidence, between material culture and literary testimony, necessitated adopting different aspects of theoretical approaches to migration best suited to approaching the extant evidence.

An extended reading of the literature around migration theory led to the identification of some key concepts which would allow us to achieve our goal of

applying it to our chosen case study of Milesian overseas settlement. We identified four central conceptual approaches to migration which could be profitably combined to address the nature of the surviving evidence. In Part I.2, we explored the main aspects of these and addressed some related theoretical issues such as causation and the emergence of new forms of structures and practices (see also Appendix A).

As a starting point for our model, it was essential to be able to establish, in a rigorous fashion, the temporal and spatial parameters of the subject under investigation. To achieve this, the first element of our framework was to establish migration trajectories. Using the notion of the diffusion or dissemination of innovation, the concept of trajectories allowed us to begin to map out the ways in which migration occurred in space and time and provided a means to understand why, once started, migration processes may increase over time, and then decrease and stop or continue as a slow ebb and flow. In the absence of the kind of data that better evidenced contexts of migration can afford the researcher, we chose to represent these trajectories using proxies. Several sites and regions were chosen to illustrate the development of a trajectory, which we understood as unique to their specific context, prior to comparison with other trajectories. These were chosen primarily based on the existence of suitable proxies, but at the same time some attempt was made to select a variety of representative examples (though the nature of the evidence meant these were geographically restricted to the western and northern Black Sea).

At the same time as developing these trajectories, it became clear that the exogenous drivers of migration, in particular regional contexts, should also be addressed. An artificial division of these two elements would make it difficult to map out trajectories in their wider contexts, while at the same time distancing the exogenous drivers from the spatially and temporally specific contexts in which they functioned. First, we were able to observe that, in general, trajectories of migration to Milesian migrant communities followed a predictable course of steady growth up to the middle of the sixth century, followed by more rapid expansion. The scale of this process differed between specific settlements, and it became clear that exogenous events such as destructions, the behaviour of local pastoralists, the role of local centres of exchange and terrestrial migration to the regions surrounding the migrant settlements and the urban areas themselves, had potential impacts on the specific development of a given trajectory.

In the Propontic regions this is best evidenced by the roles played by Troy and Daskyleion as centres of exchange and, in the case of the latter, as a node facilitating access to wider networks of interactions in central Anatolia. On the southern Black Sea coast, the migrant settlements themselves played this role merging with existing routes of cultural interchange and facilitating economic interactions along the coast and into Kolchis. In the southern part of the western Pontic coast, the migrants quickly began to profitably interact with the settled communities inland, an interaction which must have been mutually beneficial, and gave them access to the material resources of the region, subsequently encouraging further migration. In northern Dobrudja, the aftermath of the collapse of the Babadag culture also had an effect on the trajectory of migration as, alongside the arrival of maritime migrants, nucleated settlements of the local terrestrial population appeared. Both sets of migrants undertook a cultural interaction and formed a regional community of practice, that was intertwined to the extent that identifying one from the other has proven a difficult and contentious task.

Around the Dniester, the trajectory of migration seems to have been influenced to a large degree by the proximity of established migrant settlements at Istros to the south and Olbia to the northeast. From limited beginnings at Nikonion, the region experienced a rapid settlement growth in a very short period at the end of the sixth century. An important element in the trajectory of migration to the northwestern Pontic region was the establishment of what appears to be a quasi-planned settlement at Olbia. During the sixth century it was at the centre of extensive rural expansion resulting in a complex settlement structure. Further east, Taganrog appears to be a geographic outlier and, possibly due to its relative isolation, the trajectory of migration here seems to have been limited and the presence of local sedentary populations may have prevented further expansion into the region. At first glance, Pantikapaion offered a comparably more favourable location, yet its expansion and the trajectory of settlement of further migrant communities along the coast was heavily influenced by the periodic movements of nomadic groups from the North Caucasus, the Early Skythians. The trajectory of migration to the Taman

peninsula and the Kuban Bosporus seems to have been more extensive, but there too, it is clear that coastal locations were preferred, and early fortifications imply a similar set of external pressures. In this region, however, the trajectory of migration was also affected by endogenous conditions, the slow silting up of the channels overtime which, by the end of the period under study, may have led to the abandonment of some settlements. Furthermore, a major new migrant settlement was established in the region at Phanagoria and it seems to have superseded the previous migrants' more dispersed settlement patterning habit.

While these conditions have been independently observed, the utility of our model allows us to link them specifically to the patterning of migration over time. By visualizing trajectories, we can better comprehend the wider ranging effects of endogenous drivers on specific migration processes and lay the groundwork for identifying concurrent exogenous drivers within the emigrant community. These are explored here with a more traditionally historiographic approach due, in part, to the greater availability of written historical data for the city of Miletos itself. In Part II.2, we identified three potential endogenous drivers, internal social conflict, economic developments, and external conflicts. Through a close reading of the texts, we were able to conclude that internal conflict was a feature of Archaic Milesian life, but the attempt to reconstruct wider narratives should be avoided. Furthermore, we also argued that the prosperous economic context in the Archaic city may have driven migration, by framing it as a proactive aspirational choice, based on expanded opportunities for motivated individuals and the access to migration capital that it afforded them. Finally, we noted that external conflict may have driven migration through the loss of material capital resources, particularly land in the Maeander valley, and some level of migration was doubtless precipitated by the apparent total destruction of Miletos in 494. Furthermore, we argued that exogenous drivers of emigration could have influence in the migration decisions of groups at different times. For example, internal conflict could precipitate the emigration of one group such as the *Cheiromacheia*, while simultaneously raising the cost of migration for another, the *Aeinautai*, and vice versa. External conflict and events, such as the destruction of Miletos, acted as a different kind of driver for heterogenous groups and access to capital required to escape the city in the face of the Persian destruction, also likely had a determinative role.

Having established the trajectories and drivers of migration we are left with a model of migration that says nothing about the migrants themselves. Addressing this lacuna is problematic in proto-historical case studies where any first-person evidence of the experience of migration is unlikely to have been recorded or to have survived. To overcome this, we adopted the notion of position practices. This allowed us to create a synthetic vista of context, opportunities, access, and capital, based around wider social statuses and identity characteristics. This requires the initial subsummation of the migrant within their socio-cultural position, but the mutual inclusivity of these positions allows us scope to sketch out the wider interplay of various dispositions within the individual migrant or migrating group. In Part II.3.1, this involved undertaking an ethno-culturally essentialist analysis of several bodies of evidence. It aimed to assess the levels of sociocultural influences and interactions as well as provide grounds to speculate on the cultural identities of the migrants. As we saw in Part III, this is an essential step in sketching out the contexts in which communities of practice negotiate socio-cultural behaviours. Having made a case for the socio-cultural heterogeneity of the migrants, we then moved on to exploring the role of specific practice positions on access to capital, and opportunities to migrate at different points in the trajectory. We established that social status, particularly elite status, facilitated access to migration capital while simultaneously offering potential socio-political benefits from its enaction. At the same time, the conflicts we observed in Part II.2.1, might also make elite status less secure. In this sense the loss of capital and status could concomitantly lower the capital required to migrate by reducing the cost of fragmenting social, cultural and economic ties to the emigrant community.

By analysing vocational position practices, we were able to transcend the elite focus of the written and epigraphic evidence and explore the ways in which non-elite emigrants such as craftspeople, agriculturalists, traders and fishers were able to migrate. Each of these vocations facilitated access to associated capital through learned skills and exogenous opportunities. For agriculturalists and fishers, the geographic contexts of emigrant communities provided numerous opportunities to utilize their skills, while the development of the communities themselves and the everyday needs of the migrants widened the opportunity and economic and social capital of craftspeople. For traders, the wider networks of exchange that migrant communities interacted with provided opportunities to engage with local communities within their own economic systems. For example, the settlements of the forest-steppe region were part of a system which stretched to western Europe, the Baltic, the Balkans and western Siberia. It is vital that we understand Greek economic migration to the Black Sea in light of this. Milesian migrant communities may have been on the periphery of the economic systems of the Mediterranean-Near Eastern world, but the position of Greek migrants on the edges of this northern region of interaction was arguably just as important, if not more so.

Understanding these Milesian migrant communities in light of this wider interconnected world leads us on to the final part of our model. In Part III, we explored the ways in which these communities of practice created a socio-cultural *koine* of Milesian migrant settlements. In some respects, this was predicated on shared emigrant cultural traits, but, as we demonstrated through the development of domestic space and religious practices, it was far from a simple transplantation. The use of dugout architecture across a wide space is a good demonstration of this. While it may have initially begun as a borrowing from local Pontic or Anatolian practices, its spread and longevity implied a more fundamental role in social practices. We argued that the process of migration and the desire of the migrant to stablise their surroundings through homemaking, led to the diffusion of a particular type of architecture that was an important manifestation of this during the innovator and early uptake phases of migration. By the later phases it was supplanted by other architectural forms, demonstrating the ways in which the continuation of the migration trajectory can change the cultural forms developed within the community of practice and introduce new ways of being in everyday life.

Religious practices and the worship of certain deities also illustrates the functioning of the community of practice and the development of a Milesian emigrant *koine*. While the main deities, Apollo, Aphrodite and Demeter are all important in the emigrant community, the practices and characteristics of their cults were notably different. For example, the use of epithets differed. Apollo, in the guise of Ietros, developed within the context of Milesian emigrant communities of practice. Elements of localized cults of healing and immortality are alluded to by this epithet, and the spread of this deity across the region testifies to the shared cultural practices of a wider regional koine. Aphrodite too, seems to fulfil the role of a maritime deity both in the immigrant and emigrant communities, which may account for her prominence in the latter, while other important Milesian deities such as Artemis and Athena received comparatively little focus. Furthermore, the convergence of marine, Ouranian and Chthonic aspects implies the malleability of such deities within local contexts as well as her connection to various local topographical features such as the *sacrée fosse* at Istros. Overall, the role of religion is multi-faceted and adaptable. This is entirely in keeping with the way in which communities of practice function, through negotiation and shared cultural norms, but also the ways in which they overlap and undercut one another. The Milesian emigrant

koine that we have argued for was, in essence, made up of various different emigrant communities and, beyond that, heterogenous groups of migrants. We should expect as little cultural uniformity across these communities as we would for the strict uniform recreation of metropolitan institutions and life ways imagined by colonial perspectives.

Overall, this study has argued for a new way of looking at the subject of relocation in the Archaic period in a nuanced, multi-focal and holistic way. Yet in studying the big picture of history, we are reliant on the synthesis of multiple specific small studies. By using a flexible approach, we have attempted to negate the wider effects of this problem, but it should be borne in mind that studies such as this can change and develop as new material is uncovered, new perspectives gained, or new conclusions reached. Such diverse bodies of evidence leave room for contention on specific points, datasets, and arguments, which to a greater or lesser extent can have some bearing on the conclusions drawn.

Nevertheless, the key findings of this study - that wider processes of Milesian migration were embedded within local and regional geo-political, cultural and economic networks; that exogenous drivers operated in distinct ways to varied degrees for different groups of potential migrants; that access to migration capital amongst positionally practicing groups had an important determinative role in their spatial and temporal migration; and that the interaction of culturally, socially and vocationally heterogenous groups of migrants resulted in the formation of a community of practice of "Milesian migrant culture"; are strongly supported by the available evidence interpreted through a theoretically rigorous model of migration.

Finally, a model specifically designed for the study of proto-historical migration has much utility. It could as easily be deployed to understand movement in the Bronze or Early Middle Ages, and beyond to more recent periods. The reliance of contemporary sociological studies of migration on participant interviews could be enhanced by applying this model to the unarticulated textures of modern international migration, while in transnational discourses it offers an alternative way of exploring the immigrant community as an instantiation of transnational practices. By grounding our model in theoretical approaches and deploying a flexible methodology designed to analyse divergent bodies of evidence, while avoiding the reductive confirmatory bias inherent in many previous studies influenced by western colonial thought, the model that we have presented here can be used by researchers in a variety of historical disciplines and eras and allows us to understand migration in all its complexity, contradictions and consequence.

Appendix A Sociological Theory

Practice Theory

Structures, in their capacity to generate emergent contexts and in their affective role on actors, can have an important effect on migration processes. The drivers of migration, be they predisposing, proximate, precipitating or mediating; form the contexts in which migration decisions and actions are taken. Exogenous generative and temporal effects of macro structural contexts interact with the endogenous feedback mechanisms shaped through emergent structures within micro and meso level temporal change. Alone, this model of migration processes is structural and determinative. It requires the introduction of the second, more nebulous, axis of migration theory: agency.²⁷⁸ In our brief survey of research into migration we have already noted a number of theories which place agency at the heart of the process, either giving unbridled voluntarism to actors, or through more complex optional matrices, such as in rational-choice migration. In contrast, we shall see that demonstrations of agency in migration contexts are not as simple as making cost-benefit decisions on whether and where to migrate, nor can actors be seen

²⁷⁸ Throughout we will refer to the people who exercises agency as actors as opposed to agents. This distinction is based on the variable potential scope for agentic demonstration, and the potential for constraining contexts to prevent an actor from exercising agency. In other words agents are always actors, but actors cannot always exercise agency.

as de-contexualised agents able to make such choices based on little more than social or economic imperatives.

In this sense, Bourdieu's theory of practice, which explores the interaction of structure and agency through fields, habitus and capital, may be the more theoretically reliant approach. Its strengths lie in its ability to supersede the subjectivity of agents with said subjectivity becoming a strength rather than weakness. This is due to the interaction between capital; the potential resources, strategies, competency and capacity for action, and fields; the wider social scenarios, hierarchies and systems of relations in which the agent operates (Bourdieu 1977, 1986). The third element in this approach, habitus, denotes inscribed modes of understanding, knowledge, emotional behaviour and self-conceptualisation which form, reform, structure and undercut the ways in which capital is negotiated within fields of action (Bourdieu 1985). While the approaches of Bourdieu and Giddens are often conceived as being essentially two sides of the same coin, an oft neglected aspect of Bourdieu's concept of habitus, its generative force, elides some of the problems noted by critics of Giddens' work. The generative nature of habitus means that it is not merely an internalized but an embodied structure (Greaves, Knight, and Rutland 2020). Habitus, on this reading then becomes an emergent structure. This means that it has the capacity to alter the sum of its parts as well as constitute them (Elder-Vass 2010: 33-34). This generative causal capacity to effect and enact change beyond the agent's control, reifies and externalizes the

structure, overcoming the problem of dualism between structure and agency and placing causality at the nexus between them (O'Reilly 2012: 5-6).

In her 2012 monograph, Karen O'Reilly set out a methodology for the study of migration based on aspects of practice theory and structuration theory (O'Reilly 2011). She argues that "social processes take place through an ongoing cycle ... between external structures Internalized structures in agents ... practices ... and outcomes." (O'Reilly 2011: 17). Her model of migration practice consists of these four elements, external structures, internal structures, practice and outcomes. While similar arguments are made by Massey et al. (1998: 281) amongst others, the utility of O'Reilly's model lies in its functional design, in the sense that it is explicitly formulated to provide a framework for research, and its expressly theoretical character. It elides reliance on particularistic theories of economic causality in migration²⁷⁹ and seeks to understand the basic constituting processes that lie behind the various fields of interaction, which constitute and are in turn constituted by the practice of migration. It is therefore necessary for the scholar of migration to analyse each of these manifestations

²⁷⁹ Cf. Massey et al. (1998: 281) who state "any satisfactory theoretical account of international migration must contain four basic elements: a treatment of the structural forces that promote emigration *from developing countries*, a characterization of the structural forces that attract immigrants *into developed countries*; a considerations of the motivations, *goals and aspirations* of the people who respond to these structural forces ... and a treatment of the social and economic forces which arise." (emphasis my own).

of social processes to begin to understand the ways in which migration is enacted, experienced and embodied.

She does not attempt to posit a hierarchy of causality between the elements of her model and instead argues that they should be seen as mutually reflective, constituting and intrinsically interconnected (O'Reilly 2011: 16-17). She goes on to argue that the perception of the researcher often determines whether a specific process will be viewed as internal or external and as a practice or an outcome. Each part of the model can stand for the others depending on its relational perspective to the agent (O'Reilly 2011: 23). To simplify, a law prohibiting theft is an external structure in the sense that it is an action that is punishable regardless of the agent's conception of the action. Simultaneously, the spirit of said law may well be an internal structure in as much as another agent (or even the same agent) may imagine it as a moral precept. At the same time, it is both a practice of this morality, and an outcome of the negotiation of the negative meaning of theft in a community of agents.

Structuration Theory

Anthony Giddens' has proposed a framework to overcome the dichotomy of structure and agency which he terms 'Structuration Theory' which has proven popular in migration contexts (Goss and Lindquist 1995; Morawska 2001). His conception of structure as constituted by and through agency, and its ultimately recursive and structuring nature, relies on a conception of the social world as nebulous series of connections and relations made by the individual agent or actor. Furthermore, he argues that the distinction between structure and agency is no more than a perception and thus "structure is not 'external' to individuals" while "the social systems in which structure is recursively implicated ... comprise the situated activities of human agents, reproduced across time and space." (Giddens 1984: 25). This means that the reification of structure, its actual reality, only exists in the sense that it is perceived by the agent as a structuring force within the sphere of their systems of choice. This elides the problems of structure and agency as separate constituent factors, by understanding the basic sense in which the structural nature of an agent's experience is constituted by their own perception of the world around them and their role and place within it.

Gidden's theory of structuration has, nevertheless, provoked extended debate and criticism in social studies, including within the field of migration studies.²⁸⁰ The central concern of his critics, is that, by conceiving of structure and agency as a duality, in other words structure as indivisible for the contexts of its construction and perception by agents, he effectively annuls it as a unit of analysis. This, despite its obvious manifestations and, more importantly, its unintended consequences in relation to agent's behaviours and spheres of action. Furthermore, critics have rightly questioned whether structuration theory constitutes a viable sociological approach (Bakewell 2010). It has been observed that most studies which attempt to follow this theoretical model are

²⁸⁰ Though Giddens himself claimed that, "The concepts of structuration theory, as with any competing theoretical perspective, should for many research purposes be regarded as sensitizing devices" (1984: 326).

unable to replicate Gidden's hypothesis and frequently result in the restatement of structure as a reified field of action with a complex relationship to agency, but by no means one of complete inter-reliance (Bakewell 2010: 1701-02). This is notable in the temporal field in the sense that an agent may make a decision based on pre-existing structural conditions, yet, if agency and structure are a true duality, as Giddens' seems to conclude, then the structure becomes the decision and the decision the structure, leading to an infinitely recurring ontological cycle in which causality, as a unit of analysis, become negated.

Morphogenesis

In explicit reaction to Gidden's conceptualisation of structure and agency as a duality, Margaret Archer developed a conceptual framework for causality termed morphogenesis. She argues that the way in which Giddens understands structures as a metaphysical manifestation of agentic enaction, renders any distinction between the two impossible to study. For Archer, the basic observation that structures appear to have an effect on actors external to the actors ability to embody the structure through action, means that a theoretical and practical distinction must exist between them (Archer 1982) (Archer 1982: 477). If, as Giddens seems to argue, structures do not pre-exist their enaction through agency, how is it possible for them to exert any causal force? To overcome this problem of causality, Archer embeds temporality within her model of causation. This temporal relationship between structure and agency is key to understanding their relative roles in enacting change or reconstituting normality (Archer 1982: 467-8). She represents this temporal aspect through

the unfolding, of structural contexts in a process of conditioning. This is comparable to the process in which an actors' dispositions are embedded, negotiated, enacted, and/or changed through social interaction; before the structures and contexts concerned are elaborated, rather than simply being reasserted as in Giddens model (Archer 1982: 477). Morphogenesis describes the complex interactions which produce change in the form of structural elaboration (Archer 1982: 458).

Society and social structures, in Archer's view, are never the deliberate results of prior interactions and thus always remains subject to change. Indeed, the disparity between intention and aspiration and structural reality becomes, on this reading "the underlying motor for change" (Archer 1995: 165). Actors' ability to exert influence and enact change through agency is, perforce, subject to extant structural contexts. These constrain the totalising realisation of their intentions (Archer 1995: 167). Thus, the morphogenetic approach seeks to understand the ways in which patterns of behaviour and decision making are undergirded and generated by structural contexts while simultaneously acting to reassert or reimagine these contexts in conscious or unconscious ways. The resulting structural elaborations create new sets of structural conditions in which agents continue to act (Archer 1995). This morphogenetic cycle attempts to account for the ways in which patterns of structural generation, demonstrations of agency and subsequent structural elaboration, function in such a way as to develop, recreate and create social structures anew. Archer (1995: 166) conceives of morphogenesis exclusively as a process of change, thus

it is defined by its outcomes which, by definition, diverge from its antecedents. She terms the recurrence of social structures *morphostasis*, whereby the outcomes of the processes exhibit little substantial difference from their constituting structural contexts. Yet, by introducing a temporal dimension to these processes, the differences between *morphogenesis* and *morphostasis* are reduced to subjective considerations, in other words 'how much change?' (cf. Archer 1995: 168). A particular structural elaboration or reversion must still presuppose both a generating structural context and agentic action. Therefore, the elaborated structure cannot, in practice, represent a true reiteration unless we follow the illogical argument that a generative structure, in itself, presupposes its own elaboration at time T+X. Nevertheless, in accepting the logical improbability of morphostatic structural elaborations and positing that the effect of time alters all structures, Archer's morphogenetic approach is able to reconcile some of the more problematic aspects of structuration theory's notions of interaction between agency and structure, providing a model which elaborates the actual mechanisms by which they enact affective force on one another over time (Archer 1995: 167).

By utilizing aspects of the social theories of migration, we propose here to explore a model of causality which gives priority to neither the effects of structures nor the agency of actors, but instead looks to analyse the ways in which they dynamically interact to create *opportunities* for migration. The model that we are constructing with which to study the process of migration, comprised of three elements. *Generative structures* are the macro and micro level contexts which create conditioning conditions in which actors enact *agency*. Secondly, agency itself, here understood as the ways in which affective action is conceived and undertaken by actors towards future ends. The third aspect that we shall discuss is *emergent structures*, the structural frameworks that develop out of the confluence of agency and generative structures, and which themselves generate new structural contexts and provide feedback mechanisms for both agents and initiating structures. An important underpinning of this model is the recognition of the fundamental temporal difference between the initiation of migration and its perpetuation (De Haas 2010: 1589).²⁸¹ In the morphogenic approach to social interactions, Margaret Archer provides the important distinction between structures, and agents' internalised dispositions, at various timescales extending from "Time T" to "T+1" and further (Archer 1982: 476). This means that the constitution of agentic dispositions and their social context at T+X must presuppose the relative conditioning principles of previous time frames. The feedback mechanisms and generative force of emergent structures ensures that this process functions cyclically or, in the words of Ewa Morawska, agents and structures are in a "processes of continuous becoming ... always changeable and never fully determined" (Morawska 2011: 4).

Agency

²⁸¹ Massey et al call this "triggering"

If we are to understand the role and functioning of agency in migration process it is essential that we first provide a working definition of the concept. While most people probably think that they could identify instances of agency and likely have an innate understanding of the ways in which they can exercise it in a given situation, the definition of agency in sociological and migration studies literature remains a site of contest (Fuchs 2007). Nevertheless, here we shall give a broad definition based around theoretical work in this area before drilling down into the specific types and qualities of agency, while bearing in mind that this definition is by no means definitive in all alternative contexts. Anthony Giddens, in The Constitution of Society, takes great care, from the outset, to define the intended meaning of agency in his work, specifically that it "refers not to the intentions people have of doing things but to their capability of doing those things in the first place" (1984: 9). The power of agency lies in the actor's ability to enact action. While Gidden's formulation makes it clear that intentions are not *a priori* the same as agency, he does provide an opaque nod towards action's parallel mental process, intent.

A number of migration scholars have picked up on this idea when offering their own definitions of agency and action in migratory or migratorypotential contexts. Stephan Fuchs calls agency the "faculty for action" (2007), indicating the role of both mental and physical processes, while, for Oliver Bakewell, placing more emphasis on the 'thinking' aspect of agency, states that it is "the capacity for social actors to reflect on their position, devise strategies and take action to achieve their desires" (2010: 1694). In two further papers, Bakewell and his colleagues clarify this definition further, stating that agency "through the interplay of habit, imagination and judgement, [can] both reproduce and transform those structures through interactive response to the problems posed by changing historical situations" (Bakewell, De Haas, and Kubal 2012: 432) and that agency "is concerned with people's capabilities to take their aspirations and transform them into changed positions in the social and geographical world" (Bakewell, Van Heel and Long 2018: 930). The important concept to note here is that of 'transformation'. Agency is an active process that generates change and leads to new emergent structural contexts. While Bakewell and his colleagues see this change from the agent's point of view, in their intentional or aspirational wish to change their social and structural contexts, or conversely to ensure beneficial continuity and stability, we must also be cognizant of the importance of the unintended outcomes of agency (Giddens 1984: 11).

Yet if intentionalism has a varying effect on outcomes, to what extent are actors actually able to enact transformative or stabilising agency? There is the danger that, when followed to its logical conclusion, whether human agency then has any meaning or actual affective force in its intentional constitution. If the unintended causal chain becomes the wide-reaching outcome of agency, is it possible to effectively enact agency in any situation, rather than just to pursue actions, the consequences of which, become unrelated to the original intention? Giddens argument, that "The consequences of what actors do, intentionally, or unintentionally, are events which would not have happened if that actor had behaved differently" (1984: 11), bears a resemblance to the idea of the "butterfly effect", whereby small changes can potentially cause largescale unforeseen structural and systematic changes, but in Giddens notion of unintentional agentic outcomes, these can only be assessed teleologically. It could be argued that this contradicts his notion, that without the action, or with a different action, the outcome would be different, in the sense that this becomes empirically unknowable.

To overcome this contradiction, we need to further drill down into what agency entails. In a widely cited paper published in the last years of the twentieth century CE, sociologists Mustafa Emirbayer and Ann Mische, offered a detailed analysis of what they term the "chordal triad of agency" (Emirbayer and Mische 1998: 970-1002). This conceptualisation of agency has proven a fruitful framework to explore questions of agency in migration studies and will form the basis of our understanding of agency for the purposes of this study. Emirbayer and Mische view agency as a "temporally embedded process of social engagement" (1998: 963). What they mean by this is that agency functions both cognisant of and in relation to the timeframes of past, present and future as memorised, experienced, and imagined by actors respectively. Demonstrations of agency, they argue, are always directed "toward something, by means of which actors enter into relationship with surrounding persons, places, meanings, and events" (Emirbayer and Mische 1998: 973). Furthermore, they contend that, as the contexts in which agency changes, it is also possible for the temporal orientation of agency to adjust to these emergent situations. Agency orientated towards the past, functions in the sense that people draw upon experience and can seek to recreate action within the mould of the 'known'. Emirbayer and Mische equate this temporal dimension with habitual action, in other words basic undertakings designed (or un-designed) to recreate 'known' conditions, contexts and structures. Conversely, futuring agency is taken to be the way in which people can imagine possibilities, and organize and plan 'projects' within these possibilities to pursue specific aims or goals. Present agency is the way that conceptualizations of past contexts and events are contextualised, along with future prospections within temporally contingent "moments" of time i.e., the present (Emirbayer and Mische 1998: 963). In sum, whereas a particular instantiation of agency may be initially intended to ensure structural continuity, over time, and potentially in conflict with this intention, emergent situations may require enaction of agency orientated towards future plans and imagined outcomes, or may entail the weighing up of present conditions in terms of memorised analogous contexts in tandem with expected future developments. Because situational contexts evolve and change from moment to moment, actors must continually re-evaluate the meaning and form of the/their past to align with their interpretation of the outcome of the present, in other words, teleologically. This 'new' understanding of the causal relationship between past and present then becomes the framework on which future prospectuses are based (Emirbayer and Mische 1998: 969).

The three 'temporal orientations', which make up Emirbayer and Mische's "chordal triad", are mapped on to different types of agency based on their temporal focus. These consist of iterational agency, projective agency and practical evaluative agency, though they acknowledge that, in practice, such a division is artificial and moments in which agency is enacted tend to encompass all three to a greater and lesser degree (1998: 971-3). Iterational agency, "lies in the schematization of social experience ... manifested in actors' abilities to recall, to select, and to appropriately apply the more or less tacit and taken-forgranted schemas of action that they have developed through past interactions" (Emirbayer and Mische 1998: 975). This type of agency bears a close resemblance to the functioning of agency in Gidden's Structuration theory, in the sense that it tends towards the reproduction of social and structural contexts, though Giddens notion of intentional and unintentional outcomes and reflexivity are more at home in the sphere of projectional and practical evaluative agency (Giddens 1984: 9-11).

Iterational agency functions through a system which Emirbayer and Mische term "selective recall". In the first place it consists of "selective attention", the precise memorial and experiential information relevant at a particular temporal junction "developed over the course of biographical histories and past collective experience" (Emirbayer and Mische 1998: 979). This form of recall frequently occurs "pre-reflexively", yet even un- or semiconscious habitual activity still requires a selection of relevant information needed to sustain or reproduce structures and patterns of social activity (Stones 2001: 185-6). Following the conscious or unconscious orientation of attention towards relevant bodies of memory and knowledge, actors then locate them within "wider categories of identification and value" (Emirbayer and Mische 1998: 980). This process involves assessing recalled information within wider socio-cultural categories of meaning. Despite the fact that these matrices of meaning are frequently sub-conscious, iterating actors still need to exercise agency in locating present moments or past experience within wider frameworks, to ensure structural, social and cultural continuity (Emirbayer and Mische 1998: 982).

In migration contexts, according to Oliver Bakewell and his colleagues, iterational agency can be manifested in close ties between emigrant and immigrant communities. Cultural manifestations of nostalgia are an emotive concept and represent a desire to rebuild the social, cultural and physical fabric of the emigrant community, in immigrant contexts (Bakewell, de Haas, Kubal 2012: 426). We could also argue that iterative agency can also include examples of migration and mobility in general, through the formation of "culture of migration" in which increasing prestige is attached to migration" (de Haas 2010: 1608). This is an important observation as it underlines the agentic orientation of iterational manifestations. Efforts to reproduce the structural context of the emigrant community may have the unintended consequence of making migration a more desirable proposition and embedding notions of movement into cultural identities. These identities can then be iteratively enacted through further migration.²⁸²

²⁸² See Knight (2020), for a discussion of this process in reference to Milesian emigrant culture.

The second type of agency identified by Emirbayer and Mische, projective agency, is orientated primarily towards the future, though still contains elements of the recall processes inherent in iterational agency, in terms of the ways "past patterns of interaction are imaginatively recomposed to generate new future possibilities" (1998: 991). Eva Morawska describes this as, the "imagination of future trajectories of action" (2011: 5). In instances of projective agency, actors are able to distance themselves from habitual modes of thought and action to project imagined and desirable ways of being. Projection involves negotiation of normative structures driven by changing and challenging structural-temporal contexts. The agentic element here, lies in "the *hypothesization* of experience" as they "reconfigure received schemas by generating alternative possible responses to the problematic situations they confront in their lives." (Emirbayer and Mische 1998: 984, emphasis in original).

Projectivity is reflective in the sense that it is a response to contexts and problems which cannot be satisfied by mere recourse to iteration. In this sense, structures *generate* changes in actor's vistas which require an adequate response beyond restatement. Projects and projective agency involve the actors' ability to comprehend and alter their memorial and experiential schemas to fit changing circumstances either externally constituted, or through their own reactive projections of their goals, aspirations and aims. Projective is therefore set between iterational agency and practical evaluative agency (the past and the present), in the sense that it involves the creation of new schemas of action beyond iteration, as direct responses to agents' reflective interactions with generative structures (Emirbayer and Mische 1998: 984).

Projective agency, in Emirbayer and Mische's framework, is constituted through a number of dimensions which are enacted at different points in the process of agentic action. First, actors engage in "anticipatory identifications", whereby potential patterns of development are detected in nebulous futured schematic frames (1998: 989). They make predictions on the course of events and potential outcomes. Inherent in this activity is the production of "narrative construction", whereby future frames of action are narrativized and embedded into wider anticipated or accepted schemes of action (Emirbayer and Mische 1998: 989). The third internal element of projective agency is "symbolic reconstitution", the deconstruction and reconstruction of accepted frameworks of meaning into new possibilities and trajectories to create "alternative meansends sequences", involving strategic predictions of potential forms and sequences of actions by other actors, as well as the ways in which these effect structural constraints and opportunities (Emirbayer and Mische 1998: 989-90).

The final two elements of projective agency are "hypothetical resolution" and "experimental enactment" (Emirbayer and Mische 1998: 990). The former involves imagining the possibilities and outcomes of different potential action sequences as a response to changing or challenging structural contexts. This aspect of projectivity involves the interaction between predicted emergent schemas and multi-form modes of potential projective agency, while "experimental enactment" entails "hypothetical resolutions ... put to the test in tentative or exploratory social interactions" (Emirbayer and Mische 1998: 990). One of the ways in which these hypothesised resolutions can be enacted is through processes of "ritual role reversal" (Emirbayer and Mische 1998: 990). This may have particular importance in terms of ancient Greek migration, in the way in which migration is often culturally framed as a transgressive act (Dougherty 1993). If "it's murder to found a colony" (Dougherty 1998), it may follow that in these narratives, migrants take on the normatively negative role of the criminal or murderer (particularly of a member of kin), which creates an outsider persona suited to their migration action, which likewise removes them from the immediate emigrant community. These narratives may have been experimenting with notions of inclusion and exclusion, to understand the effect of migration decisions.

Placing projective agency into migration contexts, Oliver Bakewell and his colleagues have noted the importance of projective migration as a response to rapidly changing structural contexts, or a rupturing device intended to enact effective change (Bakewell, de Haas, Kubal 2012: 430). Overall, migration projects and projective agency are probably more widespread than iterational elements. For example, in terms of lifestyle or aspirational migration, imagined vistas may well provide an important aspect of the decision to migrate (Benson and O'Reilly 2009: 17-18; Morawska 2011). It has also been observed that instantiations of projective agency can contribute to constraining and mediating feedback processes (Bakewell 2014: 313).

The third part of Emirbayer and Mische's chordal triad consists of practicalevaluative agency. This type of agency is both proactive and reactive and accords to the temporal moment of the present, which they describe as "the contextualization of projects or of habitual practices within the concrete circumstances of the moment" (Emirbayer and Mische 1998: 997). Practicalevaluative agency predominantly occurs at the 'moment of decision', principally when actors encounter structural contexts which they conceive as inhibiting their ability to enact projects and/or enable recursive iterational practice (Emirbayer and Mische 1998: 994). Emirbayer and Mische term this process "situationally based judgement", where, as contemporary emergent situations problematize experiential schemas, actors are required to respond and reflect in increasingly complex and strategized ways. In their words, the "locus of agency in its practical-evaluative dimension lies in the contextualization of social experience" (Emirbayer and Mische 1998: 994). There is also a highly social element of practical-evaluative agency, negotiation and dialogue within intra and inter-personal setting about 'ways to go on' in contemporary contexts This gives actors the ability to take decisions based on considered options, contingencies and outcomes which have the ability to undercut, undermine and change normative actions.

Practical-evaluative agency tends to function as a temporally linear processes encompassing five heuristic elements. "Problematisation" refers to actors' comprehension of a moment or situation as "ambiguous, unsettled or unresolved" (Emirbayer and Mische 1998: 998). This is the recognition that a moment requires an affective decision or action. For projects or projective agency this includes an actor's conceptualization that the moment or situation is, for whatever reason, detrimental to the project's fruition. For Emirbayer and Mische, practical-evaluative agency occurs at the nexus between past and future, the present moment in which "something must be done—some practical judgment arrived at—that will render the given situation unproblematic, settled, and resolved" (1998: 998). Following this recognition, that a specific junctural moment requires a decision, actors then typically "characterize" it in terms of memorial and experiential schemas, forming the second step in the practical-evaluative process (Emirbayer and Mische 1998: 998).

Characterisation is followed by "deliberation" or consideration, wherein actors compare and contrast schemas and modes of action in light of the contemporary context and prospective or engaged projects. It is a reflective process which can be enacted through and within individuals or groups and requires a conscious engagement with how best to respond to the contingencies of the moment, and fulfil the requirements needed for a positive outcome. This is dependent on the actors' conclusions as to the exigency of moment, project and scheme (Emirbayer and Mische 1998: 998). Then follows the decision itself. It is characterized as both "a movement to concrete action" and a "resolution to act here and now in a specific way" (Emirbayer and Mische 1998: 999). Even for the agent, this step, as with the others, may not be immediately perceptible, functioning on an unconscious or semi-reflexive plain. In this sense, it can reflect planning or opportunism, and can be influenced by both feedback from previous decisions as well as "articulable explicit reasoning" (Emirbayer and Mische 1998: 999). Finally, the actor "executes" a particular action. This entails the ability of actors to enact action, aimed at particular outcomes within specific contemporary contexts (Emirbayer and Mische 1998: 999). Yet, the outcomes, having been weighed up, can also entail negative outcomes, or create new problems (Giddens 1984: 10-11). Eva Morawksa argues that practical-evaluative agency entails the making of "practical and normative judgements among alternative possible trajectories of action" (Morawksa 2011: 5), while Karen O'Reilly sees practical-evaluative agency as key to the formation of what she calls "conjuncturally specific internal structures" (O'Reilly 2011: 29), in other words the specific sets of internal structures or habitus that an actor draws upon in a given situation.

Internal Structures

According to Karen O'Reilly, "internal structures" are composed of "people's habits, conceptual frameworks, repeated practices, internalized social structures and norms, the result of experience, habit and socialization." (O'Reilly 2011: 26). These can be usefully viewed through the lens of lifeexperience or biography.²⁸³ We define this as the ways in which the myriad of more regularly proximate, external structures, are internalized, negotiated and understood by the agent, and their ability to make decisions based on this. At

²⁸³ This definitions of migrant biographies and life-experiences is adapted from the ideas of Halfacree and Boyle (1993) and Erel (2010).

face value, this might seem to suggest a reductive structuralist perspective, and again the idea of emergent qualities becomes important. The chronology of affective structural experience is unique to the individual agent in the pathways in which their life or biography unfolds. Their experience of the world, though socially and structurally situated, is still, to a great degree, conditioned by the matrix of experiences and occurrences which take place within their life, both in the form of day-to-day proximate structures and one-off of periodic upper layer structures. The internal structures of the agent are the constituent elements of their agency. These condition their ability to concomitantly affect wider social and non-social structures. In this sense they are partly analogous with the concept of capital, though denote the wider sphere of the ability to gain or deploy this capital, as well as the ability to make value judgements. In other words, to participate in the negotiation of meaning. This reactive or proactive element is categorized as conjuncturally specific by O'Reilly (O'Reilly 2011: 26-27). It is the ability to strategise and enact agency within given structural conditions including the ways in which they are understood; the strategies deployed to negotiate them and the agent's ability to anticipate, predict and preempt the conjuncturally specific internal structures of other agents.

Karen O'Reilly has also noted similarities between Emirbayer and Mische's notions of agency, particularly iterational agency, and Pierre Bourdieu's concept of habitus (O'Reilly 2011: 29), an idea, which she argues elsewhere, consists of an embodied system of general dispositions. Indeed, she notes that, "cultural and imaginative discourses and ethical principles are also durable and transposable and need to be included within habitus" (O'Reilly, Stones, and Botterill 2014: 6). Based on empirical observation, she further notes that, in the case of British lifestyle migration to Spain, the intentions of actors to circumvent markers of class frequently resulted in their restatement (Oliver and O'Reilly 2010). Emirbayer and Mische term iterational schemas, "taken-for-granted ... corporeal and affective ... cognitive patterns" which operate most effectively in terms of iterational agency (1998: 975). Yet, as we have seen, Emirbayer and Mische's conception of agency also relies on the activation of schemas or internal structures in its projective and practicalevaluative tones. Actor's projects are not conceived in a vacuum, their projective agency is reliant on their understanding and ability to place prior memory and experience into a conceptual framework from which they can engage in predictive projection about specific outcomes. Likewise, practical evaluative agency entails an actor's ability to compare a given circumstance or moment to a wider experiential dataset, while simultaneously deliberating on the specific action which will provide a preferable outcome. To primarily place internal structures/schemas within moments of iterational agency, robs this concept of its force in contextualizing all instantiations of agentic action.

Pierre Bourdieu defines an actor's habitus as "systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures ... which generate and organize practices and representations that can be objectively adapted to their outcomes" (Bourdieu 1990b: 53). Habitus designates the ways in which schemas or internal structures are constructed within the body and mind of the individual actor, composed of their life experiences, and are utilized, either consciously or subconsciously, within specific present contexts. Bourdieu further emphasizes the fundamentally practical role of habitus, noting that it is "always orientated towards practical functions" (1990a: 52). This practical side of habitus, however, also has constraints. It does not allow the actor to function in an essentially voluntarist way. As an activation of past experiences and memories within social/ised settings, and as an internalization of social rules, norms, and mores, it constrains the actor from exercising agency towards "the unthinkable" or the "already denied" (Bourdieu 1990a: 54). While the fields of potential action appear as unrestricted to the actor. This perspective is mitigated by the fact that they cannot conceive of patterns of action which are absent from their habitus. This idea of habitus does, in some ways, lend itself to O'Reilly's categorization as a primarily iterational force. The role of habitus in structuring practices and systems of meaning is, in Bourdieu's words "a present past that tends to perpetuate itself into the future by reactivation in similarly structured practices ... is the principle of the continuity and regularity" (Bourdieu 1990a: 54). This notion, of the activation of experiential and memorial schemes, within specific contemporary circumstances, lends itself to the notion that habitus functions primarily in a recursive manner. Yet, Bourdieu also argues that exact recursive reproduction requires no differentiation between present and past contexts (1990a: 63). This situation which is logically improbable given the way in which an actor's habitus, as a set of dispositions based in the past and aimed

at the present, ensures that present contexts necessarily presuppose past contexts.

This tension, between past and present, leaves room for the prospect of habitus as a generative force, one which implies, in its very nature, the prospection of novelty in the relationship between past and present contexts. Because "realization" and action are the modes in which creativity or agency functions (Bourdieu 1990a: 55), it cannot be said to pre-exist nor should it be a teleological imposition. The specific context of doing, with its connections and associations with past, present and future, is where structures are made and unmade and where the actor enacts agentic potential (Bourdieu 1990a: 55-6). Furthermore, because the practice or action orientated habitus "also functions on the basis of "forecast" or "anticipations", this facilitates "a generative spontaneity which asserts itself in improvised confrontation with ever-renewed situations" (Bourdieu 1990a: 77-78). Because habitus is activated in present conditions which inevitably contain an unseen/unknowable future element, the way in which past systems of understanding are applied implies forms of agency beyond the iterational. Furthermore, as Greg Noble has observed, habitus' efficacy, as a heuristic device, lies in the friction between its iterational and creative functions (Noble 2013: 343). Bourdieu states "the habitus is an infinite capacity for generating products - thoughts, perceptions, expressions and actions - whose limits are set by the historically and socially situated conditions of its production" (1990a: 55). In short, habitus allows for agency in all of the forms we have outlined so far, undergirded by the structural contexts in which

it is formed, and giving the actor a wide set of tools and practice with which to engage with contemporary moments both purposefully or mechanically, in both creative or recursive ways to enact projects or ensure continuity (Noble 2013: 343).

To put it simply, practice entails the ways of being and doing, enacted, negotiated, and produced by human agents. In sum, practice is social life in all its guises. What we mean here is that, while basic biological urges such as feeding and procreation may occur in contexts in which sociability in any wide sense is not necessary, the meanings attached to the way in which these behaviours are enacted have little importance without a concomitant matrix of social relations in which they are embedded. Structures, both internally and externally constituted and functioning, can be conceived of as the result of practices, while practices simultaneously function in the context of structural relations and considerations (O'Reilly 2011: 28-31). Practices include both the day-to-day enactment of social life and contextually specific reactive action. In terms of historical and archaeological studies, analysis of practices lies within the sphere of action and behaviour. From the material to immaterial, practices can be encoded in texts, objects, and inscriptions amongst other media. Migration practice, on the other hand, can lie within the decision to migrate, the temporal duration of a migration i.e. whether return migration or remittance is practiced, and the forms in which migrants enact day-to-day life in relation to their identity as migrants (O'Reilly 2011: 32).

The force of practice to alter and renegotiate proximate external structures is more difficult to situate. In many cases it lies within the enaction and adjustment of internal structures, to meet the exigencies of externalized conditions (O'Reilly 2011: 29). A key tenet of Bourdieu's theory of practice is that this structuring force can also be understood to be the way in which a given action may simultaneously be conceived as a practice and a structure. Strategies function on multiple ontological levels. They are both proximate structures, in the sense that they may be categorized in terms as reifications of knowledge acquisition and deployment external to the individual agent; while at the same time they are also practices, modes of behaviour, chosen by agents as negotiations between proximate and upper structural levels. The way in which they are enacted in practice, functioned to renegotiate and restructure them at the level of their dual role as proximate external structures.

External Structures

In Karen O'Reilly's migration practice framework, 'external structures' stand for the macro- and micro- level historical processes in which potential migrant agents are situated. They are long-term, potentially affective structures, processes and conditions which can have an effective force on individual migrants, communities and societies. Moreover, they can also be represented by the smaller scale physical, legal and institutional frameworks in which migrants live and move. In traditional approaches to migration in general, and Archaic migration specifically, these are most often the primary unit of analysis. Widespread economic instability, local or regional conflicts, tension between demographic expansion and resource bases can all be identified as external affective structures of migration. For O'Reilly they function on two levels, the 'upper structural layer' and the 'proximate layer' (O'Reilly 2011: 23). The former are most easily identifiable in economic approaches to migration whether they are the conditions which prompt and structure decision making processes in rational choice theory, or the more determinative economic structural parameters identified in push-pull approaches to migration. Proximate structures, on the other hand, operate at the micro level, they can be identified in judicial and legislative proscriptions, concerning the parameters in which individuals can move, as well as material instantiations of migration potentiality, such as migrant social networks, trafficking groups or legal or illegal transport opportunities.

In general, higher order structures resist adaption by the individual agent; they are hard structures (O'Reilly 2011: 23-24). Regardless of the agent's commensurate social, cultural and economic capital, hard formed upper structural layer processes are not amenable to change through agency due to their large-scale temporal and spatial frames. In many cases the migrating (or non-migrating) agent is unaware of their existence or their affective force. As we have discussed above, this is the sphere in which structuration runs into theoretical and methodological difficulties. If, as Giddens' duality of structure and agency supposes, these too are products of the agent's perception, interaction and understanding of the combination of disparate elements, then they cannot function as structuring structures in this way, leaving open the

paradox of their empirically identifiable effects. The effect of these external structures is thus based on their emergent qualities, those aspects which allow their disparate elements to effectively tip over into agent experience and act as causal factors for patterns of behavioural practice.

In critical realist approaches such as morphogenesis, and to a lesser extent in practice theory, structures can play an important role in facilitating conditions for action. This type of structure, which we shall term generative, has found an important place in the migration literature and in theoretical approaches such as world systems, and has often been characterised as the key driver of migration. In effect, such structures are held to have a causal effect on social processes often referred to as their emergent properties. In the words of Margaret Archer these structures possess "the generative capacity to modify the powers of its constituents in fundamental ways and to exercise causal influences" (Archer 1995: 174). As we have seen, while structuration theory has sought to question whether these structures can be said to exist independently of the actors who draw on them and reify them, for any headway to be made in the study of migration movements, they must be conceptualised as analytically distinct categories, at least in the sense that they operate at anterior temporal phases from their enaction by actors (Archer 2011). Furthermore, empirical observation strongly suggests that they do in fact exist, at least in a parallel plain, alongside actors, and have causal powers which are unrelated or external to their interaction with the actor. For example, conflict exists and has a causal

effect on migration in certain cases regardless of whether an actor activates it as the prime mover in their decision to migrate.

Appendix B Immigrant Settlements included in the Study

	F.	F.			
	Date	date			
Name	Lit.	Arch.	Metropolis Source	Date	Coordinates
Leros		-700	BNJ 72 F 26	-330	37.157002, 26.853851
Ikaria	-497		BNJ 72 F 26	-330	37.611152, 26.286591
Miletoupolis			BNJ 1054 F 63	-10	40.083458, 28.316486
Kardia	-650		Ps-Scym. 700-3	-120	40.556304, 26.747068
Limnai			BNJ 72 F 26	-330	40.313939, 26.249544
Dioskourias	-550	-570	Arr. Peripl. M. Eux. 10.4	130	42.99833095, 41.01117505
Phasis		-550	Her. Lemb. 46	-170	42.135867, 41.6923225
Gyenos		-500			42.75581, 41.403117
Naukratis		-610	Hdt. 2.178	-400	30.75, 30.75
Pantikapaion		-615	Strab. 7.4.4	10	45.3532623, 36.470222
Кероі	-550	-570	Ps-Scym 893	-120	45.299422, 36.997343
Nymphaion		-570			45.2341843, 36.4146273
Theodosia	-550	-570	Arr. Peripl. M. Eux. 19.3	130	45.04609, 35.378768
Kerkinitis		-510			45.203672, 33.361389
Hermonassa	-525	-575			45.215263, 36.712664
Myrmekeion		-570			45.3533940521, 36.5287717301
Tyritake		-570			45.281685, 36.4129155
Patraeus	-550	-550		-200	45.311415, 36.850141
Kimmerikon		-500			45.042315, 36.22459
Kytaia		-500			45.078484, 36.422348
Gorgippia		-500			44.89409175, 37.3100281
Berezan	-647	-630			46.600402, 31.411537
Olbia		-600	Hdt 4.17		46.691895, 31.901597
Kyzikos	-676	-610	BNJ 72 F 26	-330	40.3855645, 27.883191
Parium	-709		Strab. 13.1.14	10	40.424866, 27.068127
Abydos	-680		Thuc. 8.61.1	-400	40.195984, 26.406961
Priapos	-680		Strab. 13.1.12	10	40.403338, 27.303743
Prokonessos	-680		Strab. 13.1.12	10	40.591686, 27.55568
Lampsacus	-654		Strab., 13.1.19	10	40.346685, 26.699162
Kios	-627		Milet. i.3 141.6–7;	-228	40.432469, 29.15639
Arisbe			Strab. 14.1.6	10	40.19429, 26.535763
Artake			BNJ 72 F 26	-330	40.375, 27.786
Paisos			BNJ 72 F 26	-330	40.400225, 26.787097
Sinope	-631	-625	Ps-Scym. 781-97	-120	42.025776, 35.143037

Amisos	-600	-575	BNJ 115 F 389	-330	41.292721, 36.3313
Trapezus	-756		Xen. An 4.8.22 (Sinope)	-370	41.0042695, 39.7233115
Kerasous			Xen. An. 5.3.2 (Sinope)	-370	40.919134, 38.397931
Kotyora			Xen. An. 5.5.3 (Sinope)	-370	41.000154, 37.875188
Kromna			Ps-Scym. 1005	-120	41.838242, 32.651063
Kytoros			Ps-Scym. 1005	-120	41.861928, 32.897814
Sesamos			Ps-Scym. 1005	-120	41.746969, 32.385648
Tieion			Ps-Scym. 1005	-120	41.558273, 32.055366
Myrkinos	-510		Hdt. 5.23	-400	40.898657, 23.818105
Skepsis	-494		Strab. 13.1.52	10	39.82554, 26.688003
Orgame		-640			44.758137, 28.940017
Istros	-657	-630	Hdt. 2.33	-400	44.547894, 28.774482
Odessos	-584	-575	Ps-Scym. F1	-120	43.2061605, 27.9134725
Tomoi		-550	Ps-Scym. 767	-120	44.1728565, 28.6497375
Bizone		-500			43.4338945, 28.33814
Dionysopolis		-475			43.417781, 28.1629075
Nikonion		-550			46.215722, 30.454849
Tyras		-550	Ps-Scym. 832	-120	46.2007555, 30.350134
Apollonia	-610	-615	Ps-Scym. 730-33	-120	42.425159, 27.695564
Antheia					42.460757, 27.585061
Taganrog		-600			47.216667,38.916667

Appendix E Dwellings at Berezan

In terms of dugout or semi-dugout structures, Sergey Solovyov, apparently working from the data gathered in the sectors 14 (O-Eastern) and 27 (Northwestern), calculated the relative numbers chronologically as follows: 600-5758 - 525-500; 66 - 550-525; 56 - 575-550; 17 - . If we assume that the percentage of subsequently excavated dugouts and those absent from Solovyov's analysis fall within the same percentage distribution over the four time periods, we arrive at totals of 28 in the first period, 90 in the second, 107 in the third and 20 in the fourth. Taking the average dugout size as around $8m_2$, the total area taken up by dugouts for each period is: $600-575224 - m_2$; 575-550720 - m2; 550-525856 - m2; 525-500160 m2. It is immediately noticeable that after the destruction event circa 525, dugout architecture almost totally disappears from the site. In addition to dugouts, over the periods under study, the following distribution of above ground residential buildings can be noted; 550-540500-475; 7 - 525-500; 14 - 540-525; 4 - CE - 20. The size of these buildings can differ markedly and are often difficult or impossible to ascertain due to their state of survival. Nevertheless, in the first period of above ground construction, the size of the houses seems to have been around 40m2 on average. In the second, recorded sizes range from 123 m2 (House 1, Sector 27, Solovyov 1994; 1999: 65-76) to 380 m2 (House 3, Sector O-Western, Chistov 2012: 41-54; 2016: 15-20; 2019: 102), of which around 50% was given over to living space, the rest being courtyards and storage. Based on this, we suggest a living area of around 100 m2 for the buildings of this period. For the third

period, it is possible to give rough estimates of the living space for the buildings uncovered by Solovyov in the sector 27 (northwestern), which results in an average living space of around 140 m2. Again, in the final period we have a range of sizes, but given the relative predominance of buildings from this era in sector 14 (O-Eastern) an average area of 275 m2 with living space of around 135m2 can be postulated (Chistov 2016: 15). If we combine this data, we arrive at the following total living areas for each epoch as: 600-575 - 224m2; 575-550- 720 m2; 550-5252296 - m2 - 525-500 - 1140m2; 500-4752700 - m2.

House #	Sector	Phase	m2	Excavator	Refs
1	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
2	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
3	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
4	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
5	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
6	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
7	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
8	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
9	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
10	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
11	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
12	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
13	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
14	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
15	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
16	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
17	14	I-A	6	Lapin	Solovyov 1999: 31, fig. 9
18	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
19	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
20	14	I-A	3.75	Lapin	Solovyov 1999: 31, fig. 9
21	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
22	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
23	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
24	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
25	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
26	14	I-A		Lapin	Solovyov 1999: 31, fig. 9

27	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
28	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
29	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
30	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
31	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
32	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
33	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
34	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
35	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
36	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
37	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
38	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
39	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
40	14	I-A	7.395	Lapin	Solovyov 1999: 31, fig. 9
41	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
42	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
43	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
44	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
45	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
46	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
47	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
48	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
49	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
50	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
51	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
52	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
53	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
54	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
55	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
56	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
57	14	I-A	34.5	Lapin	Solovyov 1999: 31, fig. 9
58	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
59	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
60	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
61	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
62	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
63	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
64	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
65	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
66	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
67	14	I-A		Lapin	Solovyov 1999: 31, fig. 9

68	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
69	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
70	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
71	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
72	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
73	14	I-A		Lapin	Solovyov 1999: 31, fig. 9
1	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
2	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
3	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
4	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
5	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
6	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
7	27	I-A	5.7	Solovyov	Solovyov 1999: 32, fig. 10
8	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
9	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
10	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
11	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
12	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
13	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
14	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
15	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
16	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
17	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
18	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
19	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
20	27	I-A	5	Solovyov	Solovyov 1999: 32, fig. 10
21	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
22	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
23	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
24	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
25	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
26	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
27	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
28	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
29	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
30	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
31	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
32	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
33	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
34	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10
35	27	I-A		Solovyov	Solovyov 1999: 32, fig. 10

36	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
37	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
38	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
39	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
40	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
41	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
42	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
43	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
44	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
45	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
46	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
47	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
48	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
49	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
50	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
51	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
52	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
53	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
54	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
55	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
56	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
57	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
58	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
59	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
60	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
61	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
62	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
63	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
64	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
65	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
66	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
67	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
68	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
69	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
70	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
71	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
72	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
73	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
74	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
75	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10
76	27	I-A	Solovyov	Solovyov 1999: 32, fig. 10

3	O-W.	I-A			Chistov 2020: fig. 5
4	0-W.	I-A			Chistov 2020: fig. 5
5	0-W.	I-A			Chistov 2020: fig. 5
6	0-W.	I-A			Chistov 2020: fig. 5
7	0-W.	I-A			Chistov 2020: fig. 5
9	0-W.	I-A			Chistov 2020: fig. 5
10	0-W.	I-A			Chistov 2020: fig. 5
11	0-W.	I-A		Chistov	Chistov 2006: 60-61
13	0-W.	I-A			Chistov 2020: fig. 5
14	0-W.	I-A			Chistov 2020: fig. 5
15	0-W.	I-A			Chistov 2020: fig. 5
16	0-W.	I-A			Chistov 2020: fig. 5
17	0-W.	I-A			Chistov 2020: fig. 5
18	0-W.	I-A	15.21	Chistov	Chistov 2012: 8-24
20	0-W.	I-A			Chistov 2020: fig. 5
21	0-W.	I-A			Chistov 2020: fig. 5
22	0-W.	I-A			Chistov 2020: fig. 5
23	0-W.	I-A		Chistov	Chistov 2006: 61
24	0-W.	I-A		Chistov	Chistov 2006: 61-62
25	0-W.	I-A		Chistov	Chistov 2006: 62
26	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
27	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
28	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
29	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
30	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
31	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
32	0-W.	I-A		Chistov	Chistov 2012: 8-24
33	0-W.	I-A		Chistov	Chistov 2012: 8-24
34	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
35	0-W.	I-B		Chistov	Chistov 2019: 104
36	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
37	0-W.	I-A	3.24	Chistov	Chistov 2012: 8-24
39	0-W.	I-B		Chistov	Chistov 2019: 104
40	0-W.	I-B		Chistov	Chistov 2019: 104
43	0-W.	I-A			Chistov 2020: fig. 5
44	0-W.	I-A		Chistov	Chistov 2012: 8-24
45	0-W.	I-A	10.18	Chistov	Chistov 2012: 8-24
47	0-W.	I-A		Chistov	Chistov 2020: 19-25
48	0-W.	I-A		Chistov	Chistov 2020: 19-25
50	0-W.	I-A		Chistov	Chistov 2020: 19-25
58	0-W.	I-A	3.5	Chistov	Chistov 2020: 19-25

59	0-W.	I-A		Chistov	Chistov 2020: 19-25
60	0-W.	I-A		Chistov	Chistov 2020: 19-25
61	0-W.	I-A		Chistov	Chistov 2020: 19-25
63	0-W.	I-A		Chistov	Chistov 2020: 19-25
64	0-W.	I-A		Chistov	Chistov 2020: 19-25
65	0-W.	I-A		Chistov	Chistov 2020: 19-25
66	0-W.	I-A		Chistov	Chistov 2020: 19-25
67	0-W.	I-A		Chistov	Chistov 2019: 104
67	0-W.	I-A			Chistov 2020: fig. 5
68	0-W.	I-A			Chistov 2020: fig. 5
69	0-W.	I-A		Chistov	Chistov 2019: 104
71	0-W.	I-A			Chistov 2020: fig. 5
72	0-W.	I-A			Chistov 2020: fig. 5
73	0-W.	I-A		Chistov	Chistov 2019: 104
73	0-W.	I-A			Chistov 2020: fig. 5
74	0-W.	I-A			Chistov 2020: fig. 5
78	0-W.	I-A			Chistov 2020: fig. 5
3	Т	I-A	3.25	Krutilov	Krutilov 2007: 26-28
4	Т	I-A	4.8	Krutilov	Krutilov 2007: 26-28
5	Т	I-A	15.12	Krutilov	Krutilov 2007: 28
9	Т	I-A	11	Krutilov	Krutilov 2007: 30
Rm 18	O-W.	I-B		Chistov	Chistov 2020: 49-55
41	27	I-B		Solovyov	Solovyov 1999: 59-63
47	27	I-B		Solovyov	Solovyov 1999: 59-63
53	O-W.	I-B		Chistov	Chistov 2013: 601
2	27	II-A	57	Solovyov	Solovyov 1994; 1999: 65-76
8	27	II-A	125	Solovyov	Solovyov 1994; 1999: 65-76
3	O-W.	II-A	190	Chistov	Chistov 2012: 41-54
43	0-W.	II-A	31	Chistov	Chistov 2012: 59
MK 7	0-W.	II-A		Chistov	Chistov 2020: 66-68
MK 8	0-W.	II-A		Chistov	Chistov 2020: 68-72
					Chistov 2016: 23; 2020: 75-
MK 9	0-W.	II-A		Chistov	90
3	0-W.	II-A		Chistov/Nazarov	Chistov 2020: 64-66
SK 62	O-W.	II-A		Chistov	Chistov 2016: 21; 2020: 74- 75
pre-MK1	0-W.	II-A		Chistov	Chistov 2020: 88
SQ. 49	0-W.	II-A		Chistov	Chistov 2020: 88
SDO 24	0-W.	II-A		Chistov	Chistov 2019: 100
57	14	II-A		Lapin	Chistov 2017: 136
73	0-W.	II-A		Chistov	Chistov 2017: 136
1	27	II-B1	180	Solovyov	Solovyov 1994; 1999: 65-76

3	27	II-B1	195	Solovyov	Solovyov 1994; 1999: 65-76	
4	27	II-B1	96	Solovyov	Solovyov 1994; 1999: 65-76	
5	27	II-B1	128	Solovyov	Solovyov 1994; 1999: 65-76	
6	27	II-B1	136	Solovyov	Solovyov 1994; 1999: 65-76	
7	27	II-B1	70	Solovyov	Solovyov 1994; 1999: 65-76	
2	27	II-B1	166	Solovyov	Solovyov 1994; 1999: 65-76	
SK 41	O-W.	II-B1	9	Chistov	Chistov 2012: 73	
SK 42	O-W.	II-B1	9.6	Chistov	Chistov 2012: 73	
SK 80	O-W.	II-B1		Chistov	Chistov 2020: 117	
SK 81	O-W.	II-B1		Chistov	Chistov 2020: 117	
SK 49	O-W.	II-B1	10.1	Chistov	Chistov 2020: 117-118	
SK 55	O-W.	II-B1	6.1	Chistov	Chistov 2020: 120	
SK 56	O-W.	II-B1	10.7	Chistov	Chistov 2020: 120	
SK 54	O-W.	II-B1		Chistov	Chistov 2020: 117	
1	14	II-B2		Lapin	Krÿzhitskii 1982: 27, fig. 4	
2	14	II-B2		Lapin	Krÿzhitskii 2005: 186	
4	14	II-B2		Lapin		
5	14	II-B2		Lapin	Krÿzhitskii 2005: 186	
6	14	II-B2		Lapin	Krÿzhitskii 2005: 186	
7	14	II-B2		Lapin	Krÿzhitskii 2005: 186	
B8 Hs.	8	II-B2		Von Stern	Kryzhitsky 2005: 186	
3	14	II-B2		Lapin	Kryzhitsky 2005: 181	
8	14	II-B2		Lapin	Kryzhitsky 2005: 181	
9	14	II-B2		Lapin	Kryzhitsky 2005: 181	
10	14	II-B2		Lapin	Kryzhitsky 2005: 181	
W Hs. E						
q.	26	II-B2		Kopeinka	Kopeinkia 1981	
	26	II-B2		Kopeinka	Kopeinkia 1981	
	26	II-B2		Kopeinka	Kopeinkia 1981	
W q.	26	II-B2		Kopeinka	Kopeinkia 1981	
3	0-W.	II-B2		Chistov	Chistov 2012: 41-54	
Rm. 3, 5	0-W.	II-B2	70.5	Chistov	Chistov 2012: 81-86	
WI. 25-	0) 11			China		
27	0-W.	II-B2		Chistov	Chistov 2012: 86-87	
Rm. 8	0-W.	II-B2		Chistov	Chistov 2012: 87	
MK-9	0-W.	II-B2		Chistov	Chistov 2020: 150-152	

Site	Date	Crimea	Taman	Urban	Rural
Pantikpaion	-615	х		Х	
Alekseevskoe	-600		Х		Х
Myrmekion	-575	Х		Х	
Akhtanizovskaya 4	-575		Х		Х
Hermonassa	-575		Х	Х	
Кероі	-575		Х	Х	
Patraeus	-575		Х	Х	
Nymphaion	-570	х		Х	
Theodosia	-570	Х		Х	
Tyritake	-570	х		Х	
Golubitskaya 2	-570		Х		Х
Phanagoria	-542		Х	Х	
Beregovoy 4	-535		Х		Х
Bolna 1	-535		Х		Х
Bolna 2	-535		Х		Х
Bolna Rebolyuciy 1	-535		Х		Х
Bolna Rebolyuciy 2	-535		Х		Х
Fantalovskaya 1, 6	-535		Х		Х
Kuchugury 5	-535		Х		Х
Sennoy 2	-535		Х		Х
Sennoy 9	-535		Х		Х
Solenyi 3	-535		Х		Х
Starotitarovskaya 13	-535		Х		Х
Starotitarovskaya 16	-535		Х		Х
Starotitarovskaya 5	-535		Х		Х
Strelka 1	-535		Х		Х
Strelka 2	-535		Х		Х
Taman 3	-535		Х		Х
Taman 4	-535		Х		Х
Tamanski 3	-535		Х		Х
Tamanski 4	-535		Х		Х
Veselovka 1	-535		Х		Х
Vinogradnyi 2	-535		Х		Х
Vinogradnyi 8	-535		Х		Х
Vyshesteblievskaya 1	-535		х		Х
Vyshesteblievskaya 10	-535		Х		Х
Sindike/Gorgippia	-530		Х	Х	
Akra	-525	х		Х	

Appendix F Settlements in Kimmerian Bosporus

Geroevka 1	-510	х			Х
Tobecik 8	-510	Х			Х
Andreevska Yuzhnaya	-510	Х			Х
Yuzhno-Churubashskoe	-510	Х			Х
Kimmerikon	-510	Х		Х	
Porthmion	-510	Х		Х	
Zavetnoe 5	-510	Х			Х
Zenon Chersonese (Mys Zyuk)	-500	Х			Х
Chokraskij Rodnik	-500	Х			Х
Chebakskaya Balka	-500	Х			Х
Mys Takil	-500	Х			Х
Kytaia	-500	Х		Х	
Akhtanizovskaya 1	-500		Х		Х
Akhtanizovskaya 2	-500		Х		Х
Bolna 4	-500		Х		Х
Fantalovskaya 3	-500		Х		Х
Fantalovskaya 7	-500		Х		Х
Ilich 2	-500		Х		Х
Krasnoarmeiskiy 1	-500		Х		Х
Krasnoarmeiskiy 3	-500		Х		Х
Krasnoarmeiskiy 5	-500		Х		Х
Krasnoarmeiskiy 6	-500		Х		Х
Kuchugury 15	-500		Х		Х
Kuchugury 2	-500		Х		Х
Kuchugury 3	-500		Х		Х
Kuchugury 4	-500		Х		Х
Kuchugury 7	-500		Х		Х
Kuchugury 9	-500		Х		Х
Priazovskiy 1	-500		Х		Х
Priazovskiy 4	-500		Х		Х
Priazovskiy 5	-500		Х		Х
Primorsky 18	-500		Х		Х
Primorsky 23	-500		Х		Х
Sennoy 3	-500		Х		Х
Starotitarovskaya 7	-500		Х		Х
Taman 1	-500		х		Х
Taman 11	-500		Х		Х
Taman 12	-500		Х		Х
Tamanski 5	-500		Х		Х
Tyramba	-500		Х	Х	
Vinogradnyi 1	-500		Х		Х

Vinogradnyi 7	-500		Х	х
Vyshesteblievskaya 14	-500		Х	Х
Vyshesteblievskaya 6	-500		Х	Х
Zaporozhkaya 1	-500		Х	Х
Geroevka 2	-490	Х		Х

Name	Date	Necropolis	Local	Babadag
Orgame	-640	Х		
Istros	-635			
Tichilești	-625		Х	Х
Nuntaşi II	-600			
Zimbru	-600		Х	
Celic-Dere Tumular Necropolis	-600	Х		
Beidaud	-600		Х	х
Tariverde	-575			
Histria Bent	-575	Х		
Sinoe-Zmeica	-575			
Călugăra	-575		Х	
Açic Suat	-575			
Istros Tumulus	-550	Х		
Visina	-560			
Sarinasuf	-560			
Histria Pod	-550			
Baia 2	-525			
Histria-Sat	-500	Х		
Corbu de Jos	-500	Х		
Celic-Dere	-500		Х	Telița Amza
Cassiana	-500		Х	
Enisala	-500		x	
Murighiol	-500		Х	
Vadu	-500			
Telița	C6-5	Х	Х	
Isaccea	C6-5	Х	Х	
Cernavoda	-500	Х	Х	

Appendix G Settlements in Dobrudja

Deity	Epithet/s	Site	After	Before	Sanctuary	Altar	Statue	Coinage	Graffito	Inscription	Theonym
Aphrodite		Berezan	-550	-525	Х	Х	х				
Aphrodite		Dionysopolis	-400	-300						Х	
Aphrodite	Ourania Apatouria	Hermonassa	-400	-300						Х	
Aphrodite		Istros	-599	-500	Х					Х	
Aphrodite		Кероі	-575	-550	Х					Х	
Aphrodite	Ourania	Kytaia	-350	-300		Х					
Aphrodite	Pontia	Kyzikos	-197	-31						Х	
Aphrodite		Myrmekeion									
Aphrodite		Nikonion	-520	-400			Х				
Aphrodite		Nymphaion	-520	-500	Х						
Aphrodite	Ourania	Olbia	-500	-500	Х	Х			Х		
Aphrodite	Ourania	Pantikapaion	-150	-125						Х	
Aphrodite	Nauarkhos	Pantikapaion	-47	-14						Х	
Aphrodite		Priapos									
Aphrodite		Prokonessos									
Aphrodite	Ourania	Sindike	-323	-31							
Aphrodite		Skepsis	27	313							
Aphrodite		Tios	200	400							
Aphrodite		Tomis	-20	0							
Aphrodite		Tyritake	-550	-500						Х	
Apollo		Abydos	-540	-425				Х			Х
Apollo		Amisos	-135	-63				Х			

Appendix H Deities at Milesian Migrant Communities

Apollo	Didymeus	Amisos	100	200						Х	
Apollo	Didymeus	Amisos									
Apollo	letros	Apollonia	-520	-480	Х	Х			Х		
Apollo		Berezan	-600	-550					Х		
Apollo	Didymeus	Berezan	-520	-480						Х	
Apollo	Milesios	Berezan	-520	-480						Х	
	Metros										
Apollo	Olbiophoros	Berezan	-520	-480						Х	
Apollo	Toxophoros	Berezan	-520	-480						Х	
Apollo	Nikephoros Boreas	Berezan	-520	-480						Х	
Apollo	letros	Berezan	-600	-550					Х		
Apollo	letros	Hermonassa	-389	-348						Х	
Apollo	Delphinious	Hermonassa								Х	
Apollo	Prostates	Hermonassa									
Apollo		Istros	-475	-450						Х	
Apollo		Istros	-475	-450						Х	
Apollo		Kardia						Х			
Apollo	Delphinious	Кероі	-600	-500							Х
Apollo	Didymeus	Kios	-276	-275						Х	
Apollo		Kytaia	-350	-300		Х					
Apollo	Lykeos, Archegetes	Kyzikos	-500	-500	Х			Х		Х	Х
Apollo	letros	Myrmekeion	-520	-480					Х		
Apollo		Nymphaion	-400	-300						Х	1
Apollo	Delphinious	Odessos	-450	-400	Х		Х	х		Х	Х
Apollo	letros	Olbia	-580	-560	Х	Х	Х		Х		
Apollo	Boreas	Olbia	-550	-525	Х					Х	
Apollo	Delphinious	Olbia	-530	-500	Х						

Apollo	Lykaios	Olbia							
Apollo	letros	Pantikapaion	-500	-485	Х			Х	
Apollo		Parium					Х	Х	
Apollo	Hegemon	Phasis	-420	-410				Х	
Apollo	Priepenaos	Priapos							
Apollo		Prokonessos							Х
Apollo		Sesamos	-400	-300			Х		
Apollo	letros	Sindike	-400	-300					Х
Apollo	Delphinious	Sindike	-300	-200					Х
Apollo		Sindike	-100	0			Х		
Apollo	letros	Sinope							Х
Apollo		Skepsis	-400	-200				Х	
Apollo		Theodosia	-520	-500					Х
Apollo		Tomis	-300	-200			Х	Х	
Apollo?		Istros	-550	-525	Х				
Ares		Nikonion	-500	-500					
Ares		Tios	200	300					
Artemis		Abydos	-400	-300			Х		
Artemis		Amisos	-135	-63			Х		
Artemis		Amisos					Х		
Artemis	Pythia	Apollonia						Х	
Artemis	Ephesos	Berezan	-575	-550					
Artemis		Berezan	-500	-400				Х	
Artemis	Ephesos	Hermonassa	-349	-310				Х	
Artemis		Istros	-300	-200				Х	
Artemis		Kytaia	-350	-300		х			

Artemis	Pythia	Kyzikos							
Artemis	Parthenos	Leros	-300	-200					
Artemis		Nikonion	-500	-500				Х	
Artemis		Pantikapaion	-625	-575					
Artemis	Ephesos	Pantikapaion	-550	-525				Х	
Artemis	Pythia	Pantikapaion	-550	-525				Х	
Artemis		Pantikapaion	306	306					
Artemis		Phasis			Х				
Artemis		Priapos			Х				
Artemis	Ephesos	Sindike	-400	-300	Х			Х	
Artemis		Sinope	100	200			Х		
Asklepius		Lampsakos	-200	-100				Х	
Asklepius		Tomis	-300	-200		Х			
Athena		Amisos	-400	-300			Х		
Athena		Istros	100	200				Х	
Athena	Soteira	Kyzikos					Х		
Athena		Nikonion	-500	-500				Х	
Athena		Odessos	-300	-200			Х		
Athena		Olbia	-560	-550	Х				
Athena		Olbia	-525	-450					
Athena	Polias, Sotira	Sinope	0	200				Х	
Athena		Skepsis	-311	-311	Х			Х	
Athena		Theodosia	-400	-380			Х		
Athena		Tios	-100	0					
Athena		Tomis					Х		
Cybele		Kytaia	-420	-350				Х	

Demeter		Amisos			х						
Demeter		Apollonia	-600	-550	Х		Х				
Demeter		Dionysopolis	-300	-200		Х				Х	
Demeter		Istros	-300	-200						Х	
Demeter		Kardia	-350	-250				Х			
Demeter	Karpophoros	Kios									
Demeter		Kytaia	-500	-400	Х	х	х		Х	Х	
Demeter		Myrmekeion	-520	-500	Х						
Demeter		Nymphaion	-560	-540	Х						
Demeter		Odessos	-520	-480	Х						
Demeter		Olbia			Х						
Demeter		Olbia	-500	-400						Х	
Demeter		Pantikapaion	-389	-348						Х	
Demeter		Sesamos	-400	-300				Х			
Demeter	Kurotrophos	Sindike	-400	-300	Х					Х	
Demeter		Theodosia	-400	-300					Х		
Demeter		Tios	0	200							
Demeter		Tomis	-50	-1						Х	
Demeter		Tyritake	-575	-525			Х				
Demeter?		Nikonion	-600	-500			Х				
Diokouroi		Olbia	-525	-500	Х				Х		
Dionysus	Soter	Amisos					Х	Х			
Dionysus		Dionysopolis	-300	-280			Х				
Dionysus		Istros	-323	-31			Х				
Dionysus		Kytaia	-400	-350						Х	
Dionysus		Kyzikos	0	300						Х	

Dionysus		Lampsakos	-200	-100				Ì	x	
Dionysus		Nikonion	-600	-500					Х	
Dionysus		Pantikapaion	-520	-510						
Dionysus		Skepsis	-200	0			Х			
Dionysus		Tios	0	100						
Dionysus		Tomis	-100	0					Х	
Dionysus		Tyritake	-300	-250		х				
Dioscurai		Dioskourias								
Dioscurai		Tomis	-50	-1					Х	
Dioynsus	Polykarpos	Odessos							Х	
Ge	Chthonia	Apollonia	-500	-300					Х	
Ge		Kyzikos	-500	-400			Х		Х	
Hekate		Apollonia	-500	-300					Х	Х
Hekate		Kyzikos								Х
Hekate		Odessos							Х	Х
Hekate		Olbia								
Hekate		Prokonessos								Х
Hera	Tyche	Amisos	-420	-380			Х			
Hera		Kromna	-400	-300			Х			
Hera		Nikonion	-500	-500					Х	
Hera		Tios	200	300			Х			
Hermes		Amisos				Х				
Hermes		Berezan	-575	-550				Х		
Hermes		Istros	-200	-100					Х	
Hermes		Myrmekeion	-500	-450				Х		
Hermes		Olbia	-525	-500						

Hermes		Sindike	-300	-200						
Hermes		Tios	100	300						
Hermes		Tomis	-300	-180			Х			
Hermes		Trapezos			Х					
Hestia		Apollonia							Х	Х
Hestia		Dionysopolis								Х
Hestia		Kyzikos	-400	-300						Х
Hestia		Sindike	-300	-200						Х
Hestia	Prytaneon	Sinope	-400	-300					Х	
Hestia		Tios	100	200						
Hygenia		Tomis	-300	-200		Х				
Ino		Sinope	-300	0	Х				Х	
lsis		Amisos				Х				
Kabeiroi		Tomis	-120	-80					Х	
Kore		Kytaia	-400	-350					Х	
Kore	Soteira	Kyzikos	-400	-300			Х			
Kore		Tyritake	-500	-400		Х				
Kybele		Amisos	-520	-460	Х			Х		
Kybele		Kyzikos	-400	-400						
Kybele		Nikonion	-500	-500					Х	
Kybele		Prokonessos				Х				
Kybele		Sindike	-400	-300						
Kybele		Tios	200	400						
Kybele		Tomis	-420	-400		Х				
Leto		Amisos								
Leto		Istros	-400	-380					Х	

Leto		Sindike	100	300						х
Meter										
Theon		Tios	100	300						
Metros	Pontia	Dionysopolis	-280	-260	Х				Х	
Metros	Demeter?	Olbia	-580	-560	Х	Х				
Poseidon		Amisos	193	211				Х		
Poseidon		Dionysopolis	-300	-100					Х	
Poseidon	Helikonios	Istros	-300	-200					Х	
Poseidon	Helikonios	Istros	212	250					Х	
Poseidon		Kromna								
Poseidon		Kyzikos	-450	-450				Х	Х	
Poseidon		Odessos	100	200						
Poseidon		Olbia								
Poseidon	Sosiniou	Pantikapaion	-47	-14					Х	
Poseidon		Sindike	173	211	Х				Х	
Poseidon	Helikonios	Sinope	-400	-300					Х	
Poseidon		Tios	0	300						
Poseidon	Helikonios	Tomis	100	200						
Priapos		Lampsakos	-500	-300						
Rhea		Phasis								
Telesphorus		Tomis	-300	-200			х			
Theos										
Megas		Odessos	-400	-300			Х	Х		
Zeus		Istros	-575	-525	Х				Х	
Zeus		Kromna	-400	-300				Х		
Zeus	Bonitenos	Kytora								
Zeus	Olbios	Kyzikos	0	300					Х	

Zeus	Patria, Soter	Myrmekeion						Х		
Zeus		Nikonion	-500	-300	Х			Х		
Zeus		Olbia	-525	-450						
Zeus		Pantikapaion	-400	-300				Х		
Zeus		Sesamos	-400	-300			Х			
Zeus	Soter	Sindike								
Zeus	Dikaiosynos	Sinope	-200	0					Х	
Zeus	Idaeus	Skepsis	27	313			Х			
Zeus		Tios	-400	-300						
Zeus	Stratios	Tios	-500	-400						
Zeus		Tomis	-120	-100			Х			
	Nike	Amisos	-323	-31						
		Arisbe	-600	-500	Х?					
	Apatouria	Berezan						Х		
	Phosphorus	Odessos	-300	0					Х	

Appendix I Settlements in the Lower Dnieper-

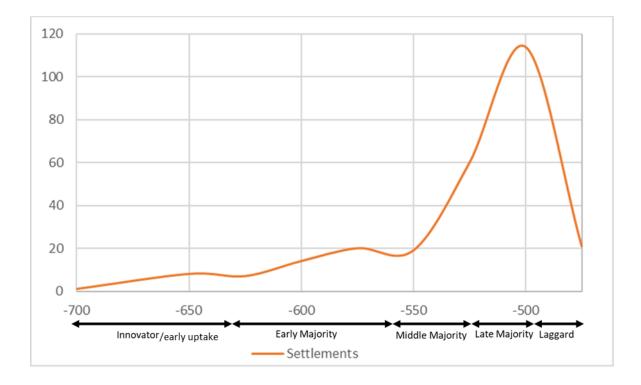
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Name	Date
Berezan	-630
Olbia	-600
Kaborga 1	-575
Bol'shaya Chernomorka 2	-575
Malaya Chernomorka 2 (Beikush)	-575
Kutsurub 1	-575
Shirokaya Balka 1	-575
Yagorlytskoye poseleniye	-575
Vyktorovka 1	-575
Kutsurub 3	-550
Staraja Bogdanovka 2	-550
Chertovatoe 7	-540
Luparevo 1	-540
Stanislav 1	-540
Novaya Bogdanovka 1	-540
Dniprovskoe 3	-540
Zakisova Balka 1	-540
Ochakov 2	-525
Malaya Lyashchevaya	-525
Bolshaya Lyashchevaya kosa 1	-525
Bolshaya Lyashchevaya kosa 2	-525
Mys 2	-525
Andreevo Zorino 2	-525
Malaya Chernomorka 1	-525
Pokrovka	-525
Ivanovka 1	-525
Dmitrievka 1	-525
Petukhovka 1	-525
Adzhigolskaya Balka 11	-525
Chertovatoe 5	-525
Chertovatoe 4	-525
Chertovatoe 3	-525
Katelino 3	-525
Katelino 4	-525
Staraja Bogdanovka 6	-525

Staraja Bogdanovka 8	-525
Novaya Bogdanovka 8	-525
Bolshaya Korenikha	-525
Varvarovka 3	-525
Aleksandrovna	-525
Kozyrka 2	-525
Popova Balka	-525
Chertovatoe 2	-520
Limany 2	-520
Limany 1	-520
Limany 5	-520
Kozyrka 16	-520
Adzhigolskaya Balka 10	-515
Dniprovskoe 4	-515
Kozyrka 12	-515
Adzhigolskaya kosa 1	-515
Nikolaeva 1	-510
Nikolaeva 2	-510
Nikolaeva 3	-510
Nikolaeva 4	-510
Nikolaeva 5	-510
Kozyrka 22	-510
Kozyrka 17	-510
Kozyrka 7	-510
Staraja Bogdanovka 7	-510
Staraja Bogdanovka 10	-510
Staraja Bogdanovka 11	-510
Novaya Bogdanovka 7	-510
Limany 3	-510
Limany 2	-510
Shmidtovka 3	-510
Kamenka 3	-510
Kaborga 6	-510
Bol'shaya Chernomorka 3	-510
Shirokaya Balka	-510
Adzhigolskaya Balka 2	-505
Adzhigolskaya Balka 14	-505
Kozyrka 19	-505
Staraja Bogdanovka 9	-505
Radsad 2	-505
Stanislav 2	-505

Semenov Rog	-500
Izhetskoe 4	-500
Bol'shaya Chernomorka 9	-500
Skel'ka 1	-500
Adzhigolskaya Balka 9	-500
Adzhigolskaya Balka 8	-500
Adzhigolskaya Balka 7	-500
Adzhigolskaya Balka 5	-500
Adzhigolskaya Balka 3	-500
Adzhigolskaya Balka 12	-500
Chertovatoe 1	-500
Katelino 2	-500
Kozyrka 9	-500
Kozyrka 4	-500
Kozyrka 3	-500
Kozyrka 6	-500
Staraja Bogdanovka 12	-500
Malaya Korenikha 4	-500
Varvarovka 1	-500
Bublykova Balka	-500
Limany 1	-500
Katelino 1	-495
Kozyrka 11	-495
Didova Khata 2	-490
Siversov mayak	-490
Kozyrka 25	-490
Kozyrka 18	-475
Kozyrka 20	-470
Kozyrka 25	-470
Kozyrka 15	-470
Staraja Bogdanovka 4	-470
Novaya Bogdanovka 3	-470

Appendix J Overall Trajectory of Archaic Milesian Migration by total urban and rural settlement Numbers.



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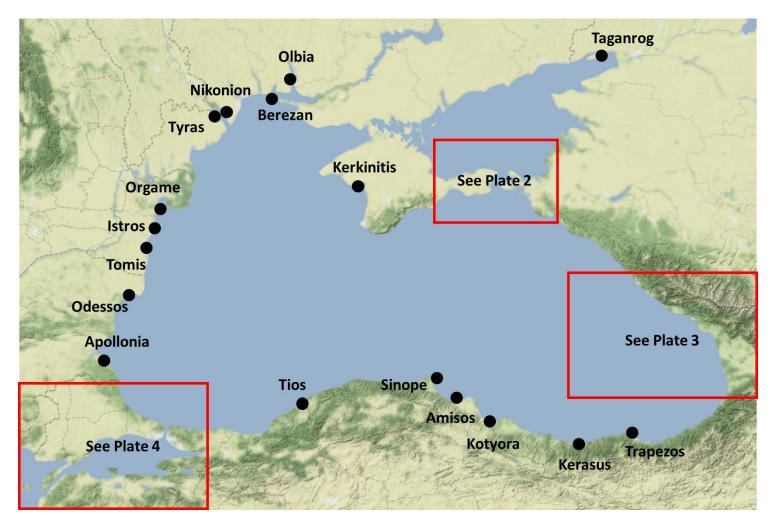
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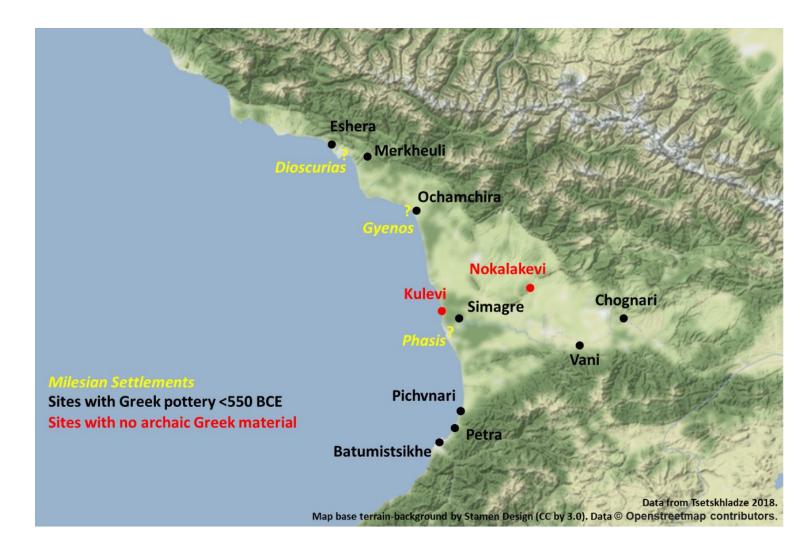
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- PLATE 1 Map of Milesian Migrant Settlements in the Black Sea*
- PLATE 2 Map of Milesian Migrant Settlement in the Kimmerian Bosporus*
- PLATE 3 Map of Milesian Settlements in Kolchis*
- PLATE 4 Map of Milesian Settlements in the Propontis and Hellespont*
- PLATE 5 Tumulus T-A95, Orgame (courtesy of Vassilica Lungu)
- PLATE 6 *Bothros* next to temple of Zeus, Istros (the author)
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- PLATE 10 Temple of Aphrodite at Berezan (courtesy of Dmitry Chistov)
- PLATE 11 Orgame, view from the south (the author)
- PLATE 12 Map showing locations of C7 transport amphorae finds in N. Black Sea.*

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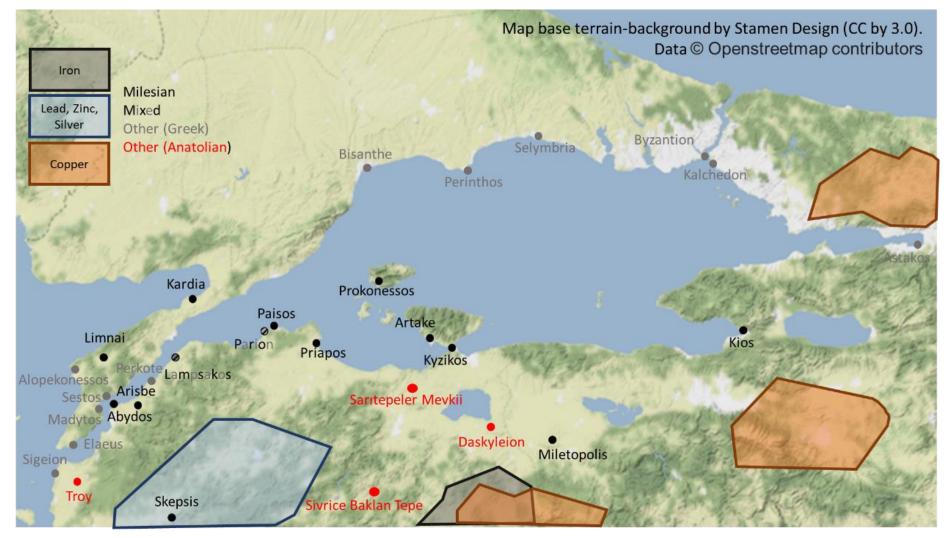




PLATE 5





PLATE 7















